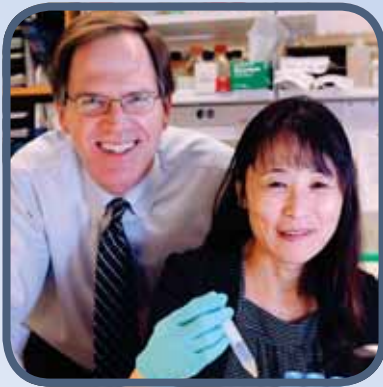




Department of Pediatrics



2010 Annual Academic Review



UT Southwestern Medical Center
Children's Medical Center Dallas



2010 Annual Academic Review

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UT Southwestern Medical Center
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Introduction and Chair Activities

The Department of Pediatrics at UT Southwestern Medical Center has three major missions:

- The constant effort to improve the standard of practice and the provision of the best quality of patient care to infants, children and adolescents who seek care or are referred to us from North Texas, other regions of the United States or other countries.
- The acquisition of new knowledge in developmental biology and pediatric care through research by pursuing unanswered questions and continuing to test and refine previously established ideas.
- The education of medical students, residents, postdoctoral fellows and other healthcare professionals by transmitting knowledge, instilling excitement for learning, nurturing and recognizing the critical mind, and translating and refining questions raised during the process.

Under the leadership of Dr. George Lister, Professor and Chairman of Pediatrics at UT Southwestern and Pediatrician in Chief at Children’s Medical Center, the department is clustered in 17 academic divisions, 16 representing traditional areas of clinical practice and one exclusively research-driven division. Within each clinical division, faculty members practice as a group to provide comprehensive services for their respective areas of expertise. Many faculty direct active research programs or engage in collaborative projects in areas closely aligned with their clinical interests. Each division also has specific educational goals for medical students and residents, and most divisions have fellowship programs aimed at providing education to prepare fellows for academic careers.

Dr. Julio Pérez Fontán, Professor and Vice Chairman of Pediatrics at UT Southwestern and Executive Vice President of Medical Affairs at Children’s Medical Center (CMC), had major responsibility for integrating the clinical programs of the Pediatrics department with those of other academic departments who have faculty at CMC, for overseeing the organization of research programs at CMC and for developing the Children’s Research Institute.

The department continued to grow, with the arrival of new leaders for some divisions and programs, while other division directors assumed new directions or new roles. Dr. George Buchanan announced his plans to relinquish his position as Director of Hematology-Oncology and an extensive national search identified top candidates for the position.

Forty-three new faculty members joined the department and 27 left UT Southwestern to pursue other opportunities. Recruitment of additional faculty continues in a number of areas to address the increase in demand for clinical services at Children’s, at both the Dallas and Legacy campuses, and to build a strong base in both laboratory and clinical research.

In the past year, Dr. Lister successfully applied for a K12 Award, Child Health Research Center Development Award, entitled, “Antecedents and Sequelae of Childhood Onset Diseases,” to support at least 4 junior faculty to launch their respective research careers. He will serve as the PI, and Dr. Shaul will be the Training Director. Dr. Perez Fontan will head the selection committee and a number of faculty, including Perrin White, Phil Shaul, Rashmin Savani, Michel Baum, Drew Feranchak, and Jim Amatruda will serve as training faculty.

The activities of Texas PASS (pediatric access to subspecialists) continued to increase. This is a service for primary care providers in North Texas who are seeing Medicaid patients, to provide 24/7 telephone consultation with subspecialty pediatricians and psychiatrists within 30 minutes of a request. This program is an effort to improve access to care for the huge number of children who are underserved, to reduce costs for lost time at work or lost days at school, to identify areas for continuing education and to build personal relationships between primary and subspecialty providers.



Texas PASS Team
Nicole Santiago, Dr. Carol Podolsky, Dr. George Lister and Jeanne Nightingale Teresi

North Texas Children's Study Coalition (G Lister, PI), which includes investigators from the UT Southwestern, UT Health Science Center Tyler, UT Health Science Center Houston School of Public Health and Battelle Memorial Institute to study families and children in Lamar County, TX, as participants in the The National Children's Study was in full operation. The coalition was also awarded selection as one of the national vanguard sites for provider based enrollment.



Faculty



George Lister, M.D.
Professor and Chairman of Pediatrics

George Lister, M.D., is Professor and Chairman of Pediatrics at UT Southwestern, holder of the Robert L. Moore Chair in Pediatrics and the Pediatrician-in-Chief at Children's. He earned his B.A. from Brown University in 1969 and his M.D., cum laude, from Yale University in 1973, where he was elected to the Alpha Omega Alpha Medical Honor Society in his junior year. While a student at Yale, he was awarded a Bay Area Heart Association Fellowship to work at the University of California-San Francisco (UCSF). Dr. Lister performed his residency in Pediatrics at Yale-New Haven Hospital from 1973 to 1975, where he began his research interest in post-natal adaptation to hypoxia. He performed a fellowship at UCSF and the Cardiovascular Research Institute from 1975 to 1978. His clinical training was in cardiology and neonatology with an interest in practicing in the emerging field of pediatric critical care medicine. He joined the faculty in the departments of anesthesia and pediatrics at UCSF before assuming a position at Yale in 1978, where he rose to Professor of Pediatrics and Anesthesiology. Dr. Lister founded the Section of Critical Care and Applied Physiology, started a fellowship program and was the Chief and the Director of the Pediatric Intensive Care Unit until he

left Yale in 2003, when he moved to his current position at UT Southwestern. In addition to his interest in academic development, Dr. Lister is involved in research focused on oxygen transport during postnatal development. In 1992 the National Institute of Child Health and Development (NICHD) appointed him chair of The Collaborative Home Infant Monitoring Evaluation, a multi-center program to study the efficacy of home monitoring for sudden infant death syndrome (SIDS). The research from this program resulted in major changes in the use of home monitoring nationally and internationally, and was the basis for complete revision of the American Academy recommendations. He served in this role for 10 years and received two special awards for leadership by the National Institute of Health (NIH); his clinical studies in this area remain supported by a grant from the NIH.

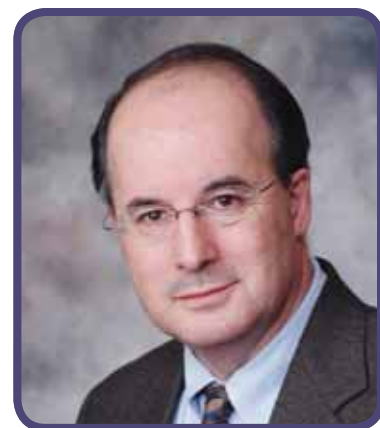
Dr. Lister has been an active member of national and international academic societies and has served in a number of leadership roles including President of the Society for Pediatric Research, Editor-in-Chief of the journal, *Pediatric Research*, President of the American Pediatric Society, and Councilor and Secretary-Treasurer of the International Pediatric Research Foundation. Dr. Lister has had an active role in a number of other academic activities, such as Chairman of the Critical Care Section of the American Thoracic Society, the SIDS Long-range Planning Committee for the NIH, and the Institute of Medicine Committee on post-market surveillance of pediatric medical devices. He is also a senior editor of *Rudolph's Pediatrics*, and has authored more than 150 scientific articles. He has served on the sub-board of critical care medicine and was the medical editor for 20 years, beginning with the inception of the board. He served as Chair of the Board of Directors of the American Board of Pediatrics. He also served on the Residency Review and Redesign Committee and serves on the Initiative for Innovation in Pediatric Education, national groups that are reassessing pediatric residency education in the United States.

Dr. Lister has a deep commitment to students, residents and fellows who wish to explore careers in medicine, particularly in academic fields. Toward this end, he directed an NIH-funded training program in Critical Care Medicine for 20 years, helped initiate the Student Summer Research Program, has participated actively in teaching programs in Eastern Europe, and served as the clinical director of the M.D.-Ph.D. program at Yale. His presidential

address to the Society for Pediatric Research in 1993 was entitled “Development of the Academic Pediatrician,” and to the American Pediatric Society in 2009 was entitled “The Complexity of Education in the 21st Century: What Can We Do.”

Among his other honors, Dr. Lister has been elected to membership of the Institute of Medicine of the National Academies and to the Academy of Medicine, Engineering, and Science of Texas. His deep commitment to teaching students, residents and fellows has earned him recognition through receipt of the Francis Gilman Blake Award and the Charles W. Bohmfalk Prize for teaching at Yale Medical School, a Fulbright Fellowship, the Distinguished Career Award of the Critical Care Section of the American Academy of Pediatrics, and the Society for Pediatric Research Maureen Andrew Mentor Award.

Julio Pérez Fontán, M.D., Professor and Vice Chairman of Pediatrics, holds the Joel B. Steinberg, M.D. Chair in Pediatrics and is serving as the Interim Director of Respiratory Medicine at UT Southwestern. He also is Associate Dean for Pediatric Services and Program Development at UT Southwestern and Executive Vice President of Medical Affairs at Children’s. The autonomic nervous system, control of airway smooth muscle and neurogenic inflammation are the focus of Dr. Pérez Fontán’s research. Dr. Pérez Fontán received his medical degree summa cum laude from the Universidad de Santiago de Compostela, Spain, in 1977. He performed his residency in Pediatrics at the Universidad Autonoma de Barcelona from 1978 to 1981, and a fellowship at the University of California and the Cardiovascular Research Institute in San Francisco from 1981 to 1984. Prior to joining the UT Southwestern faculty, Dr. Pérez Fontán was a member of the faculty at the University of California in San Francisco, Yale University and Washington University in St. Louis. He was honored as the Alumni Endowed Professor of Pediatrics at Washington University School of Medicine in 2001.



Julio Pérez Fontán, M.D.
Professor, Vice Chairman of Pediatrics

New Faculty

Cardiology

- Mark A. Clay, M.D., Assistant Professor
- Amy Juraszek, M.D., Associate Professor
- Tejas K. Shah, M.D., Assistant Professor
- Poonam Punjwani Thankavel, M.D., Instructor
- Surendranath Reddy Veeram Reddy, M.D., Assistant Professor

Critical Care Medicine

- Michael Green, M.D., Assistant Professor
- Vinai Modini Modem, M.D., Instructor
- Maria Teresa Zuluaga, M.D., Assistant Professor

Emergency Medicine

- Dane Fliedner, M.D., M.P.H., Assistant Professor
- Reagann McCreary, D.O., Assistant Professor
- Jennifer Pape, M.D., Instructor
- Rhiannon Shutka, M.D., Instructor

Endocrinology

- Amy Burton, M.D., Assistant Professor
- Roy Kim, M.D., Assistant Professor
- Ximena Lopez, M.D., Assistant Professor
- Ryan Stewart, M.D., Assistant Professor

Gastroenterology

- Amal Dutta, M.D., Ph.D., Instructor
- Aakash Goyal, M.D., Assistant Professor
- Koorosh Kooros, M.D., Assistant Professor
- Qin Li, M.D., Ph.D., Instructor
- Charina Ramirez, M.D., Assistant Professor

General Pediatrics

- Suzanne Dakil, M.D., Assistant Professor
- Erin E. Scheideman, M.D., Instructor
- Christy Turer, M.D., Instructor

Hematology-Oncology

- Mark E. Hatley, M.D., Ph.D., Instructor
- Tiffany Simms-Waldrip, M.D., Assistant Professor

Hospitalist Medicine

- Ayesha Ahmad, M.D., Instructor
- Kathryn Elizabeth Ban, M.D., Instructor
- Megan Durham, M.D., Instructor
- Melissa Harlan, M.D., Instructor
- Allison Hsu, M.D., Instructor
- Jennifer Johnston, M.D., Instructor
- Jennifer Rammage, M.D., Instructor
- Catherine Robben, M.D., Instructor
- Leticia Shanley, M.D., Instructor

Infectious Disease

- Carla Garcia, M.D., Assistant Professor

Neonatal-Perinatal Medicine

- Arlene Davis, M.D., Assistant Professor
- Julie Mirpuri, M.D., Instructor
- Emily Osier, Assistant Professor
- Muraleedharan Sivarajan, M.D., Assistant Professor
- Audra Stewart, D.O., M.P.H., Assistant Professor

Nephrology

- Katherine Twombly, M.D., Assistant Professor

Neurology

- Sailaja Golla, M.D., Assistant Professor
- Fares Kokash, M.D., Assistant Professor

Respiratory Medicine

- Preeti Sharma, M.D., Assistant Professor

Faculty Departures

Administration

- M. Douglas Baker, M.D., Professor

Allergy & Immunology

- William A. Neville, M.D., Clinical Assistant Professor

Critical Care Medicine

- Mandeep Chadha, M.D., Assistant Professor
- Fiona H. Levy, M.D., Associate Professor

Emergency Medicine

- Sara L. Beers, M.D., Assistant Professor
- Robert A. Wiebe, M.D., Professor

Endocrinology

- Bassil M. Kublaoui, M.D., Assistant Professor
- Y.C. Annie Wang, M.D., Assistant Professor

General Pediatrics

- Rebeca Alvarez-Piantini, M.D., Clinical Assistant Professor
- Jane Brotanek, M.D., M.P.H., Assistant Professor
- Susan Dibs, M.D., Clinical Assistant Professor
- Karen E. S. Meador, M.D., M.B.A., Assistant Professor

Hematology-Oncology

- J. Scott Cameron, M.D., Ph.D., Assistant Professor
- Matthew H. Porteus, M.D., Ph.D., Assistant Professor
- Charles T. Quinn, M.D., M.S.C.S., Associate Professor
- Christina Tarango, M.D., Instructor

Hospitalist Medicine

- Kenneth Chen, M.D., Instructor
- Laura Davidson Harn, M.D., Assistant Professor
- Jessica Lynn Lloyd, M.D., Assistant Professor
- Gayle Murray, M.D., Instructor

Infectious Disease

- Asuncion Mejias, M.D.

Neonatal-Perinatal Medicine

- Rodica Catrinel Marinescu, M.D., Assistant Professor
- Donald McCurnin, M.D., Professor

Faculty Promotions

Critical Care Medicine

- Fiona Levy, M.D., Professor

Emergency Medicine

- Craig Huang, M.D., Associate Professor

General Pediatrics

- Matthew Cox, M.D., Associate Professor
- Michael Lee, M.D., Associate Professor
- Rashmi Shetgiri, M.D., Assistant Professor

Hematology-Oncology

- Janna Journeycake, M.D., M.S.C.S., Associate Professor

Infectious Disease

- Jeffrey McKinney, M.D., Ph.D., Associate Professor, Resident Education Director

Nephrology

- Fangming Lin, M.D., Ph.D., Associate Professor

Pulmonary & Vascular Biology

- Michihisa Umetani, Ph.D., Assistant Professor

Rheumatology

- Alisa Gotte, M.D., M.S.C.S., Assistant Professor

Faculty Recognition

Several faculty members were recognized locally, regionally and nationally for their achievements and potential for contributions by receipt of various important honors and grants.

Clinical Scholars Program

- Dr. Timothy McCavit was selected in 2009 by the Department of Clinical Science as a new fellow for the Clinical Scholars Program. Fifteen pediatric faculty members have been honored by receipt of these competitive awards since the program's inception in 2005.

Excellence in Education Awards

Class of 2009 for MS4

- Dr. Myra Wyckoff – Acute Care

Class of 2010 for MS3

- Drs. Jose Aceves and Michael Dowling – Neurology
- Drs. Theresa Barton and Vineeta Mittal – Pediatrics

Class of 2011 for MS2

- Dr. Angela Mihalic – Clinical Medicine

Class of 2012 for MS1

- Dr. James Amatruda – Biochemistry
- Dr. Lewis Waber – Genetics

Major Local and National Recognition

- Dr. Kamal Bharucha received the 2009 President's Research Council Distinguished Young Researcher Award and a K-08 Physician Scientist Career Award.
- Dr. Drew Bird was named Dedman Family Scholar in Clinical Care.
- Dr. George Buchanan received the ASH Mentor Award for clinical science from the American Society of Hematology.
- Dr. Glenn Flores was the recipient of The Millie and Richard Brock Lectureship, Award and Visiting Professorship in Pediatrics from the New York Academy of Medicine.
- Dr. Robert Wiebe was recipient of a Pioneer Award from the Tennessee Emergency Medical Services for Children Foundation.
- Dr. Michihisa Umetani received the 2009 UT Southwestern O'Brien Kidney Research Center Pilot & Feasibility Award
- Drs. Rebecca Gruchalla and David Khan were named among The Best Doctors in Dallas by *D Magazine*.
- Twenty-three faculty were named Texas Super Doctors by *Texas Monthly*.

Twenty-eight junior faculty have received mentored research training awards in the past five years, including:

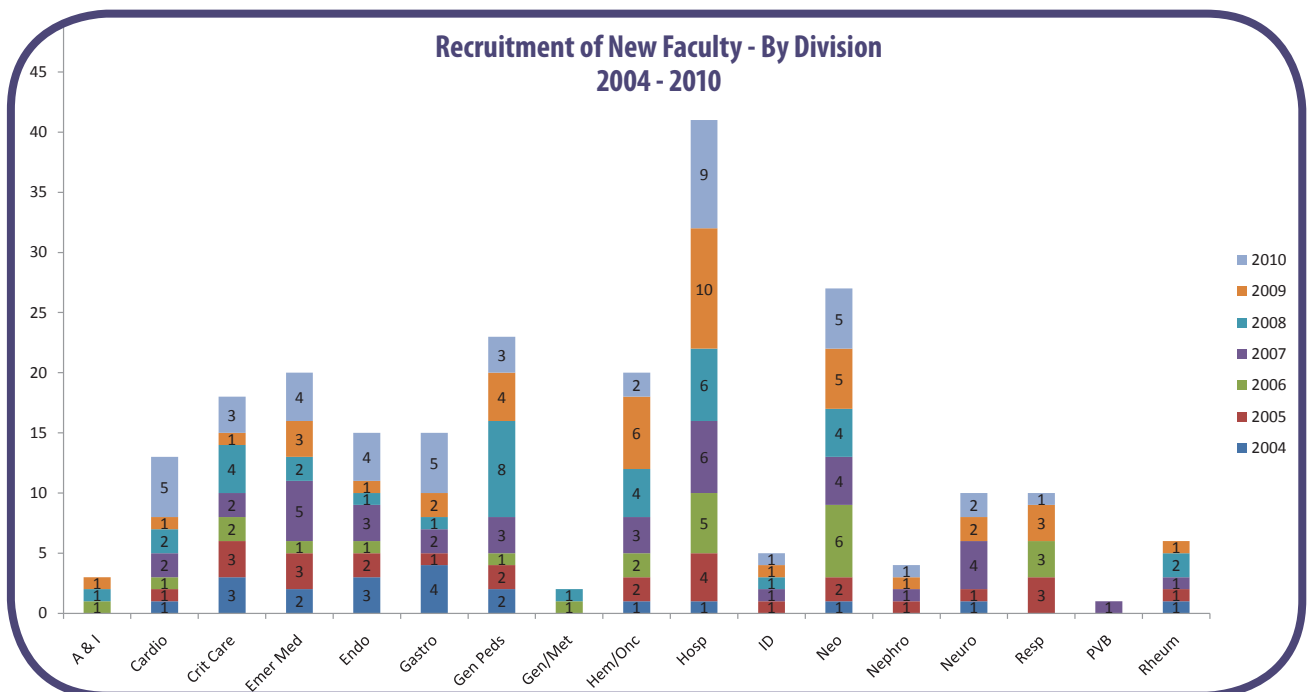
- 14 from K12 Clinical Scholars Program
- 3 from K12 Pediatric Scientist Development Program
- 1 from K12 Critical Care Scientist Development Program
- 10 from K08 Mentored Scientist Awards

Many other important achievements and contributions of the faculty are acknowledged throughout this report.

Plans for the Coming Year

The department continues to dedicate considerable effort toward recruitment of faculty as the Children's at Legacy campus grows in clinical activities and the clinical demands increase at Children's Dallas. As shown in the following figure, the Department has expanded substantially over the past five years and new divisions in Respiratory Medicine, Neurology and Pulmonary and Vascular Biology have been developed.

There will be continued support of entry-level faculty who are selected as Clinical Scholars in the Department of Clinical Science and those applying for extramural mentored research awards. Finally, the medical student, residency and fellowship programs remain major areas of importance for the department and are served by faculty who contribute as educators in a myriad of ways.



Activities of the Chair

Research Activities

- Mechanisms for apnea and bradycardia in infants during cardiorespiratory monitoring
- Response to hypoxia during postnatal development

Presentations/Teaching Activities

- “Managing Difficult Conversations,” American Society of Pediatric Nephrology Development Workshop, Pediatric Academic Societies Meeting, Vancouver, BC, May 2010
- “Challenges Facing Pediatric Chairs,” Pediatric Academic Societies Meeting, Vancouver, BC, May 2010
- “The Complexity of Graduate Medical Education: Developing Pediatricians for the 21st Century,” Department of Pediatrics Grand Rounds and Visiting Professor, The University of California at San Diego, March 2010

Major Administrative or Leadership Responsibilities

- Chair, Research Advisory Committee, American Board of Pediatrics
- Member, Credentials Committee, American Board of Pediatrics
- Member, American Board of Medical Specialties, American Board of Pediatrics
- Member, Long-range Planning Committee, American Board of Pediatrics
- Member, Long-term Investment Committee, American Board of Pediatrics
- Member, Subspecialties Committee, American Board of Pediatrics
- Member, Subspecialties Executive Subcommittee, American Board of Pediatrics
- Member, New Subspecialties Committee, American Board of Pediatrics
- Member, American Board of Pediatrics Foundation, American Board of Pediatrics
- Member, Joint Committee with AMSPDC, American Board of Pediatrics
- Member, Council of Past Chairs, American Board of Pediatrics
- Member, Research Scientific Advisory Committee, Blythedale CMC, New York
- Member, Maureen Andrew Mentorship Award Selection Committee
- Member, Pollin Award Selection Committee
- Senior Editor, *Rudolph’s Pediatrics*, 22nd Edition
- Associate Editor, *Current Opinion in Pediatrics*
- Member, Editorial Board, Mount Sinai Journal of Medicine
- Member, Coordinating Committee, National Child and Maternal Health Education Program

UT Southwestern Activities

- Member, Search Committee for Dean of Southwestern Medical School
- Member, Executive Clinical Chairs Committee
- Member, Dean’s Research Advisory Committee
- Member, Finance Committee
- Co-chair, Search Committee for Chair of Psychiatry
- Chair, Task Force on Global Health Programs and Programs Focused on Underserved Populations in the US
- Member, Selection Committee, Patricia and William L. Watson, Jr. Award in Clinical Medicine
- Chair, Autism Search Committee

Awards and Honors

- Best Doctors in America
- Texas Super Doctor, *Texas Monthly*

Collaborative Partnership with Premier Facilities

The Department of Pediatrics at UT Southwestern Medical Center offers enhanced opportunities through its close association with three premier teaching institutions:

- Children’s Medical Center Dallas
- Parkland Health & Hospital System
- Texas Scottish Rite Hospital for Children

In conjunction with UT Southwestern, there is access to state-of-the-art facilities and emerging technologies to provide the highest standard of care for patients.

UT Southwestern Medical Center

Ranked among the top academic medical centers in the world, UT Southwestern includes among its faculty four Nobel Prize winners, 40 physicians and researchers elected as presidents of their national specialty associations, and three-fourths of Texas’ medical members of the National Academy of Sciences – the most prestigious scientific society in America. It is one of the largest academic physician practices in the Southwest, serving as a major referral center for patients with complex diseases and providing care for nearly 97,000 total inpatient visits and approximately 1.7 million outpatient visits annually. A premier research institution pioneering breakthroughs in cardiovascular disease, cancer, neurosciences and women’s health, UT Southwestern offers an unsurpassed pediatric heart disease program in association with Children’s that achieved the first successful pediatric heart transplant in Dallas in 1988.



Children’s Medical Center Dallas

Children’s is one of the largest and busiest pediatric medical centers in the nation, with 559 beds and nearly 570,000 patient visits annually (inpatient and outpatient). Affiliated with UT Southwestern, Children’s is the only academic pediatric medical center in North Texas, and is dedicated exclusively to the comprehensive care of children from birth to age 18. Children’s is recognized among the best pediatric hospitals in the country by *U.S. News & World Report*, ranking in all 10 of the subspecialties covered in the survey, including Top 10 rankings in Orthopedics, Urology and Nephrology. In addition, Children’s is a Level I Trauma Center and a Magnet Recognition hospital for nursing excellence. Children’s

provides care in more than 50 pediatric subspecialties, and is a major pediatric kidney, liver, intestine, heart and bone marrow transplant center. The hospital continues to commit significant resources to expanding services, including the addition of new floors on the main campus in Dallas; a second full-service medical center in Plano, Texas; an outpatient care and surgery center in Southlake, Texas; and the establishment of a network of pediatric primary care offices located throughout the Metroplex.

Children’s Medical Center at Legacy

Children’s Medical Center at Legacy extends the world-class service of Children’s Medical Center to the growing number of families north of Dallas and beyond. The full-service hospital, located in Plano, Texas, includes 72 inpatient beds, six intensive care beds, four state-of-the-art operating rooms, a 24-7 emergency department, diagnostic and pharmacy services and a large outpatient care center. Children’s at Legacy offers a full array of pediatric subspecialty services, including cardiology, ENT, sports medicine and maternal fetal medicine. Like Children’s in Dallas, the medical staff at Children’s at Legacy includes specialists from UT Southwestern, providing a vast base of talent and knowledge. Located at 7601 Preston Road in Plano, Texas, the campus sits on a 155-acre site with “green space” preserved to provide an environment of healing and tranquility for patients and families.



Parkland Health & Hospital System

Parkland Health & Hospital System was named one of “America’s Best Hospitals” for 16 consecutive years by *U.S. News & World Report*. Parkland’s legacy of achievements includes the first certified Level I Trauma Center in the region with 62 percent of trauma cases in Dallas County treated at Parkland. Today the hospital offers Centers of Excellence in burns, cancer, cardiology, endocrinology, epilepsy, gastroenterology, orthopedics, spinal cord injuries, trauma, and women and infants. The Parkland Burn Center is the second largest civilian center in the United States and

is regarded as among the best. A 90-bed Level III Neonatal Care Unit provides the most skilled health professionals and state-of-the-art tools and equipment for 1,200 severely premature infants and neonates annually. More than 50 percent of the doctors in North Texas have obtained formal training at Parkland. From the poor and homeless to the wealthy, Parkland’s main hospital, 11 community health centers, 11 youth and family centers, nine women’s clinics and four mobile healthcare vans treat one of the largest and most diverse compositions of patients in the area.

Texas Scottish Rite Hospital for Children

Texas Scottish Rite Hospital for Children is one of the nation’s leading pediatric centers for the treatment of orthopedic conditions, certain related neurological disorders such as spina bifida, and learning disorders such as dyslexia. Serving Texas children from birth to age 18, the hospital has treated more than 200,000 patients since its inception, with 39,625 outpatient visits and 2,146 surgeries performed in fiscal 2010. The medical breakthroughs and new technologies developed through TSRHC’s research efforts, including the discovery of the first gene associated with idiopathic scoliosis, dramatically impact the lives of children worldwide.



Education

One of the three major missions of the Department of Pediatrics is the education of medical students, residents, postdoctoral fellows and other health care professionals by transmitting knowledge, instilling excitement for learning, and translating and refining questions raised during the process. Each division has specific educational goals for the students and residents. Most divisions also have fellowship programs which provide education to prepare fellows for an academic career.



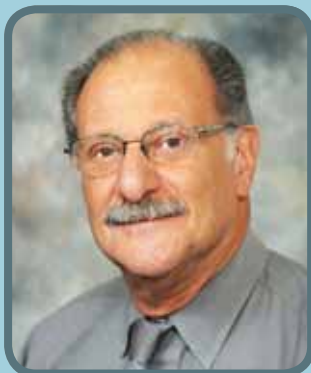
Soumya Adhikari, M.D.
Assistant Professor
Director, Pediatric Clerkship

Soumya Adhikari, M.D., Assistant Professor of Pediatrics at UT Southwestern Medical Center and Director of the Pediatric Clerkship, completed his residency at UT Southwestern/Children's Medical Center in 2004 and then pursued subspecialty training in pediatric endocrinology through a fellowship at UT Southwestern. Since the completion of his training Dr. Adhikari has split his time between his clinical responsibilities, providing care for children of all ages with hormonal disorders, his research interests, primarily focused on beta cell preservation in type 1 diabetes, and his role as Clerkship Director. Dr. Adhikari earned his Bachelor of Science degree at the University of Florida in Gainesville in 1996 and received his medical degree from the University of Miami School of Medicine in 2001.

Jeffrey McKinney, M.D., Ph.D., is Associate Professor of Pediatrics and the Residency Program Director. He has a B.S.E. in Biomedical Engineering from the University of Iowa College of Engineering. He also received a degree in Physiology at Oxford University as a Rhodes Scholar, followed by M.D. and Ph.D. degrees from the University of Iowa College of Medicine. To seek additional patient and geographic diversity, he was a house officer at Yale New Haven Children's Hospital, where he stayed as an infectious disease fellow and junior faculty member at Yale. Between 1998 and 2003 he received all three of Yale's top service or teaching awards for Pediatric Resident, Fellow and Attending of the Year. He was recruited to the Infectious Diseases faculty at Washington University in St. Louis in 2003, where he was elected Pediatric Teacher of the Year by residents in 2008 and medical students in 2009. Dr. McKinney has been with UT Southwestern Medical Center since 2009 in his role of program director. He holds the Harry W. Bass, Jr. Professorship in Education.



Jeffrey McKinney, M.D., Ph.D.
Associate Professor
Director, Pediatric Resident Education



Charles R. Rosenfeld, M.D.
Professor
Director, Pediatric Fellowship
Education

Charles R. Rosenfeld, M.D., Professor of Pediatrics, Obstetrics/Gynecology, and Anesthesiology in the Division of Neonatal-Perinatal Medicine at UT Southwestern, serves as the Director of Fellowship Education and holds the George L. MacGregor Professorship in Pediatrics. His research focus is on mechanisms modulating uteroplacental and umbilical blood flows, development of the renin-angiotensin system, cardiovascular role of estrogens in pregnancy and fetal-neonatal blood pressure regulation. Dr. Rosenfeld obtained his medical degree from Emory University, Atlanta, Georgia, in 1966. Post-doctoral training included Pediatric Residencies at Yale-New Haven Medical Center, New Haven, Connecticut, 1966 - 1967, and Bronx Municipal Hospital Center and Albert Einstein College Medicine, New York, New York, 1967 - 1970, a Pediatric Pulmonary Medicine Fellowship at Albert Einstein College of Medicine, 1970 - 1971 and a Research Fellowship in Neonatal-Perinatal Medicine at the University of Colorado Medical Center, Denver, 1971 - 1973. He joined the UT Southwestern faculty in July 1973. Dr. Rosenfeld has had continuous NIH funding for more than 30 years and has published more than 170 peer-reviewed manuscripts.

Medical Student Education

As one of four medical schools in the University of Texas system, UT Southwestern accepts approximately 230-240 students annually. The education of these students remains one of the core missions of the Department of Pediatrics. A solid foundation in childhood health and illness has long been recognized as one of the central components of a well-rounded medical education, and the department strives to offer students the opportunity to explore the full breadth of pediatric medical care through their many programs.

At the center of these offerings is the core clerkship in Pediatrics for third-year medical students at UT Southwestern. This required element of the medical curriculum consists of an eight-week rotation through the many care units housed at Children's Medical Center, in addition to select locations at Parkland Health & Hospital System and, uniquely, through the offices of select community pediatricians from around the North Texas area who volunteer to participate in student education by hosting medical students in their offices. During this eight-week rotation, students spend four weeks on the inpatient service units at Children's and another four weeks in various ambulatory settings. The inpatient experience is aligned to maximize student participation in all aspects of patient care: students spend two weeks of their time on a general pediatrics ward and two weeks on one of the hospital's subspecialty wards. The outpatient experience provides trainees a one-week exposure to neonatal care at the newborn nursery in Parkland, two weeks of ambulatory experience focused in the Medical Student Clinic, and the aforementioned opportunity to spend a week at the office of a private general pediatrician in the Dallas community. This latter week provides students a unique perspective into the provision of care outside of a traditional academic teaching environment.



In the Medical Student Clinic (MSC), third-year students work directly with attending physicians from the faculty of the Department of Pediatrics at UT Southwestern and with local pediatricians who volunteer their time. Knowing that patients who present to MSC will only be seen by them and their attending physician provides students a higher level of responsibility than in many other aspects of their 3rd year training. During these two weeks, students also rotate through many of the subspecialty care clinics located throughout the hospital to gain exposure to the full breadth of specialized care provided by staff physicians.

A full curriculum based on the core competencies as published by the Council on Medical Student Education in Pediatrics (COMSEP) is taught through bedside clinical supervision, daily rounds, in addition to various didactic sessions and interactive case-based discussions facilitated by faculty in nearly all the divisions in the Department of Pediatrics. The entire curriculum is reviewed on an ongoing basis based on feedback from medical school faculty, national regulatory agencies and students themselves. Newly this year, a web site dedicated to the student clerkship was created to give the students one place to turn for all their educational resources. Students rotating through the core clerkship continue to outpace national averages on standardized assessments. For the 2009-2010 academic year, UT Southwestern students scored three points above the national average for comparable pediatric clerkships on the National Board of Medical Examiners subject exam in Pediatrics.

Fourth-year medical students at UT Southwestern have more flexibility to tailor their academic schedule to meet individual learning goals. Whether students want to gain a more in-depth exposure to pediatric subspecialties in preparation for an eventual career in pediatrics or just to strengthen their foundation in caring for children in advance of another career path, the department offers numerous opportunities to fourth-year students through the facilities at Children's and Parkland. Students can immerse themselves in acute/intensive care experiences via rotations in the Neonatal Intensive Care Unit, the Pediatric Intensive Care Unit, Cardiovascular Intensive Care Unit and Pediatric Emergency Medicine.

Extended experiences in any of the various subspecialty clinics including Pediatric Hematology-Oncology, Nephrology, Gastroenterology, Endocrinology and others are available for fourth-year students as well. In addition, in the past

year, a total of 39 students from outside institutions came to UT Southwestern and Children's Medical Center to do visiting rotations in Pediatrics. The department also offers, and continues to strive to increase the number of, international-health elective opportunities for students.

Medical students rated their experience on their Pediatrics Clerkship in 2009-2010 as overwhelmingly positive. Student feedback from course evaluations has remained consistently positive, specifically as it relates to autonomy, promotion of clinical skills, and preparation for internship. On the 2010 graduation questionnaire, 91.5% of UT Southwestern students rated their educational experience as "good" or "excellent," continuing a trend of excellence in that measure for the past 5 years.

Faculty from the Department of Pediatrics also participate, often in leadership roles, in the more didactic curriculum of the first two years of medical school, including such key courses as genetics, biochemistry and medical ethics. Beginning with the 2007-2008 academic year, faculty members in the department also served as mentors in the new colleges system at UT Southwestern. Each mentored a group of six medical students in both first- and second-year classes and delivered curricula such as professionalism and ethics, communication skills like taking patients' histories, diagnostic and physical exam skills, and clinical reasoning and interpretation skills through weekly small group meetings. The first group of students to participate in the colleges program will graduate this year.



The department takes great pride in the quality of teaching provided by the entire faculty. At the 2010 Excellence in Education Annual Reception and Award ceremony, four faculty members in the department received teaching awards. These included one faculty member recognized for excellence for their role in the MS1 Preclinical curriculum (James Amatruda), an MS2 Preclinical Teaching Award (Angela Mihalic), and two Pediatrics Core Clerkship Teaching Awards (Christina Bourland and Paul Harker-Murray). Perhaps most telling, 26 students from the graduating medical school class of 2010 have chosen to pursue a career in pediatrics or some combined program including pediatrics.

Resident Education



2010-2011 Residents

The UT Southwestern Pediatric Residency Program at Children's Medical Center partners with the Department of Pediatrics faculty members to provide broad and deep educational experiences to our 100 UT Southwestern – Children's Medical Center pediatric house officers, as well as more than 200 visiting trainees in anesthesia, emergency medicine, family medicine and psychiatry. Each division in the Pediatrics Department contributes substantially to the Residency Program in important ways, including educating residents during each rotation, and through noon conference didactic presentations. Select faculty also serve as academic mentors for resident-prepared large group lectures in the context of our evidence based medicine series, the mortality and morbidity series, and the weekly department-wide featured case of the week teaching conference; as well as small group, literature-based, morning reports that develop critical thinking skills.

Residents go through 13 four-week rotations throughout the academic year. The rotations offer the residents their core education in pediatric medicine as practiced in the emergency room, pediatric ward medicine teams, newborn nursery, neonatal and pediatric intensive care units, and subspecialty ward service teams. Additional training in subspecialty consult services and other individualized training are offered as electives. Learning clinic-based pediatrics with continuity of care and longitudinal follow up occurs throughout training.

The program is evaluated twice yearly by multiple stakeholders. These evaluators include our cadre of longitudinal mentors, program leaders, educational leaders within the inpatient and ambulatory areas, and current and future chief residents. Evaluations include resident assessment of rotations and faculty, in-training examination scores, certifying examination scores, duty hours and other ACGME compliance issues, and an in-depth review of educational experiences by all divisions. All divisions meet to discuss resident feedback provided through resident evaluation of rotations.

Pediatric Residency Program Team

The program is led by Jeffrey McKinney, M.D., Ph.D., Program Director, who works closely and collaboratively with the program's two Associate Program Directors, Dorothy Sendelbach, M.D. and Lauren Gore, M.D., and the Program Coordinator, Dawn Bayé, MBA. They offer unique and complimentary talents and insights that strengthen the program and the education of its residents.



Dorothy Sendelbach, M.D., Associate Professor of Pediatrics and Associate Program Director, received her undergraduate degree in chemical engineering from Rutgers University. She graduated from New Jersey Medical School in Newark. She completed her residency at Children's Medical Center in 1985. She briefly worked in a pediatric emergency room, followed by seven years as a primary care pediatrician in an inner city clinic for the indigent and working poor. For the past 15 years, Dr. Sendelbach has worked in the Department of Pediatrics at UT Southwestern. Her clinical practice is as an attending pediatrician in the newborn nursery at Parkland Memorial Hospital where there are about 15,000 admissions annually and where she

serves as Medical Director. Her interests include breastfeeding promotion, jaundice screening, neonatal abstinence syndrome and pulse oximetry screening. Since 2006, Dr. Sendelbach has served as an Associate Program Director for the Pediatric Residency Program and is the primary leader of the mentorship program, for internal program reviews, and for new electives creation and development. She is part of UT Southwestern's medical student mentoring program, and was honored as the 2009 Physician of the Year among all Parkland physicians.

Lauren Gore, M.D., Assistant Professor of Pediatrics and Associate Program Director, received her undergraduate degree from Texas A&M University. She graduated from UT Health Science Center, where she received her M.D. Dr. Gore completed her residency at UT Southwestern in 2007. She also served as Chief Resident during 2007-2008, which sparked her interest in resident education. Mentoring is one of her true passions, and Dr. Gore serves as a mentor to the PL3 residents and guides the chief residents through their year. She has participated in recruitment of the new intern class, program development, continuity clinic logistics, and mentoring residents during CAT, M&M, and advocacy projects. Her in-depth and nuanced understanding of patient flow and care systems, honed as a former UT Southwestern - Children's Medical Center Chief Resident have profoundly improved integration of this year's ACGME patient safety mandates into the system.



The 2010-2011 Chief Residents were **Mindy Calandro, Diana Dickschat and David Troendle**. The chiefs are heavily involved in the day-to-day activities of the program and serve as a liaison among faculty members and residents. Chief resident focused project development efforts have led to substantial department-wide process improvements in house officer training, patient safety, and the front line use of medical literature and evidence based medicine.

Pediatric Residency Program Enhancements

Dr. McKinney, in his second year as Program Director, saw a reduction in resident work hours, mandated by the ACGME. Changes in resident schedules were lead by the chief residents (detailed in Chief Projects section). The mandated reduction in duty hours will also impact how residents learn, and develop their professional skills.

2010 saw several updates to the program. Feature examples are:

Resident Talent Development – Interest Groups

The residency program continues to see the importance of medical interest group development for the residents. To guide these interests, two new interest groups were developed, make a total of three groups:

- Innovations in BioMedicine (NEW) – serves as a research interest group. The residents meet regularly to discuss research articles with invited faculty members and fellows as presenters.
- Advocacy and Transnational Medicine Group (NEW) – topics discussed in this group include Community Needs Assessments, Policy Maker Interactions, Local Resource Partnerships and Advocacy Project Sustainability. The Advocacy and Transnational Medicine Group is lead by Nancy Kelly, M.D., and Christina Bourland, M.D.
- Primary Care Pediatrics – the group serves an avenue for residents interested in primary care pediatrics to learn about the field from leading primary care and public health physicians.

Incorporation of iPod Touches

In 2010, the residency program created a shift in how medical information is delivered to house officers, through the use of a dedicated medical education computer server network, and each house officer's iPod Touch. The iPod Touch allows residents to access key teaching videos, continuity clinic curriculum, archived resources and our state-of-the-art medical library in a timely, efficient manner. Delivering key information to residents with a swipe of the finger continues to improve patient care and safety.

Medical-Legal Partnership

The Medical-Legal Partnership aims to improve the health and well-being of vulnerable individuals, children and families by integrating legal services into the medical setting. The residents have now been successfully trained to identify those patients and families in need of legal services. The residents screen and identify social determinants that affect patients, reporting the concerns to the lawyers housed in Children's Medical Center. The services allow for the residents to be more complete and effective, advocates for their patients.

Dr. McKinney also focused on the following initiatives throughout the year:

- Intern Medical Literature Search and Clinical Citation Training Sessions
- Senior Resident Mortality and Morbidity Root Cause Analysis Conference Series
- Department Case of the Week Conference, to include real-time inter-service faculty discussions of key decision branch points in patient evaluation and treatments
- Medical Spanish Language Skills – Incorporation of Rosetta Stone within the program
- Community Advocacy Training
- Novel Recruiting Strategies and Tactics to Attract UT Southwestern / Children's Medical Center House Officer Candidates To Dallas

Chief Resident Projects

Beyond their essential day-to-day roles as teachers, role models, and leaders, the chief residents have been central to achieving specific program enhancements. The 2010 chiefs have incorporated the following into the Program:

Behavioral / Developmental Rotation Changes

The developmental pediatrics rotation, which takes place during the second year of residency, has undergone a number of changes this year. Many of these changes evolved from resident suggestions and requests for experiences they wanted to gain during this rotation. Rather than spending most of the block at Texas Scottish Rite Hospital for Children, the residents now spend time in a variety of clinics and schools in the Dallas metroplex. Residents spend time in a number of CMC clinics including low birth weight observing Bayley's developmental exams, international adoption and foster care clinic understanding the unique developmental issues this unique patient population presents, and the neurodevelopmental disabilities clinic.

The chiefs have designed a number of learning opportunities away from the hospital as well. Residents spend time at the Callier Center for communication disorders where they participate in various autism therapy groups, as well as learn about feeding difficulties in the pediatric population. The residents also spend time at the Crystal Charity Ball Autism clinic where they observe the entire intake and evaluation process of a child with concern for autism. Several clinic sessions are also spent with a private pediatrician in the Dallas area who specializes in the diagnosis and management of ADHD. The residents also have had the opportunity to spend time at the Shelton School for children with learning differences seeing a wide array of classroom environments, speech evaluations, and various therapy sessions.

Intern Retreat

The intern retreat has always been an opportunity for professional development as well as time for reflection on the events that have transpired throughout the year. As in prior years, time at the retreat was spent working on team building, as well as discussion about process improvement. In light of suggestions from prior residents, it was also decided to focus on one of the more difficult issues in pediatrics which has to do with death and the dying process among our patients. David Browning, who is a medical social worker from Boston Children's Hospital, facilitated an in-depth session with the interns regarding how medical professionals deal not only with terminal patients but also with these patient's families. The retreat also focused a great deal of time on how to begin designing and implementing a class wide advocacy project with the goal of making this project a "three year effort" rather than beginning a project late in the third year.

Schedule Changes

A significant amount of time this year was spent redesigning the residency program structure in light of the new ACGME duty hours regulations. Given that the new regulations allow for no more than 16 hours of call in a row for PL1s and no greater than 24 hours of call for PL 2/3s, there were a number of changes that needed to be implemented for the residency program. In order to begin the process of redesigning the schedule for the residency program, the program leadership made a list of important goals for this restructuring which included, but were not limited to, enhancing the educational value of residency, limiting the number of patient handoffs, and preserving exposure to a vast array of pediatric clinical diagnoses.

Educational Library

Last year, the residency program began working on a project that would deliver high quality educational materials to residents on demand. This year a delivery system was developed that allows residents to access a library of sentinel literature and training videos whether it be on their home computer, any computer on campus, or on their iPod Touch at the patient's bedside. The library continues to grow. It contains historic original descriptions of classic diseases from physicians such as Addison, Kawasaki and Stills, training videos of commonly preformed procedures, as well as contemporary articles to help with point of care decision making. This library teaches residents an appreciation of the literature and allows them to practice evidence based medicine more effectively and efficiently on the front lines.

Ethics Curriculum

This past year, a new objective oriented ethics curriculum was successfully developed and piloted. The curriculum utilizes frequently meeting small groups, longitudinal mentorship, and case based learning sessions to equip residents with tools necessary to identify, analyze, and resolve ethical issues in clinical medicine. The program looks forward to utilizing this curriculum for years to come to aid in our mission of training compassionate, principle based, ethical physicians of the future.

Mentor Program

A central element of the Pediatric Residency Program is its longitudinal mentorship actively provided to every resident. The mentor program was established in 2004 to increase the individualized approach to resident development and pursuit of educational goals. A mentor is assigned to a resident during intern orientation, and that resident/mentor dyad continues throughout the three years of residency training. The mentor relationship allows residents the one-on-one interaction with a faculty member that guides them through residency, career development, evaluation review, and guidance through individual residents' projects.

The mentor is not necessarily intended to be an expert specialist in the particular field of subspecialty training that a resident may choose to pursue. Rather, the mentor's focus is to provide oversight, general counsel and guidance pertinent to the individual in the process of developing as a well rounded pediatrician. The mentors are well positioned within the department to have broad connections to all subspecialty areas so that if a resident is interested in pursuing a particular path with some specificity, such as a research block, that mentor is of assistance in arranging such interactions.

In 2010, 15 faculty members served as mentors:

Soumya Adhikari, M.D.	Becky Ennis, M.D.	Dorothy Sendelbach, M.D.
Christina Bourland, M.D.	Lauren Gore, M.D.	Maeve Sheehan, M.D.
Laura Brumley, M.D.	Nancy Kelly, M.D., M.P.H.	Joel Steinberg, M.D.
Matthew Cox, M.D.	Pamela Okada, M.D.	Jennifer Walsh, M.D.
Maite de la Morena, M.D.	Raymong Quigley, M.D.	Myra Wyckoff, M.D.

This group meets monthly with the Department Chair and the Program Director to review each intern or resident's progress and career development.

Advocacy Curriculum

Advocacy has advanced to more than just residents completing an advocacy project, but now to an advocacy curriculum. Under the direction of Drs. Nancy Kelly and Christina Bourland the advocacy curriculum includes:

- Noon Conferences
- Web Based Learning
- Advocacy Interest Group
- Work with Resident Advocacy Leaders
- Advocacy Newsletter
- Year Specific Activities
 - Intern Year
 - Diary of patient issues that affect them
 - Intern retreat session
 - First Care activities (Medical Legal Program)
 - Second Year
 - Selection advocacy project
 - Adolescent activity
 - Third Year
 - Community pediatrics rotation
 - Implementation / completion of advocacy project

The Senior Residents completed advocacy projects that addressed many needs in the community. Many projects allowed for improvements in the hospital, community and culturally. Samples of the 2010-2011 advocacy projects are:

- Texas Cord Blood Banking
- Resource guide for practitioners, patients, and families in the Dallas Community dealing with Obesity and Asthma
- Resident education on talking to parents about a new diagnosis of Down Syndrome
- Child Abuse Prevention project through parent education in high risk populations (specifically working with teen moms with limited education and support)
- Palliative Care
- Substance Abuse – marijuana and its complications
- Shadowing and education experience with high school youth and hospital volunteers
- STAND – Smart Teens Against Nicotine and Drugs

Intern Recruitment

Intern recruitment saw a 15% increase in applicants interviewed, with 34 new intern positions offered for the 2011-2012 academic year. The new intern class brings a wide range of diversity, language skills, advocacy talents and research experience. Core interviewers increased their responsibilities during the recruitment season, not only interviewing candidates, but also providing an extensive analysis of a candidate's application. Our faculty graciously invested more than 1,000 hours in interviews alone. The core interviewers were:

Kathryn Ban, M.D.	Laura Klesse, M.D., Ph.D.	Catherine Robben, M.D.
Bradley Barth, M.D.	Joshua Koch, M.D.	Norberto Rodriguez-Baez, M.D.
Christina Bourland, M.D.	Karen Latour, M.D.	Zora Rogers, M.D.
Carolyn Cannon, M.D., Ph.D.	Benjamin Lee, M.D.	Pablo Sánchez, M.D.
Leticia Castillo, M.D.	George Lister, M.D.	Meghana Sathe, M.D.
Lina Chalak, M.D.	Tanya Martinez-Fernandez, M.D.	William Scott, M.D., M.S.
Mark Clay, M.D.	Timothy McCavit, M.D.	Dorothy Sendelbach, M.D.
Jennifer Cox, M.D.	Laura McClendon, M.D.	Philip Shaul, M.D.
Matthew Cox, M.D.	George McCracken, Jr., M.D.	Martha Stegner, M.D.
Cindy Darnell, M.D., M.S.C.S.	Jeffrey McKinney, M.D., Ph.D.	Elizabeth (Kaili) Stehel, M.D.
Lauren Gore, M.D.	Vineeta Mittal, M.D.	Bharath Thankavel, M.D.
Paul Harker-Murray, M.D., Ph.D.	Pamela Okada, M.D.	Marita Thompson, M.D.
Michele Hutchison, M.D., Ph.D.	Emily Osier, M.D.	Jennifer Walsh, M.D.
Shelby Joseph, M.D.	Ashish Patel, M.D.	Laura Wolovits, M.D.
Vijay Kalidindi, M.D.	Reina Patel, D.O.	Myra Wyckoff, M.D.
Nancy Kelly, M.D., M.P.H.	Marilyn Punaro, M.D.	

Resident Projects 2010-2011 Academic Year

Research

Matthew Fletcher, M.D.

- Dr. Matthew Fletcher, along with Dr. Tim McCavit, Assistant Professor in Pediatric Hematology-Oncology, were involved in a study examining the effect of timing of antibiotic administration on outcome in the febrile neutropenic population. The study is a retrospective chart review of all patients presenting to Children's with febrile neutropenia between 2001 and 2009 for the purpose of evaluating if the timing from presentation until the first dose of parenteral antibiotics affects outcome among pediatric patients with cancer and febrile neutropenia. Drs. Fletcher and McCavit's abstract was accepted for the ASCO Convention - June 4, 2011

Paul Tannous, M.D., Ph.D.

- Working title: Targeted ablation of dividing neural crest cells during cardiac outflow tract formation.
Mentor: Steven Kernie, MD, Associate Professor
Summary: During mid-gestation, cardiac neural crest cells migrate to the developing cardiac outflow tract where they contribute to truncal septation and valve formation. Using a transgenic mouse model we are able to selectively kill actively dividing neural crest cells, thus allowing disruption of outflow tract formation during a well-defined temporal period. The team is hoping to define a critical period of neural crest cell division which, if disrupted, will produce a phenotype similar to persistent truncus arteriosus.

Presentations

- **David Troendle.** Studying hepatobiliary transport and hepatocyte cell volume regulation in the lab of Dr. Andrew Feranchak, studies demonstrated 1) that hepatocyte cell volume regulation is dependent on ATP release and purinergic signaling, 2) that fatty liver cells have altered cell volume regulatory mechanisms stemming from a decrease in secretion of ATP, and 3) that this altered cell volume regulation can be overcome with the addition of extracellular ATP. Data was presented as a platform presentation at the 2010 PAS meeting in Vancouver.
- **Teena C. Thomas,** Soumya Adhikari, Joshua Smith, Perrin C. White. Transient Neonatal Hypocalcemia: Presentation and Outcomes. May 2010. Poster Session: Endocrine Clinical. May 2010. Data was presented as a poster presentation at the 2010 PAS meeting in Vancouver.
- **Margaret Trost,** Carla Garcia, Wai-Ming Lee, Michelle Gill. Spectrum of Disease Associated with the Diagnosis of Rhinovirus at Children's Medical Center of Dallas. May 2010. Data was presented as a poster presentation at the 2010 PAS meeting in Vancouver.
- **Anna Miller.** Single Balloon Enteroscopy to Confirm Crohn's Disease in a Pediatric Patient. Poster session at the 2010 NASPGHAN Annual Meeting (North American Society for Pediatric Gastroenterology, Hepatology, and Nutrition). October 2010
- **Jacquelyn Powers,** Carrye Cost, Kevin Cederberg, Patrick Leavey. Use of bone scintigraphy in osteosarcoma, a single institution review. Poster presentation at ASPHO (American Society of Pediatric Hematology Oncology). April 2011.
- **Natasha W. Hanners,** Sylvia Trevino, Rita M. Gander, Linda Byrd, Pranavi Sreeramoju, Jane D. Siegel, Mambarath A. Jaleel, and Pablo J. Sanchez. Eradication of Vancomycin-Resistant Enterococcus faecium (VRE) from a Neonatal Intensive Care Unit (NICU). Describing the clinical characteristics of infants colonized with VRE in our NICU, maternal characteristics of those infants and interventions used to control the outbreak. Poster presentation at 2011 PAS meeting.
- **Carlos Oliveira,** Vineeta Mittal, Benjamin Lee, Benjamin Martin, Reina Patel, Rashmi Shetgiri, Glenn Flores. American Federation for Medical Research Southern Regional Meeting. February 2011 "Do Family-Centered Rounds improve parent satisfaction, communication, coordination of care, patient safety, outcomes, hand-offs, and trainees education? A qualitative study of parents of hospitalized children."
- **Sara Franzen, MD,** Christina Sakai, MD, Rashmi Shetgiri, MD and Glenn Flores, MD. Poster Presentation at 2011 PAS Conference 'Bridging the Gap of Mental Healthcare in the Transition to Adulthood: The Perspectives of Emancipated Foster-Care Youth'
- **Carlos Oliveira,** Pablo J Sanchez, Alicia Guzman, Diana Vasil, Nancy Miller. Pediatric Academic Societies Poster presentation Denver 2011: Abstract title: Race and Ethnicity of Mothers with Spanish Surnames
- **Amy Walz, MD.** Poster Presentation. American Society of Hematology Oncology Conference. "Progression Free Survival and Outcomes of Tectal Plate Lesions in Children." Mentor-Dr. Laura Klesse. 2011

Publications

Joanna McKey

- **McKey J., Dimeff R.** (in press 2012). Chapter42: Sports allergy and immunology. In: Harrast M., Finoff J. Sports Medicine Study Guide and Review for Boards.

Certifications

Heather Miller

- Helping Babies Breath Certification as Instructor. 2011



2010 Graduating Residents

Fellow Education

In January 2005, the department established an interdisciplinary program for subspecialty education. The objective, a work in progress, is to develop a departmental repository of educational and administrative resources and experiences to enrich the opportunities offered by the individual subspecialty training programs. The program is directed by Dr. Rosenfeld, who has more than 35 years experience in postgraduate education and research, in conjunction with the Program Directors, other faculty and, very importantly, the fellows. Central to the program's activities is a bimonthly conference designed to explore and discuss institutional resources, examine approaches and requirements needed to initiate clinical and laboratory research, plan a career and make career choices, present ongoing research by faculty and fellows, and provide a site for social interaction and discussions between trainees from all subspecialties. The program is unique in that much of the ACGME required core curriculum can be achieved in a manner that best meets the needs of each trainee.

During 2010 there were 97 subspecialty trainees within the various divisions. Tremendous value is placed on preparing these young pediatricians to undertake careers as clinician-investigators, teachers, subspecialty consultants and, more generally, as contributors to the growing body of knowledge in pediatric medicine and developmental biology. Fellowship education is viewed as the first and most important step in the transfer of the academic mission to the next generation. The last decade has been associated with a substantial change in postgraduate education, prompted by the recognition that the "old" apprenticeship system often shortchanged the education of the trainee in the interest of providing clinical service. This has resulted in guidelines that guarantee the integrity of the educational environment against the demands that the changing healthcare landscape has been applying on academic centers. Although the spirit of these guidelines has been welcomed by the academic community, the balance between clinical responsibility and education remains an issue that is in flux.

The department, therefore, sees opportunity in this changing educational environment. Key to realizing this opportunity is acknowledging that subspecialty training must accomplish three goals:

1. Prepare future subspecialists cognitively and technically to practice their discipline proficiently using an evidence-based approach
2. Provide analytical skills and critical thinking necessary to confront conditions they may not have previously encountered
3. Engender a desire to advance knowledge and improve care through research and teaching

To facilitate the pursuit of these goals, each division has a training program that provides the clinical experience and research environment for trainees to be exposed to scientific investigation and be taught the means to translate inquiry into scholarship. All subspecialty programs were reaccredited by the Residency Review Committee of the ACGME in 2008 and contain clinical and research experiences in accordance with the guidelines set forth by the American Board of Pediatrics. In compliance with these guidelines, each trainee has a Scholarship Oversight Committee that assists the Program Directors in monitoring each trainee's research experiences.

The Department of Pediatrics encourages its subspecialty fellows to participate in national and local activities that will enhance their education. UT Southwestern's fellows have been recognized for their accomplishments and academic potential by receiving awards and grants from many sources. Several fellows also have competed successfully for fellowships from the Pediatric Scientist



2010 Graduating Fellows

Training Program and K-awards from the NIH or analogous mentored research grants. The Department and Medical School are committed to encouraging and assisting talented physicians to develop an academic career; to this end, UT Southwestern has created a Physician-Scientist Training Program and a Curriculum in Patient-Oriented Research to help launch the careers of promising trainees.

Twenty-six of the 97 fellowship trainees Department completed their training in June 2010. Fifteen of the 26 assumed academic positions in various medical schools, with 53% remaining on the faculty at UT Southwestern. Notably, three trainees chose to do additional training/research, while the remaining trainees entered into clinical practice. Of the graduating fellows, 35% received peer-reviewed funding for their fellowship research project (e.g., the American Academy of Pediatrics) and eighteen published peer-reviewed manuscripts prior to completing their training. This group also presented 51 abstracts at regional, national or international meetings during their senior year.

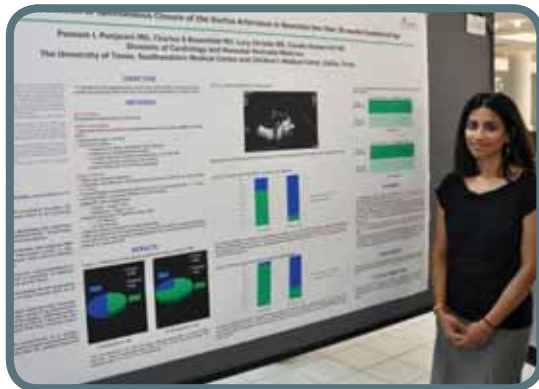
The future of pediatric subspecialty training continues to change at UT Southwestern. Separate conferences have been established to meet the individual needs of the 1st year and the 2nd-3rd year trainees in August and September.

A notable change in our Training Programs was the establishment of a Senior Fellows' Research Day on May 25, 2010. There were 18 poster presentations and five oral presentations, the latter chosen after abstract reviews by the faculty. This was followed by a dinner for all trainees, mentors, program directors and division directors and a presentation by Dr. Alan Schwartz, Chairman of Pediatrics, Washington University School of Medicine, on identifying opportunities for career development. Awards were given for the best poster and oral presentations. Second year trainees presented their research in the second half of the core curriculum in order to receive timely critical review from their peers and the faculty at an early stage in their research efforts.



Pediatric Endocrinology graduating fellow, Dr. Micah Olson, discusses his research project with keynote speaker, Dr. Alan Schwartz, at the 1st Annual Fellows' Research Day.

Best Poster Presentation



Poonam Punjwani, M.D.
Division of Pediatric Cardiology

Echocardiographic Prediction of Spontaneous Closure of the Ductus Arteriosus in Neonates less than 30 weeks Gestional Age

Best Oral Presentation



Mark Hatley, M.D., Ph.D.
Division of Pediatric Hematology-Oncology

MicroRNA-21 Drives Non-small Cell Lung Cancer Tumorigenesis through the Relieving Inhibition of the Ras Pathway and Inhibiting Apoptosis

Allergy & Immunology

The Allergy and Immunology division in the Department of Pediatrics was established approximately eight years ago. Originating in the Department of Internal Medicine, it now spans both departments, with four Pediatric-based and two Internal Medicine-based faculty members, each board certified in Allergy and Immunology. Pediatric allergist specialists, Drs. Indulekha Warriar, J. Andrew Bird and William Neville see children with allergic disorders and asthma at Children's, staffing eleven allergy clinics per week. In addition, Dr. Maite de la Morena has established a primary immunodeficiency program at Children's. She sees all inpatient consultations for immunodeficiency disorders and has three clinics per week during which she evaluates these patients.

Dr. David Khan is the Program Director of the Allergy and Immunology fellowship program. Both he and Dr. Rebecca Gruchalla, Division Director, see adults and children with asthma and allergic disorders at the Aston Center at UT Southwestern.

The division continues to participate in both clinical and basic science research efforts. As both a clinical and a mechanistic site in the Inner City Asthma Consortium (ICAC), it continues to expand its research efforts in pediatric asthma. The division also collaborates with various basic scientists on campus: Drs. Michelle Gill, Nitin Karandikar and David Farrar.

In addition to asthma research, the Clinical Immunology Program at UT Southwestern, directed by Dr. de la Morena, was awarded recognition by the Jeffrey Modell Foundation as a Center of Excellence for diagnosis and treatment of primary immunodeficiency diseases. The Immunology Program serves a large geographic referral area encompassing North Texas, eastern New Mexico, Oklahoma, western Louisiana and southern Arkansas. This comprehensive program provides both diagnostic and state-of-the-art treatment opportunities for patients with primary immunodeficiency diseases.

Furthermore, the Immunology Program is committed to the education of physicians and other healthcare providers, trainees, the general public, patients and families regarding diagnosis, manifestation, natural history and treatment of primary immunodeficiency diseases.

Faculty

Rebecca Gruchalla, M.D., Ph.D., Professor of Internal Medicine and Pediatrics, is the Division Chief of Allergy and Immunology at UT Southwestern and holder of the William A. Sellars, M.D. and Joyce M. Sellars Distinguished Chair in Allergy and Immunology. She received her Ph.D. in Immunology in 1981 and her medical degree in 1985 from UT Southwestern and her Bachelor of Science degree from Texas Tech University, Lubbock, Texas, in 1976. Dr. Gruchalla completed her residency in Internal Medicine at The Hospital of the University of Pennsylvania in Philadelphia in 1988 and her fellowship training in Allergy and Immunology at UT Southwestern in 1990. Dr. Gruchalla's clinical interests are focused on anaphylaxis, asthma, drug allergy, mastocytosis and urticaria. In addition to her clinical activities, Dr. Gruchalla is principal investigator of the Inner City Asthma Consortium, Dallas site. This Consortium is a multi-site National Institutes of Health (NIH)-funded consortium that is performing both clinical and mechanistic studies pertaining to pediatric inner-city asthma. In 2007, Dr. Gruchalla was honored with the Gail G. Shapiro Memorial Lectureship and received the Women's Involvement in the American Academy of Allergy, Asthma and Immunology Special Recognition Award. She currently serves on the Board of Directors of the American Board of Allergy and Immunology and on the Editorial Board of the *Journal of Allergy and Clinical Immunology*. She recently completed a four-year term on the Board of Directors of the American Academy of Allergy, Asthma and Immunology.



Rebecca Gruchalla, M.D., Ph.D.
Director, Pediatric Allergy & Immunology

Our newly opened Food Allergy Center is the
only academically affiliated pediatric food allergy program
in North Texas.



John Andrew Bird, M.D.

Assistant Professor, Pediatrics and Internal Medicine
Dedman Family Scholar in Clinical Care

Clinical/research expertise: Food allergy treatment, anaphylaxis, eosinophilic esophagitis, development of oral tolerance

Education: Texas A&M, College Station, B.S., *cum laude*, 1999; UT Health Science Center at San Antonio, M.D., 2003

Post-doctoral training: Baylor College of Medicine, Houston, TX, Intern and Resident, Pediatrics, 2003-2006; Fellow, Allergy and Immunology, 2006-2008; Duke University Medical Center, Durham, NC, Clinical Research Fellow, Food Allergy, 2008-2009



M. Teresa (Maite) de la Morena, M.D.

Associate Professor, Pediatrics and Internal Medicine
Director, Jeffrey Modell Diagnostic Center for Primary Immunodeficiency Diseases

Clinical/research expertise: Primary immunodeficiencies, transplantation

Education: University Complutense De Madrid, Madrid, Spain, M.D., 1983

Post-doctoral training: Hospital Clinico San Carlos, Madrid, Spain, Research Assistant, Surgery, 1983-1986; Hospital General Gregorio Maranon, Research Assistant, Immunology, Madrid, 1986-1987; All Children's Hospital, University of South Florida, St. Petersburg, FL, Fellow, Immunology and Research, 1987-1988; Intern, Pediatrics, 1988-1989; Resident, Pediatrics, 1989-1991; Fellow, Allergy and Clinical Immunology, 1991-1994; Fellow, Clinical Laboratory Immunology, 1994-1995



David A. Khan, M.D.

Professor, Internal Medicine
Director, Allergy and Immunology Fellowship Program, UT Southwestern
Director, Asthma and Allergy Clinic, Parkland Memorial Hospital

Clinical/research expertise: Rush immunotherapy, anaphylaxis, mood disorders in asthma, nonallergic rhinitis and alternative therapies for chronic urticaria

Education: University of Illinois School of Medicine, Chicago, M.D., 1988

Post-doctoral training: Good Samaritan Medical Center, Phoenix, AZ, Resident, Internal Medicine, 1988-1991; Mayo Clinic, Rochester, MN, Fellow, Allergy and Immunology, 1991-1994



William Neaville, M.D.

Clinical Assistant Professor, Pediatrics and Internal Medicine

Clinical/research expertise: Asthma and allergies

Education: University of Arkansas at Little Rock, B.S., 1993; University of Arkansas for Medical Sciences, Little Rock, M.D., 1997

Post-doctoral training: University of Arkansas for Medical Sciences and Arkansas Children's Hospital, Little Rock, Resident, Pediatrics, 1997-2000; University of Wisconsin, Madison, Fellow, Allergy and Immunology, 2000-2003



Indulekha Warriar, M.D.

Assistant Professor, Pediatrics and Internal Medicine

Clinical/research expertise: Asthma, allergies, immunology, pharmacology

Education: Medical College, Trivandrum, University of Kerala, India, M.B.B.S., 1991

Post-doctoral training: Trivandrum Medical College Hospital and SAT Hospital, India, Intern, 1990-1991; Ophthalmic Hospital, Trivandrum, India, Graduate Student, Ophthalmology, 1991; Government BJ Medical College, India, Graduate Student, Radiology, 1991-1993; Children's Hospital of Michigan, Wayne State University, Detroit, Resident, Pediatrics, 1994-1997; Fellow, Clinical Pharmacology, 2003-2006; Fellow, Allergy and Immunology, 2005-2006; Research Fellow, Allergy and Immunology, 2007

Post-doctoral Fellows

Completed June 2010

Gene Devora, M.D.

Research Interests:

Immunopathologic changes in nasal polyps following systemic corticosteroids

Eric Kovash, M.D.

Research Interests

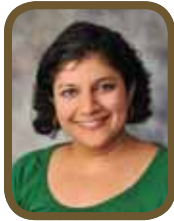
Retrospective analysis of the safety and efficacy of drug challenges; review of the efficacy of second generation antihistamines in chronic antihistamines

Robert Silge, M.D.

Research Interests:

Role of microRNAs in T cell development

2nd Year



Pooja Paranjpe, M.D.

Research Interests:

Quality of life in food allergic patients



Stephanie Regan, M.D.

Research Interests:

Therapies for management of chronic urticaria

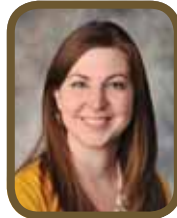
1st Year



Michael Alvares, M.D.

Research Interests:

Nasal polyps



Erin Clarke, M.D.

Research Interests:

Asthma and changes in the weather



Leon Kao, M.D.

Research Interests:

Risk factors for subjective symptoms during drug challenges; predictive value of food testing in adults with chronic rhinitis or asthma

Clinical Research Staff

Maria Crain, APN

Allergy Clinic

Cangzhuan (Caroline) Dong

Research Associate

Deborah Gonzales

Clinical Data Specialist

Holly Grannon, RN

Immunology Clinic

Rebecca Hardy

Senior Research Nurse

Nan Jiang

Research Associate

Kristen Malone, RN

Allergy Clinic

Brenda Lewis

Clinical Data Specialist

Dolores Santoyo

Research Coordinator

Brooksie Schultz, RN

Allergy & Immunology Clinic

Elizabeth Tschoepe, RN

Allergy & Immunology Clinic

Research Activities

Under Dr. Gruchalla's direction, the division continues to expand both its clinical and basic science research efforts in asthma. UT Southwestern Medical Center was among 11 institutions selected by the National Institutes of Health to receive \$56 million over five years as part of the Inner City Asthma Consortium (ICAC). The ICAC investigates novel treatments and causes of asthma in urban children. Ongoing studies include a prospective, longitudinal evaluation of environmental factors that influence the development of asthma. The consortium is administered by the University of Wisconsin-Madison. In addition to UT Southwestern, research is being conducted at Boston University, Children's Memorial Hospital in Chicago, Children's National Medical Center in Washington, D.C., Henry Ford Health System, in Detroit, National Jewish Health in Denver, Johns Hopkins University in Baltimore, Mount Sinai School of Medicine in New York, St. Louis Children's Hospital and University of California, San Francisco.



Dr. Drew Bird enrolled five subjects in a study using peanut oral immunotherapy (OIT). OIT is an experimental treatment for food allergy that involves safely ingesting small amounts of the food to which the person is allergic and increasing the amount on a regular basis. He is working with Dr. Michelle Gill, Assistant Professor, Pediatric Infectious Disease and Internal Medicine, to understand the

immunologic changes that accompany the development of desensitization to peanuts during peanut OIT. Other studies performed in 2010 included two multi-center trials examining the safety of giving the flu vaccine to a child with egg allergy, and understanding the effects of a cooking class on the quality of life for families dealing with food allergies.

Clinical Activities

Asthma and Allergy

The Asthma and Allergy outpatient clinic is equipped to diagnose and manage the whole spectrum of allergic diseases. There are nine half day clinics per week to provide care for patients. An average of 200 patients are seen per month for evaluation and management of various atopic diseases, including, but not limited to, asthma, allergic rhinitis, atopic dermatitis, food allergy, insect sting allergy and drug allergy. Procedures such as skin prick testing for environmental and food allergens, hymenoptera venom allergy testing and testing for drug allergies are performed by trained personnel. Other services offered are immunotherapy - both traditional and rush - and anti-IgE immunoglobulin administration.

A Pulmonary Function Lab is available for spirometry as well as exhaled nitric oxide studies for the evaluation and management of patients with asthma. Providers work closely with educators from the Asthma Education and Asthma Management programs to provide a comprehensive management strategy for patients with severe asthma. Special procedures such as drug challenges and food challenges are also performed in the outpatient clinic.

A combined Allergy/Immunology and Otolaryngology sinus clinic (CASCADE) was established recently to provide comprehensive care for patients with chronic sinusitis. One half-day clinic per month is offered at either the Dallas or Legacy campus. To facilitate care, patients who are seen in these clinics have a complete evaluation of allergen sensitization patterns and immunological system, as well as an otolaryngological evaluation in one setting.

An active inpatient consult service is available for evaluation of patients with allergic diseases. Consults are usually requested in cases of suspected drug-allergy, anaphylactic reactions and severe asthma.

Food Allergy

In September of 2010, the Food Allergy Center at Children's Medical Center, which is directed by Dr. Drew Bird, officially opened its doors. This multidisciplinary center, in association with UT Southwestern, is the only academically affiliated pediatric food allergy program in North Texas. As such, the Center provides comprehensive care for patients who have been diagnosed with food allergies and conducts research that is instrumental in developing treatments, therapies and, ultimately, a cure for food allergies. Its staff also works tirelessly throughout the region to educate parents, healthcare providers, school personnel and community stakeholders to help children and families navigate the many challenges associated with this complex health issue.



The grand opening of the Children's Medical Center Food Allergy Center set a high standard of excellence for the future of the Food Allergy Program. The new Center was made possible with the support of the Robert H. Dedman, Jr. Family Foundation, The Robert and Nancy Dedman Foundation and Mrs. Robert H. Dedman, Sr. Their \$2.35 million gift supported construction costs and additional infrastructure needs. The event attracted nationally recognized leaders in the food allergy field such as Dr. Hugh Sampson from the Jaffe Food Allergy Institute at Mount Sinai Medical Center in New York City. The Food Allergy Collaborative is a partnership between Children's Medical Center and Food Allergy Institute (FAI). The collaborative will be an annual event to host key leaders in food allergy research and advocacy.

During the Center's first year, Dr. Bird completed more than 950 clinical visits. In addition, more than 35 food challenges were conducted in 2010. Food challenges are performed when laboratory and skin testing have left uncertainty as to whether a child is allergic to a particular food. Small amounts of the potentially allergenic food are given in incremental doses over an hour and the child is observed for two additional hours. If the child has an allergic reaction, the food is removed from the diet. If the child is able to tolerate a full serving without a reaction, the food is reintroduced into the child's diet.

Immunology

Directed by Dr. de la Morena, the Immunology outpatient clinic at Children's serves as a referral center for primary immunodeficiency diseases for North Texas, southern Oklahoma, Arkansas, Louisiana and New Mexico. Patients with recurrent, persistent or unusual infections are evaluated for an inherited disorder of immune function. The clinic has expertise for management of all established primary immunodeficiency disorders (>155 disorders currently recognized). Referrals for periodic fever syndromes and evaluations for immunosuppressed states post transplantations also are seen in clinics.

Assisted by clinic personnel Holly Grannon and Elizabeth Tschoepe, more than 500 patients have been seen in the outpatient clinics. The Immunology program currently follows more than 150 established primary immunodeficiency diseases. More than 25 patients receive infusions of gammaglobulin regularly. Inpatient consultation services for evaluation of immunodeficiency are available seven days a week. More than 100 inpatient consults were provided last year.

In collaboration with Drs. Victor Aquino and Jennifer Cox of the Hematopoietic Stem Cell Transplantation (HSCT) team at Children's, 11 patients have received hematopoietic cell transplantation for primary immunodeficiency diseases. All are doing well.

- 1 Interferon-gamma defect
- 1 Chediak Higashi syndrome
- 1 Wiskott Aldrich syndrome
- 2 Hemophagocytic Lymphohistiocytosis (HLH)
- 5 Severe combined immunodeficiencies (SCID)
- 1 Hyper IgM

Presentations/Teaching Activities

The Allergy and Immunology division provides the major instruction to pediatric residents in the evaluation and management of children with allergic diseases, asthma and immunodeficiency diseases. It also provides didactic teaching for the pediatric residents on the basics of allergy and immunology and directs teaching for the pediatric residents in the regular departmental clinical conferences and as part of the inpatient consultation service.

An Allergy and Immunology elective is available for pediatric residents, and fourth-year medical students. The objectives of the elective are to:

- Develop a working differential diagnosis of allergies, asthma and primary immunodeficiencies;
- Learn how to conduct a complete physical exam including the upper and lower airways;
- Examine and discuss patients from all major allergy and immunology categories: allergic rhinitis, asthma, urticaria, drug allergy, food allergy and primary immunodeficiency.

Pediatric residents see outpatients in our clinics under the supervision of one of the members of the division faculty. Relevant articles about specific allergic and immunologic disorders are provided to residents at the beginning of each rotation and residents attend clinical conferences offering didactic teaching for fellows. In addition to resident training, the division has one of only 71 accredited programs for fellowship training in Allergy and Immunology; Dr. David Khan is the Program Director.

Rebecca Gruchalla, M.D., Ph.D.

- “Induction of Drug Tolerance Procedures,” Symposium, American Academy of Allergy, Asthma and Immunology Annual Meeting, New Orleans, LA, February 2010

J. Andrew Bird, M.D.

- “Advances in the Treatment of Food Allergy,” Texas Health Research and Education Institute Grand Rounds, Texas Health Presbyterian Hospital, Dallas, February 2010
- “Impact of Oral Food-Specific Immunotherapy (OIT) on Health Related Quality of Life (HRQL) of Children and Parents During Build Up of Tolerance” and “Double-Blinded Placebo Controlled Sublingual Immunotherapy (SLIT) Trial of Peanut Allergy,” American Academy of Allergy, Asthma and Immunology 2010 Annual Meeting, New Orleans, LA, February 2010
- “Food Allergy: Desensitization and Tolerance,” 12th Annual Texas Allergy, Asthma, and Immunology Society, Allergy for the Allergist Meeting, Fort Worth, May 2010
- “Diagnosing and Managing Food Allergies,” Department of Pediatrics Grand Rounds, UT Tyler, September, 2010
- “How Food Allergies Affect a Family,” Children’s Women’s Auxiliary Luncheon, Dallas, TX, October 2010
- “Recent Advances in Management & Treatment of Eosinophilic Esophagitis,” Hands of Hope Eosinophilic Support Group, Plano, TX, November 2010

M. Teresa (Maite) de la Morena, M.D.

- “Understanding the Immune System of the Premature and the Term Neonate,” The 14th International Congress on Infectious Diseases, Miami, FL, March 2010

David A. Khan, M.D.

- “Allergic Rhinitis with Negative Skin Tests” and “Rush Immunotherapy,” Grand Rounds, Allergy Society Meeting and Winthrop University, Long Island, NY, January 2010

Major Administrative or Leadership Responsibilities

Rebecca S. Gruchalla, M.D., Ph.D.

- Director, Division of Pediatric Allergy and Immunology
- Member, Scientific Advisory Board, Bioinformatics Information Support Contract, DAIT, NIAID
- Member, Board of Directors, American Board of Allergy and Immunology (ABAI)
- Member, Editorial Board, Journal of Allergy and Clinical Immunology
- Secretary, Board of Directors, ABAI
- Medical Director, Allergy and Immunology Services, Children’s

J. Andrew Bird, M.D.

- Member, American Academy of Pediatrics, Allergy and Immunology subcommittee
- Member, American Academy of Allergy, Asthma and Immunology, Food Allergy, Anaphylaxis, Dermatology and Drug Allergy Interest Section

- Moderator, American Academy of Allergy, Asthma, and Immunology 2010 Annual Meeting, New Orleans, LA
- Reviewer, 2010 Nurse Excellence Award Review Committee, Children's Medical Center
- Fellow, American Academy of Pediatrics

M. Teresa (Maite) de la Morena, M.D.

- Member, Advisory Committee for the U.S. Immunodeficiency Network Consortium (USIDNet)
- Medical Director, The Jeffrey Modell Foundation Center for Primary Immunodeficiency Diseases at UT Southwestern/Children's
- Vice-Chair, Primary Immunodeficiency Diseases Committee American Academy of Allergy, Asthma and Immunology
- Member, Primary Immunodeficiency Diseases Committee of the American Academy of Allergy, Asthma and Immunology

David A. Khan, M.D.

- Program Director, UT Southwestern Allergy and Immunology Fellowship
- Director, Parkland Memorial Hospital, Asthma and Allergy Clinics
- Co-chair, ACAAI Allied Health Symposium Committee
- Member, Training Program Directors Planning Committee, ACAAI
- Chair, Drug and Anaphylaxis Committee, ACAAI
- Past-President, Texas Allergy, Asthma, and Immunology Society
- Secretary, FADDA, American Academy of Allergy, Asthma, and Immunology

Awards and Honors

J. Andrew Bird, M.D.

- National Institutes of Health Pediatric Loan Repayment Program Award 2010-2012
- Fellow, American Academy of Pediatrics

Cardiology

The Division of Cardiology has three areas of primary focus: a commitment to advancing scientific discovery through clinical and basic research; provision of outstanding pediatric cardiac care; and the education of new physicians as well as the ongoing support of practicing physicians throughout the state.

Research is strongly supported by UT Southwestern's main campus resources, including extensive core facilities for genetic evaluation and both surgical and catheterization suites for large animal studies. Clinical research is further augmented by the Department of Clinical Sciences, with support services for study design, grant preparation and statistical analysis.

The clinical service program benefits from a large referral base, including those from regional, national and international sources in addition to the local Metroplex population. In collaboration with Children's Medical Center, construction of a new Heart Center is under way to bring all cardiac services together on one floor of the hospital, beginning with a new 20-bed CVICU that opened last year.

The division actively participates in the training of students, residents and subspecialty fellows, which is provided by a diverse and talented cardiology faculty, who themselves represent all of the major training programs in the United States.

Five new faculty members joined the division in 2010.

- **Dr. Amy Juraszek** joined us from Boston Children's Hospital where she managed the registry of autopsy specimens. She will be developing educational curricula for trainees at all levels and will provide clinical support in the echocardiography laboratory.
- **Dr. Tejas Shah** completed advanced training in heart failure and cardiac transplantation at UT Southwestern. His primary role will be to support the rapidly growing transplant service.
- **Dr. Poonam Thankavel** joined the faculty as a clinical instructor after completing our cardiology fellowship program. She will be advancing her skills in cardiac imaging and supporting the echocardiography laboratory.
- **Dr. Suren Veeram Reddy** completed pediatric cardiology training in Michigan and a 4th year of training at UT in interventional catheterization. He will be conducting research in new stent technologies in addition to supporting the catheterization laboratory.
- **Dr. Mark Clay** trained in cardiology and acquired advanced training in cardiac critical care at Emory University. He will attend in the cardiac intensive care unit. He has a research interest in neuroprotection.

Additional faculty recruitments to support expansion in the areas of cardiac transplantation, heart failure, critical care, prevention and advanced noninvasive imaging are ongoing.

Faculty

William A. Scott, M.D., M.S., Professor of Pediatric Cardiology and Clinical Sciences, is the Director of the Pediatric Cardiology program at UT Southwestern. Dr. Scott specializes in cardiac electrophysiology, with clinical interests in catheter ablation, pacemaker and defibrillator management, syncope and noninvasive evaluation. His research involves arrhythmia diagnosis and management, cardiac involvement in neuromuscular disease, epidemiology of congenital heart disease, heart rate variability and pacemaker device therapy. Dr. Scott graduated from the University of Notre Dame, Indiana, with a Bachelor of Science degree in 1978 and the University of Michigan, Ann Arbor, with a Master of Science degree in clinical research design and statistical analysis in 1988. He received his medical degree from the Indiana University School of Medicine, Indianapolis, in 1982 and was a resident in the Pediatrics department from 1982 to 1984 and Chief Resident from 1984 to 1985. He held a fellowship in Pediatric Cardiology and Electrophysiology at the University of Michigan from 1985 to 1988. Dr. Scott was honored by inclusion in the Best Doctors of America database from 2003 through 2010.



William A. Scott, M.D., M.S.
Director, Pediatric Cardiology



Aliessa P. Barnes, M.D.

Assistant Professor, Medical Director – Heart Transplantation

Clinical expertise: Congenital heart disease, ECHO, transplantation, cardiomyopathy, cardiac transplantation, fetal echocardiography.

Research expertise: Transplantation, echocardiography

Education: Southwestern University, Georgetown, TX, B.S., 1996; UT Southwestern, M.D., 2001

Post-doctoral training: UT Southwestern/Children's, Resident, Pediatrics, 2001-2004; UT Southwestern, Fellow, Pediatric Cardiology, 2004-2007



Shannon E. Blalock, M.D., M.S.P.H.

Assistant Professor

Clinical expertise: Fetal echocardiography, cardiac MRI, pulmonary arterial hypertension

Research expertise: Maladaptive ventricular changes in systemic right ventricles and pulmonary arterial hypertension

Education: University of Notre Dame, South Bend, IN, B.A., 1996; Texas A&M University College of Medicine, Temple, M.D., 2002

Post-doctoral training: University of Arkansas for Medical Sciences, Little Rock, Resident, Pediatrics, 2002-2005; UT Southwestern, Fellow, Pediatric Cardiology, 2005-2008; Children's Hospital, Boston, MA, Senior Fellow, Advanced Imaging, 2008-2009



Sarah D. Blumenschein, M.D.

Clinical Associate Professor

Clinical expertise: Cholesterol, congenital heart disease, hyperlipidemia, obesity, lipid disorders

Education: Wellesley College, MA, B.A., 1960; Cornell University Medical College, New York, NY, M.D., 1964

Post-doctoral training: New York University, Bellevue Hospital, Intern, Pediatrics, 1964-1965; Johns Hopkins Hospital, Harriet Lane Clinic, Baltimore, MD, Resident, Pediatrics, 1965-1966; University Medical Hospital, Durham, NC, Fellow, Pediatric Cardiology, 1966-1969



Mark Clay, M.D.

Assistant Professor

Clinical expertise: Cardiac critical care

Research expertise: Neurodevelopmental abnormalities in neonatal and pediatric patients undergoing cardiopulmonary bypass and aborted cardiac arrest, progesterone as a neuroprotective agent

Education: Xavier University, New Orleans, LA, B.S., 1998; Emory University, Atlanta, GA, M.D., 2002

Post-doctoral training: University of Alabama Affiliated Hospitals, Birmingham, Resident, 2002-2005; Chief Resident, 2005-2006; Sibley Heart Center/Emory University, Atlanta, GA, Fellow, Pediatric Cardiology, 2006-2009; Fellow, Pediatric Critical Care, 2009-2010



Michael D. Day, M.D.

Assistant Professor

Clinical expertise: Pediatric cardiology

Research expertise: Endocarditis

Education: University of Tennessee at Knoxville, B.S., *magna cum laude with honors*, 1997; UT Southwestern, M.D., 2001

Post-doctoral training: Brown University, Hasbro Children's Hospital, Providence, RI, Resident, Pediatrics, 2001-2004; Chief Resident; 2004-2005; Boston Children's Hospital, MA, Fellow, Cardiology, 2005-2007; Chief Fellow, Cardiology, 2007-2008



V. Vivian Dimas, M.D.

Assistant Professor

Clinical expertise: Interventional cardiology

Research expertise: Interventional cardiology and novel techniques, long-term post operative outcomes

Education: Southern Methodist University, Dallas, TX, B.A., *cum laude*, 1992; University of Oklahoma College of Medicine, Norman, M.D., 1999

Post-doctoral training: University of Oklahoma Health Sciences Center, Norman, Resident, Pediatrics, 1999-2002; Baylor College of Medicine, Houston, TX, Fellow, Cardiology and Interventional Cardiology, 2002-2006

David E. Fixler, M.D., M.Sc.

Professor

Dr. Fred S. Brooksaler Professorship in Pediatrics

Clinical expertise: Congenital heart disease, transplantation

Research expertise: Epidemiology of congenital heart disease, childhood hypertension

Education: University of Notre Dame, IN, B.S., 1960; University of Chicago Pritzker School of Medicine, M.D., 1964; University of London School of Hygiene and Tropical Medicine, M.Sc., Epidemiology, 1982

Post-doctoral training: Northwestern University Medical School, Children’s Memorial Hospital, Chicago, IL, Resident, Pediatrics, 1964-1966; Fellow, Pediatric Cardiology, 1966-1967; University of California at San Francisco Cardiovascular Research Institute, NIH Post-doctoral Research Fellow, Pediatric Cardiology, 1969-1971



Candace L. Gibbin, M.D., M.S.P.H.

Assistant Professor

Clinical expertise: Echo, fetal echocardiography, preventive cardiology, Kawasaki Disease, outpatient pediatric cardiology

Research expertise: Fetal echocardiography

Education: Lynchburg College, VA, B.S., 1970; University of North Carolina, Chapel Hill, M.S.P.H., 1972; Medical College of Virginia, Richmond, M.D., 1976; Johns Hopkins University, Baltimore, MD, Certificate in the Business of Medicine, 2000

Post-doctoral training: Georgetown University Medical Center, Washington, DC, Intern, Pediatrics, 1977-1978; Emory University, Atlanta, GA, Resident, Pediatrics, 1978-1979; Chief Resident, Pediatrics, 1979-1980; Children’s Hospital National Medical Center, Washington, DC, Fellow, Pediatric Cardiology, 1988-1991



Lisa C. Heistein, M.D.

Assistant Professor

Clinical expertise: Congenital heart disease, fetal echocardiography, pediatric echocardiography

Research expertise: Echocardiography

Education: Case Western University, Cleveland, OH, B.A., *summa cum laude*, 1994; Ohio State University College of Medicine, Columbus, M.D., 1998

Post-doctoral training: Ohio State University & Children’s Hospital, Columbus, Resident, Pediatrics, 1998-2001; UT Southwestern, Fellow, Pediatric Cardiology, 2002-2005; Fellow, Pediatric Echocardiography, 2005-2006



Catherine M. Ikemba, M.D.

Assistant Professor

Clinical expertise: Noninvasive imaging including transthoracic, transesophageal and fetal echocardiography, perinatal cardiology and counseling

Research expertise: Noninvasive cardiac imaging, psychological impact of prenatal diagnosis

Education: University of California, Los Angeles, B.S., 1991; University of Southern California School of Medicine, Los Angeles, M.D., 1996

Post-doctoral training: Albert Einstein College of Medicine, Bronx, NY, Resident, Pediatrics, 1996-1999; Baylor College of Medicine, Houston, TX, Fellow, Pediatric Cardiology, 1999-2002; Fellow, Pediatric Cardiology Noninvasive Imaging, 2002-2003



Amy L. Juraszek, M.D.

Associate Professor

Clinical expertise: Cardiac pathology, education

Research expertise: Cardiac development

Education: Pennsylvania State University, University Park, B.S. *with honors*, 1992; University of Pittsburgh School of Medicine, PA, M.D., 1996

Post-doctoral training: Children’s Hospital of Pittsburgh, PA, Resident, Pediatrics, 1996-1999; Medical University of South Carolina, Charleston, Fellow, Pediatric Cardiology, 1999-2002



Colin E. Kane, M.D.

Assistant Professor

Clinical expertise: General pediatric cardiology, echocardiography, fetal echocardiography

Research expertise: Web-based distance medical education

Education: Bucknell University, Lewisburg, PA, B.Sci., 1996; Loyola University, Stritch School of Medicine, Maywood, IL, M.D., 2002

Post-doctoral training: Christiana Care Health System, Newark, DE, Resident, Internal Medicine & Pediatrics, 2002-2006; Emory University School of Medicine, Atlanta, GA, Fellow, Pediatric Cardiology, 2006-2009





Matthew S. Lemler, M.D.

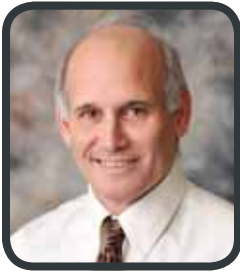
Professor

Clinical expertise: Congenital heart disease, echocardiography, non-invasive imaging, fetal echocardiography, single ventricle palliation

Research expertise: Aspirin resistance in pediatrics, long-term chemotherapy toxicity, sedation

Education: UT Austin, B.B.A., 1985; UT Medical Branch at Galveston, M.D., 1989

Post-doctoral training: UT Southwestern/Children's, Resident, Pediatrics, 1989-1992, University of Colorado Health Science Center, Denver, Fellow, Pediatric Cardiology, 1992-1995; Fellow, Echocardiography, 1995-1996



George Lister, M.D.

Professor and Chairman, Department of Pediatrics

Robert L. Moore Chair in Pediatrics

Clinical expertise: Cardiopulmonary interaction

Research expertise: Cardiovascular and hematologic development, SIDS

Education: Brown University, Providence, RI, B.A., 1969; Yale University School of Medicine, New Haven, CT, M.D., 1973

Post-doctoral training: Yale University School of Medicine, New Haven, CT, Resident, Pediatric Medicine, 1973-1975; University of California San Francisco, Cardiovascular Research Institute, Fellow, Pediatric Cardiology and Neonatology, 1975-1978



Lynn Mahony, M.D.

Professor

Clinical expertise: Congenital heart disease, congestive heart failure, Marfan syndrome, student athlete pre-participation evaluation

Research expertise: Clinical trials and other studies examining short- and long-term outcomes for patients with congenital heart disease including quality of life

Education: Massachusetts Institute of Technology, Cambridge, B.S., 1972; Stanford University School of Medicine, CA, M.D., 1975

Post-doctoral training: Stanford University Medical Center, CA, Resident, Pediatrics, 1975-1978; University of California at San Francisco, Fellow, Pediatric Cardiology, 1978-1981; Cardiovascular Research Institute, Fellow, Research, 1978-1981



Alan W. Nugent, M.B.B.S, F.R.A.C.P.

Associate Professor

Clinical expertise: Pediatric cardiology, interventional catheterization, cardiovascular intensive care

Research expertise: Interventional cardiology

Education: The University of Melbourne, Australia, M.B.B.S., 1991

Post-doctoral training: Austin Hospital, Melbourne, Intern, 1992; Royal Children's Hospital, Melbourne, Resident, Pediatrics, 1993-1995; Fellow, Pediatric Cardiology, 1996-1999; Children's Hospital, Boston, MA, Fellow, Pediatric Cardiology, 1999-2002



Claudio Ramaciotti, M.D.

Professor

Clinical expertise: Congenital heart disease, Duchenne muscular dystrophy, echocardiography, ventricular function, patent ductus arteriosus in extreme low birth weight infants

Research expertise: Congenital heart disease, echocardiography

Education: Universidade Federal do Rio de Janeiro, Brazil, undergraduate, 1972; Universidade Federal do Rio de Janeiro, Brazil, M.D., 1977

Post-doctoral training: Universidade Federal do Rio de Janeiro, Intern, Pediatrics, 1976-1977; Hospital dos Servidores do Estado, Rio de Janeiro, Resident, Pediatrics, 1978-1979; Chief Resident, Pediatrics, 1979; Emory University, Atlanta, GA, Intern and Resident, Pediatrics, 1987-1989; School of Pediatric Cardiology of the Institute of Child Health, University of London, England, Fellow, Pediatric Cardiology, 1982-1984; University of California at San Francisco, Research Fellow, Pediatric Echocardiographic Laboratory, 1984-1985; Children's Hospital of Philadelphia, PA, Fellow, Pediatric Cardiology, 1989-1992; Fourth Year Fellowship, Pediatric Cardiology, 1992-1993

Tejas K. Shah, M.D.

Assistant Professor

Clinical expertise: Adult congenital heart disease, heart failure/heart transplantation, international medicine

Research expertise: Cardiac MRI/magnetic resonance spectroscopy

Education: University of Missouri-Kansas City School of Medicine, B.A. and M.D., 2001

Post-doctoral training: University of Tennessee, Memphis, Residency, Internal Medicine and Pediatrics, 2001-2005; UT Southwestern, Fellow, Pediatric Cardiology, 2006-2009; Fellow, Heart Failure and Heart Transplantation, 2009-2010



Poonam Punjwani Thankavel, M.D.

Instructor

Clinical expertise: Echocardiography: 3D, transesophageal, fetal

Research expertise: Echocardiographic evaluation of the patent ductus arteriosus in neonates

Education: Eckerd College, St. Petersburg, FL, B.S. 2000; St. George's University School of Medicine, Grenada, West Indies, M.D., 2004

Post-doctoral training: University of South Florida, Tampa, Resident, Pediatrics, 2004-2007; UT Southwestern, Fellow, Pediatric Cardiology, 2007-2010



Surendranath Reddy Veeram Reddy, M.D.

Assistant Professor

Clinical expertise: Pediatric interventional cardiology, pediatric and adult congenital heart disease

Research expertise: Biodegradable stents for use in children

Education: Vijayanagar Institute of Medical Sciences, Karnataka, India, M.B.B.S., 2001

Post-doctoral training: Vijayanagar Institute of Medical Sciences, Bellary, India, Intern, Pediatrics, 2000-2001; Michigan State University/ Hurley Medical Center, Flint, Resident, Pediatrics, 2003-2006; Wayne State University, Fellow, Pediatric Cardiology, 2006-2009; UT Southwestern, Fellow, Interventional Cardiology, 2009-2010



Thomas M. Zellers, M.D.

Professor

Kathryne and Gene Bishop Distinguished Chair in Pediatric Care at Children's

Clinical expertise: Interventional cardiology and novel techniques, congenital heart disease

Research expertise: Interventional cardiac catheterization and the role of interventional procedures and devices in congenital heart disease

Education: Wabash College, Crawfordsville, IN, 1977; University of Dallas, B.A., *cum laude*, 1979; UT Southwestern, M.D., 1983

Post-doctoral training: University of Virginia Children's Medical Center, Charlottesville, Resident, Pediatrics, 1983-1986; Mayo Clinic and Mayo Foundation, Rochester, MN, Fellow, Pediatric Cardiology, 1986-1989; Baylor College of Medicine and Texas Children's Hospital, Houston, Fellow, Interventional Catheterization, 1997



Ilana J. Zeltser, M.D.

Assistant Professor

Clinical expertise: Interventional cardiology, cardiac electrophysiology, cardiovascular screening, post-pericardiotomy syndrome, sports medicine

Research expertise: Interventional cardiology, post-pericardiotomy syndrome

Education: Columbia University, New York, NY, B.A., 1993; New York University School of Medicine, M.D., 1997

Post-doctoral training: Mount Sinai Hospital Medical Center, New York, NY, Resident, Pediatric Medicine, 1997-2000; Children's Hospital of Philadelphia, PA, Fellow, Electrophysiology, 2003-2004; Fellow, Pediatric Cardiology, 2000-2003



Pediatric cardiology faculty represent

11 INSTITUTIONS

nationwide.

Post-doctoral Fellows

Completed June 2010



Poonam Punjwani, M.D.

Current Position:
Instructor, Pediatric Cardiology, UT Southwestern

Research Interests:
Patent ductus arteriosus in preterm infants



Suren Reddy, M.D.

Current Position:
Assistant Professor, Pediatric Cardiology, UT Southwestern

Research Interests:
Interventional cardiology



Ashleigh Richards, M.D.

Current Position:
Private practice, Dallas, TX

Research Interests:
Genetics of cardiovascular disease



Tejas Shah, M.D.

Current Position:
Assistant Professor, Pediatric Cardiology, UT Southwestern

Research Interests:
Heart Transplantation

4th Year



Frederic Bernstein, D.O.

Research Interests:
Interventional cardiology

3rd Year



Adrian Dyer, M.D.

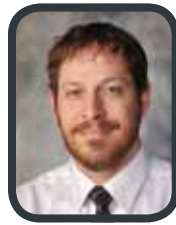
Research Interests:
Rejection in pediatric cardiac transplant patients



Jason Imundo, M.D.

Research Interests:
Cardiac electrophysiology

2nd Year



Jeremy Affolter, M.D.

Research Interests:
Cardiac critical care



Preetha Balakrishnan, M.D.

Research Interests:
Cholesterol



Arshid Mir, M.D.

Research Interests:
Aspirin resistance (pharmacodynamic) treated with low dose aspirin after systemic pulmonary shunts in single ventricle patients

1st Year



Greg Barker, M.D.

Research Interests:
Evaluation of cardiac metabolism using Carbon-13 NMR



Holly DeSena, M.D.

Research Interests:
Biodegradable PDA stents

We offer qualified fellows 4th-year training programs in:

- cardiac critical care
- interventional cardiology
- imaging
- electrophysiology
- heart transplantation

Clinical Research Staff

Tre Welch, Senior Research Scientist, CardioThoracic Surgery

Research Activities

Members of the division are engaged in multiple projects to advance the care of children with heart disease.

Basic Science

An exciting new area of investigation is the development of biodegradable stents for use in the cardiovascular system. Current research is directed at an evaluation of the tissue response to these materials in animals. Cardiopulmonary bypass is known to have adverse effects on neurologic development, but a clear understanding of the mechanisms is lacking. Using a mouse model of bypass, investigation is underway to evaluate biomarkers of injury. Another new area of investigation is to optimize cardiovascular support therapy for pediatric patients with end stage heart failure. Currently the only ventricular assist devices available require surgical placement. We are investigating an animal model for the feasibility of a catheter delivered device. One additional animal research area is the optimization of technologies for fetal intervention.

Clinical Sciences

The cardiology division participates in multiple multicenter trials. In interventional catheterization, current trials are assessing various devices, including the Amplatzer and Helex occluders, and management of coarctation including the placement of stents. It is anticipated that a recently completed multicenter trial of athletic screening processes will be used for a broader national evaluation. We are contributing to a quality initiative to assess the care of patients with hypoplastic left heart syndrome. A multicenter effort is also underway to evaluate the use of ventricular assist devices in the pediatric population.

Collaborative studies within the department of Pediatrics include protocols to evaluate stroke, migraine, and complications of sickle cell disease and childhood cancer.

Ongoing areas of research interest include epidemiologic studies of congenital heart disease, particularly within the state of Texas, natural history studies of patent ductus arteriosus in preterm neonates, MRI evaluation of pulmonary hypertension and for postoperative tetralogy of Fallot, evaluation of renal function with heart catheterization, markers for cardiac transplant rejection, and innovations in noninvasive cardiac monitoring.

Clinical Activities

Pediatric Cardiology faculty provided more than 8,000 inpatient, outpatient and diagnostic services in 2010. Inpatients with cardiac disease received care in the 20-bed CVICU and a 22-bed telemetry/step-down unit. Last year, care was provided for 500 surgical patients, including 359 open cases, 16 cardiac transplants and 2,395 medical patients with an average length of stay of 12 days in the CVICU and six days on the cardiology inpatient unit.

Nearly 9,900 patients were evaluated in the outpatient clinics at Children's main campus and Legacy facilities. In addition to overall cardiac evaluation, specialty clinics provided focused care for patients with implanted devices, arrhythmia, obesity, cholesterol and lipid disorders, heart transplantation, Marfan syndrome and adults with congenital heart disease.

Diagnostic services included 878 cardiac catheterizations, most involving interventional procedures. Eighty-three of those were electrophysiologic procedures including catheter ablation. Noninvasive studies are comprised of imaging and electrocardiographic studies. The division performed 7,141 transthoracic ECHOs, 628 transesophageal studies and 400 fetal ECHOs. Additional studies included 11,802 electrocardiograms (ECGs), 852 Holter monitors, 226 pacemaker analyses, 142 exercise tests and 133 cardiac MRIs.

Additionally, telemedicine capabilities for transmission and review of echocardiographic and electrocardiographic studies are available to multiple institutions across the state, from Amarillo to Tyler. Approximately 549 ECHOs and 100 ECGs were interpreted from these institutions.

Presentations/Teaching Activities

Aliessa P. Barnes, M.D.

- “Feasibility and Utility of Pre-participation Cardiovascular Screening in a State-Funded Program,” American Heart Association Scientific Sessions, Chicago, IL, November 2010
- “Use of Highly Sensitive Troponin T and N-Terminal Pro-Brain Natriuretic Peptide to Diagnose Acute Rejection in Pediatric Cardiac Transplant Recipients,” American Heart Association, Chicago, IL, November 2010 (Poster Presentation)

Shannon E. Blalock, M.D.

- “Commonly Missed Diagnoses in Congenital Heart Disease,” Pediatric Grand Rounds, Trinity Mother Francis Hospital, UT Health Science Center, Tyler, TX, July 2010
- “Fetal Right and Left Heart Obstructive Lesions,” Statewide Conference: Advances in Fetal ECHO, Children’s Medical Center at Legacy, September 2010

Michael Day, M.D.

- “Tachyarrhythmias: What To Do with Fast Heart Rates,” Emergency Medicine Conference, Children’s Medical Center, April 2010
- “Prenatal Diagnosis of Hypoplastic Left Heart Syndrome,” Maternal Fetal Medicine Conference, Children’s Medical Center at Legacy, June 2010
- “Pre-sports Screening and Sudden Death in Young Athletes,” Pediatric Grand Rounds, Trinity Mother Frances Hospital, UT Health Science Center, Tyler, TX, October 2010

David E. Fixler, M.D.

- “Mortality in the First Five Years of Life in Infants with Single Ventricle,” Texas Birth Defects Research Symposium, Austin, October 2010

Candace Gibbin, M.D.

- Course Director: Advances in Fetal Echo, Children’s Medical Center, September 2010

Catherine Ikemba, M.D.

- “Cardiac Development,” Embryology Seminar for First Year Medical Students, UT Southwestern, March 2010
- “Infective Endocarditis,” Pediatric Residents, Children’s Medical Center Dallas, September 2010

Amy L. Juraszek, M.D.

- “Small Group Demonstrations of Congenital Heart Disease Pathology,” Invited speaker, 16th Annual Pediatric Echocardiography Conference, Atlanta, GA, April 2010
- “The Anatomy of Congenitally Corrected Transposition” and “Anatomical Considerations in Ebstein’s Anomaly,” Invited speaker, 24th Annual Meeting of the European Association for Cardiothoracic Surgery, Geneva, Switzerland, September 2010
- “Mortality in HLHS: Review of 216 Autopsy Cases of Aortic Atresia with Attention to Coronary Pathology,” Oral Abstract Session, American Heart Association Scientific Sessions, Chicago, IL, November 2010

Matthew Lemler, M.D.

- “Evaluation of Late Cardiotoxicity in Children Who Received Low Dose Anthracyclines for Treatment of Pediatric Cancer,” 23rd Annual Meeting, American Society of Pediatric Hematology Oncology, April 2010
- Session Chair: “The Repaired Congenital Patient for the Non-expert: What Problems Should I Anticipate,” 21st Annual Scientific Sessions, American Society of Echocardiography, San Diego, CA, June 2010
- “Coarctation of the Aorta: Identification of Late Complications,” 21st Annual Scientific Sessions, American Society of Echocardiography, San Diego, CA, June 2010

Lynn Mahony, M.D.

- “Quality of Life Scores in Children and Adolescents with Congenital Heart Disease are Lower than in the Healthy Pediatric Population,” American Academy of Pediatrics, San Francisco, CA, October 2010

Alan Nugent, M.B.B.S., F.R.A.C.P.

- “Long-term Outcomes of Dilated Cardiomyopathy Presenting During Childhood: Results from a National Population-based Study of Childhood Cardiomyopathy” and “Long-term Outcomes of Hypertrophic Cardiomyopathy Presenting During Childhood: Results from a National Population-based Study of Childhood Cardiomyopathy,” 59th Annual Scientific Session, American College Cardiology, Atlanta, GA, March 2010

Claudio Ramaciotti, M.D.

- “Echocardiographic Prediction of Spontaneous Closure of the Ductus Arteriosus in Neonates Less Than 30 Weeks of Gestation,” American Academy of Pediatrics National Conference and Exhibition, Section on Perinatal Pediatrics, San Francisco, CA, October 2010

Poonam Punjwani Thankavel, M.D.

- “Echocardiographic Prediction of Spontaneous Closure of the Ductus Arteriosus in Neonates Less Than 30 Weeks of Gestation,” American Academy of Pediatrics National Conference and Exhibition, Section on Perinatal Pediatrics, San Francisco, CA, October 2010

Thomas Zellers, M.D.

- "Long Term Follow Up of the First Generation Amplatzer Duct Occluder (Phase I and Phase II Trials) is Associated with Excellent Closure Rates," Pediatric and Adult Interventional Cardiac Symposium (PICS-AICS), Chicago, IL, July 2010 (Poster Presentation)

Ilana Zeltser, M.D.

- "Feasibility and Utility of Pre-participation Cardiovascular Screening in a State-Funded Program," American Heart Association Scientific Sessions, Chicago, IL, November 2010
- "Implantable Device Issues in Pediatrics and Congenital Heart Disease," Heart Rhythm Society Annual Scientific Sessions, Denver, CO, May 2010

Major Administrative or Leadership Responsibilities

William A. Scott, M.D., M.S.

- Director, Division of Pediatric Cardiology
- Co-director, Heart Center, Children's
- Director, Pediatric Cardiac Electrophysiology, Children's
- Associate Editor, *Pediatric Cardiology*

Aliessa P. Barnes, M.D.

- Medical Director, Heart Transplant Program
- Entrance Reviewer, UT Southwestern
- Physician Consultant with the Epic Build Team for Templates, Children's

Shannon E. Blalock, M.D.

- Director, Cardiac Magnetic Resonance Imaging

Sarah D. Blumenschein, M.D.

- Director, Preventive Cardiology Clinic

Michael D. Day, M.D.

- Director, Cardiac Outreach

V. Vivian Dimas, M.D.

- Reviewer, *Pediatric Cardiology*

Catherine M. Ikemba, M.D.

- Chair, Pediatric Cardiology Scholarship Oversight and Monitoring Committee, UT Southwestern
- Director, Fetal Medicine, Heart Center, Children's

Amy L. Juraszek, M.D.

- Director, Heart Center Education
- Member, Nomenclature Working Group and Archiving Working Group, International Pediatric and Congenital Cardiac Code
- Editorial Board Member, *CTSNNet Congenital Portal*
- Editorial Board Member, *World Journal for Pediatric & Congenital Heart Surgery*

Matthew S. Lemler, M.D.

- Director, Echocardiography Laboratory
- Reviewer, *Pediatric Cardiology*

Lynn Mahony, M.D.

- Chair, Pediatric Heart Network Steering Committee
- Editorial Board, American Heart Association, *Circulation*
- Abstract Reviewer, American Heart Association
- Director, Pediatric Cardiology Fellowship, UT Southwestern
- Member, Grand Rounds Committee, Department of Pediatrics, UT Southwestern

Alan W. Nugent, M.B.B.S., F.R.A.C.P.

- Director, Cardiac Catheterization Laboratory
- Training Program Director, Interventional Cardiology
- Member, Heart Center Leadership Advisory Board

Claudio Ramaciotti, M.D.

- Director, Cardiac Imaging
- Member, Ethics Committee, American Society of Echocardiography

Thomas M. Zellers, M.D.

- Vice President, Medical Staff Service, Children's
- President, Congenital Cardiovascular Interventional Study Consortium (CCISC), Children's
- Physician Director, Continuing Medical Education Department, Children's
- Chair, Scientific Committee, CCISC
- Physician Chair, EPIC Portal Committee
- Abstract reviewer, SCAI Scientific Meeting
- Abstract reviewer, PICS Scientific Meeting
- Reviewer, *Pediatric Cardiology*
- Reviewer, *Pediatric Infectious Disease*

Honors / Awards

William Scott, M.D., M.S.

- Best Doctors in America
- Texas Super Doctors, *Texas Monthly*
- Best Pediatrician in Dallas, *D Magazine*

Sarah Blumenschein, M.D.

- Best Pediatrician in Dallas, *D Magazine*
- Texas Super Doctors, *Texas Monthly*

Michael Day, M.D.

- Best Pediatrician in Dallas, *D Magazine*

David Fixler, M.D.

- Best Pediatrician in Dallas, *D Magazine*

Matthew Lemler, M.D.

- Best Doctors in America
- Texas Super Doctors, *Texas Monthly*

Lynn Mahony, M.D.

- Best Pediatrician in Dallas, *D Magazine*
- Texas Super Doctors, *Texas Monthly*

Alan Nugent, M.D.

- Best Pediatrician in Dallas, *D Magazine*

Claudio Ramaciotti, M.D.

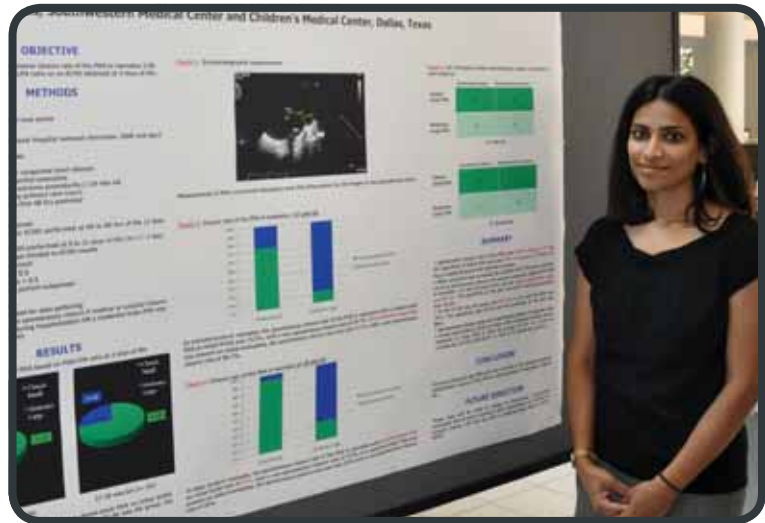
- Best Pediatrician in Dallas, *D Magazine*
- Texas Super Doctors, *Texas Monthly*

Poonam Punjwani Thankavel, M.D.

- Young Investigator Travel Award, 2010
National Conference and Exhibition, American Academy of Pediatrics
- Best Poster Presentation, First Annual Senior Fellows' Research Day, Department of Pediatrics, UT Southwestern

Thomas Zellers, M.D.

- Best Pediatrician in Dallas, *D Magazine*
- Texas Super Doctors, *Texas Monthly*



Dr. Poonam Punjwani Thankavel

Best Poster Award at the

1st Annual Senior Fellows Research Day

"Echocardiographic Prediction of Spontaneous Closure of the Ductus Arteriosus in Neonates Less than 30 Weeks Gestational Age"

Critical Care Medicine

The Division of Pediatric Critical Care Medicine plays a vital role in providing care to critically ill children at Children's and is continuously making improvements and innovations to ensure the patient care provided is of the highest quality. It has a long-standing history of clinical, bench and translational research.

The division's internationally recognized critical care fellowship program, one of the largest and most competitive programs, attracts top pediatric graduates. Teaching of fellows, residents and medical students takes place at the bedside and during lectures and simulation sessions. In addition, there is an array of research training opportunities helping fellows learn to ask and answer scientific questions relating to the genetic, molecular, cellular, physiologic and nutritional and metabolic aspects of pediatric critical care medicine.

In 2010 the Critical Care Division extended to the Legacy campus, where Dr. Raymond Nkwantabisa serves as Clinical Director. This six-bed unit at Children's Medical Center at Legacy serving the north Dallas pediatric community is the only pediatric intensive care unit in the area.

The cardiovascular intensive care unit, a tertiary level facility with complex congenital heart disease, expanded its faculty to seven attendings and continues to grow. Recruitment of additional faculty continues in an effort to meet the growing demands of patients and referring physicians in the area.

Faculty



Leticia Castillo, M.D.
Director, Pediatric Critical Care Medicine

Leticia Castillo, M.D., Professor, Thomas Fariss Marsh, Jr. Chair in Pediatrics and Director of the Division of Pediatric Critical Care Medicine began her medical career at the Universidad Nacional Autonoma de Mexico, where she received her M.D. Following her internship and residency in pediatrics in Mexico City, she served as an intern and resident at the New England Medical Center, Boston, Massachusetts. She then completed a fellowship in Pediatric Critical Care Medicine at Massachusetts General Hospital and a postdoctoral fellowship in Nutrition Biochemistry at Massachusetts Institute of Technology. Dr. Castillo served on the faculty at Harvard Medical School as a scientist at the laboratory of Human Nutrition, Massachusetts Institute of Technology. In 2005 she served on the faculty at Baylor College of Medicine and as a senior investigator at the Children's Nutrition Research Center, USDA. She has served as a permanent member at the Surgery, Anesthesia and Trauma Scientific Review Group at the National Institutes of Health and on the Advisory Board for the National Center for Rehabilitation Research at the Eunice Shriver National Institute of Child Health Development of the NIH. Dr. Castillo has contributed on the area of insulin resistance and amino acid metabolism during critical illness.

Cindy Darnell Bowens, M.D., M.S.C.S.

Assistant Professor

Clinical expertise: Pain control, sedation

Research expertise: Effects of low dose ketamine infusion, safety of Lorazepam use in critically ill children

Education: University of Louisville, KY, B.A., *cum laude*, 1994; University of Louisville School of Medicine, KY, M.D., 1998, UT Southwestern, M.S.C.S., with distinction, 2008

Post-doctoral training: University of Tennessee at Memphis, Resident, Pediatrics, 1998-2001; UT Southwestern, Fellow, Pediatric Critical Care Medicine, 2001-2004



Deborah L. Carlson, Ph.D.

Assistant Professor, Pediatrics and Surgery

Research expertise: Surgery, cardiac function following burn injury and sepsis, matrix metalloproteinases in cardiac dysfunction

Education: State University of New York at Fredonia, B.S., 1989; State University of New York at Buffalo, Roswell Park Division, Ph.D., Molecular and Cellular Biology, 1996

Post-doctoral training: University of Nebraska, Lincoln, Fellow, Protein Biochemistry, 1995-1997





Mandeep Chadha, M.D.

Assistant Professor

Clinical expertise: Ischemic brain injury, traumatic brain injury

Research expertise: Traumatic brain injury

Education: University of Tulsa, OK, B.S., *cum laude*, 1994; UT Medical Branch at Galveston, M.D., 1998

Post-doctoral training: Arkansas Children's Hospital, Little Rock, Resident, Pediatrics, 1998-2001; Children's Hospital of Pittsburgh, PA, Fellow, Pediatric Critical Care Medicine, 2001-2004; Safar Center for Resuscitation Research, Pittsburgh, PA, NRSA Fellow, Neurointensive Care and Resuscitation Research, 2003-2005



Archana Dhar, M.D.

Assistant Professor

Clinical expertise: Pediatric critical care; use of online, noninvasive, intravascular monitoring in continuous renal replacement therapies

Research expertise: Effects of CVVH and ICP monitoring on outcomes following acute liver failure

Education: B.J. Medical College, Gujarat University, India, M.B.B.S., 1993

Post-doctoral training: Gujarat University/Civil Hospital, Ahmedabad, Gujarat, India, Resident, Pediatrics, 1993-1995; University of Oklahoma Health Science Center, Tulsa, Resident, Pediatrics, 1999-2002; University of Tennessee Health Science Center, Memphis, Fellow, Pediatric Critical Care Medicine, 2002-2003 and 2005-2008



Leslie Garner, M.D.

Assistant Professor

Clinical expertise: Pediatric critical care

Research expertise: Macrophage function

Education: Vanderbilt University, Nashville, TN, B.A., *summa cum laude*, 1992; UT Southwestern, M.D., 1996

Post-doctoral training: UT Southwestern/Children's, Intern, Pediatrics, 1996-1997; Resident, Pediatrics, 1997-1999; UT Southwestern, Fellow, Pediatric Critical Care Medicine, 2000-2003



Michael Green, M.D.

Assistant Professor

Clinical expertise: Pediatric critical care, pediatric cardiac critical care

Research expertise: Pediatric acute lung injury, simulation

Education: Baylor University, Waco, TX, B.A., 2000; UT Health Science Center at San Antonio, M.D., 2004

Post-doctoral training: Vanderbilt University Medical Center, Nashville, TN, Resident, Pediatrics, 2004-2007; Children's Hospital, Boston, MA, Fellow, Pediatric Critical Care Medicine, 2007-2010



Steven Kernie, M.D.

Associate Professor, Pediatrics and Developmental Biology

Clinical expertise: Pediatric critical care

Research expertise: Hippocampal development, neural stem cells in traumatic brain injury, injury-induced neurogenesis in the brain

Education: Stanford University, Stanford, CA, B.A., 1988; University of Washington School of Medicine, Seattle, M.D., 1992

Post-doctoral training: UT Southwestern/Children's, Resident, Pediatrics, 1992-1995; Chief Resident, Pediatrics, 1995-1996; UT Southwestern, Fellow, Pediatric Critical Care Medicine, 1996-1999; Fellow, Developmental Neurobiology, 1997-1999



Joshua Koch, M.D.

Assistant Professor

Clinical expertise: Neurocritical care

Research expertise: Neurocognitive outcomes in children after congenital heart surgery, investigation and improvement of intensive care neurologic monitoring

Education: Trinity University, San Antonio, TX, B.S., 1997; University of Kansas School of Medicine, Wichita, M.D., 2001

Post-doctoral training: UT Southwestern/Children's, Resident, Pediatrics, 2001-2004; Chief Resident, Pediatrics, 2004-2005; UT Southwestern, Fellow, Pediatric Critical Care Medicine, 2005-2008

Fiona H. Levy, M.D.

Professor

Vice President of Quality, Children's

Clinical expertise: General and cardiac ICU care**Research expertise:** Quality improvement, patient safety**Education:** Wellesley College, MA, B.A., 1983; New York Medical College, Valhalla, M.D., 1987; Washington University, St. Louis, MO, M.B.A., 2001**Post-doctoral training:** SUNY Health Center, Syracuse, Resident, Pediatrics, 1987-1990; Children's Hospital and Medical Center, Seattle, WA, Fellow, Pediatric Critical Care Medicine, 1990-1993**Peter M. Lockett, M.D.**

Professor

Clinical expertise: Acute lung injury, mechanical ventilation**Research expertise:** Pulmonary outcomes in neuromuscular disease, clinical trials in pediatric critical care**Education:** University of Kentucky, Lexington, B.G.S., 1975; University of Kentucky College of Medicine, Lexington, M.D., 1978**Post-doctoral training:** University of Kentucky, Lexington, Resident, Pediatrics, 1978-1981; Columbia University College of Physicians and Surgeons, New York, NY, Fellow, Pediatric Pulmonary Medicine, 1981-1984; Fellow, Cellular Physiology, 1984-1987**T. Raju Meyappan, M.D.**

Assistant Professor

Clinical expertise: Pulmonary ventilation, congenital heart disease, single ventricle physiology, extracorporeal support**Research expertise:** Effects of cardiopulmonary bypass, use and role of technology in medical practice**Education:** Lafayette College, Easton, PA, A.B., 1994; Georgetown University, Washington, DC, M.S., 1995; SUNY Downstate Medical Center College of Medicine, Brooklyn, M.D., 1999**Post-doctoral training:** Schneider Children's Hospital, Miami, FL, Resident, Pediatrics, 1999-2002; Fellow, Pediatric Critical Care Medicine, 2002-2005; Fellow, Pediatric Cardiac Critical Care, 2005-2006**Darryl Miles, M.D.**

Assistant Professor

Clinical expertise: Traumatic brain injury, neural protection strategies**Research expertise:** MRI imaging biomarkers of neuronal injury, neural stem cells**Education:** San Jose State University, CA, B.S., 1993; University of California San Francisco School of Medicine, M.D., 1997**Post-doctoral training:** University of California San Francisco, Resident, Pediatrics, 1997-2000; UT Southwestern, Fellow, Pediatric Critical Care Medicine, 2002-2005**Susan Morris, M.D.**

Assistant Professor

Clinical expertise: Pediatric critical care medicine, transport, sedation**Research expertise:** Medical simulation**Education:** Louisiana Tech University, Ruston, B.S., 1999; Louisiana State University Health Sciences Center, Shreveport, M.D., 2003**Post-doctoral training:** Emory University School of Medicine, Atlanta, GA, Resident, Pediatrics, 2003-2006; Emory University School of Medicine/Children's Healthcare of Atlanta at Egleston, Fellow, Pediatric Critical Care Medicine, 2006-2009**Raymond Nkwantabisa, M.D.**

Assistant Professor

Clinical Director, Pediatric Intensive Care Unit, Children's at Legacy

Clinical expertise: Pediatric critical care**Education:** University Medical School of Pecs, Hungary, M.D., *cum laude*, 1996**Post-doctoral training:** Brookdale University Hospital and Medical Center, Brooklyn, NY, Resident, Pediatrics, 2000-2002; Chief Resident, Pediatrics, 2002-2003; Case Western Reserve University/Rainbow Babies & Children's Hospital, Cleveland, OH, Fellow, Pediatric Critical Care Medicine, 2003-2006



Julio Pérez Fontán, M.D.

Professor, Vice Chairman
 Joel B. Steinberg, M.D. Chair in Pediatrics
Clinical expertise: Pediatric critical, pediatric cardiac critical care
Research expertise: Airway smooth muscle, autonomic nervous system, neurogenic inflammation
Education: University De Santiago De Compostela, Spain, M.D., 1977
Post-doctoral training: Universidad Autonoma de Barcelona, Spain, Resident, Pediatrics, 1978-1981; University of California San Francisco, Fellow, Pediatric Critical Care Medicine, 1981-1984; Cardiovascular Research Institute, University of California San Francisco, Fellow, 1982-1984, Associate 1984-1985



Vinai Modini Modem, M.D.

Instructor
Clinical expertise: Critical care nephrology, continuous renal replacement therapies
Research expertise: Early identification of and factors affecting outcomes in critically ill children requiring CRRT, effects and optimal management of fluid overload in critically ill children
Education: Bangalore Medical College, India, M.B.B.S., 1996
Post-doctoral training: Brooklyn Hospital Center, NY, Resident, Pediatrics, 1997-2000; University at Buffalo, NY, Fellow, Pediatric Critical Care, 2002-2005; UT Southwestern, Fellow, Pediatric Nephrology, 2008-2010



Lakshmi Raman, M.D.

Assistant Professor
Clinical expertise: Pediatric critical care
Research expertise: Chronic hypoxia and hippocampal injury, hypothermia in traumatic brain injury
Education: Madras Medical College, University of Madras, India, M.B.B.S., 1989
Post-doctoral training: Royal College of Physicians, London, Diploma in Child Health, 1993; Royal College of Physicians, London, MRCP, Pediatrics, 1994; SUNY Downstate Medical Center, Brooklyn, Resident, Pediatrics, 1997-2000; Chief Resident, 2000-2001; University of Minnesota, Minneapolis, Fellow, Pediatric Critical Care, 2001-2004



Margaret Schwarz, M.D.

Associate Professor
Clinical expertise: Pediatric and cardiac critical care
Research expertise: Pulmonary morphogenesis and vascularization, endothelial-monocyte activating polypeptide II, 5 1 integrin / FN / VEGFR interactions, pancreatic tumor growth
Education: University of Missouri, Kansas City, 1986, B.A., University of Missouri Six-Year Medical School, Kansas City, 1987
Post-doctoral training: Children's Hospital, Columbus, OH, Resident, Pediatrics, 1987-1990; Children's Hospital of Pittsburgh, PA, Pediatric Critical Care Fellowship, 1990-1993



Maeve Sheehan, M.D.

Associate Professor
Clinical expertise: Multi-system organ failure, pediatric stabilization, triage and transport, quality and safety
Education: University College Dublin, School of Medicine, Ireland, M.D., 1993; Diploma in Child Health, 1995
Post-doctoral training: St. Vincent's Hospital, Dublin, Ireland, Resident, Medicine and Surgery, 1993-1994; The Children's Hospital, Dublin, Ireland, Resident, Pediatrics, 1994-1995; The National Maternity Hospital, Dublin, Ireland, Resident, Neonatology, 1995; The Cleveland Clinic Foundation, OH, Resident, Pediatric and Adolescent Medicine, 1996-1999; Cincinnati Children's Hospital, OH, Fellow, Pediatric Critical Care/Clinical and Research, 1999-2002



James Thomas, M.D.

Associate Professor, Pediatrics and Molecular Biology
Clinical expertise: Pediatric critical care, immunology
Research expertise: Innate immune response to infection, innate immune signaling and autoimmunity, innate immunity and myocardial dysfunction
Education: Princeton University, NJ, A.B., *magna cum laude*, 1981; Stanford University School of Medicine, CA, M.D., with research honors, 1989
Post-doctoral training: Children's Hospital of Los Angeles, CA, Resident, Pediatrics 1989-1992; UT Southwestern, Fellow, Pediatric Critical Care Medicine, 1992-1995

Marita T. Thompson, M.D.

Associate Professor

Clinical expertise: Extracorporeal membrane oxygenation, pediatric trauma**Education:** University of California at Los Angeles, B.S., 1983; University of Illinois College of Medicine, Chicago, M.D., 1989**Post-doctoral training:** Harbor UCLA Medical Center, Torrance, CA, Resident, Pediatrics, 1989-1992; UT Southwestern, Fellow, Pediatric Critical Care Medicine, 1993-1996**Joshua Wolovits, M.D.**

Assistant Professor

Clinical expertise: Cardiac critical care, quality-care initiatives in the ICU**Research expertise:** Cerebral hemodynamics and neuro-protection in congenital heart disease, sedation strategies in the cardiac patient, strategies to prevent shunt thrombosis in the single ventricle patient**Education:** UT Austin, B.A., 1998; UT Southwestern, M.D., 2002**Post-doctoral training:** UT Southwestern/Children's, Intern, Pediatrics, 2002-2003; Resident, Pediatrics, 2003-2005; University of California San Francisco, Fellow, Critical Care, 2005-2008; UT Southwestern, Fellow, Cardiac Critical Care Medicine, 2008-2009**Maria Teresa Zuluaga, M.D.**

Assistant Professor

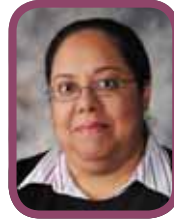
Clinical expertise: Pediatric critical care medicine, congenital heart disease, brain injury, global health**Research expertise:** Brain injury**Education:** Universidad CES, Medellin, Colombia, M.D., 1994**Post-doctoral training:** University of Puerto Rico School of Medicine, San Juan, Resident, Pediatrics, 2002-2005; University of California San Francisco Medical Center/Children's Hospital and Research Center, Oakland, Fellow, Pediatric Critical Care, 2005-2008**Post-doctoral Fellows***Completed June 2010***Ashraf M. Resheidat, M.D.****Current Position:**
Anesthesia Resident, UT Southwestern**Research Interests:**
Immune responses to hyaluronic acid in lung injury**Christopher S. Todd, M.D.****Current Position:**
Assistant Professor, Texas Tech Health Science Center, Amarillo**Research Interests:**
Pulmonary vascular development; role of EMAP II in integrin signaling*3rd Year***Patrick Hairston, M.D.****Research Interests:**
Effect of chronic hypoxia on glial development**Kyle Lieppman, M.D.****Research Interests:**
Hippocampal neurogenesis after traumatic brain injury**Janet Hume, M.D.****Research Interests:**
Myocardial function and inflammatory response in community-acquired MRSA sepsis-role of caspases 1, 3, and 8**Anne Mahan, M.D.****Research Interests:**
Role of alpha-5-beta-1 in pneumocyte differentiation

2nd Year



Lane Lanier, M.D.

Research Interests:
Mechanisms of antiphospholipid antibody interaction with endothelial cells to cause thrombosis



Elizabeth Persad, M.D.

Research Interests:
Role of alpha 5 integrin in lung repair/fibrillogenesis after acute lung injury



Humberto Liriano-Fanduiz, M.D.

Research Interests:
IRAK-1 and IRAK-2 deletions and its disruption in Toll/IL-1 signaling



Hariprem Rajasekhar, M.D.

Research Interests:
Initial lumen formation in vasculogenesis



Shai Manzuri, M.D.

Research Interests:
Regulation of nutrient homeostasis under conditions of inflammation and critical illness

1st Year



Manish Bajracharya, M.D.

Research Interests:
Lung recruitment maneuver in pediatrics using CPAP of 40 over 40 seconds



Eugene Chung, M.D.

Research Interests:
Clock dysynchrony with continuous feedings during sepsis



Kimberly Borke, M.D.

Research Interests:
Amino acid and lipid metabolism in obese subjects



Kamna Jaiswal, M.D.

Research Interests:
Identify and characterize NLRs in the heart and their abundance and activity in response to thermal injury and thermal injury complicated by sepsis

Research Staff

Dr. Leticia Castillo's Lab

- Munira Abbas, B.S., M.H.A./M.B.A., Research Study Coordinator
- Shai Manzuri, M.D., Post-Doctoral Researcher

Dr. Deborah Carlson's Lab

- Jeremy Affolter, M.D., Post-doctoral Researcher
- Jeong Sim Hue, Ph.D., Post-doctoral Researcher
- Janet Hume, M.D., Ph.D., Post-doctoral Trainee Clinician

Dr. Steve Kerner's Lab

- Jennifer Gilley, B.S., Graduate Student
- Wei Li, M.A., Ph.D., Post-doctoral Researcher
- Kyle Lieppman, M.D., Post-doctoral Researcher
- Shereen Mohideen, Co-mentor

- Jamie Wright, Research Intern
- Cui-Ping Yang, Ph.D., Post-doctoral Researcher
- Tzong-Shiue Yu, B.S., Graduate Student
- Gui Zhang, Research Assistant II

Dr. Lakshmi Raman's Lab

- Xiangmei Kong, M.S., Research Assistant I

Dr. Margaret Schwarz's Lab

- Maria Afanador, M.D., Post-Doctoral Researcher
- Katherine Bennett, M.D., Post-Doctoral Researcher
- Anne Mahan, M.D., Post-Doctoral Researcher
- Christopher Todd, M.D., Post-Doctoral Researcher

Dr. James Thomas's Lab

- Michelle Jennings, Research Assistant II
- Ken-Meng Lin, Ph.D., Senior Research Scientist
- May Tsen, M.D., Senior Research Associate
- Munira Abbas, B.S., M.H.A./M.B.A., Research Study Coordinator

Research Activities

The number and diversity of research activities within the division continues to grow. Faculty members are engaged in bench, translational and clinical research projects. There are multiple areas of investigation that the division is proud to highlight.

The long term goals of Dr. Leticia Castillo's laboratory are focused on defining the regulatory mechanisms of nutrient homeostasis under conditions of inflammation and critical illness, and how these processes affect nutrient requirements for nutritional balance and function maintenance. Attention is focused on translational studies on:

- Amino acid homeostasis and utilization during enteral or parenteral routes of administration provided to critically ill children.
- Parenteral and enteral sulfur amino acid requirements to maintain methylation function and glutathione synthesis rates.
- Protein and energy interactions under conditions of inflammation and insulin resistance.
- The impact of current critical care practices providing continuous light and feedings on circadian clock mechanisms and insulin resistance in critically ill children. For this purpose, we use stable isotopic mass spectrometric and imaging techniques.

The over-arching theme of Dr. Deborah Carlson's work is to characterize the inflammasome mediating the inflammatory response in the heart following thermal injury and thermal injury complicated with sepsis. She is currently examining the mechanism of caspase-1 activation, identifying the inflammasome and its components within the heart and within the myocyte specifically. She proposes that NOD-like receptors (NLR's) create a platform for regulation of the IL-1 family members through caspase-1, suggesting a role in both innate and adaptive immunity for the inflammasome. Her work is currently determining if NLR's are essential in mediating the inflammatory response in the heart in response to thermal injury and thermal injury complicated with sepsis, suggesting that inflammasomes are differentially expressed in the heart, responding to a tier like system where upregulation of at least two components is required to assemble functional inflammasomes. This model suggests a concept of tissue inflammation privilege, and may provide insight into the response of the heart to stress. The results of this project are aimed at targeting specific mechanisms of IL-1 member induced cardiac dysfunction in the heart, and in specific cell types, such as the myocyte after injury, to allow the use in clinical practices of established therapies such as estrogen regulation, caspase 1 inhibition and cardiac P2X7 inhibitors more selectively to allow directed cytokine regulation.

Dr. Cindy Darnell focuses her research on the delineation and improvement of the effectiveness and mitigation of the undesirable effects of the sedative and analgesic medications commonly used in the care of patients in the intensive care unit. She is the site investigator for the RESRORE protocol, an NIH funded study on the implementation of a sedation weaning protocol in critically ill children.

Dr. Archana Dhar is the Principal Investigator (PI) of an IRB-approved retrospective study comparing the clinical characteristics of children admitted to the pediatric intensive care unit with seasonal influenza versus novel influenza H1N1. She also serves as Sub-PI for a national study sponsored by the Department of Health and Human Services: Novel Influenza A (H1N1) Surveillance Registry, and is involved in an IRB-approved study titled "Outcomes for liver transplantation for acute liver failure in children, specifically use of CVVHD, ICP monitors, plasma exchange: The Dallas experience."

The laboratory of Dr. Steve Kernie, which includes new faculty member, Dr. Lakshmi Raman, continues to investigate how the developing brain responds to devastating injuries due to trauma or lack of oxygen. One area of focus is the very common clinical practice of administering pure oxygen to patients following brain injury. Researchers demonstrated that this practice can actually be harmful because it depletes vital precursor cells that ultimately form needed insulation or myelin around nerve cell projections. They found that mice exposed to these high levels of oxygen clinically developed an illness much like cerebral palsy that persisted long after the original brain injury occurred. This published work was accompanied by a press release in July 2008 that resulted in national attention from both the scientific and lay communities. Another area of interest centers on how brain stem cells become activated by injuries and then function to replace neighboring cells which are vulnerable to injury. This activation allows a very specific part of the brain, the hippocampus, to partially recover its important functions in learning and memory formation. Problems with learning and memory are among the most damaging sequelae following brain injuries due to trauma or lack of oxygen. These findings now allow researchers to begin investigating drugs that might be able to enhance this process of self-recovery.

Dr. Joshua Koch serves as the site primary investigator for the multi-center trial, Therapeutic Hypothermia After Pediatric Cardiac Arrest (THAPCA). This trial is funded by the National Heart, Lung, and Blood Institute and began enrollment on September 1, 2009. He is also primary investigator for the project, Prospective Analysis of Regional Cerebral Perfusion Using Head Ultrasound and Multi-Source-Detector Near Infrared Spectroscopy (NIRS) Imaging.



Dr. Peter Lockett's current research interests include clinical trials in pediatric critical care. In 2002 he was an initial organizing member of the Pediatric Acute Lung Injury and Sepsis Investigators (PALISI) clinical trials group. This group recently

completed a collaboration with members of the Acute Respiratory Distress Syndrome Network (ARDSnet) as part of the NIH Roadmap contract mechanism entitled "Reengineering Clinical Research in Critical Care." This project involved the development, validation and distribution to naive sites of a computer-based decision support tool for glucose control in adult and pediatric ICUs. An application to the NIH for a large multi-center trial of glucose control in critically ill children is pending. Dr. Lockett is a co-investigator and the site PI for this project.

Dr. Darryl Miles has continued his work to understand the pathophysiology unique to childhood brain injury and to investigate the mechanisms of traumatic brain injury and neural self-repair. It is his desire to contribute to the development of novel therapeutic strategies, ultimately improving the neuro-cognitive outcome of pediatric acquired brain injury. His work using transgenic mouse models has demonstrated that immature neuronal and glial progenitors are selectively vulnerable to various insults such as traumatic brain injury (TBI) and hypoxic-ischemic encephalopathy and contribute to the neural remodeling response. In the transition from basic science to clinical investigation, he is a contributing member of the Brain and Nerve Injury Center (BNIC) and is the CMC site principal investigator on a NIH funded study to investigate how genetic polymorphism affect long-term developmental outcome in children after moderate and severe TBI. Dr. Miles is currently analyzing MRI and CT findings in children with moderate to severe TBI to identify patterns of injury and their relationship to neuro-cognitive outcome. This analysis hopefully will serve as a basis for future studies in children, using advanced neuro-imaging techniques to elucidate the brain's acute and remodeling response to TBI.

During lung formation, alterations in vessel growth contribute to dysfunctional lung development. The research of Dr. Margaret Schwarz focuses on the contributions that the vasculature brings to functional lung development. In order to better examine this concept, focus has been placed on the individual vessel types as well as their ability to influence the distal lung cells to exchange oxygen. Researchers specifically look at the influence that known vascular growth factors have on other cell types that have typically not been determined to be responsive to vascular growth factors. Within this context they have developed specific models that examine whether immature cells that are capable of becoming oxygen-exchanging cells are able to make this morphogenic change when exposed to vascular-specific growth factors. Their endpoint is to identify whether morphogenesis of these immature cells is impacted. Identifying those factors that have multi-cellular targets will greatly expand the understanding of lung development, leading to new therapeutic targets to treat disease processes that result in abnormal lung development.

Dr. James Thomas focuses his work on the investigation of how the host senses and responds to injury and infection on a molecular level. Advances stemming from research in *Drosophila* (fruit flies) development and the Human Genome Project uncovered a highly conserved family of mammalian proteins – the toll-like receptors (TLRs) – that detect microbial invasion and tissue injury and trigger local and systemic responses to contain the insult. These receptors communicate with the cell's interior, using signaling proteins common to all the TLRs as well as the interleukin-1

family of receptors. He has worked to genetically inactivate two critical intracellular signaling proteins – IRAK1 and IRAK2 – and is studying their function in the innate and adaptive immune response, including the development of systemic lupus erythematosus (SLE) in humans and the acute inflammatory response to infection in murine and in vitro models.

Dr. Modem Vinai focuses his research efforts on the effect of fluid removal through renal replacement therapy in children with acute inflammation, and the development of a database on the outcome of patients treated with this modality.

Clinical Activities

2010 was a year of continued productivity and enhanced clinical care for the Division of Critical Care Medicine, with admissions remaining over 3,000 for the year. The division, in collaboration with the Division of Cardiology and the Heart Center, provides state-of-the-art cardiovascular critical care services for children with congenital heart disease as well as other cardiac diseases. There were 700 additional admissions of complex cardiac disease to the Cardiovascular Intensive Care Unit for this academic year. As a leading provider of critical care services, the division does not measure or define the success of efforts by patient volume or bed number, but rather by the specialization of care that is offered and the quality outcomes of patients.



The ICU at Legacy campus offered 24/7 coverage of critically ill children, as well as monitoring of post-operative and chronically ventilated patients, under the leadership of Dr. Raymond Nkwantabisa. The Legacy campus counts with all supporting subspecialties.

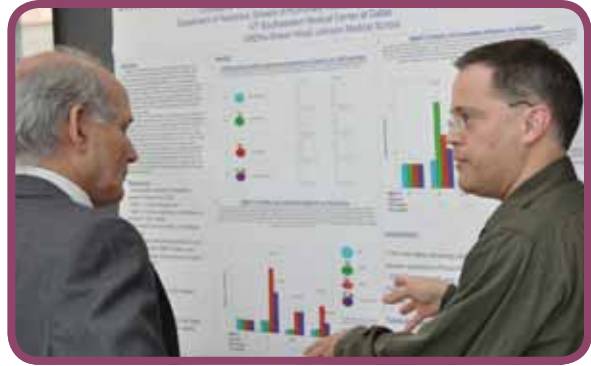
Dr. Maeve Sheehan, provided physician leadership the Children's transport program and Access Center, two integral patient care services that differentiate critical care medicine within the regional market. Under her leadership Children's Medical Center Transport system has an established reputation as a leader in the region. Dr.

Archana Dhar, Associate Director of the Pediatric Critical Care Fellowship Program provided leadership on the education and training of the next generation of Pediatric Intensivists. The ECMO program under the leadership of Dr. Marita Thompson and supported by Raju Meyappam and James Thomas continues to provide state of the art care for critically ill children. Under the leadership of Dr. Steve Kernie, senior faculty member and Medical Director of the Perot Family Center for Brain and Nerve Injuries, the division has seen improvement and standardization of the clinical practice and long-term follow-up for children with brain injuries. The Perot Center has been instrumental to the support of clinical trials in the area of neuroprotection. Under the leadership of Dr. Fiona Levy, a senior member of the division and Vice President for Quality at Children's, the critical care division has refined performance improvement efforts as evidenced by widespread participation of the division faculty in various quality improvement projects. Dr. Cindy Darnell's efforts on organ procurement education have been decisive to improve the lives of chronically ill children through awareness and education on the potential of organ donation. Dr. Susan Morris has taken a leadership role on critical care education through simulation scenarios at our state-of-the-art simulation center. Dr. Leslie Garner has provided exemplary service as the division leader for both residency and medical student education during PICU rotations. Dr. Joshua Wolovitz in collaboration with the Respiratory Department, headed by Brian Walsh, RRT., developed Clinical Guidelines for ventilator weaning.

Dr. Michael Green, a Pediatric Intensivist trained at Children's Hospital, Boston, MA. Harvard medical School and Teresa Zuluaga, M.D. a Pediatric Intensivist trained at Children's Hospital, University of San Francisco, joined the Pediatric Critical Care Faculty at Children's Medical Center.

Presentations/Teaching Activities

Divisional teaching activities for residents, fellows and medical students take place during the care of critically ill children and with specific didactic curriculums that foster intellectual exchange and the life-long habit to question and learn. The principal teaching platform is daily rounds; however, admissions, resuscitations and major interventions all provide hands-on learning opportunities. This bedside teaching is complemented by didactic sessions specifically tailored for the level of training of residents and fellows. Critical care practice is based on team effort, and teaching activities are focused on the education and participation of team members, including nursing and respiratory therapy colleagues. At weekly division conferences, clinical cases, review of quality standard practices and divisional performance is assessed. Additionally, monthly division research conferences allow review of research works and evaluation of fellows' progress toward completion of research projects. A weekly critical care curriculum for fellows ensures that trainees at all levels develop the foundational knowledge necessary for the practice of high-quality clinical care.



Dr. Christopher Todd discusses his research project with Dr. George Lister at the department's 1st Annual Senior Fellows Research Day, May 2010

Leticia Castillo, M.D.

- "Clock Dysfunction and ICU Practices," Pediatric Critical Care Research Seminar Series, UT Southwestern, April 2010
- "Metabolic Diseases in Children," Board Review Course, Chicago, August 2010
- "Insulin Resistance and Protein Metabolism in Critically Ill Children," Obesity Alliance Seminar Series on Nutrition, Metabolism and Obesity, UT Southwestern, September 2010

Cindy Darnell, M.D., M.S.C.S.

- "Organ and Tissue Donation in the Cardiac ICU," Cardiac ICU Nurse Lecture Series, Children's, August 2010

Joshua Koch, M.D.

- "Neurocognitive Outcomes After Congenital Heart Surgery," The 41st Kenneth C. Haltalin in Pediatrics for the Practitioner Annual Seminar, Dallas, TX, April 2010

Major Administrative or Leadership Responsibilities

Leticia Castillo, M.D.

- Director, Pediatric Critical Care Medicine
- Director, Pediatric Critical Care Fellowship Program
- Permanent Member, Surgery Anesthesia and Trauma (SAT) Scientific Review Group, National Institutes of Health
- Ad hoc Reviewer, Biomedical Imaging Technology Scientific Review Group, National Institutes of Health
- Ad hoc Reviewer, Clinical Studies and Training Scientific Review Group, National Heart, Lung, and Blood Institute
- Ad hoc Reviewer, Integrative Nutrition and Metabolic Processes Scientific Review Group, National Institutes of Health
- Ad hoc Peer Reviewer, American Journal of Physiology (Endocrinology and Metabolism), Critical Care Medicine, Pediatric Critical Care Medicine, New England Journal of Medicine, American Journal of Clinical Nutrition, Journal of Nutrition

Deborah L. Carlson, Ph.D.

- Member, Shock Society Presidential Committee for Honors
- Member, International Shock Society Presidential Committee for Publications
- Member, IACUC, UT Southwestern

Cindy Darnell, M.D.

- Co-chair, Transplant Review Committee, Children's
- Hospital Physician Liaison for Organ Donation, Children's

Archana Dhar, M.D.

- Associate Director, Pediatric Critical Care Fellowship

Leslie Garner, M.D.

- Course Director, MSIV PICU Acute Care Rotation, Children's
- Liason, Resident Education in the PICU, Children's
- Chair, Critical Care Services EPIC User Group, Children's

Steven Kernie, M.D.

- Medical Director, Perot Family Center for Brain and Nerve Injuries
- Ad hoc Reviewer, National Science Foundation, Faculty Early Career Development Program
- Ad Hoc Reviewer, Sigma Delta Epsilon/Graduate Women in Science Fellowship
- Ad Hoc Reviewer, Department of Defense, Traumatic Brain Injury Research Program
- Ad Hoc Reviewer, Children's Clinical Research Advisory Committee
- Member, The New Jersey Commission on Spinal Cord Research
- Member, NIH, NINDS, guest member, Neurogenetics and Neuroimaging, MDCN-K, Neurogenesis and Cell Fate, MDCN and Molecular Neurogenetics

Joshua Koch, M.D.

- Medical Director, Cardiovascular Intensive Care Unit, Children's
- Co-Chair, CPR Committee, Children's

Fiona H. Levy, M.D.

- Vice President, Quality, Children's
- Interim Director, Division of Pediatric Critical Care Medicine (through November 2009)
- Director of Access and Inpatient Services, Children's
- Member, Council on Child Health Quality, National Association of Children's Hospitals and Related Institutions
- Member, Quality and Safety Leaders Steering Committee, Child Health Corporation of America
- Member, Children's Hospitals Advancing Patient Safety (CHAPS) Council, Child Health Corporation of America
- Member, National Quality Forum Technical Advisory Panel
- Member, Pediatric Quality Indicator Advisory Group, a Collaboration with Texas Healthcare Information Collection for the Center for Health Statistics, Texas Department of State Health Services
- Ad Hoc Member, Dallas/Fort Worth Hospital Council Data Initiative Executive Committee

Peter M. Luckett, M.D.

- Member, American Thoracic Society (ATS) Membership Committee
- Member, ATS Pediatric Assembly Program Committee
- Medical Director, Respiratory Care Department, Children's
- Member, American Thoracic Society Nominating Committee

T. Raju Meyappan, M.D.

- Core Member, ECMO Team, Children's

Darryl Miles, M.D.

- BSI Clinical Leader Medical/Trauma ICU, Children's

Raymond Nkwantabisa, M.D.

- Clinical Director, Legacy Campus PICU.

Julio Pérez Fontán, M.D.

- Vice Chairman, Department of Pediatrics, UT Southwestern
- Executive Vice President of Medical Affairs, Children's
- Associate Dean for Pediatric Services and Program Development, UT Southwestern
- Interim Director, Division of Pediatric Respiratory Medicine, UT Southwestern
- Chairman, CTSA Pilot Grant Program
- Co-Chair, Chair of Radiology Search Committee
- Associate Director, T32 Training Grant
- Chairman, Anesthesiologist for Children Board of Directors

Margaret Schwarz, M.D.

- Ad Hoc, NHLBI Respiratory Integrative Biology and Translational Research Study Section

Maeve Sheehan, M.D.

- Medical Director, Transport and Access Services, Children's
- Resident Mentor, UT Southwestern, Department of Pediatrics
- Physician Lead, The Crystal Charity Ball "Signature Project," Children's
- Medical Director, PICU Nurse Practitioner Practice, Children's
- Co-chair, Emergency Medicine Committee, Texas Pediatrics Society
- Member, Pediatrics Committee, Governor's EMS and Trauma Advisory Council
- Quality Director, Critical Care Division.

Marita T. Thompson, M.D.

- Medical Director, ECMO.
- Medical Director, Trauma/Neurosurgical ICU, Children's
- Member, Institutional Review Board (IRB)
- Core Interviewer for Intern Applicants

Joshua Wolovits, M.D.

- Physician Leader, Heart Center BSI Committee
- Physician Champion, CICU NACHRI CA-BSI

Honors / Awards

Leticia Castillo, M.D.

- Member American Pediatric Association.

Cindy Darnell, M.D.

- Treasurer, Medical and Dental Staff 2010

Maeve Sheehan, M.D.

- President Elect, Medical and Dental Staff 2010, Children's
- America's Top Pediatricians, Consumers' Research Council of America

Emergency Medicine

The emergency department at Children's Medical Center is the only Level 1 pediatric trauma center in North Texas, and one of the busiest pediatric emergency medicine clinical services in the country. The Division has 19 pediatric emergency medicine faculty, three general pediatric faculty and nine fellows dedicated to advancing the care of acutely ill and injured children through clinical service, education and research.

The division had a very successful recruiting season in 2010, adding four outstanding new faculty:

- Dr. Rhiannon Hull completed her pediatric residency at UT Southwestern.
- Dr. Reagann McCreary completed a combined pediatrics and emergency medicine residency at Indiana University.
- Dr. Jennifer Pape completed her residency at Duke University Medical Center.
- Dr. Dane Fliedner joined us after three years as Associate Clinical Professor at the University of California Irvine and three years with Acute Kids Urgent Care in the north Dallas area.

The well-established, clinically strong pediatric emergency medicine fellowship program recruits three fellows per year. The program offers a recently incorporated comprehensive research curriculum with didactic teaching that covers basic research concept and statistics.

Division faculty have diverse research and administrative interests, offering the pediatric emergency medicine fellows a unique opportunity to select the appropriate mentor with interests that match theirs. A full-time, experienced research coordinator assists the faculty and fellows with their research projects.

In addition, faculty and fellows play a major role in the education of pediatric residents, family medicine residents, adult emergency medicine residents, and medical students. Training in the emergency department is often sought by residents from other pediatric training programs in Texas and Oklahoma. Recognizing the outstanding clinical training, and opportunities to see a diverse population of acutely ill and injured children, fellows from other pediatric emergency medicine fellowship programs often submit requests for elective rotations here.

In 2010, Dr. Britton Devillier completed his physician executive training and assumed responsibilities in compliance training and billing practice within the division.

Faculty

Halim Hennes, M.D., M.S., Professor of Pediatrics and Surgery, is the Director of Pediatric Emergency Medicine at UT Southwestern and Medical Director of Emergency Services at Children's. His clinical expertise is in the areas of pediatric traumatic brain injury, pain management and sedation. Current research centers on pre-hospital pediatric pain management and education of pre-hospital providers. Dr. Hennes received his medical degree from Ain Shams University, Cairo, Egypt, in 1973, and his M.S. in biostatistics from the Medical College of Wisconsin, Milwaukee, in 1992. After completing his post-graduate training in Egypt, he moved to the United Kingdom for additional training before coming to the United States. He completed his general pediatric training at Children's Hospital of Wisconsin, Milwaukee, in 1986 before joining the faculty at the Medical College of Wisconsin as a Pediatric Emergency Medicine physician from 1986 to 2008. In 2002, Dr. Hennes completed a fellowship in Emergency Medical Services and currently serves as the Academic Pediatric Societies' liaison to the Emergency Medical Services for Children (EMSC). He also served on numerous regional, national and international committees. The Business Journal named him one of the Best Pediatric Emergency Medicine doctors in America in 2007.



Halim Hennes, M.D.
Director, Pediatric Emergency Medicine

The **ONLY LEVEL 1 PEDIATRIC TRAUMA CENTER**
in North Texas



Mohamed K. Badawy, M.D.

Assistant Professor

Clinical/research expertise: Pediatric emergency care, head trauma, asthma, traumatic brain injury

Education: University of Alexandria, Egypt, M.D. *with honors*, 1991

Post-doctoral training: University of Alexandria Hospitals, Egypt, House Staff, 1992-1993; Intern, General Surgery, 1993; New York Medical College, Manhattan, Resident, Pediatrics, 1996-1999; University of Rochester, NY, Fellow; Pediatric Emergency Medicine, 1999-2002



M. Douglas Baker, M.D.

Professor

Director of Medical Services at UT Southwestern

Children's Sarah M. and Charles E. Seay Distinguished Chair in Pediatric Medicine

Clinical/research expertise: Pediatric emergency care, fever management in infants and children

Education: Franklin and Marshall College, Lancaster, PA, B.A., 1974; Temple University School of Medicine, Philadelphia, PA, M.D., 1978; Yale University, New Haven, CT, Master of Arts, *privatum*, 1999

Post-doctoral training: Geisinger Medical Center, Danville, PA, Intern, Pediatrics, 1978-1979; Children's Hospital National Medical Center, Washington, DC, Resident, Pediatrics, 1979-1981; Chief Resident in Pediatrics, 1981-1982; Milton S. Hershey Medical Center, Hershey, PA, Fellow, Newborn Critical Care Medicine, 1982-1983; Children's Hospital Boston, MA, Fellow, Pediatric Emergency Medicine, 1983-1984



B. Beatrix Bansal, M.D.

Assistant Professor

Associate Director of Emergency Department, Children's at Legacy

Clinical expertise: Pediatric emergency care

Education: Santa Clara University, CA, B.S., 1989; University of Hawaii, Honolulu, M.D., 1994

Post-doctoral training: UT Southwestern/Children's, Resident, 1994-1997; UT Southwestern, Fellow, Pediatric Emergency Medicine, 1997-2000



Sara L. Beers, M.D.

Assistant Professor

Clinical expertise: Pediatric emergency care, status asthmaticus and child maltreatment syndrome

Education: University of New Mexico, Albuquerque, B.S., 1995; University of New Mexico School of Medicine, Albuquerque, M.D., 2001

Post-doctoral training: UT Southwestern/Children's, Resident, Pediatrics, 2001-2004; UT Southwestern, Fellow, Pediatric Emergency Medicine, 2004-2007



Britton M. Devillier, M.D., M.P.H.

Assistant Professor

Clinical expertise: Pediatric emergency care

Education: Oral Roberts University, Tulsa, OK, B.S., 1985; Tulane University School of Medicine and School of Public Health and Tropical Medicine, New Orleans, LA, M.D., 1989

Post-doctoral training: Baylor College of Medicine, Waco, TX, Resident, Pediatrics, 1989-1992; Texas Children's Hospital, Houston, Fellow, Pediatric Emergency Medicine, 1992-1994



Philip Ewing, M.D.

Assistant Professor

Clinical/research expertise: Pediatric emergency care, acute management of diabetic ketoacidosis

Education: Davidson College, Davidson, NC, B.S., 1996; Virginia Commonwealth University, Medical College of Virginia Campus, Richmond, M.D., 2002

Post-doctoral training: UT Southwestern/Children's, Resident, Pediatrics, 2002-2005; UT Southwestern, Fellow, Pediatric Emergency Medicine, 2005-2008

Sing-Yi Feng, M.D.

Assistant Professor

Clinical/research expertise: Pediatric emergency care, toxicology

Education: Pennsylvania State University, University Park, B.S., 1996; Jefferson Medical College, Philadelphia, PA, M.D., 1998

Post-doctoral training: Lutheran General Children's Hospital, Chicago, IL, Resident, Pediatrics, 1998-2001; Chief Resident, Pediatrics, 2001-2002; UT Southwestern, Fellow, Pediatric Emergency Medicine, 2002-2005; Fellow, Medical Toxicology, 2005-2007



Dane Fliedner, M.D., M.P.H.

Assistant Professor

Clinical expertise: Pediatric emergency medicine

Education: University of California, Santa Cruz, B.A., 1995; New York Medical College, Valhalla, M.D. and M.P.H., 2000

Post-doctoral training: University of California, Irvine, Resident, Pediatrics, 2000-2003



Collin S. Goto, M.D.

Associate Professor

Clinical/research expertise: Pediatric emergency care, toxicology

Education: University of Hawaii, Honolulu, B.A., 1986; University of Hawaii, John A. Burns School of Medicine, Honolulu, M.D., 1990

Post-doctoral training: John A. Burns School of Medicine/Kapiolani Medical Center for Women and Children, Honolulu, HA, Resident, Pediatrics, 1990-1993; UT Southwestern, Fellow, Pediatric Emergency Medicine, 1993-1996; Fellow, Medical Toxicology, 1998-1999



Craig J. Huang, M.D.

Associate Professor

Associate Director, Transport Services

Associate Director, Pediatric Emergency Medicine Fellowship Program

Clinical/research expertise: Pediatric emergency care, apparent life-threatening events, the use of technology in pediatric emergency care, trauma and burns

Education: Rice University, Houston, TX, B.A., 1992; UT Medical Branch at Galveston, M.D., 1996

Post-doctoral training: Virginia Commonwealth University, Medical College of Virginia Hospitals, Richmond, Resident, Pediatrics, 1996-1999; Eastern Virginia Medical School, Children's Hospital of The King's Daughters, Norfolk, Fellow, Pediatric Emergency Medicine, 1999-2002



Rhiannon Hull, M.D.

Instructor

Clinical expertise: Pediatric emergency medicine, general pediatrics

Education: Louisiana Tech University, Ruston, B.S., 2003; UT Medical Branch at Galveston, M.D., 2007

Post-doctoral training: UT Southwestern/Children's, Resident, Pediatrics, 2007-2010



Reagann McCreary, D.O.

Assistant Professor

Clinical/research expertise: Pediatric emergency medicine, clinical research

Education: Texas Tech University, Lubbock, B.S. *summa cum laude*, 2000; University of North Texas Health Science Center-Texas College of Osteopathic Medicine, Fort Worth, M.D., 2005

Post-doctoral training: Indiana University, Indianapolis, Resident, Pediatrics, 2005-2010





Audra L. McCreight, M.D.

Assistant Professor

Clinical/research expertise: Pediatric emergency care, pediatric ultrasound, applications of ultrasound technology

Education: Austin College, Sherman, TX, B.A., 1997; UT Southwestern, M.D., 2001

Post-doctoral training: UT Southwestern/Children's, Resident, Pediatrics, 2001-2004; UT Southwestern, Fellow, Pediatric Emergency Medicine, 2004-2007



Julia A. McDonald, M.D.

Assistant Professor

Clinical expertise: Pediatric emergency care, international health

Education: Texas Christian University, Fort Worth, B.S., 1989; UT Health Science Center at San Antonio, M.D., 1993

Post-doctoral training: University of Louisville, KY, Resident, Pediatrics, 1993-1997; Fellow, Pediatric Emergency Medicine, 1997-2000



Jo-Ann Nesiana, M.D., M.S.

Assistant Professor

Clinical/research expertise: Pediatric emergency care, head trauma, pre-hospital pediatric trauma care

Education: University of Benin, Benin-City, Nigeria, M.B.B.S., 1989; Graduate School of Biomedical Sciences, Milwaukee, WI, M.S., 2008

Post-doctoral training: Driscoll Children's Hospital, Corpus Christi, TX, Resident, Pediatrics, 1998-2001; Chief Resident, Pediatrics, 2001-2002; Medical College of Wisconsin, Milwaukee, Fellow, Pediatric Emergency Medicine, 2005-2008



Pamela J. Okada, M.D.

Associate Professor

Division Research Director

Clinical/research expertise: Pediatric emergency care, traumatic brain injury, trauma outcomes, neurologic emergencies

Education: University of California, Los Angeles, B.S., 1985; Tulane University School of Medicine, New Orleans, LA, M.D., 1990

Post-doctoral training: Harbor-UCLA Medical Center, Torrance, CA, Resident, Pediatrics, 1991-1993; Fellow, Pediatric Emergency Medicine, 1993-1994; UT Southwestern, Fellow, Pediatric Emergency Medicine, 1994-1996



Jennifer Pape, M.D.

Instructor

Clinical/research expertise: Pediatric emergency medicine, resident education, general pediatric sports medicine

Education: Angelo State University, Angelo, TX, B.S. *summa cum laude*, 2001; UT Houston, M.D., 2006

Post-doctoral training: Duke University, Resident, Pediatrics, 2006-2010



Kalpesh Patel, M.D.

Assistant Professor

Clinical/research expertise: Pediatric emergency care, pediatric sedation, clinical applications for emerging medical technology

Education: Southern Methodist University, Dallas, TX, B.S., 1994; UT Health Science Center at San Antonio, M.D., 1998

Post-doctoral training: UT Medical Branch at Galveston, Resident, Pediatrics, 1998-2001; Emory University, Atlanta, GA, Fellow, Pediatric Emergency Medicine, 2005-2008

Susan M. Scott, M.D.

Associate Professor

Director, Pediatric Emergency Medicine Fellowship Program

Clinical expertise: Pediatric emergency care, injury prevention

Education: Louisiana Tech University, Ruston, B.S., 1978; Louisiana State University School of Medicine, Shreveport, M.D., 1982

Post-doctoral training: UT Southwestern/Children's, Resident, Pediatrics, 1983-1985; UT Southwestern, Fellow, Pediatric Emergency Medicine, 1992-1995



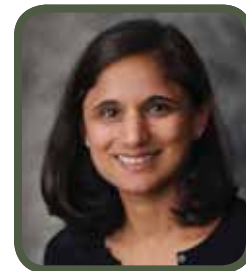
Geetanjali Srivastava, M.D., M.P.H.

Assistant Professor

Clinical/research expertise: Pediatric emergency care, life-threatening infections, evaluation and management of meningitis

Education: Bryn Mawr College, PA, B.A., *cum laude*, 1993; UT Houston, M.D., 1998; M.P.H., 1998

Post-doctoral training: University of Chicago/Comer Children's Hospital, IL, Resident, Pediatrics, 1998-2001; Children's National Medical Center, Washington, DC, Fellow, Pediatric Emergency Medicine, 2006-2009



Mercedes Uribe, M.D.

Assistant Professor

Clinical/research expertise: Pediatric emergency care, trauma, resuscitation, pain and sedation management

Education: "Tupac Amaru" Peruvian National Police School, Barrios Altos, Lima, Peru, B.S., 1989; Universidad de Montemorelos, School of Medicine, Nuevo Leon, Mexico, M.D., 1998

Post-doctoral training: Weill Medical College of Cornell University/Lincoln Medical Center, Bronx, NY, Resident, Pediatrics, 2003-2006; UT Southwestern, Fellow, Pediatric Emergency Medicine, 2006-2009



Robert A. Wiebe, M.D.

Professor

Clinical/research expertise: Pediatric emergency care, emergency systems organization, office practice emergency preparation, injury prevention and pre-hospital care

Education: San Francisco State University, CA, B.A., *cum laude*, 1963; Tulane University School of Medicine, New Orleans, LA, M.D., 1967

Post-doctoral training: Tripler General Hospital, Honolulu, HI, Resident, Pediatrics, 1968-1970



Jessica Sharry Williams, M.D.

Assistant Professor

Clinical/research expertise: Pediatric emergency care, post traumatic stress disorder

Education: Bucknell University, Lewisburg, PA, B.A., 1999; UT Health Science Center at San Antonio, M.D., 2003

Post-doctoral training: UT Medical Branch at Galveston, Resident, Pediatrics, 2003-2006; Eastern Virginia Medical School, Norfolk, Fellow, Pediatric Emergency Medicine, 2006-2009



Post-doctoral Fellows

Completed June 2010



Geetha Devdas, M.D.

Current Position:
Cook Children's, Fort Worth, TX

Research Interests:
Injury prevention



Catherine Moore, M.D.

Current Position:
Assistant Professor, Vanderbilt
University, Nashville, TN

Research Interests:
Respiratory medicine



Neil Evans, M.D.

Current Position:
Cook Children's, Fort Worth, TX

Research Interests:
Toxicology

2nd Year



Jendi Haug, M.D.

Research Interests:
Use of Simulation lab in medical
education



Mark Tabarrok, M.D.

Research Interests:
Patient safety



Irma Ugalde, M.D.

Research Interests:
Utilization of new diagnostic tests and
identifying children with septic arthritis

3rd Year



Adriana Rodriguez, M.D.

Research Interests:
Resuscitation



Dennis Tanner, M.D.

Research Interests:
Toxicology



Atim Uya, M.D.

Research Interests:
Ultrasound

1st Year



Amanda Greuter, M.D.

Research Interests:
Near infrared spectroscopy for pediatric
acute scrotum and testicular torsion



Heather Kleczewski, M.D.

Research Interests:
West Dallas project



David Rodriguez, M.D.

Research Interests:
Asthma emergency department
treatments

Clinical Research Staff

Dorothy Lopez, Research Assistant
Ashley Negaard, Research Coordinator

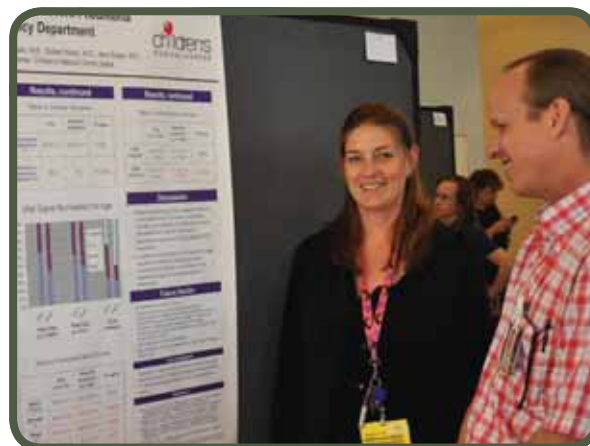
Research Activities

The Emergency Department serves a diverse population with broad pediatric pathology and high acuity providing an ideal environment for clinical research. The division has 19 emergency medicine faculty with diverse clinical and academic interests and a full-time research coordinator dedicated to assisting faculty and fellows with their research activities. Because of a rich clinical service and research interest, the division has been selected to participate in three national research network multicenter trials. Dr. Pam Okada is the site investigator on these three studies. In addition, the division is leading a multicenter study on prehospital pain management with Dr. Halim Hennes as the principle investigator. The study is funded through August 2011 by Emergency Medical Services for Children.

Recognizing the importance of training the fellows in research and other scholarly activities, the division provides start up funds to support meaningful research by the fellows. The division had \$300,487 in extramural federal funding and \$123,738 in industry supported research.

There are several areas of research interests among division faculty:

- Diabetic ketoacidosis
- Normal saline versus balanced salt solution as the initial bolus fluid in pediatric diabetic ketoacidosis
- Pediatric asthma care
- The initiation of chronic asthma care regimens in the pediatric emergency department
- Pediatric Texas Emergency Department Asthma Surveillance Project
- Pediatric ultrasound
- Therapy for outpatient management of community acquired methicillin resistant staphylococcus and effect of ultrasound management on outcome
- Neurologic emergencies
- Therapeutic moderate hypothermia for the treatment of severe pediatric traumatic brain injuries; NINDS subcontract comparing the effects of moderate hypothermia on mortality after severe traumatic brain injury
- The use of lorazepam for the treatment of pediatric status epilepticus: a randomized double blinded trial of lorazepam and diazepam; NICHD subcontract comparing the treatment effects of lorazepam and diazepam in pediatric status epilepticus
- Pre-hospital pain management
- A multicenter study to evaluate the effect of an educational pediatric pain management program for emergency medical technicians and paramedics; HRSA funded grant to develop and validate an educational module for pre-hospital providers on pediatric pain assessment and management
- Sedation and pain control
- Medical toxicology
- Trauma and injury prevention
- Family presence during pediatric trauma team activation: measuring the effects of a multidisciplinary approach to patient/family-centered care; HRSA subcontract evaluating the effect of family presence in the care of the pediatric trauma patient
- Pediatric trampoline injuries: a prospective observational study evaluating the risk factors and injuries associated with pediatric trampoline use
- Parental characteristics and pediatric emergency department usage



1st Annual Senior Fellows Research Day

*Graduating fellow Catherine Moore with
Dr. James Thomas, Associate Professor,
Pediatric Critical Care Medicine*

Clinical Activities

The division of Pediatric Emergency Medicine (PEM) provides the clinical resources for staffing emergency services at the Children's Dallas and Legacy campuses. Nineteen pediatric emergency medicine faculty and three general pediatricians provide 24/7 double coverage, and triple coverage during peak hours, at the Dallas campus. In addition, the faculty provide limited clinical coverage 8-12 hours/day at the Legacy campus. Emergency medicine physicians from the Adult Emergency Medicine Department at UT Southwestern, and two contracted pediatricians with extensive emergency

medicine experience, participate in providing clinical services at Dallas. The clinical service is also augmented by nine PEM fellows and six mid-level providers. While recruitment efforts continue, the Legacy campus PEM clinical service is predominantly covered by contracted physicians 24/7 with additional clinical support provided by division faculty.

The Emergency Department (ED) is an ACS certified level I pediatric trauma center and provides trauma stabilization and resuscitation for serious and critical injuries arriving by ambulance. There are two board certified pediatric emergency medicine toxicologists who manage a special lead clinic at Children's and provide toxicology consultation service to Children's and Parkland.



Over 116,700 patients were cared for during the last academic year at three clinical service areas. The majority of these patients (60,611) were evaluated in the ED. The remaining patients had lower acuity and were evaluated in First Care and the Referral Care Clinic, which provide urgent care resources to meet the needs of the private practicing pediatricians in the Metroplex. Most ED patients are seriously ill or injured, or with complex special health care needs, and received specialty care and consultation from the sub-specialists providing services at Children's Medical Center. Approximately 25% of the patients evaluated in the ED are admitted to the hospital. Aside from the care provided to acutely ill and injured children, faculty perform many procedural sedations for fracture reductions, laceration repair, and incision and drainage of abscesses. As a tertiary care pediatric facility, the ED received many transfers from other hospitals' emergency departments.

Despite an increase of eight percent in patient volume, from 105,039 in 2009 to 111,395 in 2010, the division continued to improve key performance measures. The overall mean length of stay decreased by 27 percent in 2010 compared to 2008, and the number of patients that left without being seen decreased by 82 percent from 6.81 percent in 2009 to 1.2 percent in 2010. In addition, the door-to-provider time decreased by 43 percent from 115 minutes in 2009 to 65 minutes in 2010. Furthermore, the ED patient satisfaction scores in 2010 improved by 21 percent from 2009 scores.

Presentations/Teaching Activities

The Emergency Medicine faculty and fellows are very active in providing didactic education internally to UT Southwestern residents and medical students, and to physicians locally and nationally. Major internal educational activities include didactic lectures to the Pediatric, Family Medicine, and Emergency Medicine residents. The faculty also are involved in teaching pediatric advanced life support (PALS) and advanced trauma life support (ATLS), and operating the simulation lab. Dr. Julia McDonald is involved heavily with international health, traveling to Haiti and the Dominican Republic to teach pediatric emergency medicine to physicians. She often invites other emergency medicine physicians and residents and medical students to travel with her.

Halim Hennes, M.D., M.S.

- "Pediatric Head Trauma, Recent Advances," "Pediatric Procedural Sedation and Pain Management" and "Evaluation and Management of the Febrile Child," Turkish Pediatric Emergency and Critical Care Congress, Adana, Turkey, March 2010
- "PAMPPER, an Educational Program for EMS Providers," EMSC Annual Grantee and Stakeholders Meeting, Bethesda, MD, May 2010

Philip Ewing, M.D.

- "Balanced Salt Solutions versus Normal Saline as the Initial Bolus Solution for Pediatric Patients in DKA," Pediatric Faculty Research Conference, Children's, January 2010
- "Dysbarism and High-Altitude Emergencies," Pediatric Emergency Medicine Fellow's Conference, Children's, March 2010
- "Prehospital Airway Management," Prehospital Provider's Meeting, Children's, April 2010

Robert A. Wiebe, M.D.

- Moore CP, Huang C, Rodriguez A, Wiebe RA, Siegel J. “Presenting Signs and Symptoms of Severe Pneumonia in the Pediatric Emergency Department,” Pediatric Academic Societies Annual Meeting, Vancouver, BC, May 2010 (Poster Presentation)
- Devdas G, Scott S, Wiebe RA, Kelly N, Hicks P, Okada P. “A Survey of Pediatric Resident Knowledge of Injury Prevention,” American Academy of Pediatrics, National Conference and Exhibition, San Francisco, CA, October 2010 (Poster Presentation)
- “ENT Emergencies in Kids,” Emergency Medicine Grand Rounds, UT Southwestern, February 2010
- “Genitourinary Emergencies in Children,” “Visual Diagnosis in Children: Identifying Common and Life-Threatening Rashes,” “The ‘Lost Art’ of the Physical Exam: Making the Diagnosis Without ‘Tests’” and “Metabolic Emergencies in Kids,” 14th Annual Spring Conference on Pediatric Emergencies, Guanacaste, Costa Rica, April 2010

Major Administrative or Leadership Responsibilities**Halim Hennes, M.D., M.S.**

- Director, Division of Pediatric Emergency Medicine
- Medical Director, Emergency Services, Children’s
- Member, Board of Directors, Dallas Physicians for Children
- Member, Committee on Pediatric Emergency Medicine, Texas Pediatric Society
- Member, NACHRI Quality Improvement Committee Steering Committee
- Member, NACHRI Pediatric Pain Management in the Emergency Department Planning Group

Beatrix Bansal, M.D.

- Board Member and Volunteer, Frisco Kids Clinic, 2008-2010

Craig J. Huang, M.D.

- Section Editor, ENT Section, PEMsoft, Pediatric Emergency Medicine Clinical Decision Support Software and Multi-media Medical Reference, Version: v2.7
- Editor and Major Contributor, PEMPix (<http://www.aap.org/moc/pempix>), A Web-Based Pediatric Emergency Medicine Clinical Image Library Sponsored by the Section of Emergency Medicine, American Academy of Pediatrics
- Member, Editorial Board (PREP E-Med) Pediatrics Review and Education Program-Emergency Medicine, American Academy of Pediatrics
- Media Editor, PREP E-Med, American Academy of Pediatrics
- **Robert A. Wiebe, M.D.**
- Chair, Committee on Continuing Medical Education, American Academy of Pediatrics
- Chair, Sub-board Pediatric Emergency Medicine, American Board of Pediatrics
- Member, Committee on Pediatric Emergency Medicine, Texas Pediatric Society

Endocrinology

The Division of Pediatric Endocrinology undertakes teaching, research and clinical care of patients with diabetes, obesity and endocrine disorders that affect growth, pubertal development or the function of the endocrine glands, such as the thyroid and adrenals. It is one of the largest such divisions in the country and is the only major program caring for children with diabetes in the Dallas metropolitan area. Because the division cares for such a large number of children with these disorders within a very large catchment area - a 100 to 150-mile radius in most directions - it is in a unique position to provide fellowship training and conduct clinical research.

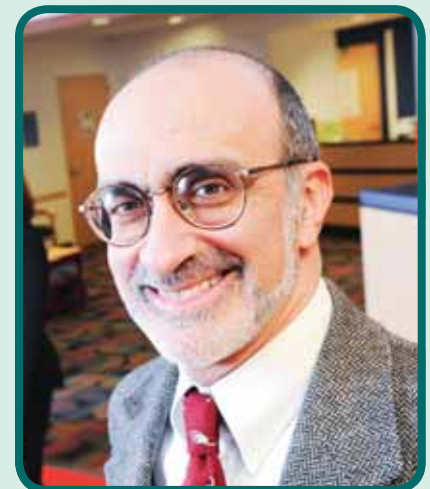
The division was created 15 years ago and has grown from a minimum of three faculty members to 14 full-time and two part-time faculty members, three of whom also have M.P.H. or Ph.D. degrees. Five faculty members have active research programs that have received competitive funding.

The fellowship program accepted its first extramural fellow in 1999 and has grown to accept two fellows per year, all of whom have been fully American-trained. Approximately half of the fellows come from the medical school's own pediatric residency program. The fellowship program emphasizes both broad and deep clinical training as well as experience in clinical research, bench research or both. All of the fellows have published their fellowship projects as one or more papers in peer-reviewed literature, and the majority of division graduates take academic positions at UT Southwestern or other medical schools.

Teaching is a top priority, and several fellows and faculty members have won local teaching awards from medical students or residents. A high value is placed on community service. Many faculty members volunteer at two local diabetes camps run by the division, and two serve as medical directors for the camps.

Faculty

Perrin C. White, M.D., Professor, was the first to hold the Audre Newman Rapoport Distinguished Chair in Pediatric Endocrinology. He was recruited to UT Southwestern as Director of the Pediatric Endocrinology program in 1994 from Cornell University Medical College in New York where he was Professor of Pediatrics. Dr. White has studied several genetic diseases of steroid hormone biosynthesis and metabolism including the most common forms of congenital adrenal hyperplasia. More recently he has concentrated on translational research including studies of gene expression in white blood cells from children with either Type 1 or Type 2 diabetes mellitus and a pilot study of a potent anti-inflammatory agent, anakinra, in patients with new-onset Type 1 diabetes. Dr. White received his A.B., *magna cum laude*, from Harvard College, Cambridge, Massachusetts, in 1972, and his M.D. from Harvard Medical School, Boston, Massachusetts, in 1976. He held residencies in pediatrics at Johns Hopkins Hospital, Baltimore, Maryland, from 1976 to 1978 and at New York Hospital from 1980 to 1981, and he held a research fellowship in developmental molecular biology at Rockefeller University, New York, from 1978 to 1980. He has received a number of awards and honors, including the Ernst Oppenheimer Award of the Endocrine Society and the Mead-Johnson Award of the Society for Pediatric Research. He has served on numerous advisory committees for the National Institutes of Health and on several editorial boards.



Perrin White, M.D.
Director, Pediatric Endocrinology

We are the **ONLY MAJOR PROGRAM**
caring for children with diabetes in the Dallas metropolitan area.



Soumya Adhikari, M.D.

Assistant Professor, Pediatrics and Pharmacology

Clinical expertise: Pediatric endocrinology

Research expertise: Preservation of beta cell function in Type 1 diabetes, neonatal hypocalcemia

Education: University of Florida, Gainesville, B.S., 1996; University of Miami School of Medicine, FL, M.D., 2001

Post-doctoral training: UT Southwestern/Children's, Resident, Pediatrics, 2001-2004; UT Southwestern, Fellow, Pediatric Endocrinology, 2004-2007



Kamal Bharucha, M.D., Ph.D.

Assistant Professor, Pediatrics and Pharmacology

Clinical expertise: Pediatric endocrinology

Research expertise: Drosophila (fruit flies) as a model organism for metabolic diseases and regulation of energy homeostasis

Education: Brooklyn College, City University of New York, NY, B.A., *summa cum laude*, 1987; University of California-Berkeley, Ph.D., 1992; Yale University School of Medicine, New Haven, CT, M.D., 1998

Post-doctoral training: Johns Hopkins Hospital, Baltimore, MD, Resident, Pediatrics, 1998-2001; University of California-Los Angeles, Fellow, Pediatric Endocrinology, 2002-2006; Howard Hughes Medical Institute, University of California, Los Angeles, Fellow, Endocrinology Research, 2003-2006; Clinical Fellow, 2006-2007



Amy Mathew Burton, M.D.

Assistant Professor

Clinical expertise: Types 1 and 2 diabetes, obesity treatment and prevention

Research expertise: Type 2 diabetes, behavior changing counseling

Education: UT Dallas, B.S., 2000; Texas Tech University School of Medicine, M.D., 2004

Post-doctoral training: University of Alabama at Birmingham, Resident, Pediatrics, 2004-2007; Fellow, Pediatric Endocrinology, 2007-2010



Bryan A. Dickson, M.D.

Associate Professor

Clinical expertise: Pediatric endocrinology, particularly endocrine disorders in neuro-oncology patients, hypothalamic obesity and iatrogenic adrenal insufficiency

Education: UT Arlington, B.S., 1980; UT Health Science Center at San Antonio, M.D., 1984

Post-doctoral training: UT Health Science Center at San Antonio/Bexar County Hospital, Resident, Pediatrics, 1984-1987; UT Health Science Center at San Antonio, Fellow, Pediatric Endocrinology, 1987-1988; Children's Hospital Medical Center, Cincinnati, OH, Fellow, Pediatric Endocrinology, 1988-1990



Ernesto Fernandez, M.D.

Clinical Assistant Professor

Clinical expertise: Diabetes

Education: UT Austin, B.A., 1984; UT Southwestern, M.D., 1988

Post-doctoral training: UT Southwestern, Resident, Pediatrics, 1988-1991

Ellen K. Grishman, M.D.

Assistant Professor

Clinical expertise: Pediatric endocrinology

Research expertise: Gene expression in leukocytes in Type 1 and Type 2 diabetes

Education: Washington University, St. Louis, MO, B.A., 1996; Creighton University School of Medicine, Omaha, NE, M.D., 2000; UT Southwestern, Clinical Research Scholar, Clinical Sciences, 2008-2011

Post-doctoral training: University Hospitals of Cleveland/Rainbow Babies and Children's Hospital, OH, Resident, Pediatrics, 2000-2003; UT Southwestern, Fellow, Pediatric Endocrinology, 2003-2006



Melissa R. Ham, M.D.

Assistant Professor

Clinical expertise: Pediatric endocrinology

Education: University of South Carolina, Columbia, B.S., *magna cum laude*, 1992; University of South Carolina School of Medicine, Columbia, M.D., 1996

Post-doctoral training: University of South Carolina School of Medicine/Richland Memorial Hospital, Columbia, Resident, Pediatrics, 1996-1999; UT Southwestern, Fellow, Pediatric Endocrinology, 1999-2002



Michele R. Hutchison, M.D., Ph.D.

Assistant Professor

Clinical expertise: Pediatric endocrinology, particularly obesity and growth disorders

Research expertise: Development of the mammalian long-bone growth plate, role of Vitamin D deficiency in type 2 diabetes

Education: Wellesley College, MA, *cum laude*, B.A., 1988; UT Southwestern, M.D., Ph.D., 1999

Post-doctoral training: UT Southwestern/Children's, Resident, Pediatrics, 1999-2002; UT Southwestern, Fellow, Pediatric Endocrinology, 2002-2004



Roy Kim, M.D., M.P.H.

Assistant Professor, Pediatrics and Internal Medicine

Clinical expertise: Obesity, diabetes, growth, thyroid, puberty

Research expertise: Lipodystrophy, obesity diabetes

Education: Pomona College, Claremont, CA, B.A., 1992; University of North Carolina School of Medicine, Chapel Hill, M.D., 1997; University of North Carolina School of Public Health, Chapel Hill, M.P.H., 1998

Post-doctoral training: Cleveland Clinic Foundation, OH, Resident, Internal Medicine, 1998-2002; Children's Hospital of Philadelphia, PA, Fellow, Pediatric Endocrinology, 2002-2005



Ximena López, M.D.

Assistant Professor

Clinical expertise: Types 1 and 2 diabetes

Research expertise: Incretin physiology in types 1 and 2 diabetes, incretin-based treatments for types 1 and 2 diabetes

Education: Universidad La Salle Medical School, Mexico City, Mexico, M.D., 2000

Post-doctoral training: University of Illinois at Chicago, Resident, Pediatrics, 2002-2005; Massachusetts General Hospital/Harvard Medical School, Boston, Fellow, Pediatric Endocrinology, 2005-2008, Joslin Diabetes Center/Harvard Medical School, Boston, Clinical Research Fellow, 2006-2008





D. Randy McMillan, Ph.D.

Assistant Professor

Research expertise: Role of large G protein-coupled receptors in development, role of hexose-6-phosphate dehydrogenase in muscle function

Education: Angelo State University, San Angelo, TX, M.S., 1979; Texas Tech University School of Medicine, Lubbock, Ph.D., 1991



Sudha L. Mootha, M.D.

Clinical Assistant Professor

Clinical expertise: Pediatric endocrinology

Education: Baylor University, Waco, TX, B.A., *summa cum laude*, 1987; UT Medical Branch at Galveston, M.D., 1991

Post-doctoral training: Case Western University/Rainbow Babies and Children's Hospital, Cleveland, OH, Intern, Pediatrics, 1991-1992; University of California San Francisco, Resident, Pediatrics, 1992-1994; Fellow, Pediatric Endocrinology, 1994-1996; UT Health Science Center at Houston, Fellow, Pediatric Endocrinology, 1996-1998



Jon D. Oden, M.D.

Assistant Professor

Clinical expertise: Pediatric endocrinology, insulin resistance, obesity

Education: Texas Tech University, Lubbock, B.S., *magna cum laude*, 1993; Texas Tech University Health Sciences Center, Lubbock, M.D., 1997

Post-doctoral training: Texas Tech University Health Sciences Center, Lubbock, Resident, Pediatrics, 1997-2000; Duke University Medical Center, Durham, NC, Fellow, Pediatric Endocrinology, 2000-2003; Post-doctoral Research Fellow, Pediatric Endocrinology, 2003-2004



Ryan Stewart, M.D.

Assistant Professor

Clinical expertise: Diabetes, insulin pump, growth, thyroid

Research expertise: Using *Drosophila* as an animal model for congenital lipodystrophy and how it pertains to human disease

Education: Texas A&M University, College Station, B.S.E.E., *magna cum laude*, 1991; UT Southwestern, M.D., 2004

Post-doctoral training: UT Southwestern/Children's, Resident, Pediatrics, 2004-2007; UT Southwestern, Fellow, Pediatric Endocrinology, 2007-2010



Kathryn Sumpter, M.D.

Assistant Professor

Clinical expertise: Pediatric endocrinology

Research expertise: Immunomodulation of Type 1 diabetes

Education: Rice University, Houston, TX, B.A., *summa cum laude*, 1997; UT Southwestern, M.D., 2003

Post-doctoral training: UT Southwestern/Children's, Resident, Pediatrics, 2003-2006; UT Southwestern, Fellow, Pediatric Endocrinology, 2006-2009

Since 2002, the division has ***MORE THAN DOUBLED***
to meet the rising demands of the community.

Grace M. Tannin, M.D.

Associate Professor

Clinical expertise: Pediatric endocrinology

Education: Washington University, St. Louis, MO, A.B., 1981; Washington University Medical School, St. Louis, MO, M.D., 1985

Post-doctoral training: Columbia-Presbyterian Medical Center, New York, NY, Resident, Pediatrics, 1985-1988; New York Hospital/Cornell University Medical Center, Fellow, Pediatric Endocrinology, 1988-1991; Center for Inherited Disorders of Energy Metabolism, Case Western Reserve University, Cleveland, OH, Fellow, Pediatric Metabolism, 1991-1993; Metabolism Training Program, Fellow, Molecular Biology of Fatty Acid Oxidation, 1993-1997



Y.C. Annie Wang, M.D.

Clinical Assistant Professor

Clinical expertise: Pediatric endocrinology

Research expertise: Behavioral interventions in type 1 diabetes patients

Education: Hendrix College, Conway, AR, B.A., 1995; University of Arkansas for Medical Sciences, College of Medicine, Little Rock, M.D., 1999

Post-doctoral training: Wake Forest University Baptist Medical Center, Winston-Salem, NC, Resident, Pediatrics, 1999-2002; Chief Resident, Pediatrics, 2002-2003; UT Southwestern, Fellow, Pediatric Endocrinology, 2004-2007



Post-doctoral Fellows

Completed June 2009



Micah Olson, M.D.

Pediatric Endocrinologist, Phoenix Children's Hospital

Research interests:

Vitamin D deficiency and type 2 diabetes in children



Ryan Stewart, M.D.

Assistant Professor, UT Southwestern

Research interests:

Drosophila (fruit flies) as a model for lipodystrophy

3rd Year



Alejandro de la Torre, M.D.

Research interests:

The role of p53 in modulating insulin action



Susan Hsieh, M.D.

Research interests:

Actions of IGF-1 (insulin-like growth factor) at the growth plate

2nd Year



Hillary Lockemer, M.D.

Research interests:

Vitamin D deficiency in obese children



Shona Rabon, M.D.

Research interests:

Transition of care in adolescents with diabetes

1st Year



Todd Alonso, M.D.

Research interests:

The role of endocrine malfunction leading to abnormal growth in sickle cell disease



Teena Thomas, M.D.

Research interests:

Transient neonatal hypocalcemia: presentation and outcomes

Clinical/Research Staff

Viren Amin

Research Technician II, Eugene McDermott Center

Michelle Castro

Research Technician II

Kelli Higgins

Research Associate

Suprabha Pulipparacharuvil

Research Scientist

Vidya Rai

Research Assistant II, Eugene McDermott Center

Daniela Rogoff, M.D., Ph.D.

Research Scientist

Kristen Tolson

Student Research Assistant, Eugene McDermott Center

Alaina Watson

Research Technician II



Research Activities

Research within the division is grouped into several main themes. Research on Type 1 diabetes includes studies of gene expression in peripheral blood cells (which includes cells mediating immune responses) conducted by Dr. Ellen Kaizer Grishman, who has found that signs of inflammation are very prominent in these cells around the time when children are diagnosed. Supported by the Juvenile Diabetes Research Foundation, she and Dr. Perrin White are following up these results in test tube studies to see what factors in serum — such as fatty acids — are responsible for triggering this inflammation and to try to elucidate the intracellular signaling pathways by which this happens. Additionally, Drs. Soumya Adhikari and Kathryn Sumpter have conducted a pilot study of a powerful anti-inflammatory agent — anakinra — in children with new-onset Type 1 diabetes to see if it might be safely used to prolong the honeymoon period in which some insulin secretion remains. Additional studies are planned with a more powerful related agent.

Several faculty members are conducting research on obesity and Type 2 diabetes. Dr. Kamal Bharucha is trying to identify genes influencing fat storage and metabolism in *Drosophila* (fruit flies). Dr. Michele Hutchison has studied the natural history of progression to insulin dependence among children with Type 2 diabetes. She has also found a very high prevalence of vitamin D deficiency among patients in the obesity clinic and has found that this is associated with biochemical changes predisposing to Type 2 diabetes.

Finally, Dr. Hutchison conducts NIH-supported basic research on how bones grow at specialized zones of cartilage termed growth plates and industry-sponsored clinical research on the therapy of short stature with the growth hormone and insulin-like growth factor-1.

Clinical Activities

The Division of Pediatric Endocrinology continues to grow rapidly to meet the rising demands of the community. Since 2002, the division has more than doubled in size to meet the increase in clinical volume from 5,000 visits per year to more than 13,000 visits in 2010. The division comprises 15 full- and part-time faculty members this year who provide comprehensive care for children with endocrine disorders, obesity and diabetes.

The Endocrinology Center provides 10 half-day clinic sessions per week for patients, including approximately 2,500 new patient consultations yearly. The Diabetes Program provides a comprehensive bilingual education program for both Type 1 and Type 2 diabetes and is one of only four pediatric programs in Texas certified by the American Diabetes Association. The diabetes program was also the first pediatric program in the country to receive disease-specific certification from the Joint Commission. The Center for Obesity and its Consequences in Health (COACH) clinic continues to provide the only comprehensive program for childhood obesity in North Texas, with more than

600 referrals per year. Expansion of the clinic to the Children's at Legacy campus provides approximately 1,100 visits per year in this fast-growing area of North Texas.

The development of clinical research studies and interventional trials has increased significantly in the division over the past year and provides an opportunity to incorporate leading-edge technology into the care of the patient population.

The endocrinology inpatient service provides care for more than 600 patients admitted to the service yearly, including 260 patients with new onset diabetes. In addition, the Endocrinology inpatient service will provide approximately 300 consultations to other services during the same time period.

Presentations/Teaching Activities

Soumya Adhikari, M.D.

- "Medical Education in the Age of Electronic Health Records: How to Achieve Best Utilization," Council on Medical Student Education in Pediatrics (COMSEP) Annual Meeting, Albuquerque, NM, March 2010

Kamal Bharucha, M.D., Ph.D.

- Endocrine Pharmacology Lecturer, 2nd Year Medical Students, 2008-present
- "An Overview of the Genetics of Childhood Obesity," Pediatric Grand Rounds, Children's, December 2010

Melissa R. Ham, M.D.

- "Treatment of Diabetes," Pediatric Grand Rounds, Medical City Hospital, Dallas, March 2010
- "Endocrinology for Acute Care Pediatric Nurse Practitioners," Acute Care Pediatric Nurse Practitioners Program, UT Arlington, April 2010

Ryan Stewart, M.D.

- "Drosophila as a Model Organism for Congenital Lipodystrophy," Endocrine Grand Rounds, UT Southwestern, April 2010
- "Drosophila as a Model Organism for Congenital Lipodystrophy," ENDO 2010: The 92nd Annual Meeting and Expo, San Diego, CA, June 2010

Grace Tannin, M.D.

- "Disorders of Puberty," Texas Chapter of the American Association of Clinical Endocrinologists, Dallas, August 2010

Major Administrative or Leadership Responsibilities

Perrin C. White, M.D.

- Director, Division of Pediatric Endocrinology
- Director, Pediatric Endocrinology Fellowship Program

Soumya Adhikari, M.D.

- Director, Pediatrics Medical Student Clerkship

Bryan A. Dickson, M.D.

- Medical Director, Endocrinology Center, Children's
- Physician Co-director, Ambulatory and Network Services, Children's
- Chairman, HER/HIM Committee (Electronic Health Record/Health Information)
- Member, Executive Board, Southwestern Diabetic Foundation

Ernesto Fernandez, M.D.

- Camp Director, Camp Sweeney (Diabetes Camp for Children), Gainesville, Texas
- President, Physicians for Children Foundation
- Board Member, Juvenile Diabetes Foundation
- Board Member, Southwestern Diabetic Foundation

Melissa R. Ham, M.D.

- Associate Director, Pediatric Endocrinology Fellowship Program

Michele R. Hutchison, M.D., Ph.D.

- Chair, Pediatric Endocrinology Scholarship Oversight Committee

Jon Oden, M.D.

- Clinical Director, COACH Clinic, Children's
- Medical Director, Camp Sweeney (Diabetes Camp for Children), Gainesville, TX

Grace M. Tannin, M.D.

- Medical Director, Camp New Horizons (American Diabetes Association camp)
- Member, Dallas ADA Advisory Board
- Member, ADA National Camp Workgroup

Awards and Honors

Ellen K. Grishman, M.D.

- Clinical Research Scholar, Department of Clinical Sciences, UT Southwestern, 2008-2011

Gastroenterology

As the major program in North Texas caring for children with gastrointestinal (GI) disorders, the Division of Gastroenterology at UT Southwestern provides patient-centered care to an ever expanding population. This nationally recognized division includes distinguished individuals focusing on diverse areas of Gastroenterology, including molecular biology of cholestatic liver disease, neurogastroenterology, chronic viral hepatitis, inflammatory bowel disease, therapeutic endoscopy, and intestinal rehabilitation and transplantation of liver and intestine.

Six additional faculty joined our division last year. We are pleased to recognize recruitment of three additional clinical gastroenterologists, Drs. Aakash Goyal, Koorosh Kooros and Charina Ramirez, increasing the number of full time gastroenterologists to thirteen. In addition, Dr. Gabriela Reed, psychologist, joined our group full time. Finally, two new basic science investigators, Drs. Amal Dutta and Qin Li, work in the general area of regulation of hepatobiliary secretion under the aegis of Dr. Andrew Feranchak. There are sixteen Southwestern faculty in our division.

In addition to the faculty additions, three nurse practitioners, Jody Mackling, Constance Van Alstyne, LaJontee Ware, and three physician assistants, Devehio Edwards, Heather Trant, Tracy Xu, joined the division to staff the newly established inpatient unit devoted to liver, intestinal failure and transplantation. These six advanced practice providers join five additional GI nurse practitioners working primarily in the outpatient clinics.

Under Dr. Michael Russo's leadership, the full service outreach consultative practice at Children's at Legacy is thriving with three full-time and three part-time providers. Next year we anticipate opening an outreach GI consultation clinic in Southlake.

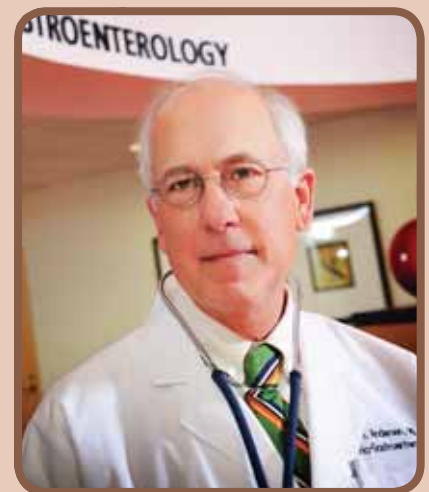
Specialized multidisciplinary clinics include:

- Chronic abdominal pain (GI, anesthesiology/pain management, psychology)
- Aero-digestive disorders (GI, ENT, pulmonary, psychology)
- Cystic fibrosis (GI, pulmonary, nutrition, psychology)
- Inflammatory bowel disease (GI, nutrition, psychology)
- Intestinal failure (GI, surgery, nutrition and psychology)

Six gastroenterology fellows (two annually) train in basic research areas throughout UT Southwestern: hepatobiliary transport physiology, eosinophilic esophagitis, pathobiology of pruritus associated with chronic liver disease, metabolic liver disease, and immunobiology of IBD.

Faculty

John M. Andersen, M.D., Professor is the Director of Pediatric Gastroenterology at UT Southwestern and Children's Medical Center. In addition to general pediatric gastroenterology, his clinical specialties and areas of research are cyclic vomiting syndrome, inflammatory bowel disease and eosinophilic esophagitis. Dr. Andersen graduated from Austin College, Sherman, Texas, with a B.A. in 1966. In 1970 he received his medical degree from the University of Pennsylvania School of Medicine in Philadelphia, where he interned from 1970 to 1971. He completed his residency in Pediatrics at UT Southwestern/Children's in 1975 and a fellowship in Gastroenterology and Lipid Metabolism at UT Southwestern in 1978.



John M. Andersen, M.D.
Director, Pediatric Gastroenterology

The **MAJOR PROGRAM** in North Texas
caring for children with gastrointestinal disorders.



Bradley A. Barth, M.D.

Assistant Professor

Director, Gastroenterology Endoscopy Unit

Clinical expertise: Therapeutic endoscopy in children including ERCP, balloon enteroscopy, treatment of acute and chronic gastrointestinal bleeding, management of esophageal strictures and capsule endoscopy

Education: UT Austin, TX, B.A., 1993; UT School of Public Health, Houston, M.P.H., 1995; UT Health Science Center at San Antonio, M.D., 1998

Post-doctoral training: Tufts-New England Medical Center/Floating Hospital for Children, Boston, MA, Resident, Pediatrics, 1998-2001; Harvard University, Boston, MA, Fellow, Pediatric Gastroenterology, Hepatology and Nutrition, 2001-2004



Nandini Channabasappa, M.D.

Assistant Professor

Director, Intestinal Rehabilitation Program

Clinical expertise: Intestinal failure and rehabilitation, therapeutic endoscopy

Education: Vanderbilt University, Nashville, TN, B.S., 1993; University of the West Indies, St. Augustine, Trinidad, M.B.B.S., 2000

Post-doctoral training: Henry Ford Hospital, Detroit, MI, Intern, Pediatrics, 2002; Wayne State University/Children's Hospital of Michigan, Detroit, Resident, Pediatrics, 2002-2005; UT Southwestern, Fellow, Pediatric Gastroenterology, 2005-2008



Amal Dutta, M.B.B.S., Ph.D.

Instructor

Research expertise: Mechanisms of biliary secretion and bile formation, functional characterization and regulation of ion channels in the liver, purinergic signaling pathways, mechanosensitive and Ca²⁺-activated channels in epithelial functions

Education: University of Rajshahi, Bangladesh, M.B.B.S., 1991; The Graduate University of Physiological Sciences, Okazaki, Japan, Ph.D., 2003

Post-doctoral training: Rajshahi Medical College Hospital, Bangladesh, Intern and Resident, Medicine and Surgery, 1991-1992; National Institute for Physiological Sciences, Okazaki, Japan, Research Associate, Physiology, 2003-2004; National Institute for Physiological Sciences, Okazaki, Japan, JSPS Fellow, 2004-2006; UT Southwestern, Fellow Pediatric Gastroenterology, 2006-2009



Andrew P. Feranchak, M.D.

Associate Professor

Clinical expertise: Pediatric gastroenterology

Research expertise: Cholestatic liver disease, cystic fibrosis, hepatobiliary transport, mechanisms of bile formation, purinergic regulation of biliary secretion

Education: University of Notre Dame, IN, B.S., 1988; University of Pittsburgh School of Medicine, PA, M.D., 1992

Post-doctoral training: University of Pittsburgh Medical Center/Children's Hospital of Pittsburgh, PA, Resident, Pediatrics, 1992-1995; University of Colorado Health Sciences Center, Denver, Fellow, Pediatric Gastroenterology, Hepatology and Nutrition, 1995-1998; Research Fellow, 1998-1999



Aakash Goyal, M.D.

Assistant Professor

Clinical expertise: Inflammatory bowel disease, liver diseases, growth and malabsorption

Research expertise: Inflammatory bowel disease and its complications

Education: B.J. Medical College/University of Pune, Maharashtra, India, M.B.B.S., 1999

Post-doctoral training: Government Medical College, Patiala, Punjab, India, Resident, Pediatrics, 1999-2002; Brookdale University Hospital and Medical Center, Brooklyn, NY, Resident, Pediatrics, 2004-2006; Chief Resident, Pediatrics, 2006-2007; Children's Hospital of Michigan, Detroit, Fellow, Pediatric Gastroenterology, Hepatology and Nutrition, 2007-2010

Koorosh Kooros, M.D.

Assistant Professor

Clinical expertise: Endoscopic ultrasound, inflammatory bowel disease, gastroesophageal reflux**Research expertise:** Endoscopic ultrasound, gastrointestinal disorders in autism spectrum disorders**Education:** University Medical School of Pecs, Hungary, M.D., cum laude, 1991**Post-doctoral training:** University Medical School of Pecs, Hungary, Resident, Pediatrics, 1991-1994; Chief Resident, Pediatrics, 1994-1995; St. Luke's-Roosevelt Hospital Center, University College of Physicians and Surgeons, New York, NY, Resident, Pediatrics, 1999-2001; Tufts-New England Medical Center, Boston, MA, Fellow, Pediatric Gastroenterology and Nutrition, 2001-2004**Qin Li, M.D., Ph.D.**

Instructor

Research expertise: FIC-1 and progressive familial intrahepatic cholestasis (PFIC), cystic fibrosis transmembrane conductance regulator (CFTR) and biliary secretion**Education:** Medical College of Wuhan University, Wuhan, China, M.D., 1985; Tongji Medical College, Huazhong University of Science and Technology, Wuhan, China, M.Sc., 1997; Ph.D., 2001**Ashish S. Patel, M.D.**

Assistant Professor

Clinical expertise: Pediatric gastroenterology, inflammatory bowel disease**Research expertise:** Inflammatory bowel disease**Education:** Emory University, Atlanta, GA, B.S., 1995; Texas A&M University Health Sciences Center, College of Medicine, College Station, M.D., 2000**Post-doctoral training:** Scott & White Hospital, Temple, TX, Resident, Pediatrics, 2000-2003; UT Southwestern, Fellow, Pediatric Gastroenterology, 2003-2006**Charina M. Ramirez, M.D.**

Assistant Professor

Clinical expertise: Metabolic liver disease, inflammatory bowel disease**Research expertise:** Niemann-Pick type C disease, fatty liver disease**Education:** University of Houston, TX, B.S., 1999; UT Medical Branch at Galveston, M.D., 2003**Post-doctoral training:** UT Southwestern/Children's, Resident, Pediatrics, 2003-2006; UT Southwestern, Fellow, Pediatric Gastroenterology and Nutrition, 2007-2010**Gabriela M. Reed, Ph.D.**

Psychologist

Clinical Expertise: Psychological evaluation and treatment of inflammatory bowel disease, functional bowel disorders, abdominal pain, constipation, and encopresis.**Education:** Texas A&M University, College Station, B.S., 2003; UT Southwestern, Ph.D, 2007.**Post-Doctoral Training:** APA-Approved Internship, UT Southwestern; Fellowship, Pediatric Psychology, Children's, 2007**Norberto Rodriguez-Baez, M.D.**

Associate Professor

Director, Gastroenterology Fellowship

Clinical expertise: Pediatric gastroenterology, liver disease, liver transplantation, hepatitis C**Research expertise:** Liver failure, hepatitis B, hepatitis C**Education:** University of Puerto Rico, Cayey, B.S., 1990; University of Puerto Rico-School of Medicine, San Juan, M.D., 1994**Post-doctoral training:** University of Puerto Rico-School of Medicine, San Juan, Intern, Pediatrics, 1994-1995; Resident, Pediatrics, 1995-1997; Stanford University School of Medicine, Palo Alto, CA, Fellow, Pediatric Gastroenterology, Hepatology and Nutrition, 1998-2001



Michael A. Russo, M.D.

Assistant Professor

Director, Pediatric Gastroenterology, Children's at Legacy

Clinical expertise: Eosinophilic esophagitis, inflammatory bowel disease, intestinal polyps

Education: University of South Alabama, Mobile, B.S., 1994; University of South Alabama College of Medicine, Mobile, M.D., 1998

Post-doctoral training: University of Arkansas for Medical Sciences, Little Rock, Resident, 1999-2001; UT Southwestern, Fellow, Gastroenterology and Nutrition, 2001-2004



Rinarani M. Sanghavi, M.D.

Assistant Professor

Director, Pediatric Neurogastroenterology

Clinical expertise: Pediatric motility disorders, neurogastroenterology, chronic abdominal pain; aerodigestive disorders

Education: Jaihind College, Mumbai, India, H.S.C. 1994; Seth G.S. Medical College, University of Mumbai, India, M.B.B.S., 1998

Post-doctoral training: Seth G.S. Medical College, Bombay, India, Intern, Pediatrics, 1999, SUNY, Downstate Medical Center, Brooklyn, Resident, Pediatrics, 2001-2004; UT Southwestern, Fellow, Gastroenterology, Hepatology and Nutrition, 2004-2007; UT Southwestern, Clinical and Research Fellow, 2005-2006



Meghana N. Sathe, M.D.

Assistant Professor

Clinical expertise: Pediatric gastroenterology, nutrition

Research expertise: Cystic fibrosis, nutrition

Education: Wellesley College, MA, B.A., 1999; University of Miami, Miller School of Medicine, FL, M.D., 2003

Post-doctoral training: UT Southwestern/Children's, Resident, Pediatrics, 2003-2006; UT Southwestern, Fellow, Pediatric Gastroenterology and Nutrition, 2006-2009



M. Gaith S. Semrin, M.D.

Assistant Professor

Clinical expertise: Pediatric gastroenterology, inflammatory bowel disease

Research expertise: Inflammatory bowel disease

Education: University of Jordan, Amman, Faculty of Medicine, M.B.B.S., 1995

Post-doctoral training: Al-Basheer Hospital, Ministry of Health, Amman, Jordan, Intern, 1995-1996; New England Medical Center/Floating Hospital for Children at Tufts, Boston, MA, Resident, Pediatrics, 1998-2000; Fellow, Pediatric Gastroenterology, 2001; Harvard Medical School, Boston, MA, Fellow, Gastroenterology and Nutrition, 2001-2004

Post-doctoral Fellows

Completed June 2009



Michael Dougherty, D.O.

Pediatric Gastroenterologist, Children's Hospital, Greenville, SC

Research interests:
Regulation of bile formation



Charina Ramirez, M.D.

Assistant Professor, UT Southwestern

Research interests:
Niemann-Pick type C

3rd Year



Amal Aqul, M.D.

Research interests:
Cholesterol transport metabolism in Niemann-Pick type C and Wolman disease



Edaire Cheng, M.D.

Research interests:
Eosinophilic esophagitis and gastroesophageal reflux disease

2nd Year



Isabel Rojas, M.D.

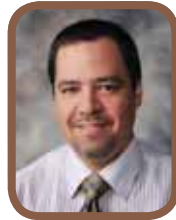
Research interests:
Itching in cholestasis



Lillienne Yoon, M.D.

Research interests:
Transitioning adolescents with IBD to adult care; COMMD proteins in IBD

1st Year



Eduardo Carlin, M.D.

Research interests:
Metabolic liver disease



Dyer Heintz, M.D.

Research interests:
Inflammatory bowel disease, lymphocytic esophagitis and Chron's disease

Research Staff

Sharon Judy, RNC
Research Coordinator

Charles Kresge
Research Associate

Shirley Montanye, RN, CCRC
Research Coordinator

Research Activities

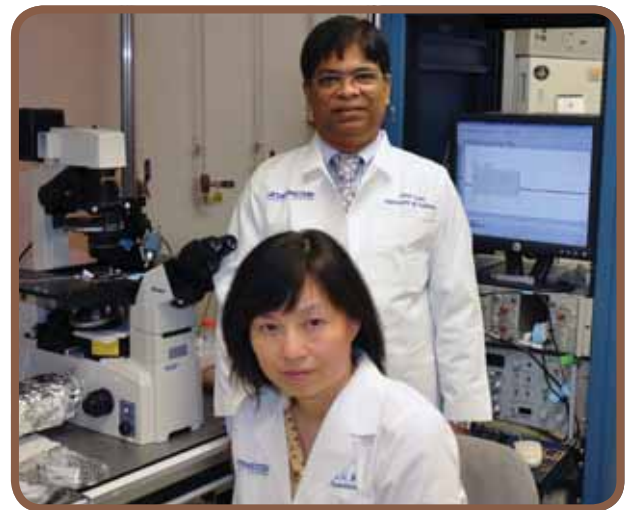
Funded gastroenterology research spans a wide range of important areas in both basic science and clinical investigation. Hepatology, both basic and clinical, comprises the most active area of investigation. Dr. Andrew Feranchak is recognized internationally for his innovative approaches to elucidating the basic mechanisms regulating biliary secretion and mechanisms of bile formation using *in vitro* models employing well characterized hepatocyte and cholangiocyte cell lines. More specifically his laboratory is investigating the regulatory role of purinergic signaling in biliary secretion and bile formation. Dr. Feranchak's research is pivotal, since it is very likely that therapeutic interventions for cholestatic liver disease await a basic understanding of the basic mechanisms of bile flow.

Dr. Norberto Rodriguez-Baez is the principle investigator at our site for a national, multicenter, NIH-supported study examining the causes for fulminant hepatic failure in children. Dr. Rodriguez-Baez's second group of studies involves treatment of chronic hepatitis B and C.

The second general area of active clinical research involves inflammation in the GI tract. Dr. Ashish Patel is leader of the nutritional management algorithm development for the Trailblazer Collaborative for pediatric Inflammatory Bowel Disease. Dr. John Andersen is investigating new treatments for eosinophilic esophagitis.

Clinical Activities

The nationally recognized clinical programs of the Division of Gastroenterology are housed at Children's Medical Center Dallas with satellite activity at Children's at Legacy. In the patient-centered environment, thirteen gastroenterology physicians, eight gastroenterology nurse practitioners, three physician assistants, and a child psychologist embedded in the gastroenterology program, provide multidisciplinary, comprehensive state-of-the-art care for children with virtually any gastrointestinal or liver problem.



In addition to gastroenterologists, outpatients are seen in parallel by four nurse practitioners with the support of six nurse-coordinators and five medical assistants. The gastroenterology laboratory staff of five nurses and two medical assistants is capable of supporting not only routine endoscopic procedures, but also therapeutic endoscopy (ERCP, balloon enteroscopy and capsule endoscopy) and a full range of motility procedures (anorectal, esophageal, antroduodenal, small bowel and colonic). The entire program is supported by a psychologist, two full-time dietitians, child-life, social work, a pharmacist and an enterostomal therapist/educator.



The division also provides services through several special programs including the:

- Neurogastroenterology program for the evaluation and management of children with a wide range of disorders including abdominal pain, abnormal motility, vomiting, constipation and digestive disorders.
- Hepatology program which is producing internationally recognized research and clinical studies in viral hepatitis treatment and acute liver failure, and a liver transplant program that ranks among the busiest in the United States with results second to none.
- Intestinal rehabilitation program, which is one of the largest in the country and the only program of this type in the Southwest.
- Southwestern Center for Pediatric Inflammatory Bowel Disease (IBD), which is the only center in the Southwest providing comprehensive care for children with IBD.
- Therapeutic Endoscopy program, which is one of fewer than 10 programs in the United States performing specialized, cutting-edge endoscopic procedures, including endoscopic retrograde cholangiopancreatography in children of all ages.
- Gastroenterology physician who is on call daily to take calls from physicians.

Statistics for a busy unit at Children's:

24-bed inpatient unit dedicated to gastroenterology and liver, including transplantation	1,076
Inpatient consultations	754
New outpatient facilities at Children's Dallas with 15 exam rooms and infusion area	8,682
Outpatient center at Children's at Legacy	4,306
Gastroenterology laboratory procedures	2,068

Presentations/Teaching Activities

The Gastroenterology division is actively involved in the teaching of medical students, residents and fellows. The main venue for resident and student education is a rotation in the inpatient unit, where two to three first-year residents, a senior resident, and medical students participate in a four-week rotation. Teaching is provided through direct patient care, bedside teaching, small-group discussions and didactic conferences. Electives are also offered in the Gastroenterology outpatient clinic for medical students, residents and visiting students/residents from other academic institutions.

The fellowship program, directed by Dr. Norberto Rodriguez-Baez, overseen by the Accreditation Council for Graduate Medical Education, currently has six fellows. The majority of fellowship education is through didactic conferences and active participation in the inpatient, outpatient, and consulting services as well as the performance of procedures. Fellows also are actively involved in research and scholarly activities throughout their three years of

training. The Division has created a nutrition elective in collaboration with dietitians at Children's. This elective is offered to pediatric residents as well as to pediatric and adult Gastroenterology fellows.

Dr. Norberto Rodriguez-Baez is the fellowship program director as well as the education coordinator in the Division of Gastroenterology. Responsibilities include planning, execution, and evaluation of all inpatient and outpatient rotations, didactic activities, development of curricular activities, and assessment methods for medical students, pediatric residents, and fellows. Mrs. Erica McPhail is the administrative coordinator for the fellowship program and its educational activities.

Bradley A. Barth, M.D.

- "Single Balloon Enteroscopy" and "Clips," NASPGHAN Therapeutic Endoscopy Pediatric "Hands-On" Courses, Chicago, IL, July 2010
- "The Upper GI Bleed: Medical Management and Injection Therapy," NASPGHAN Annual Post-Graduate Course, Chicago, IL, October 2010
- "Upper GI Bleeding," NASPGHAN Annual Meeting, Post-Graduate Course Learning Lunch, Chicago, IL, October 2010

Nandini Channabasappa, M.D.

- "Overview of Gastroenterology," UT Arlington, School of Nursing, February 2010
- "Intestinal Rehabilitation," Baylor Our Children's House, Dallas, TX, March 2010
- "Short Gut Syndrome," Parkland Nurse Practitioner Lecture Series, Dallas, TX, April 2010
- "Nutrition and Intestinal Rehabilitation," Nutrition Society of Dallas, Dallas, TX, August 2010

Andrew P. Feranchak, M.D.

- "Writing Abstracts for Scientific Meetings: Presenting Your Ideas is Key to Your Academic Success," NASPGHAN, First Year Fellows Conference, Fort Lauderdale, FL, January 2010
- "Purinergic Signaling and Bile Formation," Digestive Disease Research Conference, Scott & White and Texas A&M College of Medicine, Temple, TX, October 2010
- Moderator, GI Quiz Show, NASPGHAN First Year Fellows Conference, Fort Lauderdale, FL, January 2010
- Moderator, GI Careers in Basic Research Luncheon Round Table, NASPGHAN/Nestle Fellows Conference, Fort Lauderdale, FL, January 2010
- Organizer and Co-chair, Advances in CF Liver Disease, 24th Annual North American Cystic Fibrosis Conference, Baltimore, MD, October 2010

Ashish S. Patel, M.D.

- Crandall W, Kappelman M, Colletti RB, Denson L, Duffy L, Grunow J, Kim S, Leibowitz I, Pate, A, Schoen B, Tomer G, Miloy D, Cohen S, Margolis P and the ImprovedCareNow Collaborative (formerly PIBDNet). "Improved Outcomes in a Quality Improvement Collaborative for Pediatric Ulcerative Colitis," Digestive Diseases Week, New Orleans, LA, May 2010

Charina M. Ramirez, M.D.

- Ramirez CM, Miller AM, Repa JJ, Turley SD, Dietsch JM. "Characterization and Treatment of NPC2 Disease in the Mouse," Pediatric Academic Societies Meeting, Vancouver, BC, May 2010 (Poster Presentation)
- "Weekly Cyclodextrin Administration Ameliorates Liver Disease and Slows Down Neurodegeneration in the Niemann Pick Type C1 Mouse," Department of Pediatrics, 1st Annual Senior Fellows' Research Day, Selected Speaker, May 2010
- Ramirez CM, Chang M, Lui B, Aqul A, Taylor AM, Repa JJ, Burns DK, Weinberg AG, Turley SD, Dietsch JM. "Pulmonary Disease in NPC," Ara Parseghian Scientific Conference on Niemann-Pick Type C Disease, Tucson, AZ, September 2010
- "Endoscopic Challenge: Eosinophilic Gastroenteritis Presenting as a Gastric Outlet Obstruction," NASPGHAN Website, October 2010

Norberto Rodriguez-Baez, M.D.

- "Jaundice in Children after Two Years of Age," 42nd Annual Kenneth C. Haltalin Pediatrics for the Practitioner, Dallas, TX, April 2010
- "Jaundice in Children," Pediatric Resident Conference, University Pediatric Hospital, San Juan, Puerto Rico, August 2010
- Ramirez C, Aqul A, Megison S, Barth B, Rodriguez-Baez N. "Biliary Atresia: A Comparison of Clinical Experience," NASPGHAN Annual Meeting, New Orleans, LA, October 2010 (Poster Presentation)

Rinarani M. Sanghavi, M.D.

- "Eosinophilic Esophagitis," Pediatric Grand Rounds, Loma Linda Medical Center, CA, December 2010

Michael A. Russo, M.D.

- Walji-Virani S, Russo MA. "HIV Hepatopathy: History Suggests the Diagnosis," NASPGHAN Annual Meeting, New Orleans, LA, October 2010 (Poster Presentation)

Meghana N. Sathe, M.D.

- Sathe M, Carrillo M, Benser M, Andersen J. “Diagnosis and Management of Dumping Syndrome in Children Following Antireflux Surgery: A Single Center Experience,” American Society for Parenteral and Enteral Nutrition Annual Meeting, Las Vegas, NV, February 2010 (Poster Presentation)

Major Administrative or Leadership Responsibilities

John M. Andersen, M.D.

- Director, Division of Pediatric Gastroenterology
- Medical Director, Liver and Intestinal Transplant, Children’s
- Member, Pediatric Practice Committee, UT Southwestern
- Member, Solid Organ Transplant Steering Committee, Children’s
- Member, Process Improvement Steering Committee, Children’s
- Member, Ambulatory Pre-Arrival Access to MD Committee, Children’s
- Member, Development Committee, Children’s at Legacy
- Ad Hoc Reviewer, Pediatric Nephrology
- Ad Hoc Reviewer, Journal Pediatric Gastroenterology and Nutrition

Bradley A. Barth, M.D.

- Director, Endoscopy Lab, Children’s
- Member, Endoscopy Procedures Committee, NASPGHAN
- Ad Hoc Reviewer, Journal of Pediatrics
- Core Interviewer, Resident Applications, Children’s

Nandini Channabasappa, M.D.

- Director, Intestinal Rehabilitation Program, Children’s
- Member, Operating Room Committee, Children’s

Andrew P. Feranchak, M.D.

- Chair, Clinical Research Advisory Committee, Grant Review Committee, Children’s
- Reviewer, Senior Fellow Research Day Abstract Review, Department of Pediatrics, UT Southwestern
- Member, Training Committee, NASPGHAN
- Member, Infant Nutrition Advisory Group, Cystic Fibrosis Foundation
- Member, Society of Pediatric Research Fellow’s Basic and Clinic Award Selection Committee
- Member, Cystic Fibrosis Foundation Therapeutics Data Safety Monitoring Board

Koorosh Kooros, M.D.

- Development of Pediatric EUS Program, Children’s
- Member, Easter Seals Task Force Establish Best Practices for GI Diagnosis & Management of Autistic Children
- Investigator, Autism Treatment Network

Ashish S. Patel, M.D.

- Director, Inflammatory Bowel Disease Center, Children’s
- Medical Director, CCEA Camp Oasis (a camp for children with inflammatory bowel disease)
- Vice Chair, Crohn’s and Colitis Foundation of America
- Physician Lead, Parent Support Group for Pediatric Inflammatory Bowel Disease, Children’s
- Physician Champion, Gastroenterology Patient Education, Children’s
- Core Interviewer, Emory University
- Core Interviewer, UT Southwestern Medical School
- Core Interviewer, UT Southwestern Residency Program
- Ad Hoc Reviewer, Inflammatory Bowel Diseases
- Ad Hoc Reviewer, IBD Journal, Pediatrics, JPGN

Charina M. Ramirez, M.D.

- Co-founder and Co-Organizer, Teen IBD Group, Children’s

Norberto Rodriguez-Baez, M.D.

- Director, Pediatric Fellowship Program, Gastroenterology and Nutrition, Children’s
- Member, Organizing Committee, LASPGHAN Conference at the NASPGHAN Annual Meeting
- Chair, International Committee NASPGHAN
- Co-Chair & Moderator, LASPGHAN Concurrent Session at the 2010 NASPGHAN Annual Meeting
- Chair, Organizing Committee – International Reception at 2010 NASPGHAN Annual Meeting
- Member, NASPGHAN Annual Meeting Planning Committee
- Moderator, Pediatric Session – DDW 2010
- Member, Presentation and Publication Committee for the Pediatric Acute Liver Failure Study
- Chair, Educational Committee Pediatric Gastroenterology Division

- Member, Core Interviewer – Pediatric Residency Program – UT Southwestern
- Coordinator, Student Pediatric Clerkship Gastroenterology Rotation, UT Southwestern
- Advisor – Minority Medical Students – UT Southwestern
- Mentor, Medical Students Interested in Pediatrics, UT Southwestern

Michael A. Russo, M.D.

- Director, Pediatric Gastroenterology, Children’s at Legacy
- Liaison, Dallas Metroplex Medical Hands of Hope (an eosinophilic esophagitis support group)
- Lead Physician Liaison, “Hands of Hope”: Eosinophilic Gastrointestinal Disorders Support Group
- Professional Consultant, *Parent’s Magazine*

Rinarani M. Sanghavi, M.D.

- Director, Pediatric Gastroenterology Motility Lab, Children’s
- Co-director, Pediatric Aerodigestive Center, Children’s
- Co-director, Chronic Abdominal Pain Clinic, Children’s
- Clinical Liaison, Southlake Clinics, Children’s
- Chair, North American Society for Pediatric Gastroenterology, Hepatology and Nutrition (NASPGHAN),
- Member, Civic Activities, Medical Mission in Mumbai, India

Meghana N. Sathe, M.D.

- Associate Director, Pediatric Fellowship Program, Gastroenterology and Nutrition, Children’s Medical Center
- Member, Alagille Syndrome Alliance Medical Advisory Board
- Member, Camp Oasis, Crohns and Colitis Medical Staff Check-In

M. Gaith S. Semrin, M.D.

- Chairman, Feeding Disorders Center Development Committee

Awards and Honors

John M. Andersen, M.D.

- Super Doctors, *Texas Monthly*
- Best Doctors in America
- Best Pediatricians in Dallas, *D Magazine*

Bradley A. Barth, M.D.

- Best Doctors in America
- Best Pediatricians in Dallas, *D Magazine*

Andrew P. Feranchak, M.D.

- America’s Top Pediatricians, Pediatric Gastroenterology, Consumer’s Research Council of America
- Best Doctors in America

Koorosh Kooros, M.D.

- Strong Star

Norberto Rodriguez-Baez, M.D.

- Best Pediatricians in Dallas, *D Magazine*

Michael A. Russo, M.D.

- Best Pediatricians in Dallas, *D Magazine*

General Pediatrics

The mission of the Division of General Pediatrics is to improve the health and well-being of children through excellence in clinical care, teaching, research, and advocacy. The Division has recognized national leadership in research, health policy and advocacy regarding racial and ethnic disparities in child health and healthcare, and in improving access to and quality of care for underserved populations of children.

In 2010, Division faculty supervised the care of over 9,800 patients seen by pediatric residents in the Resident Continuity Clinic. Over 6,000 additional patients were seen in our specialized clinics, and our attending physicians cared for over 2,000 hospitalized children on the inpatient teaching services, while providing outstanding teaching to pediatric residents and UT Southwestern medical students.

The Division established the Medical-Legal Partnership at Children's Medical Center, which aims to improve the health and well-being of vulnerable individuals, children, and families by integrating legal services into the medical setting.

A partnership was established with Los Barrios Unidos Community Clinic as UT Southwestern's newest Pediatric Continuity Clinic site and an additional clinical setting where our bilingual faculty provide care to children. Los Barrios Unidos Community Clinic is a Federally Qualified Health Center (FQHC) that is accredited by The Joint Commission. The clinic works to improve health and quality of life by providing a medical home for individuals and families. It serves a low-income, predominantly Spanish primary language population in Dallas. Four residents and two attending physicians provided care at Los Barrios in 2010.

Since the last annual report, division faculty published 11 articles, including articles in *Pediatrics*, *Academic Pediatrics*, *Journal of Immunology*, *Journal of Allergy and Clinical Immunology*, *MD Advisor*, *Contemporary Pediatrics*, *Patient Education and Counseling* and *Journal of Developmental and Behavioral Pediatrics*. Our two Academic General Pediatrics fellows presented abstracts at the 2010 Pediatric Academic Societies meetings, including a platform presentation and three poster presentations.

Division faculty garnered numerous honors and awards, including appointment to the United States Preventive Services Task Force, an R01 grant from the National Institutes of Health (NIH) Eunice Kennedy Shriver National Institute of Child Health and Human Development (NICHD), the 2010 Helen Rodríguez-Trías Social Justice Award from the American Public Health Association, the Child Advocate of the Year award from the Children's Advocacy Center of Collin County, recognition as a Texas Super Doctor by *Texas Monthly*, recognition as The Best Pediatric Specialists in Dallas 2010 (for three faculty) and Best Doctors in Dallas by *D Magazine*, recognition in the Guide to America's Top Pediatricians by Consumer Research in America, a nomination to the Gamma Chapter of Alpha Omega Alpha Honor Medical Society, a UT Southwestern Outstanding Teacher Award from the Classes of 2012 and 2013, a UT Southwestern Pre-Clinical Teaching in Clinical Medicine Award from the Class of 2012, selection as a finalist in the UT Southwestern Innovation in Health Science Education Award, an educational grant from the University of Texas Health Sciences Foundation's Small Grants Program, a UT Southwestern Faculty Teaching Award in Pediatric Residency, a UT Southwestern Core Clerkship Teaching Award from the Class of 2010, a UT Southwestern Clinical Research Scholars Award, a grant from the Program for the Development and Evaluation of Model Community Initiatives in Dallas (PDEMCHID), election to the American Society of Clinical Nutrition, and a Community Access to Child Health (CATCH) grant from the American Academy of Pediatrics.

Faculty

Glenn Flores, M.D., F.A.A.P., Professor of Pediatrics, Clinical Sciences, and Public Health, and the Judith and Charles Ginsburg Chair in Pediatrics, is the Director of the Division of General Pediatrics and the Director of the Academic General Pediatrics Fellowship Program. Dr. Flores graduated with high honors from Harvard University, Cambridge, Massachusetts, in 1984, and received his medical degree from the University of California, San Francisco, in 1989. After a residency in pediatrics at New York Hospital/ Cornell Medical Center from 1989 to 1992, he was an RWJ Clinical Scholar at Yale University from 1993 to 1995. He is a member of the editorial board of the *Journal of Health Care for the Poor and Underserved*, and previously served on the editorial board of *Academic Pediatrics*. He is Chair of the Research Committee of the Academic Pediatric Association, and a member of the United States Preventive Services Task Force, National Advisory Committee of the Robert Wood Johnson Amos Medical Faculty Development Program, National Advisory Committee of the Robert Wood Johnson Foundation Aligning Forces for Quality Program, National Advisory Committee subcommittee on Children's



Glenn Flores, M.D.
Director, General Pediatrics

Healthcare Quality Measures for Medicaid and CHIP Programs of the Agency for Healthcare Research and Quality, National Advisory Committee on Identifying Innovative Programs for Improving Children's Healthcare in California of the National Initiative for Children's Healthcare Quality (NICHQ), Committee on Pediatric Research of the American Academy of Pediatrics, and the Institute of Medicine Committee on Pediatric Health and Health Care Quality Measures. He has also served as a member of the Expert Panel for the Department of Health and Human Services Health Care Language Services Implementation Guide, has provided a Congressional Research Briefing, has testified in the United States Senate on Latino health and the Hispanic Health Improvement Act, and has provided invited written testimony on health disparities for the U.S. House of Representatives' Ways and Means Committee. Dr. Flores was also previously an invited speaker at the National Summit on America's Children convened by Speaker of the House Nancy Pelosi. He is a member of the Frew Advisory Committee for the Texas Health and Human Services Commission. He has served as a consultant or national advisory committee member for the the U.S. Surgeon General, Centers for Disease Control and Prevention, NICHD, American Medical Association, National Hispanic Medical Association, and the Sesame Street Workshop. He received the 2006 American Academy of Pediatrics Outstanding Achievement Award in the Application of Epidemiologic Information to Child Health Advocacy, 2008 Millie and Richard Brock Award for Distinguished Contributions to Pediatrics, and 2010 Helen Rodríguez-Trías Social Justice Award from the American Public Health Association. He has published 123 articles and book chapters on a variety of topics in such journals as *JAMA*, the *New England Journal of Medicine*, *Pediatrics*, and the *Lancet*, including many papers that address uninsured children and racial/ethnic and linguistic disparities in children's health and healthcare.



Amy Barton, M.D.

Assistant Professor

Clinical expertise: General pediatrics

Education: University of Northern Iowa, Cedar Falls, B.A., 1996; University of Oklahoma College of Medicine, Oklahoma City, M.D., 2000

Post-doctoral training: University of Oklahoma Health Sciences Center/Children's Hospital of Oklahoma, Oklahoma City, Resident, Pediatrics, 2000-2003



Matthew J. Cox, M.D.

Associate Professor and Clinical Director of REACH

Clinical/research expertise: Physical abuse, sexual child abuse, neglect, inpatient general pediatrics

Education: Texas A&M University, College Station, B.S., 1993; UT Medical School at Houston, M.D., 1998

Post-doctoral training: Vanderbilt University Medical Center, Nashville, TN, Resident, Pediatrics, 1998-2001; Chief Resident, 2001-2002; Children's Hospital of Philadelphia, PA, Fellow, Child Abuse and Neglect, 2002-2004



Suzanne Dakil, M.D.

Assistant Professor

Clinical/research expertise: General pediatrics, risk factors for child abuse and child abuse prevention

Education: Emory University, Atlanta, GA, B.S., 2001; University of Louisville, KY, M.D., 2005

Post-doctoral training: UT Southwestern/Children's, Resident, Pediatrics, 2005-2008; UT Southwestern, Fellow, Academic General Pediatrics, 2008-2010



Susan Dibs, M.D.

Clinical Assistant Professor

Clinical expertise: International adoption medicine

Education: University of California, Los Angeles, B.S., 1981; University of Pittsburgh, PA, M.S., 1985; Mount Sinai School of Medicine, New York, NY, Ph.D., 1987; Case Western Reserve University, Cleveland, OH, M.D., 1991

Post-doctoral training: Children's Hospital of Philadelphia, PA, Resident, Pediatrics, 1992-1994; Fellow, Pediatric Emergency Medicine, 1994-1997

Vanthaya N. Gan, M.D.

Professor

Clinical expertise: General pediatrics, dermatology, asthma**Education:** Mahidol University, Bangkok, Thailand, B.S., 1971; Mahidol University, Ramathibodi Hospital, Bangkok, Thailand, M.D., 1973**Post-doctoral training:** Ramathibodi Hospital, Rotating Intern, Pediatrics, 1973-1974; UT Southwestern/Children's, Resident, 1974-1977; UT Southwestern, Fellow, Ambulatory Pediatrics, 1977-1979**Lauren Gore, M.D.**

Assistant Professor

Clinical expertise: General pediatrics**Education:** Texas A&M University, College Station, B.S., 2000; UT Health Science Center at Houston, M.D., 2004**Post-doctoral training:** UT Southwestern/Children's, Resident, Pediatrics, 2004-2007; Chief Resident, Pediatrics, 2007-2008**Shelby Joseph, M.D.**

Assistant Professor

Clinical expertise: General pediatrics**Education:** Creighton University, Omaha, NE, B.A., cum laude, 2001; Rush University, Chicago, IL, M.D., 2005**Post-doctoral training:** Rush University Medical Center, Chicago, IL, Resident, Pediatrics, 2006-2008; Chief Resident, 2008-2009**Nancy R. Kelly, M.D., M.P.H.**

Associate Professor

Clinical/research expertise: General pediatrics, anticipatory guidance, injury and poison prevention, resident education in continuity clinic**Education:** Texas A&M University, College Station, B.S., 1983, UT Medical Branch at Galveston, M.D., 1987; UT Health Science Center at Houston, M.P.H., 1994**Post-doctoral training:** University of Arkansas for Medical Sciences, Little Rock, Resident, Pediatrics, 1987-1990; Chief Resident, Pediatrics, 1990-1991; Baylor College of Medicine, Houston, TX, Fellow, Academic General Pediatrics, 1991-1994**Karen Y. Latour, M.D.**

Assistant Professor

Clinical/research expertise: General pediatrics, health care and access to health care of underserved children**Education:** Louisiana State University, Baton Rouge, B.S., 2000; UT Medical Branch at Galveston, M.D., 2005**Post-doctoral training:** Louisiana State Health Science Center, New Orleans, Resident, Pediatrics, 2005-2008; Chief Resident, Pediatrics, 2008-2009**May Lau, M.D., M.P.H.**

Assistant Professor

Clinical/research expertise: Adolescent general and sexual health issues, racial/ethnic health disparities**Education:** Cornell University, New York, NY, B.A., 1992; Albany Medical College, NY, M.D., 1998; UT Health Science Center at Houston, M.P.H., 2004**Post-doctoral training:** Albany Medical College, NY, Intern and Resident, 1998-2001; Baylor College of Medicine/Texas Children's Hospital, Houston, Fellow, Adolescent Medicine, 2001-2004; Maternal and Child Health Bureau, Health Resources and Services Administration, Fellow, Leadership Education in Adolescent Health, 2001-2004



Michael Lee, M.D.

Associate Professor

Clinical expertise: General pediatrics

Education: Baylor University, Waco, TX, 1987-1991, UT Southwestern, M.D., 1995

Post-doctoral training: UT Southwestern/Children's, Resident, Pediatrics, 1995-1998



Angela P. Mihalic, M.D.

Associate Professor and Associate Dean of Student Affairs

Clinical/research expertise: General pediatrics, medical student and resident education

Education: UT Austin College of Pharmacy, B.S., 1990; UT Southwestern, M.D., 1995

Post-doctoral training: UT Southwestern/Children's, Resident, Pediatrics, 1995-1998; PAS/ APA Educational Scholars Program, 2006-2009



Vineeta Mittal, M.D.

Assistant Professor

Clinical/research expertise: General pediatrics, family-centered care

Education: St. Xavier's College, Bombay University, India, H.S.C., 1988; Bombay University, India, M.D., 1994

Post-doctoral training: Bombay University, India, Resident, Pediatrics, 1994-1997; Canberra Clinical School, University of Sydney, Australia, Fellow, Neonatology, 1998-2000; Royal College of Pediatrics and ChildHealth, London, England, International Pediatric Training Scheme, 2001-2002; Brown Medical School, Hasbro Children's Hospital, Providence, RI, Resident, Pediatrics, 2003-2005



Anu N. Partap, M.D., M.P.H.

Assistant Professor

Clinical/research expertise: General pediatrics, child abuse and neglect

Education: University of Missouri, Kansas City, B.A., 1992; University of Missouri-Kansas School of Medicine, M.D., 1995; Arizona Graduate Program in Public Health, Tucson, M.P.H., 2001

Post-doctoral training: Maricopa Medical Center/Phoenix Children's Hospital, Resident, Pediatrics, 1995-1997; Chief Resident, Pediatrics, 1997-1998; Maricopa Medical Center, Fellow, HRSA Faculty Development, 1998-2000



Carol P. Podolsky, M.D.

Assistant Professor

Research interests: Adolescent medicine, childhood immunization, school-based health care delivery and education

Education: Cornell University, New York, NY, B.A., with honors, 1974; Harvard Medical School, Boston, MA, M.D., 1978

Post-doctoral training: Children's Hospital Medical Center, Boston, MA, Resident, Pediatrics, 1978-1981; Fellow, Adolescent Medicine, 1981-1982



Erin E. Scheideman, M.D.

Instructor

Clinical/research expertise: International medicine and global health, public health, general preventative medicine, HIV exposure/infection

Education: Vanderbilt University, Nashville, TN, B.A., cum laude, 2003; UT Health Science Center at San Antonio, M.D., 2007

Post-doctoral training: UT Southwestern/Children's, Resident, Pediatrics, 2007-2010; UT Southwestern, HIV Clinical Fellow, Vaalwater, South Africa, June-September 2010

Rashmi Shetgiri, M.D., M.S.H.S.

Assistant Professor

Clinical/research expertise: General pediatrics, Latino child health, youth violence prevention, Latino child health, racial/ethnic health disparities

Education: Drew University, Madison, NJ, B.A., 2000; University of Medicine and Dentistry of New Jersey – New Jersey Medical School, Newark, M.D., 2003; University of California School of Public Health, Los Angeles, M.S.H.S., 2008

Post-doctoral training: University of California, Los Angeles, Resident, Pediatrics, Community Health & Advocacy Training Program, 2003-2006; University of California, Los Angeles, Fellow, Robert Wood Johnson Clinical Scholars Program, 2006-2009



Joel B. Steinberg, M.D.

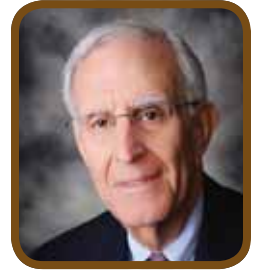
Professor

Master, Fashena College at UT Southwestern

Clinical expertise: General pediatric consultation

Education: Tulane University, New Orleans, LA, B.S., 1956; Tulane University School of Medicine, New Orleans, LA, M.D., 1959

Post-doctoral training: Parkland Memorial Hospital, Dallas, TX, Rotating Intern, 1959-1960; Tulane University School of Medicine, Charity Hospital of Louisiana, Resident, Pediatrics, 1960-1962, Chief Resident, Pediatrics, 1962



Christy Turer, M.D., M.H.S.

Instructor, Pediatrics and Internal Medicine

Clinical/research expertise: Dietary and behavioral obesity interventions, health disparities in overweight and obese patients

Education: Loyola Marymount University, Los Angeles, CA, B.S., 1999; Johns Hopkins Medical School, Baltimore, MD, M.D., 2004; Duke University, Durham, M.H.S., 2010

Post-doctoral training: Duke University Medical Center, Durham, NC, Resident, Internal Medicine and Pediatrics, 2004-2008



Jennifer Walsh, M.D.

Assistant Professor, Pediatrics and Internal Medicine

Clinical expertise: Adolescent and young adult care

Education: Princeton University, NJ, A.B. *cum laude*, 1998; UT Health Science Center at Houston, M.D., 2003

Post-doctoral training: University of North Carolina Hospitals, Chapel Hill, Resident, Internal Medicine and Pediatrics, 2003-2007



Laura Wolovits, M.D.

Assistant Professor

Clinical expertise: Adolescent medicine, child maltreatment

Education: Hendrix College, Conway, AR, B.A., 2000; UT Health Science Center at Houston, M.D., 2004

Post-doctoral training: UT Southwestern/Children's, Intern and Resident, Pediatrics, 2004-2006; Children's Hospital and Research Center, Oakland, CA, Resident, Pediatrics, 2006-2007



Post-doctoral Fellows

Completed June 2010



Suzanne Roper Dakil, M.D.

Current Position:
Assistant Professor, General Pediatrics,
UT Southwestern

Research Interests:
Child abuse and neglect, socio-demographic
and geographic characteristics of children
with abusive head trauma, development
of tools to identify families at risk and guide
prevention efforts



Christina Sakai, M.D.

Current Position:
Developmental Behavioral Pediatrics
Fellowship, Tufts New England Medical
Center

Research Interests:
Kinship foster care, healthcare transition in
foster care youth

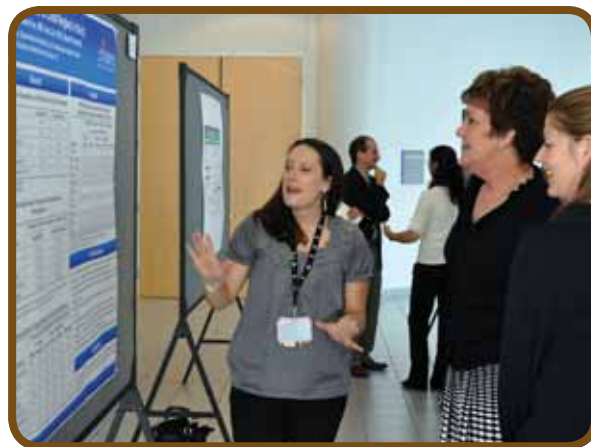
1st Year



Cathleen Lang, M.D.

Research Interests:

Child abuse prevention through education; improving the health and healthcare of abused and neglected children, including those who are in foster care and kinship care; utility of sexual assault forensics exams



Dr. Suzanne Dakil

1st Annual Senior Fellows Research Day

Clinical Research Staff

Hua Lin, Ph.D., Biostatistical Consultant III
Candice Walker, Ph.D., Research Study Coordinator
Christina Bridon, Senior Program Coordinator

Research Activities

Research activities in the Division of General Pediatrics encompass a wide variety of domains, including pediatric health services, health policy, access to healthcare, quality of care, patient safety, racial/ethnic disparities, language issues in healthcare, cultural competency, asthma, obesity, oral health, poverty and its impact on child health, pediatric workforce diversity, qualitative research, prevention of youth violence and bullying, teen dating, prevention of teen pregnancy, use of poison control centers, family-centered care, educational interventions for residents and medical students, and transitional care for adolescents and young adults.

Clinical Activities

The Division of General Pediatrics provides both inpatient and outpatient care at Children’s Medical Center. Division faculty members staff both the inpatient teaching service and provide outpatient care and consultation in nine specialized clinics and at Los Barrios Unidos Community Clinic.

Staffed by physicians who have special interest and training in adolescent and sports medicine, the **Adolescent Young Adult (AYA) Clinic** provides primary and specialty care services for patients 11 to 21 years old, and welcomes referrals from community physicians and healthcare clinics. Through healthcare delivery, education and research, the AYA Clinic seeks to improve adolescent health.

One of only a few dozen in the United States, the **International Adoption Medicine Program** offers comprehensive medical care and advice to assist internationally adopted children, their parents, and the community doctors who care for them, including medical evaluations before adoption, initial health screenings, and follow-up care for children with special physical, developmental and social-emotional needs.

The **Referral Evaluation of At Risk Children (REACH) Program** provides outpatient medical evaluations for child-abuse diagnosis, prevention and treatment, as well as inpatient and emergency department consultations in cases of suspected child abuse. Medical follow-up and networking with a variety of state and local agencies and social services are offered through the REACH Program. Supported by physicians, pediatric nurse practitioners care for children in the Foster Care Clinic, where they provide placement exams, pre-adoption physical and developmental screenings, and primary care medical services for children in foster care in Dallas County.

The **Foster Care Clinic** provides placement exams, medical homes, and pre-adoption physicals for children from infancy to 19 years old living in out-of-home placement due to child abuse and neglect. Drs. Anu Partap and Christina Sakai, and PNPs Sandra Arthur and Mary Pat Glazier, work closely with foster parents, foster agencies, CPS, court systems, and the REACH Team to optimize each child’s health, healthcare, safety, and well-being.

2010 Patient Visits

Clinic	Visits
Resident Continuity	9,870
Foster Care	1,963
Adolescent Young Adult (AYA)	1,948
REACH	1,258
Medical Student Teaching	838
International Adoption Medicine	96
Pediatric Diagnostic & Consultation	12
	<u>15,985</u>

Pediatric residents receive training in primary care in the **Resident Continuity Clinic**, providing comprehensive care under the supervision of Division faculty to both well and chronically ill children. The clinic also is the setting for many clinical studies. This state-of-the-art Clinic includes technologies that maximize the educational experience for residents and improve care for patients.

The **Acute Care Clinic (First Care)** evaluates acute nonemergency patients. Division physicians supervise pediatric residents and support educational objectives through patient care, informal lectures, and teaching conferences.

The **Pediatric Diagnostic and Consultation Clinic** cares for patients referred by primary-care physicians and specialists. Division faculty conduct comprehensive evaluations and diagnoses of patients and make recommendations for treatment and referrals back to primary-care physicians and specialists.

The **Medical Student Teaching Clinic** evaluates selected acute, nonemergency patients while providing outstanding supervised learning experiences for medical students rotating through the outpatient component of their pediatric clerkship. It is staffed both by division faculty and clinical faculty pediatricians from the community.



Presentations/Teaching Activities

Glenn Flores, M.D., F.A.A.P

- “Disparities in Immigrant Latino Children’s Health and Healthcare: How We Can Level the Playing Field,” Conference on Latino Immigrant Health, Sponsored by the Hispanic Serving Health Professions Schools & Stanford Hispanic Center of Excellence, Palo Alto, CA, 2010
- “Lost in Translation: Language Barriers, Interpreters, Communication, and Quality in Health Care,” Grand Rounds, National Institutes of Health, Bethesda, MD, 2010

Amy Barton, M.D.

- “Child Sexual Abuse Quandaries,” Pediatric Grand Rounds, Children’s Hospital of Oklahoma, Oklahoma City, November 2010

Matthew J. Cox, M.D.

- “Child Abuse: Identifying and Protecting Children,” Advanced Practitioner Conference, Children’s Medical Center, February 2010
- “Battered Children: The Role of the Medical Provider,” Dallas-Fort Worth Chapter of the Case Managers Society of America (DFW CMSA), Arlington, TX, March 2010
- “Child Abuse: The Pediatrician’s Role,” 42nd Annual Kenneth C. Haltalin Pediatrics for the Practitioner Seminar, Richardson, TX, April 2010
- “Medical Controversies in Child Abuse Cases,” Trauma Program Grand Rounds, Children’s Medical Center, April 2010
- “Referral and Evaluation of At-Risk Children: REACH Program at Children’s Medical Center,” Hands-On Healthcare Keynote Address, Dallas, July 2010
- “Failure to Thrive: The Bare Bones” and “What Would You Do: Genital Injuries in Children,” Dallas Children’s Advocacy Center Crimes Against Children Conference, Dallas, TX, August 2010
- “What Would You Do: Suspicious Traumatic Injuries in Young Children,” Pediatric Emergency Services Network Conference, Dallas, TX, December 2010

Suzanne Dakil, M.D.

- “Recidivism in the US Child Welfare System: Risk Factors for Reabuse,” Pediatric Academic Societies Annual Meeting, Vancouver, BC, May 2010
- “Geo-Mapping: An Innovative Tool for Identifying Communities at High Risk for Child Maltreatment” and “Racial and Ethnic Disparities in Child Neglect in the US,” Pediatric Academic Societies Annual Meeting, Vancouver, BC, May 2010 (Poster Presentations)
- “Medical Evaluation of Child Physical Abuse,” Dallas Children’s Advocacy Center Crimes Against Children Conference, Dallas, TX, August 2010
- “Child Abuse and Neglect: What You Need to Know to Protect Children,” Lecture for Peace Officers Receiving Intermediate Peace Officers License, Desoto Police Department, Desoto, TX, February 2010
- “Child Abuse and Neglect: The Medical Perspective,” Lecture for Law Students, Southern Methodist University, Dedman School of Law, Dallas, TX, February 2010

Nancy R. Kelly, M.D., M.P.H.

- Kelly NR, Lin H, Flores G. “Hospitalizations for Poisoning in US Children: Who’s at Risk and How Much Does it Cost?” and Troendle S, Troendle D, Kelly N. “Resident Oral Health Initiative,” Pediatric Academic Societies’ Annual Meeting, Vancouver, BC, May 2010 (Poster Presentations)
- Devdas G, Weibe R, Scott S, Kelly N, Okada P, Hicks P. “Survey of Pediatric Resident Knowledge of Injury

Prevention,” American Academy of Pediatrics National Conference, San Francisco, CA, October 2010 (Poster Presentation)

- “Immunization Concerns: Separating Fact from Fiction,” University of Texas Maternal and Child Health Training Program Seminar, University of Texas School of Public Health, Dallas, TX, April 2010

May Lau, M.D.

- Lau M, Lin H, Flores G. “Adolescent Females and the Human Papillomavirus Vaccine – Factors Associated with Vaccination and its Recommendation in the US” Pediatric Academic Societies, Vancouver, BC, May 2010
- Lau M, Avila R, Lin H, Flores G. “Racial/Ethnic Disparities in the Health and Healthcare of US Adolescents: Has Anything Changed Over the Years?” and Lau M, Avila R, Lin H, Flores G. “The Primary Language Spoken at Home and Health and Healthcare Disparities in US Adolescents: Has the Tincture of Time Reduced Disparities?” Pediatric Academic Societies, Vancouver, BC, May 2010 (Poster Presentations)
- Lau M, Lin H, Flores G. “Adolescent Females and the Human Papillomavirus Vaccine – Factors Associated with Vaccination and its Recommendation in the US,” AcademyHealth Annual Research Meeting, Boston, MA, June 2010
- Lau M, Avila R, Lin H, Flores G. “Racial/Ethnic Disparities in the Health and Healthcare of US Adolescents: Has Anything Changed Over the Years?” and Lau M, Avila R, Lin H, Flores G. “The Primary Language Spoken at Home and Health and Healthcare Disparities in US Adolescents: Has the Tincture of Time Reduced Disparities?” AcademyHealth Annual Research Meeting, Boston, MA, June 2010 (Poster Presentations)
- Lau M, Lin H, Flores G. “Adolescent Females and the Human Papillomavirus Vaccine – Factors Associated with Vaccination and its Recommendation in the US,” American Public Health Association Annual Meeting, Denver, CO, November 2010
- Lau M, Avila R, Lin H, Flores G. “Racial/Ethnic Disparities in the Health and Healthcare of US Adolescents: Has Anything Changed Over the Years?” and Lau M, Avila R, Lin H, Flores G. “The Primary Language Spoken at Home and Health and Healthcare Disparities in US Adolescents: Has the Tincture of Time Reduced Disparities?” American Public Health Association Annual Meeting, Denver, CO, November 2010 (Poster Presentations)

Angela Mihalic, M.D.

- “How to Create a Teaching Portfolio,” New Faculty Orientation Series, Division of General Pediatrics, University of Texas Southwestern Medical Center. January, 2010.
- “Millennials in Medicine- Bridging the Gap in Medical Education and Practice,” Grand Rounds, Texas Tech University Health Science Center Paul Foster School of Medicine, El Paso, TX, February 2010
- “Effectively Teaching the Millennial- Bridging the Gap in Medical Education,” Effective Teacher Series, UT Southwestern, April 2010
- “Culture and Medicine,” Physician Awareness and Ethics, Department of Neurology Resident Lecture Series, UT Southwestern, August 2010
- “Resident as Effective Teacher Introduction/Adult Learning Theory,” and “Communication Styles and Effective Facilitation,” UT Southwestern Resident as Effective Teacher Workshop, October 2010
- “Becoming Linguistically Competent and Interpreter Workshop,” First Annual Language Access Fair in Celebration of Day of the Americas, Children’s Medical Center, October 2010
- “Millennials in Medicine- Bridging the Gap in Medical Education” Effective Teacher Lecture Series, UT Austin, Seton Medical Center, November 2010
- “Effectively Teaching the Millennial-Bridging the Gap in Medical Education,” Department of Orthopedics Faculty Retreat, UT Southwestern, November 2010

Vineeta Mittal, M.D.

- “Do Family-Centered Rounds Improve Parent Satisfaction, Communication, Coordination of Care, Patient Safety, Outcomes, and Trainee Education? A Qualitative Study of Parents of Hospitalized Children,” Pediatric Hospital Medicine Meeting, Minneapolis, July 2010
- “Do Family-Centered Rounds Improve Parent Satisfaction, Communication, Coordination of Care, Patient Safety, Outcomes, and Trainee Education? A Qualitative Study of Parents of Hospitalized Children,” and “Do Family-Centered Rounds Enhance Resident’s Clinical and Educational Experiences and Improve Patient Outcomes? A Qualitative Study,” Pediatric Academic Society Meeting, Vancouver, BC, May 2010 (Poster Presentation)
- “Navigating the Ship Successfully: A Faculty Development Program to Train Faculty to Conduct Efficient FCRs,” Pediatric Academic Society Meeting, Vancouver, BC, May 2010
- “Impact of Family-Centered Rounds on Medical Education,” Facilitator for the Family-centered Care SIG, Pediatric Academic Society Meeting, Vancouver, BC, May 2010
- “Implementing Successful Family-Centered Rounds,” Pediatric Hematology Oncology Division Grand Rounds, UT Southwestern, November 2010

Rashmi Shetgiri, M.D., M.S.H.S.

- “Can Parents End Childhood Bullying? Risk and Protective Factors for Child Bullying in the US,” and “A Randomized Controlled Intervention to Reduce Youth Violence and Substance Use,” Pediatric Academic Societies Meeting, Vancouver, BC, May 2010
- “How Parents Can End Bullying: Risk and Protective Factors for Child Bullying in the US,” American Academy of Pediatrics National Conference and Exhibition, San Francisco, CA, October 2010

**Christy Turer, M.D., M.H.S.**

- “Adding Value: An Evidence + Value-Based Approach to Obesity,” Society for General Internal Medicine, Minneapolis, MN, April 2010

Jennifer Walsh, M.D.

- “Transition of Children with Complex Special Health Care Needs from the Pediatric to Adult Health Care World” 4th Annual Advanced Practice Conference, Children’s Medical Center

Major Administrative or Leadership Responsibilities**Glenn Flores, M.D., F.A.A.P.**

- Director, Division of General Pediatrics, UT Southwestern
- Founder and Director, Academic General Pediatrics Fellowship, UT Southwestern
- Study Section Member, Children’s Clinical Research Advisory Committee
- Member, Ambulatory Service Project Steering Committee, Children’s Medical Center
- Member, Demand Management Project Team, Children’s Medical Center
- Member, Community Health Research Initiative (CHRI) Steering Committee, UT Southwestern Clinical and Translational Sciences Award (CTSA)
- Member, President’s Task Force for Faculty Diversity
- Member, President’s Health Policy/Health Services Research Task Force
- Member, Project Advisory Committee, Program for the Development and Evaluation of Model Community Health Initiatives in Dallas (DMCHID)
- Study Section Member, North Central Texas CTSI Pilot Grant Award Program Committee
- Member, Dallas County Child Death and Infant Mortality Review
- Appointed Member, Frew Advisory Committee, Texas Health and Human Services Commission
- Appointed Member, Health Disparities and Hispanics Leadership Summit, sponsored by the National Hispanic Medical Association and the U.S. Department of Health and Human Services Office of Minority Health (nominated by the Texas Health and Human Services Commission)
- Member, Board of Directors, Avance Dallas
- Abstract Reviewer, Pediatric Academic Societies Meetings
- Member, Scholars Network and Steering Committee, Robert Wood Johnson Foundation’s National Program, Hablamos Juntos: Improving Patient-Provider Communication for Latinos
- Member, National Advisory Committee, Robert Wood Johnson Harold Amos (Minority) Medical Faculty Development Program
- Member, Program Advisory Committee, University of Puerto Rico-Cambridge Health Alliance-Harvard
- University EXPORT Center
- Member, Committee on Pediatric Research, American Academy of Pediatrics
- Member, Advisory Group, Academic Pediatric Association New Century Scholars Program (for under-represented minority pediatric residents)
- Member, Executive Committee, Academic Pediatric Association (APA) Research Committee
- Member, National Advisory Committee, First Focus
- Member, National Advisory Committee, Immunization Initiative Advisory Council, Migrant Clinicians Network
- Senior Investigator and mentor, Robert Wood Johnson Foundation Network for Multicultural Research on Health and Health Care
- Member, National Advisory Committee on Identifying Innovative Programs for Improving Children’s Healthcare in California, National Initiative for Children’s Healthcare Quality (NICHQ)
- Elected Chair, Research Committee, Academic Pediatric Association
- Member, Agency for Healthcare Research and Quality National Advisory Committee Subcommittee on Children’s Healthcare Quality Measures for Medicaid and CHIP Programs
- Member, Institute of Medicine/National Research Council Committee on Pediatric Health and Health Care Quality Measures
- Member, National Advisory Committee, Robert Wood Johnson Foundation Aligning Forces for Quality (AF4Q) Program
- Expert, Child Health and Nutrition Knowledge Network, Child Health and Nutrition Research Initiative

Matthew Cox, M.D.

- Medical Director, REACH Program, Children's Medical Center Dallas.
- Medical Director, Sexual Assault Forensic Examination Team, CMC Dallas
- Member, Texas Department of Health and Human Services MEDCARES Advisory Panel, Austin, TX

Vanthaya N. Gan, M.D.

- Director, Medical Student Clinic
- Associate Director, Pediatric Clerkship
- Course Director, Pediatric Preceptorship: Pre-clinical Student
- Course Director, Pediatric Preceptorship: Clinical Student
- Program Co-Director, Subspecialty Ambulatory Senior Rotation: Clinical Resident
- Faculty Advisor/Sponsor, Pediatric Interest Group
- Faculty Preceptor, Pediatric Resident Continuity Clinic, Children's
- Mentor, Medical Student College
- Member, Advisory Committee, Texas Pediatric Precept Program
- Member, Pharmacy Therapeutics Committee, Children's
- Member, ID Committee, Texas Pediatrics
- Manuscript Reviewer, Academic Pediatrics,
- Member: The Global Child Health Educational Modules Project (GCHEMP) Committee
- Member: Editorial Board Greater Dallas Pediatric Society

Lauren Gore, M.D.

- Associate Program Director, Pediatric Residency Program, UT Southwestern

Shelby Joseph, M.D.

- Medical Director, Medical-Legal Partnership for Children, Dallas

Nancy R. Kelly, M.D., M.P.H.

- Director, Continuity Clinic Program for CMC/UTSW Pediatric Residents
- Medical Director, Crystal Charity Ball Continuity of Care Clinic
- Advocacy Program Co-Director, UTSW Pediatric Residency Program
- Academic Pediatric Association Region VII Co-Chair
- Abstract Reviewer, Pediatric Academic Societies
- Manuscript Reviewer, Pediatrics, Academic Pediatrics, and Clinical Pediatrics

Karen Latour, M.D.

- Member, American Academy of Pediatrics Special Interest Group on Adoption & Foster Care Medicine

May Lau, M.D.

- Co-Chair, Texas Pediatric Society Committee on Adolescence and Sports Medicine

Michael Lee, M.D.

- Director, First Care Clinic, Children's Medical Center
- Chairman, Pediatric Peer Review Committee, Children's Medical Center
- Course Director, First Care Clinical Rotation, Children's Medical Center
- Billing and Compliance Officer, General Pediatrics Division, UT Southwestern
- Member, Infectious Disease Committee, Texas Pediatric Society

Angela Mihalic, M.D.

- Associate Dean for Student Affairs, University of Texas Southwestern Medical School
- Faculty Advisor, Academic Pediatrics Association- Educational Scholars Program
- Nominating Committee, COMSEP (Council on Medical Student Education in Pediatrics)
- Pediatric Society of Greater Dallas- treasurer
- Program Director, International Medical Exchange Program, Student Exchange Program with the University of Paris Descartes
- Course Director, Resident as Effective Teacher Workshop
- Co-Course Director, Public Policy and Healthcare Financing
- Course Director, International Service Learning Preclinical Non-Credit Elective

Vineeta Mittal, M.D.

- Associate Clinical Director of Inpatient Services for the Division of General Pediatrics
- Co-founder/Co-Chair, Family-Centered Care Special Interest Group, Academic Pediatric Association
- Liaison, General Inpatient Pediatric Consult Service, University of Texas Southwestern Medical School
- Physician Team Lead, Inpatient Teaching Service, Children's Medical Center
- Co-facilitator and co-organizer, Division of General Pediatrics and Hospitalists Medicine Group Faculty Morbidity and Mortality Conference, University of Texas Southwestern and Children's Medical Center Dallas
- Leader, Bronchiolitis Task Force, tasked with developing evidence-based care guidelines, Children's Medical Center

Rashmi Shetgiri, M.D., M.S.H.S.

- Co-Chair of Culture, Ethnicity and Healthcare Special Interest Group, Academic Pediatric Association
- Abstract Reviewer, Pediatric Academic Societies National Meeting

Joel Steinberg, M.D.

- Master, Gladys Fashena College, UT Southwestern Medical School
- Director, Pediatric Diagnostic and Consultation Service, Children's Medical Center
- Chair, Clinical Faculty Committee

Awards and Honors

Glenn Flores, M.D., F.A.A.P.

- National Institutes of Health (NIH) R01 grant, "A Randomized Trial of Effects of Parent Mentors on Insuring Minority Children," Eunice Kennedy Shriver National Institute of Child Health and Human Development (NICHD)
- Parent-mentor intervention for minority children with asthma featured in AHRQ Health Care Innovations Exchange
- Appointed to United States Preventive Services Task Force
- 2010 Helen Rodríguez-Trías Social Justice Award from the American Public Health Association

Matthew Cox, M.D.

- Children's Advocacy Center of Collin County, Child Advocate of the Year, December 2010
- Promoted to Associate Professor of Pediatrics, UT Southwestern

Vanthaya N. Gan, M.D.

- Texas Super Doctors, Texas Monthly
- Guide to America's Top Pediatricians, Consumer Research of America
- The Best Pediatrics Specialists in Dallas 2010, *D Magazine*
- Nominated for membership in the Alpha Omega Alpha Honor Medical Society, Gamma Chapter
- Co-Investigator and funding received for a research grant at Baylor College of Medicine. Study title: "Initiation of Chronic Asthma Care Regimens in the Pediatric Emergency Department"

Michael Lee, M.D.

- The Best Pediatrics Specialists in Dallas 2010, *D Magazine*
- Promoted to Associate Professor of Pediatrics, UT Southwestern

Angelia Mihalic, M.D.

- The Best Pediatrics Specialists in Dallas 2010, *D Magazine*
- UT Southwestern Commencement Faculty Marshal, elected by graduating class of 2010.
- UT Southwestern Outstanding Teacher Award, MS1 Class, 2009-2010
- UT Southwestern Outstanding Teacher Award, MS2 Class, 2009-2010
- AAMC/AMA New Horizons in Medical Education: A Second Century of Achievement invitational conference attendee
- UT Southwestern Preclinical Teaching Award, Clinical Medicine, Class of 2012

Vineeta Mittal, M.D.

- Finalist, Innovation in Health Science Education, University of Texas Health Science Education Award
- Educational Grant, University of Texas Health Sciences Education, Small Grants Program
- Faculty Teaching Award, Pediatric Residency, UT Southwestern
- Core Clerkship Teaching Award, Class of 2010, UT Southwestern

Rashmi Shetgiri, M.D., M.S.H.S.

- Awarded UT Southwestern Clinical Research Scholars Award
- Promoted to Assistant Professor of Pediatrics, UT Southwestern
- Grant, Program for the Development and Evaluation of Model Community Initiatives in Dallas (PDEMCHID)

Joel Steinberg, M.D.

- Best Doctors in Dallas, *D Magazine*
- Texas Super Doctors, *Texas Monthly*

Christy Turer, M.D., M.H.S.

- Elected to the American Society of Clinical Nutrition

Jennifer Walsh, M.D.

- American Academy of Pediatrics (AAP) Community Access to Child Health (CATCH) Planning Funds grantStudy title: "Transition of Youth with Special Healthcare Needs."

Genetics / Metabolism

The Division of Pediatric Genetics and Metabolism is a major resource for clinical genetics in North Texas, with clinics at Children's that are unique in the region. The division was the first clinic in North Texas to accept referrals from the Texas Department of Health's newborn screening program for biochemical disorders, and is the largest clinic specializing in the diagnosis and treatment of children with inborn errors of metabolism in North Texas. Referrals are received from all of the other children's hospitals in the Dallas/Fort Worth Metroplex as well as from more distant areas. Faculty and staff operate the only multispecialty clinic for patients with Down syndrome in the region and have special interests in the diagnosis and management of a variety of other genetic conditions such as Marfan syndrome, osteogenesis imperfecta and other disorders of skeletal development. The division also provides clinical services for the major clinical laboratories at UT Southwestern that deal with genetic conditions including the molecular diagnosis, cytogenetics and metabolic disease laboratories.

The division is a vital part of UT Southwestern's programs for training medical students, residents, fellows and allied health professionals. Faculty play a major teaching role in the first year of the medical school program and train third-year medical students as part of their pediatric rotation. They also play an important part in the Pediatrics and Medical Genetics residency programs.

Dr. Ralph DeBerardinis continues to expand the division's research efforts in areas that include cellular regulation of metabolism in normal cells and in cancer and in the diagnosis and treatment of pediatric metabolic diseases. He operates a basic science laboratory at UT Southwestern, coordinates the newborn screening referral service at Children's, and attends on the in-patient Pediatric Genetics and Metabolism service.

Faculty

Perrin C. White, M.D., Professor, was the first to hold the Audre Newman Rapoport Distinguished Chair in Pediatric Endocrinology. He was recruited to UT Southwestern as Director of the Pediatric Endocrinology program in 1994 from Cornell University Medical College in New York, where he was Professor of Pediatrics. In 2010, he assumed the role of Interim Director of the Pediatric Genetics & Metabolism program. Dr. White has conducted research on several genetic diseases of steroid hormone biosynthesis and metabolism including the most common forms of congenital adrenal hyperplasia. Dr. White received his A.B., *magna cum laude*, from Harvard College, Cambridge, Massachusetts, in 1972, and his M.D. from Harvard Medical School, Boston, Massachusetts, in 1976. He held residencies in pediatrics at Johns Hopkins Hospital, Baltimore, Maryland, from 1976 to 1978 and at New York Hospital from 1980 to 1981, and he held a research fellowship in developmental molecular biology at Rockefeller University, New York, from 1978 to 1980. He has received a number of awards and honors, including the Ernst Oppenheimer Award of the Endocrine Society and the Mead-Johnson Award of the Society for Pediatric Research. He has served on numerous advisory committees for the National Institutes of Health and on several editorial boards.



Perrin White, M.D.
Interim Director, Pediatric
Genetics/Metabolism

The largest clinic specializing in the diagnosis and treatment of children with
INBORN ERRORS OF METABOLISM
in North Texas



Mary Esther Carlin, M.D.

Clinical Associate Professor

Clinical expertise: Pediatric genetics, development, dysmorphology, Down syndrome

Education: Barry (College) University, Miami Shores, FL, B.S., 1966; University of Miami School of Medicine, FL, M.D., 1970

Post-doctoral training: UT Southwestern/Children's, Intern and Resident, Pediatrics 1970-1972; University of Miami Affiliated Hospital, FL, Resident, Neurology, 1972-1973; University of Miami School of Medicine, Mailman Center for Child Development, Fellow, Child Development in Clinical Genetics, 1974-1977



Ralph DeBerardinis, M.D., Ph.D.

Assistant Professor of Pediatrics and Genetics

Sowell Family Scholar in Medical Research

Eugene McDermott Center for Human Growth and Development

Research expertise: Growth factor-stimulated signal transduction pathways, pediatric inborn errors of metabolism, metabolism and tumor cell growth

Education: St. Joseph's University, Philadelphia, B.S., 1992; University of Pennsylvania, Philadelphia, Ph.D., 1998; M.D., 2000

Post-doctoral training: The Children's Hospital of Philadelphia, PA, Resident, Pediatrics and Medical Genetics combined program, 2000-2005; Fellow, Biochemical Genetics, 2006-2007



Lewis J. Waber, M.D., Ph.D.

Associate Professor, Pediatrics and the Eugene McDermott Center for Growth and Development

Distinguished Teaching Professor, UT Southwestern

Clinical expertise: Pediatric genetics, biochemical genetics, inherited metabolism disease and newborn screening

Research expertise: Management of pediatric patients with inborn errors of metabolism and studies in genetic disorders of fatty-acid metabolism

Education: Franklin and Marshall College, Lancaster, PA, A.B., 1970; Case Western Reserve University School of Medicine, Cleveland, OH, M.D. and Ph.D., 1977

Post-doctoral training: Johns Hopkins Hospital, Baltimore, MD, Resident, Pediatrics, 1977-1980; Fellow, Genetics, 1980-1982

Clinical and Research Staff

Martha Barton, LMSW, Social Worker, Metabolic Clinic
 Gail Brookshire, M.S., CGC, Senior Genetic Counselor
 Debbie Clark, LMSW-ACP, Social Worker, Down Syndrome Clinic
 Katie Green, M.S., RD, LD, Nutritionist
 Pavel Pichurin, M.D., Medical Genetics Resident
 Garrett Gotway, M.D., Ph.D., Medical Genetics Resident
 Donnice Michel, M.S., CGC, Genetic Counselor
 Christine Quinn, M.S., CCC-SLP, Speech Therapy
 Joanna Spahis, M.S.N., RN, Advanced Practice Nurse
 Jessica Sudderth, Research Assistant II
 Chendong Yang, M.D., Ph.D., Research Scientist
 Tzulung Cheng, Ph.D., Post-doctoral Researcher
 Christopher Chambers, Research Assistant II
 Andrew Mullen, Graduate Student
 Kartik Rajagopalan, Graduate Student



Research Activities



The DeBerardinis laboratory is interested in understanding the metabolic activities that support cell growth and proliferation in normal cells and in cancer. In order to produce daughter cells, which occur with each round of the cell cycle, cells need to double their biomass (proteins, lipids and nucleic acids). This is a tremendous challenge requiring energy, building blocks and the coordination of a large number of metabolic pathways. Dr. DeBerardinis is exploring the idea that these metabolic activities are orchestrated by growth factor-stimulated signal transduction pathways, which direct cells to take up abundant nutrients and allocate them into the proper metabolic pathways. He wants to understand how signal transduction impacts metabolic fluxes during physiologic states of cell proliferation (e.g., embryogenesis, wound healing, activation of

the immune system) and during pathological states (e.g., cancer). To do this, the DeBerardinis lab uses a combination of techniques in molecular biology, cell biology and biochemistry, coupled with metabolic flux analysis using mass spectrometry and nuclear magnetic resonance, and animal models of metabolism and cancer. Current projects include developing imaging probes to identify abnormal metabolic activities in tumor and in children with metabolic diseases.

Clinical Activities

The Division's clinical activities at Children's are focused in three areas. Faculty and staff in the Down syndrome clinic have more than fifty collective years of experience in caring for children with Down syndrome and provide comprehensive treatment for children and their families including medical management, genetic counseling, physical, speech and motor development evaluation and recommendations, psychosocial support, screening and referral for behavioral and psychiatric problems and referral to community agencies for educational intervention or therapies. Children with conditions involving birth defects, developmental delay or mental retardation, metabolic disorders or known or suspected genetic disorders receive evaluation and testing in the Genetics Clinic. Chromosomal metabolic and DNA analysis for diagnosis of genetic disease is provided, as well as psychosocial assessment, nutritional evaluation and counseling and comprehensive case management with referral to medical specialists, community resources and support groups. Family history analysis and genetic counseling to discuss reproductive options also are available.

The Metabolic Disease Service provides evaluation and testing for children with known or suspected inborn errors of metabolism as well as education about specific inborn errors of metabolism. Blood, urine, enzyme and DNA analyses are performed for diagnosis and treatment, and nutritional evaluation and counseling and psychosocial assessment are provided.

The Metabolic Disease Service also functions as a major referral center for the Texas Newborn Screening Program. This state-wide program seeks to identify newborn babies with any of 29 different treatable diseases, many of which are genetic/metabolic in nature. A large fraction of the 405,000 babies born in Texas each year are evaluated at Children's. When a baby in North Texas is found to have a metabolic abnormality on the newborn screen, the family is referred to our team for definitive diagnosis, treatment, and long-term care if necessary. Through the Texas Newborn Screening Program, more than 75 children with metabolic diseases are identified each year, and the coordinated care of these children by the Metabolic Disease Service at Children's significantly improves their survival and development.

Presentations/Teaching Activities

Division faculty are involved in the training of UT Southwestern's first-year medical students, specifically in the biochemistry, genetics and embryology courses. Dr. Waber is the director of the embryology course and co-director of the genetics course. As part of their pediatric rotation, third-year medical students rotate through the outpatient clinics and are provided with a case conference. The division manages a Medical Genetics residency training program and is an important part of the Pediatrics residency program.

Ralph DeBerardinis, M.D., Ph.D.

- “Molecular Basis for the Reprogramming of Cancer Cell Metabolism,” International Workshop for Translational Research on Malignant Gliomas, Naples, Italy, February 2010
- “Understanding Mitochondrial Metabolism in Tumor Growth,” Symposium on Cancer Metabolism, University of British Columbia, Vancouver, Canada, March 2010
- “Alternative Metabolic Strategies for Growth in Glioblastoma: Glucose vs. Glutamine for Support of cell Proliferation and Tumorigenesis,” Metabolism and Cancer Progression, Keystone Symposium, Vancouver, Canada, March 2010
- “The Diverse Functions of Glutamine in Metabolism, Cell Biology and Cancer,” Johnson and Johnson, Teleconference, April 2010
- “Cancer Therapy Based on Integrated Understanding of Cancer Genetics and Metabolism,” Symposium and Training XVIII: Intermediary Metabolism and Cancer, Dallas, TX 2010
- “The Warburg Effect, The Truncated TCA Cycle, and Other Metabolic Targets in Tumor Cells,” Pfizer, Pearl River, NY, July 2010
- “Mitochondrial Metabolism in Tumor Cells: Forgotten, But Not Gone,” Cancer and Metabolism: Pathways to the Future Conference, Edinburgh, Scotland, September 2010
- “Multidisciplinary Studies in Tumor Metabolism: Metabolic Targets in Glioblastoma,” CPRIT Innovations Conference, Austin, TX, November 2010
- Lecturer, Medical Genetics (first-year medical students)
- Lecturer, Cancer Biology (first-year graduate students)
- Lecturer, Cases in Medical Genetics (third-year medical students)

Lewis J. Waber, M.D., Ph.D.

- Course Director and Lecturer, Medical Embryology (first-year medical students)
- Co-course Director and Lecturer, Medical Genetics (first-year medical students)
- Lecturer, Medical Biochemistry (first-year medical students)

Major Administrative or Leadership Responsibilities**Ralph J. DeBerardinis, M.D., Ph.D.**

- Program Committee (Cellular and Molecular Biology Section, Metabolism and Cancer Subcommittee), American Association for Cancer Research
- MacArthur Foundation Fellowship Program
- UT Southwestern High Impact/High Risk Grants Program

Lewis J. Waber, M.D., Ph.D.

- Director, Genetics Residency Program
- Consultant, Newborn Screening Program, Texas Department of Health

Awards and Honors**Ralph DeBerardinis, M.D., Ph.D.**

- Principal Investigator of CPRIT Grant, “Can Glioblastoma Growth be Suppressed by Targeting Glutamine Metabolism?” This was the highest-scoring proposal among approximately 900 applications in the first year of this funding program
- Principal Investigator of Welch Foundation Award, “Dynamic Nuclear Polarization of Small Molecule Metabolic Probes: Novel Reagents for Monitoring Cancer Cell Metabolism”
- Co-investigator on CPRIT Grant, “Novel MRI and MRS methods for imaging cancer cell metabolism.”

Lewis J. Waber, M.D., Ph.D.

- Excellence in Education Teaching Award, Pre-Clinical, Class of 2012 for MS1
- Member, Texas Academy of Health Science Education

Tzuling Cheng, Ph.D.

- CPRIT Cancer Biology Training Grant

Andrew Mullen

- UT Southwestern Genetics T32 Grant

Kartik Rajagopalan

- Cancer Biology Training Grant

Hematology-Oncology

During 2010 there were 30 faculty members in the Division of Hematology-Oncology dedicated to fulfilling the program's missions of leadership in patient care, education, research and advocacy involving blood disorders and childhood malignancies. The division is nationally distinguished for its design and conduct of investigator-initiated and NIH-funded multi-center clinical trials involving childhood cancer, sickle cell disease and hemorrhagic disorders. As the major program of its kind in North Texas and one of the 10 largest in the United States, the division provides care in the Center for Cancer and Blood Disorders (CCBD) at Children's to hundreds of patients with uncommon and complex disorders, and also offers outreach that includes educational and consultative resources for primary and referring physicians in the region. The program continues to grow considerably by expanding its patient numbers despite competitive and managed care pressures.

In 2010 Children's Medical Center's Oncology Program was ranked No.16 in the United States by U.S. News and World Report, again the highest ranking of any medical subspecialty program at Children's. More than \$20 million in community philanthropic support has been garnered during the past three years in recognition of the program's reputation. In addition, more than \$3 million in research grants from NIH and other peer-reviewed funding agencies was awarded to Hematology-Oncology investigators. A number of faculty members received awards and other forms of national recognition for their outstanding work during 2010. Areas of continued growth in the near future include stem cell transplantation, neuroblastoma, sickle cell disease, thrombosis and basic research in cancer. The division's ultimate goal is to become among the top five to 10 blood and cancer programs in the world.

This year also brought with it plans for a major leadership change. Early in the year, Dr. George Buchanan, Division Director, announced his plans to step down from the leadership position he has held since 1980. Dr. Buchanan will, however, remain actively engaged in teaching, mentoring, consultative care and clinical research. The Department Chair, Dr. George Lister, assembled a search committee of local academic and administrative leaders and conducted a rigorous national search for a new Director. As 2010 ended, a finalist was identified who hopefully will take the helm of the CCBD by the summer of 2011.

Continued progress was made in the expansion of clinical facilities for the CCBD. In December 2007, the program's outpatient activities temporarily moved to the third floor of the Bright Building, across the street from the main hospital facility. The renovated space more than doubled the size of the previous clinic. A major development during 2009 was the move to a new 24-bed inpatient Hematology-Oncology facility at Children's on the sixth floor of the new Tower D. With substantial advice from a Family Council of patients' parents, the unit was designed to optimize comfort for patients and families. It includes 12 beds specifically designed for stem cell transplantation. The CCBD also was provided additional beds in the adjacent Tower C. Construction of an entirely new outpatient unit will begin in early 2011, with the aim of completing the first phase by the end of the year. At that time the hematology component of the CCBD will move from its Bright Building location to the new facility, followed during the next 18 to 24 months by completion of the project, bringing the oncology outpatient clinic, pharmacy, satellite laboratory and infusion room/day hospital into operation. The final step in the CCBD "master plan" will involve construction of administrative space on B6 and ten additional inpatient beds on C6. The CCBD Family Council continue to be instrumental in providing practical guidance regarding how this new space will best serve our patients and families.

A major area of growth during 2010 was the Hematopoietic Stem Cell (Bone Marrow) Transplantation Program under the leadership Dr. Andrew Koh, who joined the UT Southwestern faculty in July 2009 following his recruitment from the Dana Farber Cancer Institute and Harvard Medical School in Boston. His arrival has fostered successful fundraising, completion of the new 12-bed transplant unit within the 24-bed Tower D6 Hematology-Oncology Unit, faculty recruitment and a new model for inpatient coverage of children receiving transplantation by a cadre of experienced mid-level providers. Dr. Koh has successfully engineered new managed care contracts and collaborative arrangements with other pediatric oncology centers in the South and Southwest to establish Children's as a major referral center for patients in need of transplantation. Plans are to recruit additional clinical and laboratory transplant specialists during 2011 and early 2012.

An additional development during 2010 was the growth of the clinical and translational research program in neuroblastoma spearheaded by Dr. Amy Pass, who has developed excellent connections with the national neuroblastoma research community. Her work is being supported by Wipe Out Kids' Cancer, one of the Center for Cancer and Blood Disorders' outstanding local fundraising organizations.

Hematology-oncology patient activities at the Children's at Legacy campus began in May 2008 in Legacy's Ambulatory Pavilion, and in early 2009 an inpatient service was initiated for selected children with cancer and hematologic conditions. To support the continued growth of this program, four full-time faculty physicians in the CCBD now devote much of their time to clinical activities on the Legacy as well as Dallas campuses. These additional faculty and support staff will assure the continued success of the Legacy project, one of the first of its kind in the United States to

provide complex hematologic and cancer care in a suburban facility tightly linked to a world-class academic “mother ship.” The outpatient CCBD facility at Legacy had more than 3,500 visits by patients during 2010.

In addition to the growth of the clinical facilities, laboratory space at UT Southwestern has been appreciably expanded and modernized to assure the continued growth of basic and translational research conducted by the Hematology-Oncology faculty.

The CCBD faculty continues to be recognized at many levels for its excellence. For example, three of its faculty, Drs. Andrew Koh, Shelley Crary and Cindy Neunert, were among the four Department of Pediatric faculty members selected to become new members of the Society for Pediatric Research during 2010. Other honors during the year included Dr. George Buchanan’s receipt in November 2010 of the Arnold Gold Award for Humanism in Medicine from the American Association of Medical Colleges. Equally noteworthy are research grant awards received by faculty members in 2010, including grants to Dr. James Amatruda from the Cancer Prevention and Research Institute of Texas (CPRIT).

Faculty



George R. Buchanan, M.D.
Director, Pediatric Hematology-Oncology

George R. Buchanan, M.D., Professor and Division Director, is the Medical Director for the CCBD, Director of the Barrett Family Center for Pediatric Oncology at UT Southwestern and Director of the Southwestern Comprehensive Sickle Cell Center. Dr. Buchanan holds the Children’s Cancer Fund Distinguished Chair in Pediatric Oncology and Hematology and is nationally known for his expertise in sickle hemoglobinopathies, hemorrhagic disorders and general hematology. Research interests include sickle cell disease, immune thrombocytopenia, hereditary spherocytosis and iron deficiencies. He serves as research advisor and mentor to medical students, residents, fellows and junior faculty engaged in or planning careers in academic pediatric hematology-oncology. Dr. Buchanan graduated with honors from Drake University, Des Moines, Iowa, in 1966 and earned his medical degree at the University of Chicago in 1970. He performed his residency in pediatrics at Children’s Memorial Hospital in Chicago from 1970 to 1973 and was then a fellow in hematology at Children’s Hospital and in pediatric oncology at Dana-Farber Cancer Institute in Boston. He received Teaching Excellence Awards on numerous occasions from students, residents, and fellows at UT Southwestern. Dr. Buchanan has been

repeatedly recognized as one of the “Best Doctors in America.” He served as President of the American Society of Pediatric Hematology-Oncology and on the Executive Committee of the American Society of Hematology. In 2007 he received the Distinguished Career Award from the American Society of Pediatric Hematology-Oncology, in 2008 was the recipient of the Mentor Award in Clinical Research from the American Society of Hematology and in 2010 received the Arnold Gold Award for Humanism in Medicine from the American Association of Medical Colleges.



James F. Amatruda, M.D., Ph.D.

Assistant Professor, Pediatrics, Molecular Biology and Internal Medicine

Clinical/research expertise: Germ cell tumors, molecular basis of Ewing’s sarcoma, zebrafish genetic models of cancer

Education: Harvard University, Cambridge, MA, A.B., 1986; Washington University, St. Louis, MO, M.D., 1993; Washington University, Ph.D., Cell Biology and Physiology, 1993

Post-doctoral training: Brigham and Women’s Hospital, Boston, MA, Resident, Internal Medicine, 1994-1996; Dana-Farber/Partners Cancer Care, Boston, MA, Fellow, Hematology-Oncology, 1997-1999; Children’s Hospital Boston, MA, Fellow, Laboratory of Leonard Zon, M.D., 1999-2004



Kristine W. Appel, M.D.

Assistant Professor

Clinical/research expertise: General pediatric hematology and oncology

Education: UT Austin, B.A., 1990; UT Southwestern, M.D., 1994

Post-doctoral training: University of Colorado School of Medicine/The Children’s Hospital, Denver, Resident, Pediatrics, 1994-1997; UT Southwestern, Fellow, Pediatric Hematology-Oncology, 1998-2001

Victor M. Aquino, M.D.

Associate Professor

Clinical/research expertise: General oncology, stem cell transplantation, Phase I therapies, and febrile neutropenia in pediatric cancer patients

Education: CUNY Medical School at City College, New York, B.S., 1987; SUNY Health Science Center at Syracuse, M.D., 1989

Post-doctoral training: SUNY Health Science Center at Syracuse, Resident, Pediatrics, 1989-1992; UT Southwestern, Fellow, Pediatric Hematology-Oncology, 1992-1995; Fellow, Bone Marrow Transplant, 1994-1995; Fred Hutchinson Cancer Center at Seattle, WA, Fellow, Bone Marrow Transplant, 1996



Carmen Ballestas, M.D.

Assistant Professor

Clinical/research expertise: General pediatric hematology-oncology

Education: Universidad del Norte, Barranquilla, Colombia, M.D., 1999

Post-doctoral training: Texas Tech Health Science Center, Amarillo, Resident, Pediatrics, 2003-2006; University of Alabama at Birmingham, Fellow, Pediatric Hematology-Oncology, 2006-2009



Robert O. Bash, M.D.

Associate Professor

Director, Palliative Care

Clinical/research expertise: Palliative care, end-of-life care, including hospice and bereavement

Education: Indiana University, Bloomington, B.S., 1982; M.D., 1986

Post-doctoral training: James Whitcomb Riley Hospital for Children, Indianapolis, IN, Resident, Pediatrics, 1986-1989; UT Southwestern, Fellow, Pediatric Hematology-Oncology, 1989-1992; Research Fellow, Pediatric Hematology-Oncology, 1992-1993.



Daniel C. Bowers, M.D.

Associate Professor

Director, Neuro-oncology and After the Cancer Experience

Clinical/research expertise: Brain tumors, long-term follow-up of childhood cancer survivors

Education: Texas A&M University, College Station, B.S., 1989; UT Southwestern, M.D., 1993

Post-doctoral training: UT Southwestern/Children's, Resident, Pediatrics, 1993-1996; Johns Hopkins University School of Medicine, Baltimore, MD, Fellow, Pediatric Oncology, 1996-1999; Johns Hopkins University, Fellow, Epidemiology, 1998



J. Scott Cameron, M.D., Ph.D.

Assistant Professor, Pediatrics and Molecular Biology

Clinical/research expertise: Genetic control of cell lineages, programmed cell death

Education: Johns Hopkins University, Baltimore, MD, B.A., 1983; SUNY at Stony Brook, Ph.D., 1988; Harvard University, Boston, MA, M.D., 1992

Post-doctoral training: Children's Hospital Boston, MA, Resident, Pediatrics, 1992-1994; Dana-Farber Cancer Institute/Children's Hospital Boston, MA, Fellow, Pediatrics, 1995-1998; Howard Hughes Medical Institute, Massachusetts Institute of Technology, Cambridge, MA, Fellow, Biology, 1996-2001



MaryEllen Cavalier, M.D.

Assistant Professor

Clinical/research expertise: General pediatric hematology and oncology, sickle cell disease

Education: Valparaiso University, IN, B.S., 1995; Indiana University, Bloomington, M.D., 1999

Post-doctoral training: Indiana University, Bloomington, Resident, Pediatrics, 1999-2003; Fellow, Pediatric Hematology-Oncology, 2003-2005





Jennifer A. Cox, M.D.

Assistant Professor

Director, Medical Student and Resident Education

Clinical/research expertise: Immunodeficiency, clinical stem cell transplantation and transplantation for non-oncologic diseases

Education: Mississippi State University, Starkville, B.S., 1993; University of Mississippi School of Medicine, Jackson, M.D., 1997

Post-doctoral training: University of Mississippi School of Medicine, Jackson, Resident, Pediatrics, 1997-2001; UT Southwestern, Fellow, Pediatric Hematology-Oncology, 2001-2005; University of Minnesota, Minneapolis, Fellow, Blood and Marrow Transplant, 2005



Shelley E. Crary, M.D., M.S.C.S.

Assistant Professor

Clinical/research expertise: Hemophilia and thrombosis, vascular complications of splenectomy, hereditary spherocytosis and other non-malignant hematologic disorders

Education: Washington University, St. Louis, MO, B.A., 1996; Tulane University, New Orleans, LA, M.D., 2000; UT Southwestern, M.S.C.S., 2009

Post-doctoral training: Vanderbilt University, Nashville, TN, Resident, Pediatrics, 2000-2003; UT Southwestern, Fellow, Pediatric Hematology-Oncology, 2003-2006



Alexander Gozman, M.D.

Assistant Professor

Clinical/research expertise: General pediatric hematology-oncology

Education: Brown University, Providence, RI, B.S. and B.A., 1998; Brown Medical School, Providence, RI, M.D., 2002

Post-doctoral training: Children's Hospital of Philadelphia, PA, Resident, Pediatrics, 2002-2005; Weill Cornell Medical College/Memorial Sloan-Kettering Cancer Center, New York City, NY, Fellow, Pediatric Hematology-Oncology; 2005-2009



Paul Harker-Murray, M.D., Ph.D.

Assistant Professor

Clinical/research expertise: General pediatric oncology, hematopoietic cell transplantation, new agents and Phase I clinical trials, pediatric lymphoma

Education: University of Michigan, Ann Arbor, B.S., 1993; Mayo Medical School, Mayo Clinic and Foundation, Rochester, MN, Ph.D., M.D., 2001

Post-doctoral training: University of Minnesota, Minneapolis, Resident, Pediatrics, 2001-2004; Fellow, Pediatric Hematology-Oncology, Pediatric Blood and Marrow Transplantation, 2004-2007



Mark E. Hatley, M.D., Ph.D.

Instructor

Research expertise: Development of mouse sarcoma models, dissection of microRNA's role in sarcoma, microRNA-based cancer therapeutics

Education: University of Central Oklahoma, Edmond, B.S., summa cum laude, 1995; UT Southwestern, M.D. and Ph.D., 2004

Post-doctoral training: UT Southwestern/Children's, Resident, Pediatrics, 2004-2006; UT Southwestern, Fellow, Pediatric Hematology-Oncology, 2006-2010; National Institute of Child Health and Human Development, Fellow, Pediatric Scientist Development Program, 2007-2010



Janna M. Journeycake, M.D., M.S.C.S.

Associate Professor

Director, Hemophilia and Thrombosis Program

Clinical/research expertise: Hemophilia and thrombosis, thrombotic and hemorrhagic disorders during childhood, catheter-related thrombosis

Education: Rhodes College, Memphis, TN, B.S., 1991; University of Oklahoma Health Sciences Center, Tulsa, M.D., 1996; UT Southwestern, M.S.C.S., 2008

Post-doctoral training: University of Oklahoma College of Medicine, Tulsa, Resident, Pediatrics, 1996-1999; UT Southwestern, Fellow, Pediatric Hematology-Oncology, 1999-2002

Laura Klesse, M.D., Ph.D.

Assistant Professor

Director, Neurofibromatosis Program

Clinical/research expertise: Neurofibromatosis, optic gliomas, tumorigenesis, general pediatric oncology**Education:** University of Notre Dame, IN, B.S., 1992; UT Southwestern, M.D., Ph.D., 2001**Post-doctoral training:** UT Southwestern, Post-doctoral Research Fellow, 2001-2002; UT Southwestern/Children's, Resident, Pediatrics, 2002-2005; UT Southwestern, Fellow, Hematology-Oncology, 2005-2008**Andrew Koh, M.D.**

Assistant Professor, Pediatrics, Microbiology and the Simmons Cancer Center

Director, Pediatric Hematopoietic Stem Cell Transplantation Program

Clinical/research expertise: Stem cell transplantation, infectious diseases in the immunocompromised host, Candida albicans pathogenesis, Pseudomonas aeruginosa pathogenesis, host pathogen interactions**Education:** Harvard College, Cambridge, MA, A.B., 1988; Oxford University, Pembroke College, England, B.A., 1990; Harvard Medical School, Boston, MA, M.D., 1996**Post-doctoral training:** Children's Hospital, Boston, MA, Resident, Pediatrics, 1996-1999; Chief Resident, Pediatrics, 1999-2000; Fellow, Pediatric Infectious Disease; Children's Hospital and Dana Farber Cancer Institute, Boston, MA, Fellow, Hematology-Oncology, 2001-2004**Patrick J. Leavey, M.D.**

Associate Professor

Clinical Director, Center for Cancer and Blood Disorders

Director, Pediatric Hematology-Oncology Fellowship Program

Clinical/research expertise: Bone and soft tissue tumors, fellowship training**Education:** The Royal College of Surgeons, Dublin, Ireland, M.D., 1986**Post-doctoral training:** St. Lawrence's Hospital, Dublin, Intern, Adult Medicine and Surgery, 1986-1987; St. Vincent's Hospital, Dublin, Resident, Internal Medicine, 1987-1989; Our Lady's Hospital for Sick Children, Dublin, Resident, Pediatrics, 1989-1990; Princess Margaret Hospital for Children, Perth, Western Australia, Resident, Pediatrics, 1990-1992; University of Colorado Health Science Center, Denver, Fellow, Pediatric Hematology-Oncology, 1992-1996; Bonfils Blood Center, Denver, CO, Fellow, Pediatric Hematology-Oncology, 1995-1996; The Children's Hospital, Denver, CO, Resident, Pediatrics, 1996-1998**Timothy McCavit, M.D.**

Assistant Professor

Clinical/research expertise: Sickle cell disease, pediatric hematology-oncology, health services, outcomes research in sickle cell disease**Education:** Texas Tech University, Lubbock, B.S., magna cum laude, 1998; UT Southwestern, M.D., 2002; UT Southwestern, Clinical Research Scholar, Clinical Sciences, 2009-2012**Post-doctoral training:** UT Southwestern/Children's, Resident, Pediatrics, 2002-2005; Chief Resident, Pediatrics, 2005-2006; UT Southwestern, Fellow, Pediatric Hematology-Oncology, 2006-2009**Cindy E. Neunert, M.D.**

Assistant Professor

Clinical/research expertise: Hemophilia and thrombosis, immune thrombocytopenia and other platelet disorders**Education:** College of William and Mary, Williamsburg, VA, B.S., 1997; Eastern Virginia Medical School, Norfolk, M.D., 2001; UT Southwestern, Clinical Research Scholar, Clinical Sciences, 2007-2010**Post-doctoral training:** Eastern Virginia Medical School, Norfolk, Resident, Pediatrics, 2001-2004; UT Southwestern, Fellow, Pediatric Hematology-Oncology, 2004-2007**Amy Kun Pass, M.D.**

Assistant Professor

Clinical/research expertise: Clinical trial development for neuroblastoma, development of novel therapies for relapsed neuroblastoma and other pediatric cancers**Education:** University of Pennsylvania, College of Arts & Sciences, Philadelphia, B.A., cum laude, 1996; University of Tennessee, College of Medicine, Memphis, M.D., 2002**Post-doctoral training:** Cincinnati Children's Hospital Medical Center, OH, Resident, Pediatrics, 2002-2005; Baylor College of Medicine/Texas Children's Hospital, Houston, Fellow,



Pediatric Hematology-Oncology, 2005-2008

Matthew H. Porteus, M.D. Ph.D.

Assistant Professor, Pediatrics and Biochemistry

Clinical/research expertise: Novel approaches to gene therapy for children with genetic diseases, in vitro manipulation of hematopoietic stem cells, regulation of DNA damage repair

Education: Harvard University, Cambridge, MA, A.B., 1986; Stanford University Neurosciences Program, Stanford, CA, Ph.D., 1994; Stanford University School of Medicine, Stanford, CA, M.D., 1994

Post-doctoral training: Children's Hospital Boston, MA, Resident, Pediatrics, 1994-1996; Dana-Farber Cancer Institute/Children's Hospital Boston, MA, Fellow, Pediatric Hematology-Oncology, 1996-1999; California Institute of Technology, Pasadena, Fellow, 1999-2003



Charles T. Quinn, M.D., M.S.C.S.

Associate Professor

Director, Sickle Cell Disease and Thalassemia Program

Clinical/research expertise: General pediatric hematology, hemoglobinopathies, morbidity, mortality and long-term outcome of sickle cell disease and thalassemia, novel causes of sickle cell pain

Education: Texas Christian University, Fort Worth, B.S., 1990; UT Southwestern, M.D., 1994; UT Southwestern, M.S.C.S., 2008

Post-doctoral training: UT Southwestern/Children's, Resident, Pediatrics, 1994-1997; Chief Resident, Pediatrics, 1997-1998; UT Southwestern, Fellow, Pediatric Hematology-Oncology, 1998-2001



Zora R. Rogers, M.D.

Professor

Director, Bone Marrow Failure and General Hematology Program

Clinical/research expertise: Bone marrow failure, general pediatric hematology, sickle cell disease, use of ameliorative therapies in sickle cell disease - hydroxyurea, transfusion, and stem cell transplantation

Education: University of California, Berkeley, B.A. with honors, 1978; University of California, San Diego, M.D., 1983

Post-doctoral training: University of Southern California Medical Center, Los Angeles County, Resident, Pediatrics, 1983-1986; Research Fellow, Pediatric Hematology-Oncology, 1986-1987; UT Southwestern, Fellow, Pediatric Hematology-Oncology, 1987-1990



Tiffany Simms-Waldrip, M.D.

Assistant Professor

Clinical expertise: Hematopoietic stem cell transplantation for malignant and non-malignant diseases

Research expertise: Hematopoiesis, graft-versus-host disease

Education: Texas Christian University, Fort Worth, B.A., 2000; Texas Tech University Health Science Center School of Medicine, Lubbock, M.D., 2004

Post-doctoral training: University of California Los Angeles Medical Center, Resident, Pediatrics, 2004-2007; Fellow, Pediatric Hematology-Oncology, 2007-2010



Tamra L. Slone, M.D.

Assistant Professor

Clinical/research expertise: Childhood leukemia, complications of treatment of acute lymphoblastic leukemia

Education: Auburn University, AL, B.S., 1997; University of Alabama at Birmingham School of Medicine, M.D., 2001; UT Southwestern, Clinical Research Scholar, Clinical Sciences, 2007-2010

Post-doctoral training: University of Alabama Birmingham School of Medicine, Resident, Pediatrics, 2001-2004; UT Southwestern, Fellow, Pediatric Hematology-Oncology, 2004-2007; Chief Fellow, Pediatric Hematology-Oncology, 2007-2008



Martha Stegner, M.D.

Assistant Professor

Clinical/research expertise: Clinical oncology, adolescents and young adults with cancer, prevention of invasive fungal infections in children being treated for cancer

Education: Rice University, Houston, TX, B.A., cum laude, 1999; UT Southwestern, M.D., 2003

Post-doctoral training: UT Southwestern/Children's, Resident, Pediatrics, 2003-2006; UT Southwestern, Fellow, Pediatric Hematology-Oncology, 2006-2009

Cristina Tarango, M.D.

Instructor

Clinical/research expertise: Benign hematology, bone marrow failure syndromes, thrombosis and hemastasis, vascular biology, the antiphospholipid antibody syndrome

Education: UT El Paso, B.A., 1996; Stanford University School of Medicine, CA, M.D., 2003

Post-doctoral training: Yale-New Haven Hospital, CT, Resident, Pediatrics, 2003-2006; UT Southwestern, Fellow, Pediatric Hematology-Oncology, 2006-2009



Jonathan E. Wickiser, M.D.

Assistant Professor

Outpatient Clinical Director

Clinical/research expertise: General pediatric hematology and oncology

Education: Southern Methodist University, Dallas, TX, B.A., B.B.A., 1995; Texas Tech University, Lubbock, M.D., 1999.

Post-doctoral training: University of Virginia, Charlottesville, Resident, Pediatrics, 1999-2002, Chief Resident, 2002-2003; UT Southwestern, Fellow, Pediatric Hematology-Oncology, 2003-2006



Naomi J. Winick, M.D.

Professor

Lowie Foundation Professorship in Pediatric Neuro-Oncology

Children's Oncology Group Principal Investigator

Clinical/research expertise: Leukemia, clinical trials in childhood acute lymphoblastic leukemia

Education: Indiana University, Bloomington, B.A., 1974; Northwestern University, Chicago, IL, M.D., 1978

Post-doctoral training: Babies Hospital, New York, NY, Resident, Pediatrics, 1978-1981; Memorial Sloan-Kettering Hospital, New York, NY, Fellow, Pediatric Hematology-Oncology, 1981-1983; UT Southwestern, Fellow, Pediatric Hematology-Oncology, 1983-1984



Post-doctoral Fellows

Completed June 2010



Amanda B. Blair, M.D.

Current Position:
Assistant Professor, UT Health Science Center, San Antonio

Research Interests:
Transfusional alterations in angiogenesis



Hanumantha Pokala, M.D.

Current Position:
Assistant Professor, University of Oklahoma Health Science Center

Research Interests:
Epidemiology and pathophysiology of invasive fungal infection in children with cancer



Puja Gupta, M.D.

Current Position:
Assistant Professor, University of Arizona College of Medicine

Research Interests:
Molecular alterations in angiogenesis



Mark E. Hatley, M.D., Ph.D.

Current Position:
Instructor, Pediatric Hematology-Oncology, UT Southwestern

Research Interests:
Signaling in cancer cells



Dr. Mark Hatley won the award for Best Oral Presentation at the 1st Annual Senior Fellows Research Day in May 2010 (Pictured with Drs. Charles Rosenfeld and George Lister)

3rd Year



Carrye Cost, M.D.

Research Interests:
Molecular diagnostic characterization of viral infections in febrile children with cancer



Amy Fowler, M.D.

Research Interests:
Thiopurine metabolism and toxicity in children with leukemia



Nicholas Fustino, M.D.

Research Interests:
Molecular biology of germ cell tumors using zebrafish models

2nd Year



Raven Cooksey, M.D.

Research Interests:
Late metabolic complications of childhood brain tumor survivors



Scott Furlan, M.D.

Research Interests:
Molecular immunology



Carrie Laborde, M.D.

Research Interests:
Late neurocognitive affects of acute central nervous injury in children with leukemia



Ellen Plummer, M.D.

Research Interests:
Intravenous iron therapy

1st Year



Kenneth Chen, M.D.

Research Interests:
Clinical hematology-oncology, zebrafish as a model of childhood cancer



Rachel Chesley, M.D.

Research Interests:
Clinical hematology- oncology clinical hematology-oncology, palliative care



Wilson File, M.D.

Research Interests:
Quality improvement in hematology-oncology



Kasey Leger, M.D.

Research Interests:
Clinical hematology-oncology biomarkers of cardiac injury in children

Clinical, Research and Administrative Staff

The staff at UT Southwestern and Children’s who support Hematology-Oncology clinical care and research number more than 150, and a close working relationship exists between the UT Southwestern faculty and staff and the Children’s employees who assure the provision of high-quality care to children with cancer and hematologic disease and participate in the program’s education and research missions.

The Pediatrics team members at UT Southwestern who support the Hematology-Oncology research infrastructure are Contracts Specialist AnnMarie Fillmore, Administrative Associates Laura Clarke and Patricia Ellisor and Senior

Administrative Assistants Leann Bryan, Kay Stewart and Michael Winemiller. The laboratory research of Drs. Matthew Porteus, Scott Cameron, Mark Hatley and James Amatruda has been supported by 28 students, trainees and research staff.

The division's clinical research infrastructure is based primarily at Children's. Thirteen clinical research associates and three research nurses, managed by Leah Adix and Jennifer Evans, handle research protocol formatting, data analysis, consent form design, IRB and HIPAA regulatory oversight, sample acquisition, data collection and analysis. This team works closely with counterparts in the Clinical Research Department at Children's and with UT Southwestern's Cancer Center and Institutional Review Board.

Advanced practice nurses and nurse clinicians play a major role in the clinical and research programs. These programs include four advanced-practice nurses in sickle cell disease and chronic blood transfusion therapy, two in stem cell transplantation, one in neuro-oncology, two in late effects/cancer survivorship, one in hemophilia/thrombosis and four in general oncology. Three nurses function exclusively in research, enrolling and monitoring patients with cancer and hematologic disease in diverse investigative protocols.

Other Children's support staff include clinic and inpatient nurses, registration personnel, medical assistants, social workers, pharmacists, nutritionists, child life associates, an interpreter, a child life assistant, a cancer registrar, a telephone receptionist, a new-patient coordinator, an outreach manager and personnel in collaborating departments such as pastoral care and physical therapy. Kaye Schmidt, Senior Director, provides administrative leadership in the CCBD, working closely with Drs. George Buchanan, Patrick Leavey, and Jon Wickiser to assure the efficient, effective and safe operation of all clinical activities. Barbara Obert, Operations Director, and Kathy Carlisle, Nursing Director, are also on the CCBD leadership team.

Research Activities

Oncology

Each Hematology-Oncology faculty physician participates in joint clinical research projects, particularly involving the Children's Oncology Group (COG), in which Dr. Naomi Winick is the center's Principal Investigator. All faculty members in the division are members of COG, an NIH-funded multi-institutional consortium of cancer research centers. In addition to clinical research in COG, the division conducts a number of in-house therapeutic studies for children with cancer, including innovative research programs in acute lymphoblastic leukemia (ALL) and Phase I and II trials for patients with advanced malignancies of various types. Other institutional research studies focus on genetic alterations, late effects in survivors, anxiety and depression, and supportive care in cancer patients.

Hematology

Numerous clinical studies involving hematology patients (sickle cell disease, hereditary spherocytosis, thrombosis, immune thrombocytopenia (ITP)) also are being carried out by faculty and fellows; many are multi-center trials supported by the NIH. The program was funded by the NHLBI as one of 10 comprehensive sickle cell centers to participate in a clinical trials consortium, and Children's is currently one of a select group of children's hospitals nationally involved in a Sickle Cell Disease Basic and Translational Research Program initiated in April 2008. The division also is a member of the NHLBI-supported Transfusion Medicine-Hemostasis Clinical Trials Network. In addition to these multi-center studies, more than a dozen local investigator-initiated research projects in hematology were completed during 2010 or are currently in progress.

Laboratory Research

Laboratory research in the division during 2010 was conducted by several outstanding physician-scientists – Drs. Scott Cameron, Matthew Porteus, Andrew Koh, Mark Hatley and James Amatruda. Dr. Amatruda trained in zebrafish genetics with the world's expert at Harvard and has established a robust investigative program in this area at UT Southwestern. Each of these scientists has received local awards or is principal investigator on R01 grants from the NIH for recognition of their outstanding accomplishments and future potential. The presence of these bench scientists on the Hematology-Oncology faculty has greatly enhanced the division's visibility both locally and nationally. Efforts are under way to recruit additional physician-scientists to the faculty during 2011, a prospect brightened by new divisional leadership and additional resources.



Clinical Research

The clinical research program in Hematology-Oncology has grown substantially during the past decade. The outstanding clinical research infrastructure within the division – with separate components serving oncology and hematology – currently consists of 19 clinical research staff members. All of these positions are based at Children’s in Dallas, and many are funded through peer-reviewed NIH grants supporting patient-oriented investigation in childhood cancer, sickle cell disease and hemostasis-thrombosis. Regular research meetings at which faculty and fellows informally present their research hypotheses and results are highly successful, attracting faculty, fellows and Hematology-Oncology clinical research support staff.

Further evidence of the robust clinical research environment within the program is the fact that six hematology-oncology faculty members have been among the 20 to 25 NIH KL2 or CTSA grant-supported Clinical Research Scholars at UT Southwestern, while two other Clinical Scholars formally appointed in other divisions have focused their research on pediatric sickle cell disease with Dr. George Buchanan as their mentor. For seven consecutive years, fellows or junior faculty were selected to attend the American Society of Hematology’s prestigious Clinical Research Training Institute (CRTI).

Research Funding

Three of the division’s faculty have active laboratory research programs in molecular biology and biochemistry, receiving peer-reviewed grant support. Total research support for UT Southwestern faculty members in Hematology-Oncology during 2010 amounts to more than \$3.4 million, primarily grants from National Cancer Institute (NCI) or NHLBI. In addition to the NIH-supported agencies, funding from other organizations includes the Maternal and Child Health Bureau of the Health Resources and Services Administration, the Centers for Disease Control and Prevention, the Children’s Cancer Fund, Wipe Out Kids’ Cancer, the American Society of Clinical Oncology, the Amon G. Carter Foundation and the Lance Armstrong Foundation. Of note during 2010, three faculty members were Principal Investigators of R01 grants and three were supported in part by an institutional KL2 award as part of UT Southwestern’s NIH-supported North and Central Texas Clinical and Translational Research Initiative (NCTCTRI). These are in addition to the numerous other grants and contracts from the NIH held by divisional faculty members.



Long-range Research Program Goal

The division’s overall program objective — to establish at UT Southwestern and Children’s one of the finest pediatric Hematology-Oncology programs in the world — remains unchanged. To achieve this goal, the division must first maintain its large and diverse patient base by creative and outreach marketing strategies, including successful development and growth of the Legacy program. Second, the division plans to recruit additional faculty to strengthen existing clinical and laboratory research and to explore new investigative areas. To maintain and advance the program’s excellence, the recent receipt of NCI designation by UT Southwestern’s Simmons Comprehensive Cancer Center results in the CCBD being the only NCI-approved pediatric cancer program in North Texas. Expansion of the Cancer Center’s clinical and investigative programs in clinical and basic oncology research will allow for enhanced collaborations and further growth of the critical mass of investigators on the campus with whom pediatric faculty and fellows will interact.

At the divisional level, special attention is focused on recruiting several additional faculty whose major interests lie in the areas of hematopoietic stem cell transplantation, molecular oncology, cancer immunology, stem cell biology, and vascular biology.

Clinical Activities

The CCBD has one of the Department of Pediatrics’ largest subspecialty programs at Children’s. Twenty-five to forty inpatients with cancer and hematologic disorders are usually under direct care in a dedicated 24-bed unit in Tower D and on other floors throughout the hospital. The attending physicians participate in teaching medical students and residents in addition to coordinating patient care and providing consultations. Various faculty members supervise one of three inpatient services (hematology, stem cell transplantation or oncology) during their rotations, which are two weeks in length

throughout the year. During 2010 the clinical program continued to grow in total outpatient visits, inpatient days at both the Dallas and Legacy campuses and, in particular, the number of new diagnoses. The CCBD continues to be the largest – in terms of patient numbers – of all medical subspecialty programs at Children’s.

Hematology-Oncology carries out approximately 1,000 formal inpatient and outpatient consultations each year, providing diagnostic evaluations of children with anemia, bleeding disorders, and other hematologic disorders. The program saw a record 322 new patients with cancer in 2010, and has more than 400 cancer patients receiving active treatment at a given time. Approximately 1,000 additional patients have completed their treatment and are followed and monitored in the nationally-acclaimed “After the Cancer Experience” program. Unfortunately, 40 young cancer patients lost their fight during 2010, reflecting the fact that cancer remains the most common cause of death due to illness during childhood. A ten-year patient statistic summary is provided as an Appendix.

Sixty to seventy-five patients are seen daily in outpatient clinic, staffed by three or four full-time faculty members and several fellows. Many of these children receive bone marrow aspiration, lumbar puncture, and intravenous drug treatments or blood products as part of their regular outpatient management. During 2010 there were more than 20,000 outpatient hematology-oncology visits to Children’s outpatient facilities in Dallas and at Legacy. Hematology-Oncology has for years been Children’s largest medical subspecialty outpatient program with regards to patient numbers. Outpatient statistics are included in the Appendix.

The clinical service in the outpatient arena is structured around teams of physicians, nurses, social workers and research staff serving patients with hemophilia and thrombosis, sickle cell disease, general hematology, oncology, bone tumors, stem cell transplantation, long-term cancer follow-up (After the Cancer Experience, or ACE) and brain tumors. Each team meets weekly to discuss patient care issues, protocols, research and administrative activities. Patients are also discussed at weekly multidisciplinary departmental conferences to allow for all relevant staff members to be aware of major patient problems and to contribute to team decisions. New leukemia, solid tumor and complex follow-up cases are discussed at a weekly Tumor Board meeting. Cases involving brain tumors are discussed each week at a Neuro-oncology Tumor Board meeting.

Hematopoietic Stem Cell Transplantation Program

A key component of the hematology-oncology program is the hematopoietic stem cell transplantation program. Twelve of the 24 beds on the D6 inpatient Hematology-Oncology floor constitute the marrow transplant unit. These rooms contain high-efficiency particulate air filters and unidirectional air flow to reduce infection risk. More than 250 autologous and allogeneic marrow, peripheral blood stem cell or umbilical cord blood transplants have been performed since the program’s inception in 1992, including 27 during 2010. A national search for a new stem cell transplant program director was successfully completed during 2009 with the appointment of Dr. Andrew Koh. He is rapidly establishing the program as a regional center of excellence.

Outreach

Outreach activities have been spearheaded by Dr. George Buchanan and Cristy Ecton, the Outreach Program Manager. Ms. Ecton is responsible for the division’s public relations, marketing, and physician-relations efforts. She also serves as a liaison to fundraising and support groups and monitors relationships with referring physicians. Formal outreach clinics conducted by division members have included sickle cell clinics in Tyler, Texas, three to four times a year.

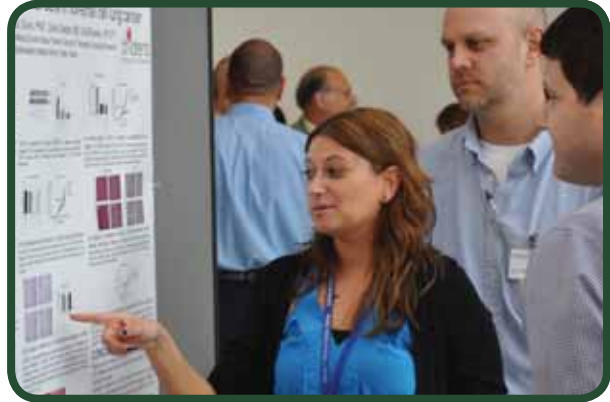
On September 25, 2010, we held for the 12th consecutive year our highly successful Continuing Medical Education course for primary care physicians, directed by Dr. Zora Rogers. More than 50 attendees benefitted from the five-hour-long Saturday morning and early afternoon program. The CCBD continues to have an excellent reputation among referring physicians for its prompt consultative services. A full-time staff member at Children’s – the new patient referral coordinator – handles incoming calls and schedules appointments, working closely with the “referral doc,” a full-time CCBD faculty physician who is available immediately to handle urgent requests as well as to answer questions and provide advice.



Presentations/Teaching Activities

The faculty in the Division of Hematology-Oncology have made a major commitment to teaching medical students, residents, fellows, primary care and referring physicians, and other healthcare professionals. Teaching is done through one-on-one interactions, small groups, seminars and formal lectures in a variety of settings. The division's Education Coordinator, Dr. Jennifer Cox, is responsible for developing and monitoring teaching programs for medical students and residents.

Dr. Patrick Leavey, the Director of the Hematology-Oncology Fellowship Program, oversees the entire array of educational activities for the fellows. Fifty-eight individuals have successfully completed the Hematology-Oncology Fellowship Program, initiated in 1984, with eleven enrolled in 2010. Continued development of this program, with the aim of training future national leaders in pediatric hematology-oncology, is a high priority for the division. The training program is accredited by the Accreditation Council for Graduate Medical Education (ACGME) and has been supported financially by Children's, the Children's Cancer Fund, Wipe Out Kids' Cancer, St. Baldrick's Foundation, the American Society of Clinical Oncology, Amgen and an NIH T32 institutional training grant. The fellowship program has developed a Web site, an informative venue for prospective applicants as well as others, that describes resources, facilities, patient populations, faculty research areas and program goals and accomplishments.



Graduating fellow, Dr. Puja Gupta, discusses her research project at the 1st Annual Senior Fellows Research Day May 2010

Teaching conferences are held from several times each week to monthly, including Pediatric Hematology-Oncology Grand Rounds, Oncology Tumor Board, Neuro-oncology Tumor Board, Hematology Case Conference, Journal Club and team meetings of each of the disease-oriented sub-programs within the division. Numerous Hematology-Oncology faculty members are recipients of teaching awards. For the past twelve years the division has offered an annual Continuing Medical Education course each October at UT Southwestern aimed at primary care physicians. Between 50 and 70 attendees participate regularly and provide uniformly positive reviews.

George Buchanan, M.D.

- "Pathophysiology of Sickle Cell Disease Related Organ Damage," Bone Marrow Transplant Tandem Meeting, Orlando, FL, February 2010
- "Career Development Pathways in Hematology-Oncology Research," 23rd Annual Meeting, American Society of Pediatric Hematology-Oncology, Montreal, Canada, April 2010
- "Diagnosis and Management of Iron Deficiency," as part of a symposium directed by Dr. Buchanan entitled "Iron-Too Little, Too Much and Why," Pediatric Academic Societies Meeting, Vancouver, Canada, May 2010
- "Being Keen on the Spleen," Visiting professor, University of Colorado, Aspen Research Conference, September 2010
- "The Bleeding Child: Clinical History and Laboratory Values – When to Refer to a Hematologist," Annual Continuing Medical Education Course, Dallas, TX, September 2010
- "Sickle Cell Anemia: Understanding the Disease and its Treatment," National Marrow Donor Program Council Meeting, Minneapolis, MN, October 2010
- "Evaluation of a Child with a Possible Bleeding Disorder," American Academy of Pediatrics National Conference and Exhibition, San Francisco, CA, October 2010
- "Management of Sickle Cell Disease: New Advances and New Controversies," Florida Association of Pediatric Tumor Programs, Orlando, November 2010
- "Making a Difference," American Association of Medical Colleges Organization of Student Representatives, Washington, DC, November 2010
- "Sickle Cell Disease Management Guidelines," NHLBI-sponsored Herrick Symposium, Bethesda, MD, November 2010

James Amatruda, M.D., Ph.D.

- "The role of BMP signaling in germ cell tumorigenesis," Keystone Meeting on New Paradigms in Cancer Therapeutics, Plenary Session, Victoria, BC, March 2010

- “Genetic Models of Ewing’s Sarcoma,” Invited Speaker, Zebrafish Disease Modelling III: Cancer and Immunity Models. Boston, MA, June 2010
- “The role of BMP signaling in germ cell tumorigenesis,” 7th International Meeting on Carcinoma in Situ and Cancer of the Testis, Copenhagen, Denmark, October 2010
- “High-throughput genomic analysis of childhood germ cell tumors,” SIOP/International Society of Pediatric Oncology, Satellite Session on Childhood Germ Cell Tumors, Boston, MA, October 2010

Victor M. Aquino, M.D.

- “Immune Reconstitution Post-Bone Marrow Transplantation,” Pediatric Allergy and Immunology Conference, Dallas, TX, January 2010

Daniel C. Bowers, M.D.

- “Long-Term Side Effects of Childhood Brain Tumor Survivors,” Vanderbilt Ingram Cancer Center, Monroe Carell Jr. Children’s Hospital at Vanderbilt, Visiting Professor Lecture, Nashville, TN, August 2010
- Invited Attendee and Participant, National Brain Tumor Society (NTBS) Quality of Life Meeting, San Francisco, CA, September 2010
- “Low Grade Gliomas,” Invited Lecture, 2010 Pediatric Brain Tumor Symposium, CME Course, Fort Worth, TX, November 2010

Shelley Crary, M.D., M.S.C.S.

- “Role of the Spleen in Vascular Homeostasis,” Pediatric Hematology-Oncology Research Seminar, Primary Children’s Hospital, Salt Lake City, UT, October 2010

Mark E. Hatley, M.D., Ph.D.

- “MicroRNA-21: Driver of Non-small Cell Lung Cancer,” Frontiers in Science, Pediatric Scientist Development Program National Meeting, Tampa, FL, March 2010
- “MicroRNA-21: Driver of Non-small Cell Lung Cancer,” Convergence, UT Southwestern School of Health Professions Grand Rounds, April 2010
- “Modulation of K-ras-driven Tumorigenesis by MicroRNA-21,” Pediatrics Hematology/Oncology Grand Rounds, May 2010
- “MicroRNA-21 Drives Non-small Cell Lung Cancer Tumorigenesis Through Relieving Inhibition of the Ras Pathway and Inhibiting Apoptosis,” Department of Pediatrics, 1st Annual Senior Fellows’ Research Day, Selected Speaker, May 2010

Janna Journeycake, M.D., M.S.C.S.

- “Challenges for the Primary Care Provider: Hypercoagulation Conditions and Anticoagulation,” One-Day Symposium, “Venus Thromboembolic Events,” University of Miami Hemophilia Treatment Center, Ft. Lauderdale, FL, March 2010
- “Thrombophilia Screening in Children,” Annual Region VI North and South Hemophilia Meeting, Oklahoma City, OK, April 2010
- “Epidemiology and Diagnosis of Catheter-related Thrombosis in Cancer Patients, 23rd Annual Meeting, American Society of Pediatric Hematology-Oncology, Montreal, Canada, April 2010
- “Knowledge Itself Is Power or Is It? Limitations and Benefits of Thrombophilia Screening,” Practical Pediatric Hematology CME Course, Children’s, September 2010
- “Thrombophilia Screening: YES,” National Hemophilia Foundation Annual Meeting, New Orleans, LA, November 2010
- “A Career in Pediatric Hematology-Oncology,” Trainees Luncheon, 52nd American Society of Hematology Annual Meeting, Orlando, FL, December 2010

Laura Klesse, M.D., Ph.D.

- “Current Therapies for Neurofibromatosis Type 1,” The Mountain States Genetics Foundation Annual Education Conference, Denver, CO, July 2010
- “New Trials and Therapies for Neurofibromatosis,” Texas Neurofibromatosis Education Day, Houston, August 2010

Andrew Koh, M.D.

- “Role of Keratinocyte Growth Factor on the Virulence of Candida Albicans,” 10th American Society for Microbiology Conference on Candida and Candidiasis, Miami, FL, March 2010

Patrick Leavey, M.D.

- “Bone Sarcoma - Role of the Interdisciplinary Team,” Grand Rounds, School of Health Professions, UT Southwestern, January 2010
- “Hope’s Potential in Promoting Psychological Adjustment and Quality of Life in a Pediatric Cancer Population,” American Psychosocial Oncology Society (APOS), Anaheim, CA, February 2011 (Poster Presentation)
- “Successful Recruitment,” Annual PAS/APPD Forum for Fellowship Program Directors, Vancouver, Canada, May 2010
- “Feasibility of Bevacizumab (NSC 704865, BB-IND# 7921) Combined with Vincristine, Topotecan and Cyclophosphamide in Patients with First Recurrent Ewing Sarcoma, (EWS)-A Children’s Oncology Group

(COG) Study,” American Society of Clinical Oncology Annual Meeting, Chicago, IL, June 2010 (Poster Presentation)

- “The Role of Hope with Psychological Adjustment and Quality of Life in a Pediatric Cancer Population,” Society for Developmental and Behavioral Pediatrics (SDBP) Annual Meeting. Boston, MA, September, 2010 (Poster Presentation)
- “Successful Recruitment,” Annual Meeting of the American Society of Pediatric Hematology Program Directors, Orlando, FL, Dec 2010

Cindy Neunert, M.D.

- “Immune Thrombocytopenic Purpura: Clinical Aspects and Management,” Advances in Hemostasis and Thrombosis: Hemostasis and Thrombosis Research Society Annual Meeting, Chicago, IL, April 2010
- “Immune Thrombocytopenic Purpura: Clinical Aspects and Management,” Pediatric Grand Rounds, Medical College of Georgia, Augusta, August 2010

Zora Rogers, M.D.

- “Sickle Cell Disease Modifying Therapies: Hydroxyurea and Chronic Transfusion,” In-depth Seminar Organizer, Moderator and Speaker, American Society of Pediatric Hematology Oncology (ASPHO), 23rd Annual Meeting: Sickle Cell Disease Research in the 21st Century, Toronto, Ontario, Canada, April 2010
- “Clinical Care and Patient Education,” Invited Speaker, Practical Care of the Patient with Fanconi Anemia Symposium, American Society of Pediatric Hematology Oncology (ASPHO) 23rd Annual Meeting, Toronto, Ontario, Canada, April 2010
- “Organ Dysfunction in Sickle Cell Disease: Brain, Lung, Kidney, Spleen and Everything Else in Between,” New York Methodist Hospital Annual Sickle Cell Disease Symposium, Brooklyn, NY, May 2010
- “Sickle Cell Trait 2010: What to Tell a Family” and “Cases and Questions,” Practical Pediatric Hematology-Oncology, CME Course Director and Speaker, Dallas, TX, September 2010

Tamra L. Slone, M.D.

- “Complications of the Treatment of Pediatric Acute Lymphoblastic Leukemia and Lymphoblastic Lymphoma,” Leukemia and Lymphoma Society Lone Star Blood Conference, Dallas, TX, February 2010
- “Evaluation of Early Markers of Late Cardiotoxicity in Childhood Cancer Survivors,” Faculty Research Conference, UT Southwestern, February 2010

Naomi J. Winick, M.D.

- “Childhood Acute Lymphoblastic Leukemia-Getting Closer,” Grand Rounds, Children’s Medical Center, January 2010
- “Overview of Children’s Oncology Group Protocols for Acute Lymphoblastic Leukemia,” Pediatric Oncology Rounds, Vanderbilt University, Nashville, TN, November 2010
- “New Leukemia Trials,” Pediatric Hematology-Oncology Grand Rounds, Cooks Children’s Hospital, Ft Worth, TX, November 2010

Major Administrative or Leadership Responsibilities

George Buchanan, M.D.

- Director, Division of Pediatric Hematology-Oncology
- Medical Director, Center for Cancer and Blood Disorders
- Director, Southwestern Comprehensive Sickle Cell Center
- Chair, Protocol Review Committee, Sickle Cell Disease Clinical Research Network, NHLBI
- Member, Medical Advisory Board, ITP Foundation, Darien, CT
- Member, Scientific Advisory Committee, St. Baldrick’s Foundation
- Member, Executive Committee, Global Sickle Cell Disease Research Network
- Co-chair, Sickle Cell Disease Guidelines Panel, NHLBI
- Member, External Advisory Committee, Texas Department of State Health Services, Texas Newborn Screening Program Performance Measures Project
- Chair, Institutional Review Board #2
- Member, Dean’s Advisory Committee on Clinical Research
- Member, Cancer Center Clinical Executive Committee
- Member, Editorial Board, Pediatrics in Review, American Academy of Pediatrics
- Review Course Director, American Society of Pediatric Hematology/Oncology
- Co-chair, Education Session: Junior Faculty Development, American Society of Pediatric Hematology/Oncology
- Member, K12/CTSA Clinical Scholar Program Selection Committee, UT Southwestern
- Member, Clinical Program Development Committee, UT Southwestern
- Member, Legacy Planning Committee, Children’s
- Former Chair and Executive Committee Member, Nominating Committee, American Society of Hematology
- Associate Editor, Pediatric Blood and Cancer
- Member, Sickle Cell Disease Working Group, American Society of Hematology

James F. Amatruda, M.D., Ph.D.

- Chair, Germ Cell Tumor Biology Sub-Committee, Children's Oncology Group

Victor Aquino, M.D.

- Member, Advisory Committee, Texas Cord Blood Bank
- Member, Pediatric Blood and Marrow Transplant Consortium Supportive Care Committee, Pediatric Blood and Marrow Transplant Consortium
- Member, Committee for Eradicating Nosocomial Catheter-Associated Blood Stream Infections, National Association of Children's Hospitals and Related Institutions (NACHRI)
- Member, Protocol Development Subcommittee of the Developmental Therapeutics Subcommittee, Children's Oncology Group
- Member, Developmental Therapeutics Scientific Committee, Children's Oncology Group

Robert Bash, M.D.

- Medical Director, Pediatric Palliative Care Program, Children's
- Founding Member, Texas Pediatric Palliative Care Consortium
- Chair, Research Subcommittee, Texas Pediatric Palliative Care Consortium
- Course Co-Director, Clinical Research Ethics Seminar, Center for Biostatistics and Clinical Science, UT Southwestern

Daniel Bowers, M.D.

- Medical Director, After the Cancer Experience (ACE), Children's

Jennifer Cox, M.D.

- Chairman, CCBD EPIC Implementation Task Force
- Education Coordinator, Division of Pediatric Hematology-Oncology Division/CCBD

Janna Journeycake, M.D., M.S.C.S.

- Director, Hemophilia and Thrombosis Program, CCBD
- Member, Advisory Board, Baxter Healthcare Physician Leadership Council
- Co-chair, Scientific Subcommittee on Perinatal Hemostasis, International Society of Thrombosis and Haemostasis
- Member, Scientific Subcommittee on Hemostasis, American Society of Hematology
- Co-chair, Anticoagulation Task Force to Implement Joint Commissions New Patient Safety Guidelines-3E, CCBD
- Secretary/Treasurer of Medical Staff, Children's
- Member, Alliance of Five Steering Committee; Chair of the Platelet/ITP Subgroup
- Member, Medical Executive Committee, Children's

Laura Klesse, M.D., Ph.D.

- Medical Director, Camp Feliz (Brain Tumor Survivors)

Patrick Leavey, M.D.

- Clinical Director, Center for Cancer and Blood Disorders, Children's
- Director, Pediatric Hematology-Oncology Fellowship Program
- Chair, Fellowship Program Directors Committee, American Society of Pediatric, Hematology/Oncology
- Director, Pediatric Intern Recruitment, Children's
- Director, Comprehensive Orthopedic Oncology Clinic, Children's
- Member, ASPHO Nominating Committee

Cindy E. Neunert, M.D.

- Planning Committee Member, Harvesters Reaching the Nations Women and Children's Health Care Center, Yei, South Sudan

Zora Rogers, M.D.

- Liaison Member, Committee on Communication, American Society of Hematology
- Member, Nominating Committee, American Academy of Pediatrics, Hematology-Oncology Section
- Member, Nominating Committee, American Society of Pediatric Hematology-Oncology
- Member, Program Committee, Abstract Reviewer, American Society of Pediatric Hematology-Oncology
- Chair, Credentials Committee, Children's
- Chair, Medical Advisory Committee, Children's
- Member, Medical Executive Committee, Children's
- Member, Disruptive Physician Committee, Children's
- Member, American Society of Hematology, Alternative Training Pathway Grant Committee
- American Society of Hematology, Representative to Planning Committee for CDC's 1st National Conference on Blood Disorders in Public Health
- Abstract Reviewer, American Society of Pediatric Hematology-Oncology, Program Committee
- Member, Executive Committee, American Academy of Pediatrics, Section on Hematology/Oncology (SOHO)
- Ad-hoc Member, National Institutes of Health, NIH-NHLBI Sickle Cell Bone Marrow Transplant Data Safety Monitoring Board (DSMB)
- Texas Department of State Health Services. Newborn Screening Division Hemoglobinopathy Consultant

Tamra Slone, M.D.

- Medical Director, Camp Esperanza (oncology camp), Children's
- Member, American Society of Hematology Lymphoid Neoplasms Committee

Jonathan Wickiser, M.D.

- Outpatient Clinical Director, Center for Cancer and Blood Disorders, Children's
- Vice Chair, Program Services, and Member of the Board of Directors, Make-A-Wish Foundation of North Texas

Naomi Winick, M.D.

- Member, Children's Oncology Group ALL Executive Committee
- Chair, Outcomes Subcommittee for Acute Lymphoblastic Leukemia, Children's Oncology Group
- Member, Constitutional Review Committee, Children's Oncology Group

Honors / Awards

George Buchanan, M.D.

- Arnold Gold Foundation Award for Humanism in Medicine, American Association of Medical Colleges
- America's Top Doctors, 9th Edition

James Amatruda, M.D., Ph.D.

- Outstanding Pre-clinical Teacher, 1st-year Medical School Class, UT Southwestern

Shelley Crary, M.D.

- Member, Society for Pediatric Research

Paul Harker-Murray, M.D., Ph.D.

- "Excellence in Education," Clinical Teaching Award, UT Southwestern

Mark E. Hatley, M.D., Ph.D.

- Outstanding Oral Presentation Award, 1st Annual Pediatrics Senior Fellows Research Day, UT Southwestern

Laura Klesse, M.D., Ph.D.

- Dedman Scholar in Clinical Care
- Affiliate Neurofibromatosis Clinic – Children's Tumor Foundation Patient Education Grant

Andrew Koh, M.D.

- Member, Society for Pediatric Research

Timothy McCavit, M.D.

- Clinical Research Scholar, Department of Clinical Sciences, UT Southwestern, 2009-2012

Cindy Neunert, M.D.

- Clinical Research Scholar, Department of Clinical Sciences, UT Southwestern, 2007-2010
- Member, Society for Pediatric Research

Tamra Slone, M.D.

- Clinical Research Scholar, Department of Clinical Sciences, UT Southwestern, 2007-2010

HEMATOLOGY-ONCOLOGY PATIENT STATISTICS

New Patients	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Leukemia										
ALL	37	34	45	31	49	38	53	58	48	54
AML	9	8	8	9	3	9	10	13	8	13
Other	1	2	4	2	1	9	4	4	4	6
Lymphoma										
Hodgkin's	7	4	10	4	9	6	5	13	5	17
Non-Hodgkin's	11	6	13	12	8	16	6	15	8	15
Solid Tumor										
Central Nervous System	54	57	61	61	70	74	70	84	99	92
Wilms/Other Kidney	8	2	14	16	9	8	11	12	9	9
Hepatoblastoma/other liver	4	1	8	1	4	4	4	2	3	3
Osteosarcoma	7	0	4	9	8	8	5	6	6	8
Ewing's sarcoma	1	2	3	5	2	7	6	4	3	3
Rhabdomyosarcoma	4	2	7	5	4	2	3	4	7	7
Other soft tissue tumors	3	6	3	8	4	4	3	4	6	5
Neuroblastoma	9	11	12	12	10	9	4	12	11	8
Retinoblastoma	3	9	7	5	2	3	7	7	7	7
Other malignant tumors	9	12	4	8	8	7	11	6	12	13
Germ cell tumors	6	2	4	5	2	3	8	7	12	11
Histiocytosis	5	8	9	4	16	13	14	10	9	9
Miscellaneous (borderline)	11	6	5	5	6	9	6	11	6	7
Myeloproliferative disorders				7	2				5	0
Total	189	172	221	209	217	229	236	278	268	290
Neurofibromatosis		18	23	21	25	20	49	48	38	82
Sickle Cell Disease										
Sickle cell anemia	33	30	45	39	35	38	47	48	34	47
Sickle C disease	12	14	17	13	19	18	30	17	30	13
Sickle beta plus thalassemia	9	6	8	0	7	2	1	4	5	2
Sickle beta zero thalassemia	1	0	0	1	3	1	1	1	0	0
Other hemoglobinopathies	5	3	2	8	0	3	3	1	4	7
Total	60	53	72	61	64	62	82	71	73	69
Coagulation Disorders										
Hemophilia A	12	14	15	11	13	12	6	17	15	10
Hemophilia B	0	3	2	4	2	3	0	2	1	3
Von Willebrand Disease	8	11	4	7	10	6	6	5	14	15
Thrombosis			6	36	47	46	75	55	60	94
Other Disorders	13	23	37	15	3	3	5	5	4	1
Total	33	51	64	73	75	70	92	84	94	123
Other Hematologic Disorders*	258	259	218	217	256	277	362	476	443	471
Misc. Patient Evaluations	129	136	149	157	189	184	177	259	200	182
Total New Patients	669	689	747	738	826	842	998	1,216	1,116	1,167

*Neutropenia, idiopathic thrombocytopenic purpura, miscellaneous anemias, etc.

HEMATOLOGY-ONCOLOGY PATIENT STATISTICS

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Active Patients										
ACE - Peds				269	289	303	377	359	386	454
ACE -Young Adult				171	101	131	150	155	156	184
Sickle cell disease	589	597	613	632	626	669	639	659	682	678
Hemophilia & related inherited coagulopathies	168	226	157	158	155	157	235	255	263	260
Misc. hematologic disorders						@500	569	863	840	1,170
Chronic erythrocyte transfusions		33	56	50	49	54	70	72	83	97
Chronic apheresis		10		10		6	9	10	5	5
Stem Cell Transplants										
Autologous	4	7	4	7	10	6	9	9	4	4
Allogeneic	13	12	5	10	6	11	16	18	18	22
Total	17	19	9	17	16	17	25	27	22	26
Outpatient Unit Visits - Dallas										
Oncology	7,351	7,116	7,497	7,571	7,681	7,619	6,533	6,905	6,493	7,855
Neuro-oncology							1,232	1,942	1,902	2,256
BMT	496	581	484	623	566	519	867	876	788	888
ACE -Young Adult	299	309	293	300	337	337	337	342	391	400
Sickle cell disease	1,053	1,143	1,236	1,459	1,301	1,167	1,243	1,354	1,802	2,447
Hemophilia & related coagulopathies	445	493	486	583	553	475	471	452	560	400
Other hematology	1,741	1,791	1,931	1,794	1,813	1,994	2,219	2,966	2,783	2,905
Total	11,385	11,433	11,927	12,300	12,251	12,111	12,931	14,837	14,719	17,151
Hospitalizations - Dallas										
Oncology Patients	1,096	1,036	1,118	1,239	1,133	1,045	1,010	1,120	1,247	
Hematology Patients	363	439	432	450	387	346	421	442	565	
Total	1,459	1,475	1,550	1,689	1,520	1,391	1,431	1,562	1,812	
Total Hospital Days - Dallas										
Oncology Patients	5,666	4,988	5,152	5,808	6,242	7,492	6,745	7,903	8,096	
Hematology Patients	1,141	1,453	1,485	1,305	1,141	1,165	1,795	2,031	1,741	
Total	6,807	6,441	6,637	7,113	7,383	8,657	8,540	9,934	9,837	
Outpatient Unit Visits - Legacy										
Oncology								202	543	793
Neuro-oncology								58	107	66
BMT									10	0
ACE -Young Adult								14	29	44
Sickle cell disease								9	67	81
Hemophilia & related inherited coagulopathies								24	50	53
Hematology								184	401	439
Total									1,207	1,476
Hospitalizations - Legacy										
Oncology Patients										
Hematology Patients									31	
Total									11	
									42	
Total Hospital Days - Legacy										
Oncology Patients										
Hematology Patients									237	
Total									13	
									250	

Hospitalist Medicine



Nationally the field of hospital medicine is relatively young, with the introduction of the term “hospitalist” in 1996 by Wachter and Goldman in a *New England Journal of Medicine* article. Over the past decade, the number of hospitalists, and hospitals using hospitalists, has grown rapidly making it one of the fastest growing specialties in pediatrics.

The Pediatric Hospital Medicine program at Children’s Medical Center has shown similar growth. Originating in 2002 as a single service line with five UT Southwestern pediatric faculty members, the program has grown to twenty-six faculty members, covering up to eight service lines at Children’s Medical Center Dallas and Children’s Medical Center at Legacy. It is among the largest and clinically busiest in the nation.

The group focuses on four particular areas: patient care, medical education, clinical research, and advocacy.

Faculty



Vijay Kalidindi, M.D.
Director, Hospitalist Medicine

Vijay Kalidindi, M.D., Associate Professor of Pediatrics at UT Southwestern is the Program Director for Hospital Medicine at Children’s. He earned his medical degree from Osmania University Medical College, Hyderabad in 1981. He completed his residency in pediatrics in 1992 and pediatric cardiology fellowship in 1995, both at Children’s Hospital of Michigan/Wayne State University School of Medicine in Detroit, MI. Prior to arrival at UT Southwestern Dr Kalidindi was Clinical Associate Professor of Pediatrics at the University of Washington School of Medicine in Seattle, WA. Dr Kalidindi has a distinguished record as a clinician and has made contributions towards quality improvement, evidence based practice and medical education. He was recipient of the physician recognition award in Michigan and was twice recipient of teacher of the year award at University of Washington affiliated programs. Dr Kalidindi is a graduate of Children’s Medical Center Leadership Academy and UT Southwestern Clinical Safety and Effectiveness Program. Dr Kalidindi is a fellow of the American Academy of Pediatrics since 1994. He is one of the Board of Directors at Dallas Physician Services for Children and is an active member of several committees including the Children’s Medical Center Quality Committee. Dr Kalidindi is passionate about program development, medical education and customer service.



Ayesha Ahmad M.D.

Instructor

Clinical expertise: In-patient medicine

Education: UT Austin, B.S., 2002; UT Health Science Center at San Antonio, M.D., 2007

Post-doctoral training: Children's National Medical Center, Washington, DC, Resident, Pediatrics, 2007-2010



Kathryn E. Ban, M.D.

Instructor

Clinical expertise: In-patient medicine

Education: Rice University, Houston, TX, B.A., cum laude, 2003; UT Health Science Center at Houston, M.D., 2007

Post-doctoral training: UT Southwestern/Children's, Resident, Pediatrics, 2007-2010



Christina C. Bourland, M.D.

Assistant Professor

Clinical expertise: In-patient medicine

Education: University of the South, Sewanee, TN, B.A., 1999; University of Alabama School of Medicine, Birmingham, AL, M.D., 2003

Post-doctoral training: UT Southwestern/Children's, Resident, 2003-2006



Clifford N. Chen, M.D.

Assistant Professor

Clinical expertise: In-patient medicine

Education: Baylor University, Waco, TX, B.A., 1998; UT Southwestern, M.D., 2003

Post-doctoral training: UT Health Science Center at Houston, TX, Resident, Pediatrics, 2003-2006



Kenneth Chen, M.D.

Instructor

Clinical expertise: In-patient medicine

Education: John Hopkins University, Baltimore, MD, B.S.E., 2002; UT Southwestern, M.D., 2006

Post-doctoral training: UT Southwestern/Children's, Resident, Pediatrics, 2006-2009



Megan Durham, M.D.

Instructor

Clinical expertise: In-patient medicine

Education: Austin College, Sherman, TX, B.S. 2003; UT Medical Branch at Galveston, M.D., 2007

Post-doctoral training: UT Southwestern/Children's, Resident, Pediatrics, 2007-2010



Melissa Harlan, M.D.

Instructor

Clinical expertise: In-patient medicine

Education: The University of Cadiz, Spain, Study Abroad Certificate, 2002; UT Austin, B.S.E. and B.A., 2003; UT Health Science Center at Houston, M.D., 2007

Post-doctoral training: UT Southwestern/Children's, Resident, Pediatrics, 2007-2010

Laura Davidson Harn, M.D.

Assistant Professor

Clinical expertise: In-patient medicine

Education: UT Austin, B.A., Plan II Honors Program, 1996; UT Southwestern, M.D., 2002

Post-doctoral training: UT Southwestern/Children’s, Resident, Pediatrics, 2002-2005



Allison Hsu, M.D.

Instructor

Clinical expertise: In-patient medicine

Education: UT Austin, B.A. and B.S., 2003; UT Southwestern, M.D., 2007

Post-doctoral training: UT Southwestern/Children’s, Resident, Pediatrics, 2007-2010



Jennifer Johnston, M.D.

Instructor

Clinical expertise: In-patient medicine

Education: Texas A&M University, College Station, B.S., summa cum laude, 2003; UT Health Science Center at Houston, M.D., 2007

Post-doctoral training: Johns Hopkins University, Baltimore, MD, Resident, Pediatrics, 2007-2010



Benjamin C. Lee, M.D.

Assistant Professor

Clinical expertise: In-patient medicine

Education: Johns Hopkins University, Baltimore, MD, B.S., 1997; Temple University School of Medicine, Philadelphia, PA, M.D., 2001

Post-doctoral training: UT Southwestern/Children’s, Resident, Pediatrics, 2001-2004



Eron S. Linver, M.D.

Assistant Professor

Clinical expertise: In-patient medicine

Education: University of Florida, Gainesville, B.S., 1994; University of Miami School of Medicine, FL, M.D., 2000

Post-doctoral training: UT Southwestern/Children’s, Resident, Pediatrics, 2000-2003



Jessica Lynn Lloyd, M.D.

Assistant Professor

Clinical expertise: In-patient medicine, pediatric critical care

Education: Louisiana State University, Shreveport, B.S., magna cum laude, 1981; Louisiana State University Health Sciences Center School of Medicine, Shreveport, M.D., 1985

Post-doctoral training: Louisiana State University Health Sciences Center, Shreveport, Resident, Pediatrics, 1985-1988; University of Florida Health Sciences Center, Jacksonville, and Louisiana State University Health Sciences Center, Shreveport, Fellow, Pediatric Critical Care Medicine, 1988-1991



Adrienne McMillan, M.D.

Instructor

Clinical expertise: In-patient medicine

Education: University of Florida, Gainesville, B.S., 2002; Medical College of Georgia, Augusta, M.D., 2006

Post-doctoral training: University of Florida Health Science Center, Jacksonville, Resident, Pediatrics, 2006-2009





Amit Mehta, M.D.

Instructor

Clinical expertise: In-patient medicine

Education: Vanderbilt University, Nashville, TN, B.S., 2001; University of Oklahoma College of Medicine, Oklahoma City, M.D. 2005

Post-doctoral training: University of Tennessee Health Science Center, Memphis, Resident, Pediatrics, 2005-2008



Kimberly D. Mulson, M.D.

Assistant Professor

Clinical expertise: In-patient medicine

Education: Old Dominion University, Norfolk, VA, B.S., 1992; University of Houston-Clear Lake, TX, M.S., 1998; St. George's University School of Medicine, Grenada, West Indies, M.D., 2004

Post-doctoral training: University of South Florida, Tampa, FL, Residency, Pediatrics, 2004-2007



Roxana Narat, M.D.

Instructor

Clinical expertise: In-patient medicine

Education: Rice University, Houston, TX, B.A., cum laude, 2002; UT Medical Branch at Galveston, M.D., 2006

Post-doctoral training: UT Southwestern/Children's, Resident, Pediatrics, 2006-2009



Phuong T. Nguyen, M.D.

Instructor

Clinical expertise: In-patient medicine

Education: Tulane University/Newcomb College, New Orleans, LA, B.S., 2001; Louisiana State University Health Sciences Center, Shreveport, LA, M.D., 2006

Post-doctoral training: UT Southwestern/Children's, Resident, Pediatrics, 2006-2009



Anna Seong-Hee Pak, M.D., F.A.A.P.

Assistant Professor

Clinical expertise: In-patient medicine

Education: University of Virginia, Charlottesville, B.A., 1996; MCP Hahnemann School of Medicine, Philadelphia, PA, M.D., 2002

Post-doctoral training: North Shore University Hospital, Manhasset, NY, Resident, Pediatrics, 2002-2004; University of Virginia, Charlottesville, Resident, Pediatrics, 2004-2005



Reina M. Patel, D.O.

Assistant Professor

Clinical expertise: In-patient medicine, asthma, family-centered rounds

Education: Houston Baptist University, TX, B.S., 1999; University of North Texas Health Sciences Center, Texas College of Osteopathic Medicine, Fort Worth, D.O., 2003

Post-doctoral training: UT Health Science Center at Houston, Resident, Pediatrics, 2003-2006



Yolande Pengetnze, M.D.

Instructor

Clinical expertise: In-patient medicine

Education: University of Yaoundé I, Cameroon, M.D., 1998; Georgetown University, Washington, DC, M.S., 2005

Post-doctoral training: Maimonides Medical Center, Brooklyn, NY, Resident, Pediatrics, 2005-2008

Jennifer Rammage, M.D.

Instructor

Clinical expertise: In-patient medicine

Education: Semester at Sea, Institute for Shipboard Education, Study Abroad Program, 2002, Rice University, Houston, TX, B.A., 2003; UT Southwestern, M.D., 2007

Post-doctoral training: Vanderbilt University Medical Center, Nashville, TN, Resident, Pediatrics, 2007-2010



Catherine Robben, M.D.

Instructor

Clinical expertise: In-patient medicine

Education: Tulane University, New Orleans, LA, B.S., 2003; University of Arkansas for the Medical Sciences, Little Rock, M.D., 2007

Post-doctoral training: UT Southwestern/Children's, Resident, Pediatrics, 2007-2010



Luis Seguias, M.D.

Assistant Professor

Clinical expertise: In-patient medicine

Education: Universidad Central de Venezuela, Los Chaguaramos, Caracas, M.D., 1989

Post-doctoral training: Universidad Central de Venezuela, Los Chaguaramos, Caracas, Resident, Pediatrics, 1990-1993; Hospital de Ninos, San Bernardino, Venezuela, Fellow, Pediatric Nephrology, 1994; Albert Einstein College of Medicine, New York, NY, Fellow, Pediatric Nephrology, 1994-1996; Resident, Pediatrics, 1996-1997; University of Miami-Jackson Memorial Hospital, FL, Fellow, Pediatric Nephrology, 1997-1998



Leticia Shanley, M.D.

Instructor

Clinical expertise: In-patient medicine

Education: Texas A&M University, College Station, B.S., magna cum laude, 2000; UT Health Science Center at San Antonio, M.D., 2005

Post-doctoral training: Medical University of South Carolina, Charleston, Resident, 2005-2007; Children's National Medical Center, Washington, DC, Senior Resident, Pediatrics, 2007-2008



Karthik Srinivasan, M.D.

Assistant Professor

Clinical/research expertise: In-patient medicine, orthopedic infections

Education: Massachusetts Institute of Technology, Cambridge, MA, B.S. 1999; UT Southwestern, M.D., 2003

Post-doctoral training: Rainbow & Babies Children's Hospital, Cleveland, OH, Resident, Pediatrics, 2003-2006



Shirley Tetteh, M.D., M.P.H.

Instructor

Clinical expertise: In-patient medicine

Education: University of Ghana, Legon, B.Sc., 1999; University of Ghana Medical School, Korle-Bu, M.B., Ch.B., 2003; Johns Hopkins Bloomberg School of Public Health, Baltimore, MD, M.P.H., 2005

Post-doctoral training: Goryeb Children's Hospital/Atlantic Health, Morristown, NJ, Resident, Pediatrics, 2006-2009



Bharath Thankavel, M.D.

Instructor

Clinical expertise: In-patient medicine

Education: Baylor University, Waco, TX, B.S. 1998; St. George's University, Grenada, West Indies, M.D., 2004

Post-doctoral training: University of South Florida St. Petersburg, FL, Resident, Pediatrics, 2004-2007





Kathleen Vandiver, M.D.

Instructor

Clinical expertise: In-patient medicine

Education: Texas A&M University, College Station, B.S., 2000; UT Southwestern, M.D., 2006

Post-doctoral training: UT Southwestern/Children’s, Resident, Pediatrics, 2006-2009

Patient Care

As the largest tertiary medical center for pediatric patients in North Texas, Children’s draws patients from North and East Texas, Southern Oklahoma and Northern Louisiana who are admitted to the general pediatrics floor. There are two types of services staffed during the year at the Dallas campus. The first relies on 24-hour, 7 days a week, on-site attending coverage. The second resembles a prototypical teaching service with several levels of learners, including medical students and pediatric resident physicians. In 2008, Children’s at Legacy opened in the suburb of Plano, Texas, and the 24/7 on-site attending model is utilized there. Since patient census varies seasonally, the number of hospitalist services change throughout the year. New developments in our program include creation of a short stay unit staffed 24/7 exclusively by hospitalists. There are five hospitalist services (three at Dallas and two at Legacy) and one teaching service during the summer months. During the peak winter months, which represents coverage of over 100 patient beds a day, there are up to seven hospitalist services (five at Dallas and two at Legacy) and one teaching service.



Faculty encounter a wide range of medical conditions with varying complexity and provide the highest quality of care for patients through evidence-based practice and family-centered care. An asthma care unit was implemented in 2009, and plans include creation of a subspecialty hospitalist service where the subspecialist is the consultant and hospitalist the attending physician.

Medical Education

In addition to their clinical duties, Hospitalist Medicine faculty members actively participate in the educational programs of UT Southwestern and Children’s. All hospitalists hold faculty appointments at UT Southwestern Medical School and are expected to create novel educational opportunities for our students and residents. Faculty teach residents from UT Southwestern’s categorical residency program, family practice interns from local programs (John Peter Smith, Baylor Garland, Charlton Methodist and UTSW), and third year medical students from UT Southwestern Medical School and trainees from outside programs doing elective rotations. Hospitalist faculty participate in nursing education as well. A hospitalist elective is available for our resident physicians.

Several hospitalists participate in the intern recruitment and other activities include resident morning reports and advocacy programs.

Division faculty had poster presentations in national meetings and several lectures to faculty, residents, students, and physician extenders, including nurse practitioners.



Research Activities

Hospitalist Medicine faculty members develop one or more areas of expertise related to their clinical interests and have engaged in a number of research endeavors, some collaborative with other disciplines. Faculty members have

partnered with colleagues in Orthopedics to standardize the approach to management of bone and joint infections, with the purpose of reducing morbidity and length of in-patient stays. Hospitalist in-patient service also serves as a site for implementation of family-centered rounds, an innovative approach that prospectively and directly incorporates parents and patients into the discussion of their medical issues and the formulation of management plans. Hospitalists participate in several quality initiatives pertaining to inpatient care including patient discharges, and are in process of developing several evidence-based, computer-based order sets and pathways. Some of the faculty members' research interests include quality initiatives, bone infections, electronic medical record, information technology and evidence based practice. Hospitalist accomplishments include publications and presentations at national meetings.

Advocacy

Hospitalists participate in a number of hospital committees in order to improve both the efficiency of the hospital and the care of patients. Hospitalist faculty have a presence in regional and national organizations such as Texas Medical Association, Texas Pediatric Society, American Academy of Pediatrics and Society of Hospitalist Medicine where they advocate for the health of our children.

Major Administrative or Leadership Responsibilities

Many hospitalists play administrative and leadership roles which contribute towards our program development:

Ayesha Ahmad

- Liaison for Global Health

Katie Ban

- Hospitalist liaison, Pediatric Residency Program

Christina Bourland

- Faculty Mentor for Interns and Medical Students

Megan Durham

- Hospitalist Liaison for Community Relations

Clifford Chen

- Liaison for EPIC Electronic Medical Record

Melissa Harlan

- Hospitalist Liaison for Legacy Program

Jennifer Johnston

- Physician Liaison, Short Stay Unit

Benjamin Lee

- Chair, Committee on Child and Adolescent Health, Texas Medical Association

Adrienne McMillan

- Hospitalist Representative, Antibiotic Stewardship Committee

Amit Mehta

- Floor Physician Liaison
- Coordinator, M&M conferences

Kim Mulson

- Floor Physician Liaison
- Coordinator, M&M conferences

Catherine Robben

- Liaison, Pediatric Clerkship Program

Leticia Shanley

- Working Group Member and Module Author, AAP Society of Hospital Medicine and Academic Pediatric Program Directors' National Night Float Curriculum and Journal Club Liaison, UT Southwestern Hospitalist Division

Karthik Srinivasan

- Hospitalist Liaison for Legacy Program

Bharath Thankavel

- Physician Liaison, Short Stay Unit

Katie Vandiver

- Hospitalist Liaison for Legacy Program

Awards and Honors

Christina Bourland

- Core clerkship teaching award

Infectious Disease

The Division of Pediatric Infectious Disease at UT Southwestern has provided an active infectious disease consultation service for Children's for more than 40 years, with consultation and care to more than 700 infants and children each year. Division faculty direct the infection control program at Children's and manage an active ambulatory service for children with infectious diseases, including a large clinic for HIV-infected and HIV-exposed children and adolescents. In these clinics, fellows, residents and medical students are trained in the management of complicated infectious diseases in pediatrics. This clinical training is in the form of consultations, rounds, conferences and outpatient infectious disease and HIV clinics. Since 1965, 96 physicians from 23 different countries have completed training in the division's fellowship training program and approximately 75 percent of these individuals have academic appointments at universities and children's hospitals worldwide. Many graduates of the program are chairs or directors of academic programs.

Faculty in Pediatric Infectious Disease also has been actively engaged in clinically applied research for more than 40 years. Results of their clinical- and laboratory-based research are presented at many forums nationally and internationally. The faculty is recognized worldwide as leaders in many areas of infectious diseases and as principal investigators of domestic and international collaborative research projects. The research efforts of the division are supported by a wide variety of sources including the National Institute of Allergy and Infectious Disease (NIAID), the National Institute of Child Health and Human Development (NICHD), the Health Resources and Services Administration (HRSA) and several foundations, as well as through grants and contracts from the pharmaceutical industry.

As a consultative service, faculty and fellows in Pediatric Infectious Disease interact with all divisions in the department and assist in the management of children with a variety of underlying medical problems.

Faculty



Jeffrey Kahn, M.D., Ph.D.
Director, Pediatric Infectious Disease

Jeffrey Kahn, M.D., Ph.D., Professor of Pediatrics and Microbiology, is Director of the Pediatric Infectious Disease program and holds the Sarah M. and Charles E. Seay Chair in Pediatric Infectious Diseases. He was recruited from Yale University in May 2009 where he studied newly discovered human viruses. Dr. Kahn's laboratory was the first group in the United States to report the clinical features, epidemiology and genetic features of human metapneumovirus, human coronavirus HKU1 and NL63, and human bocavirus. These new viruses are associated with upper and lower respiratory tract disease in infants and young children. Dr. Kahn earned his B.S. at McGill University, Montreal, PQ, Canada, in 1982 and his M.D. and Ph.D. degrees from State University of New York, Health Science Center at Brooklyn in 1991. His Ph.D. in Microbiology focused on the molecular biology of vaccinia virus, the virus used in the smallpox vaccine. He performed his internship and residency in Pediatrics at Yale-New Haven Hospital in Connecticut from 1991 to 1994 and served as Chief Resident of Pediatrics at the newly opened Children's Hospital at Yale-New Haven. Dr. Kahn completed his Pediatric Infectious Disease Fellowship at Yale University from 1995-1998, after which he joined the faculty at Yale. Among his

accomplishments, Dr. Kahn received distinguished research, clinical and teaching awards at Yale and has received research funding from the National Institutes of Health, the American Lung Association, and the American Heart Association, among others.

The division has provided an active infectious disease consultation service

FOR MORE THAN 40 YEARS.



Monica Ardura, D.O.

Assistant Professor

Clinical expertise: Pediatric infectious diseases, infections in immunocompromised hosts

Research expertise: Infections in immunocompromised hosts and related clinical trials

Education: Ursinus College, Collegeville, PA, B.S., 1994; Philadelphia College of Osteopathic Medicine, PA, D.O., 1997; UT Southwestern, Clinical Research Scholar, Clinical Sciences, 2007-2010

Post-doctoral training: Penn State Geisinger Health System, Danville, PA, Resident, Pediatrics, 1997-2000; Chief Resident, Pediatrics and Medicine, 2000-2001; UT Southwestern, Fellow, Pediatric Infectious Disease, 2004-2008



Theresa Barton, M.D.

Assistant Professor

Director, ARMS (AIDS-Related Medical Services) Clinic

Interim Director, UT Southwestern Clinical HIV Fellowship in South Africa

Clinical expertise: Pediatric infectious diseases, HIV infection, global health pediatrics

Research expertise: Long-term outcomes of pediatric HIV infection

Education: Smith College, Northampton, MA, A.B., 1993; UT Southwestern, M.D., 1997

Post-doctoral training: UT Southwestern/Children's, Resident, Pediatrics, 1997-2000; UT Southwestern, Fellow, Pediatric Infectious Disease, 2000-2003



Carla Garcia, M.D.

Assistant Professor

Clinical expertise: Pediatric infectious disease, viral lower respiratory tract infections, international adoption medicine

Research expertise: Viral lower respiratory tract infections, particularly rhinoviruses

Education: Facultad Medicina Universidad Central de Venezuela, M.D., 2000

Post-doctoral training: Universidad Central de Venezuela/Hospital Universitario de Caracas, Resident, Pediatrics, 2001-2003; Chief Resident, 2003-2004; Texas A&M University/Driscoll Children's Hospital, Corpus Christi, Resident, Pediatrics, 2005-2007; UT Southwestern, Fellow, Pediatric Infectious Disease, 2007-2010



Michelle A. Gill, M.D., Ph.D.

Assistant Professor, Pediatrics and Internal Medicine

Immunology graduate program faculty

Clinical expertise: Pediatric infectious diseases, immunology

Research expertise: Immunobiology of human dendritic cells and their role in the pathogenesis of clinical disease processes

Education: Louisiana State University, Shreveport, B.S., summa cum laude, 1988; Louisiana State University Medical Center, Shreveport, Ph.D., 1993; M.D., 1995

Post-doctoral training: University of Arkansas for Medical Sciences, Little Rock, Intern and Resident, Pediatrics, 1995-1998; Chief Resident, Pediatrics, 1998-1999; UT Southwestern, Fellow, Pediatric Infectious Disease, 1999-2003



Ruth Levitz, Ph.D.

Instructor

Research expertise: Biotechnology, drug discovery, respiratory viruses, signal transduction

Education: Hebrew University, Jerusalem, Israel, B.Sc., 1972; M.Sc., 1974; Tel Aviv University, Israel, Ph.D., Biochemistry, 1986

Post-doctoral training: Tel Aviv University, Israel, Fellow, Biological Chemistry, 1986-1989; Public Health Research Institute (PHRI), Newark, NJ, Fellow, Biomedical Studies, 1990-1995



George H. McCracken, Jr., M.D.

Professor

GlaxoSmithKline Distinguished Professorship of Pediatric Infectious Diseases

Clinical expertise: Pediatric infectious diseases, meningitis, respiratory infectious diseases

Research expertise: The epidemiology of invasive pneumococcal disease in Dallas

Education: Williams College, Williamstown, MA, B.A., 1958; Cornell University Medical College, New York, NY, M.D., 1962

Post-doctoral training: Cornell University Medical College, New York, NY, Resident, Pediatrics, 1962-1965; UT Southwestern/Children's, Chief Resident, Pediatrics, 1965-1966; Investigator, National Institutes of Health, 1966-1968

Jeffrey McKinney, M.D., Ph.D.

Associate Professor

Resident Education Director

Clinical expertise: Pediatric infectious diseases, zoonoses

Research expertise: Gram negative infections; medical education

Education: University of Iowa, Iowa City, B.S., 1986; (Oxon) Rhodes Scholar, Oxford University, United Kingdom, B.A., 1988; University of Iowa College of Medicine, Iowa City, M.D. and Ph.D., 1995

Post-doctoral training: Yale University/Yale-New Haven Children's Hospital, New Haven, CT, Intern and Resident, Pediatrics, 1995-1998; Yale University, New Haven, CT, Fellow, Pediatrics and Molecular, Cellular and Developmental Biology, 1998-2001



John D. Nelson, M.D.

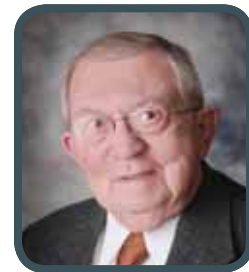
Professor Emeritus

Clinical expertise: Pediatric infectious diseases

Research expertise: Management of osteomyelitis, mechanisms of antibacterial resistance, suppurative and reactive arthritis in children, community-acquired pneumonia in children

Education: University of Minnesota Medical School, Minneapolis, B.S., 1952; M.D., 1954

Post-doctoral training: University of Minnesota Medical School, Minneapolis, Resident, Internal Medicine, 1954-1955; UT Southwestern/Children's, Resident, Pediatrics, 1957-1959; UT Southwestern, Fellow, Pediatric Infectious Disease, 1959-1960



Pablo J. Sanchez, M.D.

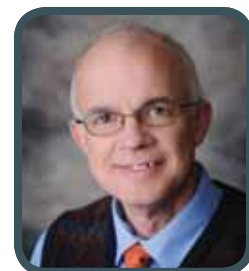
Professor

Clinical expertise: Neonatal and congenital infections

Research expertise: Congenital, perinatal and neonatal infections with focus on congenital syphilis and congenital CMV infections, gentamicin nomogram and validation

Education: Seton Hall University, South Orange, NJ, B.S., 1977; University of Pittsburgh School of Medicine, PA, M.D., 1981

Post-doctoral training: Children's Hospital of Pittsburgh, PA, Resident, Pediatrics, 1981-1984; Columbia-Presbyterian Medical Center, New York, NY, Fellow, Neonatology, 1984-1986; UT Southwestern, Fellow, Pediatric Infectious Disease, 1986-1988



Jane Siegel, M.D.

Professor

Clinical expertise: Pediatric infectious diseases, infection control

Research expertise: Community-acquired MRSA infections, healthcare associated infections

Education: University of Pennsylvania, Philadelphia, B.A., 1970; Boston University School of Medicine, MA, M.D., 1974

Post-doctoral training: Children's Hospital of Pittsburgh, PA, Resident, Pediatrics, 1974-1977; UT Southwestern, Fellow, Pediatric Infectious Disease, 1977-1979



Post-doctoral Fellows

Clinical Fellowship in South Africa



Lana Lee, M.D. (Completed April 2010)

Current Position:
Adolescent Medicine Fellowship,
Johns Hopkins

Research Interests:
HIV/AIDS in the developing world,
viral hepatitis



Kenneth Chen, M.D. (Completed June 2010)

Current Position:
Pediatric Hematology-Oncology
Fellowship, UT Southwestern

Research Interests:
Pediatric HIV, child growth and
nutrition



Erin Scheideman, M.D. (Completed Sept. 2010)

Current Position:
Instructor, General Pediatrics, UT
Southwestern

Research Interests:
Medical education, staff development

Completed June 2010



Michael Chang, M.D.

Current Position:
The Children's Hospital at Saint Francis,
Tulsa, OK (private practice)

Research Interests:
Role of gamma interferon in murine
RSV infection



Carla Garcia M.D.

Current Position:
Assistant Professor, Pediatric Infectious
Disease, UT Southwestern

Research Interests:
Rhinovirus infections associated with
bronchiolitis

3rd Year



Amanda Evans, M.D.

Research Interests:
Effects of Respiratory syncytial virus
infection of respiratory epithelial cells
on *Moraxella catarrhalis*; pathogenesis of
acute otitis media in children



Alejandro Jordan-Villegas M.D.

Research Interests:
Epidemiology of pneumococcal diseases
in children; bacterial-viral-host immune
interactions

2nd Year



Thomas Fox, M.D.

Research Interests:
Molecular mechanisms of pathogenesis
in enteric bacteria



Eduardo Lopez Medina, M.D.

Research Interests:
Candida albicans and *Pseudomonas*
aeruginosa interactions in the
gastrointestinal tract

1st Year



Joseph Cantey, M.D.

Research Interests:
Diagnosis and treatment of congenital
infections
- Reverse-syphilis maternal screening
and congenital syphilis
- Utility of blood HSV PCR in neonatal
HSV disease



Margaret Trost, M.D.

Research Interests:
Clinical and immunologic- features of
Rhinovirus infection

Clinical Research Staff

Romain Banchereau, Research Assistant

Gagan Bajwa, Research Associate

Adriana Sanchez, Clinical Data Specialist

Alejandra Soriano-Fallas, Post-doctoral Trainee Clinician

Benyachalee Techasaensiri, Clinical Data Specialist

Research Activities

Research in the division involves such areas as diarrhea, bacterial meningitis, clinical pharmacology, efficacy and safety of antimicrobial agents, pathogenesis of meningeal and respiratory infections (RSV), the link between pulmonary infection and asthma, HIV/AIDS, nosocomial infections, immunobiology of the dendritic cell responses to RSV and influenza infections, newly emerging human viruses and the epidemiology of MRSA infections in different populations and neonatal infections.

Until December 31, 2010, Dr. McCracken was the principal investigator of the NICHD Pediatric Pharmacology Research Network located at both Children's and UT Southwestern. All fellows participate in research projects with the faculty.

Dr. Garcia works with viral respiratory tract infections in young children, particularly RSV and rhinoviruses. She studies the clinical characteristics, disease severity, and differences in host immune-response. Dr. Garcia's work has been supported by the MedImmune Fellowship Grant Award for research in respiratory viruses.

Clinical Activities

Consultations in the pediatric and neonatal intensive care units at Parkland and Children's (both Dallas and Legacy campuses) involve patients with inherited or acquired immunodeficiency, including patients receiving immunosuppressive therapy for cancer, organ transplantation, bone marrow and stem cell transplantation; inflammatory bowel disease and rheumatologic disorders; and infants and children with a wide variety of classic as well as unusual infectious disease problems.

The division is responsible for an active infectious disease ambulatory clinic at Children's, where follow-up care is provided to children with complicated infections who were initially managed as in-patients and to those who have been referred to the clinic by practicing physicians in the community. The division also manages approximately 120 HIV-infected children and adolescents as well as an additional group of infants and young children with perinatal HIV exposure.

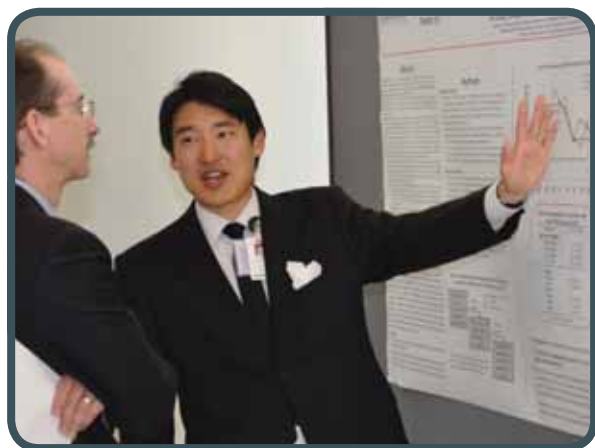
Dr. Carla Garcia joined the International Adoption Medicine Clinic to open at the Children's Medical Center at Legacy campus.

Presentations/Teaching Activities

While in the Pediatric Infectious Disease fellowship program, trainees are provided a background in laboratory techniques of classical microbiology, immunology and molecular biology; experience in application of the scientific method to clinical and laboratory research; and an opportunity to develop competence in diagnosis and management of infectious diseases.

Third- and fourth-year medical students and pediatric residents can elect to work in the general Infectious Disease inpatient service, or the HIV/AIDS clinic. During this rotation, trainees gain experience with diagnosis and management of infections in neonates, infants and children, familiarity with the rationale for selection of antimicrobial agents, and insight into issues related to infection-control practices in hospitalized patients. The rotation in the HIV clinic offers experience in management of children and adolescents with HIV infection, as well as prophylaxis and testing of infants born to HIV positive mothers.

At a weekly Wednesday morning Infectious Disease Conference, lectures and open discussions are held in which infectious disease topics are presented and discussed. Fellows present their work-in-progress reports at least twice each year at Journal Club, where cases on the clinical service are thoroughly discussed. In addition, the faculty members participate actively in the teaching of students, residents and fellows through lectures in the annual Department of Microbiology course; formal and informal discussions with students, residents, fellows and visitors during daily rounds; lectures to students and residents at many noon conferences at Children's each year, including the monthly "Bugs Among Us" lecture; inpatient consultation and ambulatory clinic service in ARCH; and talks at the annual Children's-sponsored Haltalin Seminar.



1st Annual Senior Fellows Research Day
Graduating fellow Michael Chang explains his research to Dr. William Scott, Pediatric Cardiology Division Director.

The UT Southwestern Clinical Fellowship in South Africa provides an educational and enlightening medical experience for participants. In addition to providing medical services for HIV/AIDS children and adults, program fellows are directly involved in providing education and support services for people in the Waterberg region of the Limpopo province of South Africa.

Jeffrey S. Kahn, M.D., Ph.D.

- “Emerging Human Parvoviruses,” Center for Infectious Disease Dynamics, Penn State University, Seminar series in Epidemiology of Infectious Diseases, State College, Pennsylvania, March, 2010
- “Influenza: Old Challenges, New Challenges,” 42nd Annual Kenneth C. Haltalin Pediatrics for the Practitioner, Richardson, Texas, April 2010
- “Influenza,” Dallas Independent School District (DSD), NASA Science Symposium, Dallas, TX, September 2010
- “The Long and Deadly History of Influenza and the Emergence of the Novel 2009 H1N1 Swine Flu,” Pediatric Grand Rounds, Children’s Medical Center, February, 2010
- “Swine Flu: One Year and Still Counting,” Op-Ed, Dallas Morning News, April 2010

Theresa Barton, M.D.

- “Growing Up Positive: The Evolution of Pediatric HIV/AIDS,” Pediatric Grand Rounds, Children’s Medical Center, Month 2010
- “Recent Guidelines and Evidence for Prenatal Care Recommendations in HIV-Infected Mothers, Reducing HIV Perinatal Transmission in Minority Women,” Satellite Symposium, National Medical Association Annual Convention & Scientific Assembly, Orlando, FL, Month 2010
- “Health Literacy,” Women & HIV International Clinical Conference (WHICC), Houston, TX, Month 2010
- “Maternal-to-Child HIV Transmission,” Panel Discussion, Women & HIV International Clinical Conference (WHICC), Houston, TX Month 2010
- “Pediatric HIV Infection,” UT Arlington School of Nursing, September 2010

Carla Garcia, M.D.

- C Garcia, C Tucker, R Leff, PJ Sanchez, and MI Ardura. “Pharmacokinetics (PK) of Peramivir in a Child During Extracorporeal Membrane Oxygenation (ECMO) and Continuous Venous-Venous Hemofiltration (CVVHD),” Pediatric Academic Societies Annual Meeting, Vancouver, Canada, May 2010 (Poster presentation)
- M Trost, C Garcia, W Lee, and M Gill. “Spectrum of Disease Associated with Diagnosis of Rhinoviruses in Children at Children’s Medical Center of Dallas,” Pediatric Academic Societies Annual Meeting, Vancouver, Canada, May 2010 (Poster presentation)
- C Garcia, A Soriano, S Khokhar, P Revell, O Ramilo, and A Mejias. “Rhinoviruses (RV) Cause Lower Respiratory Tract Infections (LRTI) as Severe as Those Caused by Respiratory Syncytial Virus (RSV) Independently of the Atopic Background,” 48th Annual Meeting of the Infectious Disease Society of America, Vancouver, Canada, October 2010 (Poster presentation)
- A Mejias, C Yang, C Garcia, S Khokhar, S Chavez-Bueno, C Somers, J Torres, H Jafri, K Wang, and O Ramilo. “Respiratory Syncytial Virus (RSV) Genetic Variability and Viral Loads Do Not Correlate with Disease Severity in Children Hospitalized with Bronchiolitis,” 48th Annual Meeting of the Infectious Disease Society of America, Vancouver, Canada, October 2010 (Poster presentation)

Michelle Gill, M.D., Ph.D.

- “Rhinovirus, Spectrum of Disease Associated with the Diagnosis of Rhinovirus at Children’s Medical Center of Dallas, Pediatric Academic Societies’ Annual Meeting, Vancouver, Canada, May 2010 (Poster presentation)
- “IgE Crosslinking on Human Plasmacytoid Dendritic Cells Interferes with CD4 Alloproliferation,” American Academy of Allergy Asthma & Immunology Meeting, New Orleans, LA, Month 2010 (Poster Presentation)
- “Allergen Interference with Viral-induced Plasmacytoid Dendritic Cell Function; Mechanisms of Disease,” NIH/NIAID Inner City Asthma Consortium Steering Committee Meeting, Chicago, IL, September 2010

George H. McCracken Jr., M.D.

- “Use of Antibiotics in Infants and Children,” 42nd Annual Kenneth C. Haltalin Pediatrics for the Practitioner Seminar, Richardson, TX, April 2010

Major Administrative or Leadership Responsibilities

Jeffrey S. Kahn, M.D., Ph.D.

- Director, Division of Pediatric Infectious Disease
- Director, Fellowship Training Program, Pediatric Infectious Disease
- Co-Director, Antimicrobial Stewardship Committee, Children’s Medical Center, Dallas

Theresa Barton, M.D.

- Co-director, Fellowship Training Program, Pediatric Infectious Disease
- Member, Board of Directors, HIV Medical Association
- Clinical Director, Ryan White Title IV Programs (DFAN and Youth Angle)
- Interim Director, UT Southwestern Clinical Fellowship in South Africa
- Co-chair, ARV Therapy Working Group, CDC LEGACY Project

Carla Garcia, M.D.

- Started and lead the Infectious Disease Service in-patient and out-patient consultations at Children's Medical Center at Legacy

Michelle Gill, M.D, Ph.D.

- Reviewer for SPR research abstract submissions in the area of infectious diseases for the 2010 Pediatric Society Meetings
- Member, PROSE (Preventative Omalizumab Therapy for Severe Fall Exacerbations) Clinical Trial Protocol Team, NIH/NIAID Inner City Asthma Consortium
- Member, NIH/NIAID Inner City Asthma Consortium Publications and Presentations Committee, 2010
- Member, NIH/NIAID Inner City Asthma Consortium PROSE Mechanistic Studies Development Committee, 2010

George H. McCracken, Jr., M.D.

- Chief Editor, The Pediatric Infectious Disease Journal
- President and Treasurer, National Pediatric Infectious Disease Foundation

Jeffrey McKinney, M.D.

- Director, Pediatric Residency Training Program
- Course Director, Residency Mortality and Morbidity Conference
- Director, Medical Education at Children's Medical Center
- Chair, Children's Medical Center Training Program Directors Committee

John D. Nelson, M.D.

- Chief Editor, The Pediatric Infectious Disease Journal

Pablo Sanchez, M.D.

- Chair, Committee of Infectious Diseases and Immunizations, Texas Pediatric Society
- Member, Editorial Advisory Board, Infectious Diseases in Children
- Member, Vaccines and Related Biological Products Advisory Committee (VRBPAC), Food and Drug Administration (FDA)
- Member, NICHD Pediatrics (CHHD-A) Subcommittee Review Panel
- Member, Nominating Committee, Society for Pediatric Research

Jane D Siegel, M.D.

- Medical Director, Infection Control, Children's
- Chair, Infection Control Committee, Children's
- Member, Texas State Advisory Panel for Health Care-Associated Infection Public Reporting
- Member, Patient Safety Committee, Dallas Fort Worth Hospital Council
- Member, Committee of Infectious Diseases and Immunizations, Texas Pediatric Society
- Initiation and oversight of program to provide influenza vaccine to contacts of CMC patients
- Co-coordinator, Pediatric Intern Retreat, Children's

Awards and Honors

Monica Ardura, D.O.

- Clinical Research Scholar, Department of Clinical Sciences, UT Southwestern, 2007-2010

Carla Garcia, M.D.

- DSA and PIDS Fellows Travel Grant Award, 46th Annual Meeting of the Infectious Disease Society of America. Vancouver, Canada

Asuncion Maria Mejias, M.D.

- Clinical Research Scholar, Department of Clinical Sciences, UT Southwestern, 2007-2010

Dr. Theresa Barton runs the ***ONLY DEDICATED PEDIATRIC HIV CLINIC IN NORTH TEXAS.*** She participates in community HIV programs and national HIV organizations, as well as does medical volunteer work in Haiti at least once a year.

Neonatal-Perinatal Medicine

The Division of Neonatal-Perinatal Medicine maintains a high profile within the Department of Pediatrics, as well as at Parkland and Children's, providing the highest level of clinical care at each site. The division is also responsible for high-quality academic programs that enjoy substantial extramural funding and publication record, as well as excellence in teaching at the divisional, departmental and university levels. Neonatal-Perinatal faculty continue to be invited nationally and internationally to present and serve on committees to advance neonatal care.

The division coordinates integrated neonatal care across the UT Southwestern, Parkland and Children's campuses, including more than 15,000 deliveries annually at Parkland Health & Hospital System, of which 1,300 are admitted to the 90-bed NICU at Parkland. The 36-bed referral NICU at Children's is geared to take care of infants with complex medical and surgical problems, and those with special metabolic, cardiac, or surgical conditions who are transferred from other hospitals for a higher level of care.

Working closely with Maternal-Fetal Medicine and other pediatric subspecialties, the division coordinates the Fetal Evaluation and Treatment Alliance (FETAL) Program that provides multidisciplinary antenatal consultation, advanced imaging, fetal intervention and delivery planning for referrals from North Texas and beyond. The Resuscitation Team in Labor and Delivery is an internationally acclaimed program providing state-of-the-art assistance to newborn infants as they transition to extra-uterine life. In addition, the Low Birth Weight Clinic follows infants born severely prematurely and those that have had chronic neonatal disorders to ensure appropriate growth and development up to age three.

The wealth of patients under the care of the division affords a high level of academic and scholarly activity. Medical student, resident and fellow education programs provide teaching of clinical skills, as well as experience in basic and/ or clinical research.

Neonatal-Perinatal Medicine includes basic science projects and neonatal translational and clinical projects, as well as large collaborative clinical projects conducted by the Neonatal Research Network, the Maternal-Fetal Medicine Network, and the role of cytomegalovirus (CMV) infection in hearing loss and developmental disability, all sponsored by the NIH.

In 2010, the division has grown with the addition of Drs. Arlene Davis, Julie Mirpuri, Emily Osier, and Muraleedharan Sivarajan to the faculty. We were sorry to lose Drs. Donald McCurnin and Rodica Catrinel Marinescu who moved to other cities for family reasons.

Faculty

Rashmin Savani, M.B.,Ch.B., Professor, is Director of Neonatal-Perinatal Medicine at UT Southwestern and holds the William Buchanan Chair in Pediatrics. He is also the Associate Director of Pulmonary and Vascular Biology in the Department of Pediatrics. Dr. Savani obtained his medical degree from the University of Sheffield, England, in 1982 and undertook internships in internal medicine, general surgery, and obstetrics and gynecology from 1982 to 1984. He was a pediatric resident at Duke University Medical Center, Durham, N.C., from 1984 to 1987 and held fellowships at Cincinnati Children's Medical Center in Neonatology from 1987 to 1989 and in Pulmonary Biology from 1989 to 1991. Dr. Savani was an Assistant Professor of Pediatrics in the Section of Neonatology at the University of Manitoba and Children's Hospital, Winnipeg, Canada, from 1991 to 1996. During this time, he undertook further postgraduate training in Cell and Molecular Biology at the Manitoba Institute of Cell Biology from 1991 to 1994; then had an independent lab at the Institute until he was recruited to the University of Pennsylvania and Children's Hospital of Philadelphia in 1996. There he rose to the rank of Associate Professor with Tenure in 2002, a position he held until 2006 when he was recruited to UT Southwestern. Dr. Savani's clinical expertise is in the areas of bronchopulmonary dysplasia, surfactant and pulmonary hypertension of the newborn, and his research focus has been on lung injury and development, including inflammation and angiogenesis. His laboratory is studying the role of hyaluronic acid (HA) and its receptors in a variety of models of tissue injury, in particular the response to lung injury. Projects in the laboratory include transgenic and knockout mice, intracellular signaling pathways, as well as in vitro and in vivo approaches to examine macrophage and endothelial cell biology as they relate to inflammation and angiogenesis, alveolarization and the response to lung injury.



Rashmin Savani, M.B.,Ch.B.
Director, Neonatal-Perinatal Medicine



Mahmood Alasmi, M.D., M.S.

Associate Professor

Clinical/research expertise: Neonatal and newborn care, nutrition

Education: Ain Shams University, School of Medicine, Cairo, Egypt, M.B., B.Ch., 1984

Post-doctoral training: Hahnemann University Hospital, Philadelphia, PA, Resident, Pediatrics, 1990-1993; University of Cincinnati Medical Center/Children's Hospital Medical Center, OH, Fellow, Neonatal-Perinatal Medicine, 1993-1996; University of Cincinnati Medical Center, OH, Pediatric Clinical Research Fellow and Biostatistics and Epidemiology Master Candidate, 1995-1997



Sue Bacsik, D.O.

Assistant Professor

Clinical/research expertise: Neonatal and newborn care, breastfeeding

Education: Texas Tech University, Lubbock, B.S., 1998; University of North Texas Health Science Center, Fort Worth, D.O., 2004

Post-doctoral training: UT Southwestern/Children's, Resident, Pediatrics, 2004-2007



Timothy Brannon, M.D.

Assistant Professor

Clinical/research expertise: Neonatal and newborn care, electronic medical records, bioinformatics

Education: Baylor University, Waco, TX, B.S., 1984; UT Southwestern, M.D., 1988

Post-doctoral training: UT Southwestern/Children's, Resident, Pediatrics, 1988-1991; UT Southwestern, Fellow, Neonatal-Perinatal Medicine, 1991-1994; Master of Science, Medical Bioinformatics, 2010.



Luc P. Brion, M.D.

Professor

Clinical/research expertise: Fellowship training, evidence-based medicine, renal disorders, Neonatal Research Network and other multicenter clinical trials

Education: Université Libre de Bruxelles, Bruxelles, Belgium, Bachelor of Medical Sciences, 1972; M.D., 1976; Université Libre de Bruxelles, Bruxelles, Belgium, Special Bachelors Degree in Pediatrics, 1981

Post-doctoral training: Hospital Universitaire Saint Pierre, Bruxelles, Belgium, Resident, Pediatrics, 1976-1979; Institut Edith Cavell, Bruxelles, Belgium, Resident, Pediatrics, 1979-1981; University of Toronto, Canada, Fellow, Neonatology, 1981-1982; Institut Edith Cavell, Fellow, Neonatology, 1982; Cliniques Universitaires, Hôpital Erasme, Bruxelles, Belgium, Fellow, Neonatology, 1982-1983; Albert Einstein College of Medicine, New York, NY, Fellow, Neonatology, 1983-1985



Lina Chalak, M.D.

Assistant Professor

Clinical/research expertise: Hypoxic-ischemic encephalopathy, brain injury in the newborn, bedside neurologic monitoring

Education: American University of Beirut, Lebanon, B.S., 1991; American University of Beirut Medical School, M.D., 1995; UT Southwestern, Clinical Research Scholar, Clinical Sciences, 2008-2011

Post-doctoral training: American University of Beirut, Resident, Pediatrics, 1995-1998; UT Southwestern, Fellow, Neonatal-Perinatal Medicine, 1998-2001; UT Southwestern/Children's, Resident, Pediatrics, 2001-2003



Arlene Davis, M.D.

Assistant Professor

Clinical/research expertise: Neonatal-perinatal medicine, neonatal nutrition, global health

Education: Yale University, New Haven, CT, B.S., 1999; Jefferson Medical College, Philadelphia, PA, M.D., 2004

Post-doctoral training: Emory University College of Medicine, Atlanta, GA, Resident, Pediatrics, 2004-2007; Baylor College of Medicine, Fellow, Neonatal-Perinatal Medicine, 2007-2010

William D. Engle, M.D.

Professor

Clinical/research expertise: Bilirubin metabolism and neonatal hyperbilirubinemia, blood pressure, late preterm infants**Education:** Dartmouth College, Hanover, NH, B.A., 1970; Tufts University School of Medicine, Boston, MA, M.D., 1974**Post-doctoral training:** University of Michigan Medical Center, Mott Children's Hospital, Ann Arbor, Resident, Pediatrics, 1974-1978; University of Pennsylvania School of Medicine, Philadelphia, Fellow, Neonatology, 1978-1980**Becky Ennis, M.D.**

Assistant Professor

Clinical/research expertise: Ethics and palliative care, neonatal outreach, resident education**Education:** Emory University, Atlanta, GA, B.S.N., 1992; UT Southwestern, M.D., 2000**Post-doctoral training:** UT Southwestern/Children's, Resident, Pediatrics, 2000-2003; UT Southwestern, Fellow, Neonatal-Perinatal Medicine, 2003-2006**Roy J. Heyne, M.D.**

Professor

Clinical/research expertise: Developmental follow-up of complex high-risk infants and very low birth weight, community advocacy**Education:** Pomona College, Claremont, CA, B.A., 1970; University of Colorado School of Medicine, Denver, M.D., 1974**Post-doctoral training:** St. Joseph Hospital, Denver, CO, Rotating Intern, 1974-1975; UT Southwestern/Children's, Resident, Pediatrics, 1975-1978**Gregory Jackson, M.D., M.B.A.**

Professor

Clinical/research expertise: Neonatal hyperbilirubinemia, neonatal infection, late preterm infants**Education:** University of Southern California, Los Angeles, B.A., 1968; Baylor College of Medicine, Houston, TX, M.D., 1972, University of North Texas, Denton, M.B.A., 1992**Post-doctoral training:** Emory Affiliated Hospitals, Atlanta, GA, Resident, Pediatrics, 1972-1973; Baylor Affiliated Hospitals, Houston, TX, Resident, Pediatrics, 1973-1975**Mambarath Jaleel, M.D.**

Assistant Professor

Clinical/research expertise: Mechanical ventilation, neonatal nutrition, neonatal resuscitation, electronic medical records**Education:** Bangalore Medical College, Bangalore University, India, M.B.B.S., 1994**Post-doctoral training:** Seth G.S. Medical College and King Edward Memorial Hospital, Mumbai, India, Resident, Pediatrics, 1995-1998; Canberra Clinical School, University of Sydney, Australia, Fellow, Neonatology, 1998-2000; Women and Infants Hospital, Brown Medical School, Providence, RI, Fellow, Neonatal-Perinatal Medicine, 2001-2004; Children's Hospital at Monmouth Medical Center, Monmouth, NJ, Resident, Pediatrics, 2005-2006**Sunjun Kang, M.D.**

Assistant Professor

Clinical/research expertise: Neonatal & newborn care, community advocacy, fellow education**Education:** UT Austin, B.B.A., 1985; Ohio State University College of Medicine, Columbus, M.D., 1989**Post-doctoral training:** UT Health Science Center at San Antonio, Resident, Pediatrics, 1989-1992; Brown University, Providence, RI, Fellow, Neonatal-Perinatal Medicine, 1992-1995



Rodica Catrinel Marinescu, M.D.

Assistant Professor

Clinical/research expertise: Pulmonary hypertension, neonatal cardiac disease, ECMO

Education: Universitatea De Medicina-Farmacia, Bucharest, Romania, M.D., 1994.

Post-doctoral training: Thomas Jefferson University, Philadelphia, PA, Research Fellow, Human Genetics, 2001-2002; Albert Einstein Medical Center, Philadelphia, PA, Resident, Pediatrics, 2002-2003; Drexel College of Medicine/St. Christopher's Hospital for Children, Philadelphia, PA, Resident, Pediatrics, 2003-2005; Children's Hospital, Philadelphia, PA, Fellow, Neonatology, 2005-2006; UT Southwestern, Fellow, Neonatology, 2006-2008



Laura McClendon, M.D.

Assistant Professor

Clinical/research expertise: Neonatal and newborn care, resident and medical student education

Education: Texas A&M University, College Station, B.A., cum laude, 1999; UT Medical Branch at Galveston, M.D., 2006

Post-doctoral training: UT Southwestern/Children's, Resident, Pediatrics, 2006-2009



Donald McCurnin, M.D.

Professor, Pediatrics and Cardiology

Medical Director, NICU, Children's Medical Center of Dallas

Clinical/research expertise: ECMO, congenital heart diseases, transport, pulmonary hypertension, severe BPD

Education: UT Austin, B.A., 1972; UT Health Science Center, San Antonio, M.D., 1980

Post-doctoral training: Wilford Hall, USAF Medical Center, San Antonio, TX, Resident, Pediatrics, 1980-1983, Baylor College of Medicine/Texas Children's Hospital, Houston, TX, Fellow, Pediatric Cardiology, 1983-1985; Wilford Hall, USAF Medical Center, San Antonio, TX, Fellow, Neonatology, 1990-1993



Julie Mirpuri-Hathiramani, M.D.

Instructor

Clinical/research expertise: Necrotizing enterocolitis, gut immunology, host-gut microbiota interactions

Education: St. Mary's Canossian College, Hong Kong, Advanced Level Sciences, 1995; University of Hong Kong, M.B.B.S., 2000

Post-doctoral training: Hospital Authority of Hong Kong, Floating Resident, Pediatrics, Medicine and Surgery, 2000-2001; Goryeb Children's Hospital, Morristown, NJ, Resident, Pediatrics, 2004-2007; Emory University, Atlanta, GA, Fellow, Neonatal-Perinatal Medicine, 2007-2010



Emily Osier, M.D.

Assistant Professor

Clinical/research expertise: Neonatal and newborn care, resident education

Education: Indiana University, Bloomington, B.A., high distinction, 2002; Emory University School of Medicine, Atlanta, GA, M.D., 2007

Post-doctoral training: UT Southwestern/Children's, Resident, Pediatrics, 2007-2010



Susan Raff, M.D.

Assistant Professor

Clinical/research expertise: Neonatal and newborn care, electronic medical records

Education: UT Austin, B.A., 2000; UT Medical Branch at Galveston, M.D., 2004

Post-doctoral training: UT Southwestern/Children's, Resident, Pediatrics, 2004-2007

Charles R. Rosenfeld, M.D.

Professor, Pediatrics, Anesthesiology and Pain Management, and Obstetrics and Gynecology
George L. MacGregor Professorship in Pediatrics

Clinical/research expertise: Uteroplacental blood flow, development of the rennin-angiotensin system, fetal growth restriction, neonatal nutrition, neonatal origins of metabolic syndrome, PDA and blood pressure regulation

Education: Emory University, Atlanta, GA, M.D., 1966

Post-doctoral training: Yale-New Haven Medical Center, CT, Resident, Pediatrics, 1966-1967; Bronx Municipal Hospital Center and Albert Einstein College of Medicine, New York, NY, Resident, Pediatrics, 1967-1970; Fellow, Pediatric Pulmonary Medicine, 1970-1971; University of Colorado Medical Center, Denver, Fellow, Neonatal-Perinatal Medicine, 1971-1973



Pablo J. Sánchez, M.D.

Professor

Clinical/research expertise: Neonatal and congenital infections, Neonatal Research Network and other multicenter trials

Education: Seton Hall University, South Orange, NJ, B.S., 1977; University of Pittsburgh School of Medicine, PA, M.D., 1981

Post-doctoral training: Children’s Hospital of Pittsburgh, PA, Resident, Pediatrics, 1981-1984; Columbia-Presbyterian Medical Center, New York, NY, Fellow, Neonatology, 1984-1986; UT Southwestern, Fellow, Pediatric Infectious Disease, 1986-1988



Joseph Schneider, M.D., M.B.A.

Clinical Assistant Professor

Clinical/research expertise: Neonatal and newborn care, clinical bioinformatics, electronic medical records

Education: St. Joseph’s College, Philadelphia, PA, B.S., 1974; Columbia University, New York, NY, M.B.A., 1977; Emory University School of Medicine, Atlanta, GA, M.D., 1995

Post-doctoral training: Baylor College of Medicine, Houston, TX, Resident, Pediatrics, 1995-1998; National Library of Medicine, Marine Biological Laboratory, Woods Hole, MA, Fellow, Medical Informatics, 2005



Dorothy Sendelbach, M.D.

Associate Professor

Clinical/research expertise: Breastfeeding, neonatal hyperbilirubinemia, newborn nutrition, late preterm infants

Education: Rutgers College of Engineering, Piscataway, NJ, B.S., 1978; New Jersey Medical School, Newark, M.D., 1982

Post-doctoral training: UT Southwestern/Children’s, Resident, Pediatrics, 1982-1985



Philip W. Shaul, M.D.

Professor

Director, Division of Pulmonary and Vascular Biology
Lowe Foundation Professorship in Pediatric Critical Care Research

Clinical/research expertise: Endothelial cell biology, nitric oxide, caveolae-lipid rafts, estrogen, HDL and CRP signaling

Education: Dartmouth College, Hanover, NH, B.A., 1977; University of Cincinnati, OH, M.D., 1981

Post-doctoral training: Children’s Medical Center of Cincinnati, University of Cincinnati, OH, Resident, Pediatrics, 1981-1984, Women and Infants Hospital of Rhode Island, Brown University, Providence, Fellow, Neonatal-Perinatal Medicine, 1984-1986



Julide Sisman, M.D.

Assistant Professor

Clinical/research expertise: Neonatal neurology, hypoxic-ischemic encephalopathy, amplitude-integrated EED

Education: Istanbul University, Istanbul Faculty of Medicine, Turkey, M.D., 1993

Post-doctoral training: University of Alabama at Birmingham, Fellow, Neonatology, 2000-2001; Albert Einstein College of Medicine/Montefiore Medical Center, NY, Fellow, Neonatology, 2001-2003; Albany Medical Center, NY, Resident, Pediatrics, 2003-2005; Chief Resident, Pediatrics, 2005-2006





Muraleedharan Sivarajan, M.D.

Assistant Professor

Clinical/research expertise: Neonatal and newborn care, resident education

Education: Trivandrum Medical College, University of Kerela, India, M.B.B.S., 1989; GSVM Medical College, Kanpur, India, D.C. H., 1990; Royal College of Physicians of Ireland, Dublin, M.R.C.P.I., 1995

Post-doctoral training: Lincoln Medical and Mental Health Center, Bronx, NY, Intern and Resident, Pediatrics, 2001-2004



Elizabeth Stehel, M.D.

Associate Professor

Clinical/research expertise: Breastfeeding, resident and medical student education, neonatal infection

Education: University of California-San Diego, B.S., 1993; UT Southwestern, M.D., 1997

Post-doctoral training: UT Southwestern/Children's, Resident, Pediatrics, 1997-2000



Audra Stewart, D.O., M.P.H.

Assistant Professor

Clinical/research expertise: Neonatal and newborn care, congenital hearing loss, advocacy, resident education

Education: University of Oklahoma, Norman, B.S., 1996; Oklahoma State University, Tulsa, D.O., 2002; University of Arkansas for Medical Sciences, Little Rock, M.P.H., 2008

Post-doctoral training: Arkansas Children's Hospital, Little Rock, Resident, Pediatrics, 2002-2005; Fellow, Neonatal-Perinatal Medicine, 2005-2008



Myra H. Wyckoff, M.D.

Associate Professor

Clinical/research expertise: Newborn resuscitation, resident education, non-invasive monitoring

Education: Trinity University, San Antonio, TX, B.S., 1990; UT Southwestern, M.D., 1994

Post-doctoral training: UT Southwestern/Children's, Resident, Pediatrics, 1994-1997; UT Southwestern, Fellow, Neonatal-Perinatal Medicine, 1997-2000

Post-doctoral Fellows

Completed June 2010



Katherine Bennett, M.D.

Current Position:
Sheridan's Healthcare Corp., Lovelace Women's Hospital, Albuquerque, NM

Research Interests:
Ephrin B2 and Eph B4 receptors in lung development



Lilian Teng St. John, M.D.

Current Position:
Pediatrix, San Antonio, TX

Research Interests:
Effectiveness of plastic head covering for hypothermia prevention in premature newborns

4th Year



Nathan C. Sundgren, M.D., Ph.D.

Research Interests:
Fc gamma receptor I signaling in CRP induced hypertension

3rd Year



Maria Afanador, M.D.

Research Interests:
Ephrin B2 in lung development



Vishal Kapadia, M.D.

Research Interests:
Oxidative stress in preterm infants resuscitated with either 21% or 100% oxygen



Tara DuPont, M.D.

Research Interests:
Total body cooling and hypoxic ischemic encephalopathy



John Sparks, M.D.

Research Interests:
Optimum chest compression to breaths in neonatal resuscitation using a piglet model



Natalie Frost, M.D.

Research Interests:
Estrogen receptor β and neonatal alveolarization

2nd Year



Joshua Frankfurt, M.D.

Research Interests:
Biomarkers of aberrant blood pressure regulation in VLBWs



Jacklyn LeVan, M.D.

Research Interests:
Influence of clinical trials on clinical practice in non-enrolled patients



Jenita Jeyarai, M.D.

Research Interests:
Hyperoxia, RHAMM and alveolarization



Michel Mikhael, M.D.

Research Interests:
Studies of HPI axis in infants undergoing cardiac surgery

1st Year



Ja'neer Anderson, M.D.

Research Interests:
Fetal well being and the use of ephedrine in the treatment of maternal hypotension during delivery



Katherine Stumpf, M.D.

Research Interests:
Urinary tract infection in the pre-term population: an observational study; rotavirus immunization in very low birth weight infant



Olutoye Osunbunmi, M.B.B.S.

Research Interests:
Mechanism-based therapies to prevent the antiphospholipid syndrome

The success of the research endeavors of the Neonatal-Perinatal Medicine fellowship are highlighted by the fact that six current fellows have been successful in obtaining intra- and extra-mural funding during 2009-2010.

Katherine Bennett, M.D.

- Klaus Perinatal Research Award from the American Academy of Pediatrics, Section on Perinatal Pediatrics, 2008-2009, “The Role of Ephrin B2 Reverse Signaling in Lung Morphogenesis,” \$5,000 (2009-2010)

Natalie Frost, M.D.

- Ikaria: Advancing Newborn Medicine Grant Program, “Estrogen and Estrogen Receptor Modulation of BPD,” \$10,000 (2009-2010)

Vishal Kapadia, M.D.

- North Texas Clinical & Translational Science Initiative Grant, “Use of oxygen during neonatal resuscitation of preterm infants”, 2010

John Eric Sparks, M.D.

- Children’s Hospital Foundation Grant, “Simultaneous cardiac compressions and ventilation during neonatal CPR”, 2010
- NRP Young Investigator Grant, 2010

Lilian Teng St.John, M.D.

- NRP Research Grant and Young Investigator Award, “Effectiveness of Plastic-Lined Hats for the Prevention of Hypothermia in Premature Newborns,” \$10,000 (2008-2010)

Nathan C. Sundgren, M.D., Ph.D.

- Physician Scientist Training Program, UT Southwestern, 2008-2011

Clinical/Research Staff

Research Nurses

Cathy Boatman, RN
Jeannette Burchfield, RN
Lijun Chen, PhD, RN
Lucy Christie, RN

Alicia Guzman, RN
Nancy Miller, RN
Lizette Torres, RN
Diana Vasil, RN

Research Staff

Naeun Cheong, Ph.D., Sr. Research Scientist
Kevin DeSpain, Research Assistant I
Damien Garcia, Research Technician II
Jie Liao, Ph.D., Sr. Research Associate
Xiao-Tie Liu, Ph.D., Sr. Research Associate
Christopher Longoria, Research Technician I
Dan Mija, B.S., Research Technician I

Jason Mitchell, Research Technician I
Oscar Rosado, Research Assistant I
Timothy Roy, Research Assistant II
Erica Sontoyo, Clinical Data Specialist
Jessica Sontoyo, Lab Technical Assistant
Rebeca Sontoyo, Lab Technical Assistant
Sergio David Sosa, Research Assistant I

Research Activities

The division is engaged in a broad spectrum of research activity, including basic, translational and clinical projects. Basic science projects are focused on cellular and molecular regulation of nitric oxide and other vasodilators, endothelial cell biology with respect to cardiovascular and pulmonary development and disease, mechanisms regulating uteroplacental blood flow in pregnancy, mechanisms regulating blood pressure before and after birth, pathogenesis of inflammation and lung injury in animal models, and extracellular matrix regulation of cell migration and proliferation.

Translational projects include animal models of bronchopulmonary dysplasia, genetic surfactant deficiency, and neonatal resuscitation. Clinical research projects include studies conducted through the collaborative projects conducted by the Neonatal Research Network consisting of 18 institutions in North America, sponsored by National Institute of Child Health and Human Development (NICHD). The division has been a participating member of this network since its



inception in 1986 and successfully competed for the next cycle in 2010. Other national collaborative studies include the role of CMV infection in hearing loss and strategies to prevent this long-term disability.

General neonatal projects include the natural history and diagnosis of patent ductus arteriosus, optimization of resuscitation and stabilization of the newborn in the delivery room including temperature stabilization, oxygen use and cardiac compressions, the effect of gentamicin on hypocalcaemia in the newborn, role of glucocorticoids and vasopressors in the regulation of blood pressure in very low birth weight neonates, approaches to treatment and prevention of infection in the newborn, the effects of very low birth weight on blood pressure regulation at 1 to 3 years, complications of late preterm infants, and studies of the recognition and prevention of hyperbilirubinemia in neonates.

Clinical projects in the division are facilitated by the comprehensive databases that are maintained in each area of the division's activities including resuscitation, NBN, both NICUs as well as the Follow Up Clinic. In addition, the division and its partner hospitals are members of the Vermont Oxford Network and the Children's Hospitals' Neonatal Database collaboratives.

Research funding exceeded \$1.75 million for the fiscal year. There are more than eight NIH-supported grants within the division, one which has been continuously funded for more than 30 years. Other sources of funding include an endowed chair and two professorships awarded by UT Southwestern, as well as smaller foundation and pharmaceutical company research grants.

Clinical Activities

Parkland Memorial Hospital

Neonatal-Perinatal Medicine faculty participated in the care of more than 1,300 neonates admitted to the NICU, as well as an additional 14,000 neonates admitted to the NBN at Parkland. Continued close collaboration with the faculty and fellows in the Maternal-Fetal Medicine Division in the Department of Obstetrics and Gynecology ensures optimal delivery plans for at-risk pregnancies. Despite this high-risk delivery service, adjusted neonatal mortality remains less than four per 1,000 live births and outcomes compare extremely favorably to benchmark institutions nationwide. Faculty, fellows, advanced practice nurses (APN) and residents provide integrated neonatal care at three levels of acuity in a 90-bed NICU. The Resuscitation Program, directed by Dr. Myra Wyckoff, provides a coordinated multidisciplinary team attendance at high-risk deliveries. Comprehensive electronic databases have been actively in use for more than 25 years for the NICU and for over fifteen years in the Resuscitation Program.

Children's Medical Center

After opening the 36-bed NICU in Tower D at Children's, we have seen continued growth in admissions to this unit. The quality of the program was recognized by Optum Health (part of United Healthcare), awarding the unit the "Center of Excellence" designation, one of only 61 NICUs in the US given this designation, and the only one in Dallas. This unit has bolstered the strengths of the campus program in Neonatal-Perinatal Medicine, and has seen referrals from within the Dallas/Fort Worth Metroplex and throughout North Texas and beyond. The unit cares for infants with complex medical and surgical problems, and those with special metabolic, cardiac or surgical conditions transferred from other hospitals for a higher level of care. The mortality for these extremely sick infants is less than 6 percent. Continued growth is anticipated, and neonatologists, neonatal nursing and APN recruitment is ongoing. An electronic database has already been established for the NICU at Children's. The division continues its involvement with the Children's Hospitals Neonatal Database.



Division faculty coordinate

INTEGRATED FETAL AND NEONATAL CARE

across the UT Southwestern, Children's and Parkland campuses.

Low Birth Weight Clinic and Follow-up Program

The division also participates in the Low Birth Weight Clinic located at Children's, a part of the ARCH (At Risk Children) Center, generously funded through the Crystal Charity Ball. Babies who were severely premature (<1500 gm birth weight), or who had specific chronic neonatal disorders of the brain, lungs, or intestines, can be followed through this clinic. The clinic was started in 1979 by Elizabeth Heyne, PA-C, and Dr. Roy Heyne agreed to provide physician backup on a volunteer basis. He now serves as the Medical Director of the Low Birth Weight Clinic, which sees an average of 550 to 600 patients each year, 170 of those being new patients. Each one is followed by the clinic for the first three years of life, through the early stages of chronic diseases and neurodevelopment.

Dr. Roy Heyne, advanced practitioners, and other healthcare professionals provide comprehensive medical and psychosocial treatment through intensive intervention, education, social services, and developmental testing for these potentially vulnerable babies. An electronic database of these patients has been in existence for more than 10 years and this program is integral to the NICHD Neonatal Network.

Presentations/Teaching Activities

Division faculty play prominent roles in the educational activities within the School of Medicine, the Department of Pediatrics, the Division of Neonatal-Perinatal Medicine, and Maternal-Fetal Medicine in the Department of Obstetrics and Gynecology. The goals of these programs are to facilitate the understanding of the problems associated with normal and high-risk pregnancies and to prepare trainees for careers in General Pediatrics, Obstetrics and Gynecology, Maternal-Fetal Medicine and Neonatal-Perinatal Medicine.

Teaching within multiple programs at UT Southwestern Medical School includes "Introduction to Clinical Medicine," a sophomore medical student course, the introductory course on "Human Biology and Disease" in the Integrative Biology Graduate Program, and the "Clinical Pathology Lecture Series" for residents in the Department of Pathology.

Under the supervision of faculty with expertise in resuscitation, third-year pediatric residents are assigned to the Resuscitation Team in Labor and Delivery, where they are recertified in the Neonatal Resuscitation Program, participate in the care of term newborns, and assist in the triage and initial care of sick term and premature neonates. The first- and second-year residents are directly involved in the daily care of preterm and term infants in the Parkland NICU. The goals of these experiences are to provide residents the opportunity to acquire skills in resuscitation and stabilization of the newborn, recognition of the sick neonate, a common requirement of the general pediatrician outside major urban areas, and how to provide the initial care of the sick and preterm neonate prior to transfer to a tertiary care facility.

The fellowship training program in Neonatal-Perinatal Medicine was developed by Dr. Charles Rosenfeld using guidelines of the American Academy of Pediatrics, the American Board of Pediatrics (ABP), and the Organization of Neonatal-Perinatal Training Program Directors. Fully accredited through 2013 by the Accreditation Council for Graduate Medical Education (ACGME), the three-year training program in Neonatal-Perinatal Medicine, now under the direction of Dr. Luc Brion, Program Director, has continued to flourish. Trainees in this program not only improve their skills as clinicians and teachers, but also develop their experience in basic and clinical research. Half of the 49 program graduates since 1980 chose a career in academic neonatology and half are in clinical practice, both in the United States and abroad. To date, 95 percent of graduates have published at least one manuscript from their research work during this fellowship, and fellows have enjoyed a 95 percent success rate on the American Board of Pediatrics' Neonatal-Perinatal sub-board examination. As noted above, six of the fellows successfully competed for grant awards in 2010.



Graduating fellow, Dr. Lilian Teng St. John, discusses her research project at the 1st Annual Senior Fellows Research Day May 2010

Rashmin C. Savani, M.B.,Ch.B.

- “Insights into BPD: The Inflammation Superhighway: Tolls, Signals and Pathways,” Jerry Elliot Memorial Lecturer, Key West, FL, March 2010
- “Pulmonary Surfactant, Extracellular Matrix & Innate Immunity: Novel Insights into the Regulation of Inflammation,” Vanderbilt Pediatric Research Conference, Nashville, TN, March 2010
- “Bronchopulmonary Dysplasia: New Insights into Inflammation and an Arrest of Lung Development,” Vanderbilt Pediatric Grand Rounds, Nashville, TN, March 2010
- “RHAMM Knockout Mice are Protected after Bleomycin-induced Lung Injury,” HA 2010 Inflammation and Immunity Session, Kyoto, Japan, June 2010

Timothy Brannon, M.D.

- Epic and Neonatology: A Bright Beginning. Co-presented with Renae Muhammad, RN, Epic User Group Meeting, Verona, WI, September 2010

Luc P. Brion, M.D.

- Brion LP. “Duty hours,” Organization of Neonatal-Perinatal Medicine Training Program Directors (ONTPD), San Francisco, CA, October 2010

Lina Chalak, M.D.

- Chalak LF, Brion LP, Morris MC, Burchfield J, Christie L, Sanchez PJ. “Texas, United States Biochemical Screening Criteria for Assessment of Hypoxic Ischemic Encephalopathy: How Do They Apply to the Late Preterm Infant?” Pediatric Academic Societies Meeting: Implementation of Hypothermia for Hypoxic-Ischemic Encephalopathy (HIE), Vancouver, BC, April 2010 (Poster presentation)
- DuPont TL, Chalak LF, Heyne R, Morriss MC, Sanchez PJ. “Evaluation of Infants for Hypothermia Therapy: How Good is the Neurological Examination for Detection of Hypoxic-ischemic Encephalopathy (HIE)?” Pediatric Academic Societies Meeting: Implementation of Hypothermia for Hypoxic-Ischemic Encephalopathy (HIE), Vancouver, BC April 2010 (Poster presentation)
- Kapadia V, Chalak LF, Dupont T, Brion L, Christie L, Wyckoff M. “Hyperoxemia Within the 1st Hour of Life Following Perinatal Asphyxia and Subsequent development of Moderate-severe HIE,” Pediatric Academic Societies Meeting: Implementation of Hypothermia for Hypoxic-Ischemic Encephalopathy (HIE) Vancouver, BC, April 2010

Julie Mirpuri-Hathiramani, M.D.

- Mirpuri J, Lin PW, Louis NA. “IL-10 Signaling is Developmentally Regulated and Sensitive to Lactobacillus rhamnosis (LGG) in Developing Murine Colon.” Pediatric Academic Societies Meeting, Vancouver, BC, April 2010 (SPR Fellows Basic Science Award, 2010)

Charles R. Rosenfeld, M.D.

- Rosenfeld, CR, Liu X, DeSpain K. “Mechanisms Modulating Angiotensin II Sensitivity in the Uteroplacental Vascular Bed throughout Ovine Pregnancy,” Society for Gynecologic Investigation, 2010 Annual Meeting. Orlando, FL, March 2010 (Poster presentation)
- Punjwani P, Rosenfeld CR, Ramaciotti C. “Echocardiographic Prediction of Spontaneous Closure of the Ductus Arteriosus in Neonates Less Than 30 Weeks of Gestation,” American Academy of Pediatrics, Section on Perinatal Pediatrics, 2010 National Conference and Exhibition, San Francisco, CA, October 2010

Pablo J. Sánchez, M.D.

- “Strategies to Limit Infections in the Neonate and Reduce Infection-Related Mortality,” 14th International Congress on Infectious Diseases, Miami, FL, March 2010
- Shane AL, Sánchez PJ, Hansen NI, Stoll BJ, and GDB Subcommittee for NICHD Neonatal Research Network. “Epidemiology of Methicillin Resistant (MRSA) and Sensitive (MSSA) Staphylococcus aureus (MRSA) Infections Among Very Low Birth Weight Neonates in the NICHD Neonatal Research Network,” Pediatric Academic Societies Meeting, Vancouver, BC, May 2010
- Lopez-Medina E, Ardura MI, Brock E, Siegel JD, Sánchez PJ. “2009 H1N1 Influenza in Hospitalized Infants < 6 Months of Age, Pediatric Academic Societies Meeting, Vancouver, BC, May 2010
- Boppana S, Ross S, Chowdhury N, Novak Z, Michaels M, Sánchez PJ, et al. “Dried Saliva PCR for Screening Newborns for Congenital CMV Infection,” Pediatric Academic Societies Meeting, Vancouver, BC, May 2010
- Ross S, Fowler K, Novak Z, Chowdhury N, Michaels M, Sánchez PJ, et al. “Relationship between Dried Blood Spot Positivity and Viral Load in the Urine and Saliva of Infants with Congenital Cytomegalovirus Infection,” Pediatric Academic Societies Meeting, Vancouver, BC, May 2010
- Garcia C, Tucker C, Leff R, Sánchez PJ, Ardura MI. “Pharmacokinetics (PK) of Peramivir in a Child during Extracorporeal Membrane Oxygenation (ECMO) and Continuous Venous-Venous Hemofiltration (CVVHD),” Pediatric Academic Societies Meeting, Vancouver, BC, May 2010
- Adams-Chapman I, Bann CM, Goldberg R, Benjamin D, Stoll BJ, Walsh M, Sánchez PJ, et al for the NICHD Neonatal Research Network. “Neurodevelopmental Outcome of ELBW Infants with Candida Infection,” Pediatric Academic Societies Meeting, Vancouver, BC, May 2010 (Poster presentation)
- DuPont T, Chalak LF, Heyne R, Morriss MC, Sánchez PJ. “Evaluation of Infants for Hypothermia Therapy: How Good Is the Neurological Examination for Detection of Hypoxic-Ischemic Encephalopathy (HIE)?” Pediatric Academic Societies Meeting, Vancouver, BC, May 2010 (Poster presentation)

- Chalak LF, Brion LP, Morriss MC, Burchfield J, Christie L, Sánchez PJ. “Biochemical Screening Criteria for Assessment of Hypoxic-Ischemic Encephalopathy (HIE): How Do They Apply to the Late Preterm Infant?” Pediatric Academic Societies Meeting, Vancouver, BC, May 2010 (Poster presentation)
- “Neonatal Infections: Improvement Needed!” Oregon Neonatal Seminar Series and “Congenital CMV Infection: Time to Treat” Grand Rounds, Oregon Health & Science University (OHSU), Portland, Oregon, June 2010
- “Sospecha Clínica y Diagnóstico Diferencial de TORCHS,” “Tópicos en el Tratamiento de Infecciones Congénitas,” XXII Curso Internacional de Pediatría, Viña del Mar, Chile, September 2010
- “Congenital Cytomegalovirus Infection,” Grand Rounds, “Congenital Syphilis,” “Neonatal Herpes Simplex Virus (HSV) Infection: Another TORCH?” Capital District Pediatrics Conference, Pfizer Visiting Professor, Albany Medical Center, Albany, NY, September 2010
- Kimberlin DW, Whitley RJ, Wan W, Powell DA, Storch G, Ahmed A, Palmer A, Sánchez PJ, et al for the NIAID Collaborative Antiviral Study Group, “Impact of Oral Acyclovir Suppression on Neurodevelopmental Outcomes and Skin Recurrences Following Neonatal Herpes Simplex Virus Disease,” 48th Annual Meeting, Infectious Disease Society of America, Vancouver, BC, October 2010
- “Sífilis Congénita, un Problema Persistente en América Latina,” II Congreso Internacional de Infectología Pediátrica y Vacunas, Buenos Aires, Argentina, October 2010
- “Congenital CMV and Herpes Infections: An Update,” “Strategies in Preventing Neonatal Infections,” Miami Neonatology 2010, 34th Annual International Conference, Miami Beach, FL, November 2010
- “Congenital CMV: State of the Art,” “Congenital Syphilis: A Big Challenge,” XX Brazilian Congress of Perinatology, Rio de Janeiro, Brazil, November 2010

Myra Wyckoff, M.D.

- “In Neonates Receiving Chest Compressions (P), Do Other Ratios (5:1, 15:2) (I) versus 3:1 (C) Improve Outcomes (O)?” International Consensus on Cardiopulmonary and Emergency Cardiovascular Care Science and Treatment Recommendations Conference, Dallas, TX, February 2010
- “For Newborns Receiving Chest Compressions (P) Does the Use of a Two Thumb Technique (I) as Opposed to a Two Finger Technique (C) Improve Outcome (O)?” International Consensus on Cardiopulmonary and Emergency Cardiovascular Care Science and Treatment Recommendations Conference, Dallas, TX, February 2010
- “Neonatal Resuscitation: Airway/Breathing” and “Neonatal Resuscitation: Compressions/Drugs,” NeoPREP Conference, Newport Beach, CA, February 2010
- Kapadia V, Dupont T, Chalak L, Brion L, Christie L, Wyckoff MH. “Hyperoxemia within First Hour of Life in Perinatal Asphyxia and Development of Moderate to Severe HIE: Use of 100% Oxygen during Resuscitation in DR Questioned,” Pediatric Academic Societies Meeting, Vancouver, BC, May 2010
- St. John LT, Christie LH, Wyckoff MH. “Delivery Room Risk Factors for the Development of Hypothermia in Preterm Neonates,” Pediatric Academic Societies Meeting, Vancouver, BC, May 2010 (Poster presentation)
- Osterholt HCD, Dannevig I, Wyckoff MH, Liao J, Nakstad B, Saugstad OD, Savani RC. “Newborn Piglet Resuscitation with 100% Oxygen is Associated with Increased Lung 2-nitrotyrosine, Low Molecular Weight Hyaluronan and Plasma Tumor Necrosis Factor Alpha Expression,” Pediatric Academic Societies Meeting, Vancouver, BC, May 2010
- Solevag AL, Dannevig I, Wyckoff MH, Saugstad OD, Nakstad B. “Return of Spontaneous Circulation with Compression:ventilation Ratio 15:2 versus 3:1 in Newborn Pigs with Cardiac Arrest Due to Asphyxia,” Pediatric Academic Societies Meeting, Vancouver, BC, May 2010 (Poster presentation)
- “Impact of Delivery Room CPR on the Outcome of Preterm Infants,” Neonatal Resuscitation Research Workshop, Sponsored by the National Health and Medical Research Council Centers of Clinical Research Excellence in Newborn Medicine of Australia, Vancouver, BC, May 2010
- “Prevention of Hypothermia for the Preterm Infant in the Delivery Room,” 2010 South Central Conference on Perinatal Research, Austin, TX, October 2010
- Workshop-basic Simulation Set-up and Facilitation, Neonatal Resuscitation Program (NRP) Current Issues Seminar, 2010 NCE AA, San Francisco, CA, October 2010
- “Delivery Room Management and Initial Stabilization of the ELBW Infant,” 2010 NCE AAP, San Francisco, CA, October 2010
- Sparks JE, Jaleel MA, Christie L, Brion LP, Wyckoff, MH. “Impact of Changes in the 2006 Neonatal Resuscitation Program (NRP) Recommendations for Epinephrine Usage in Delivery Room,” Mead Johnson Nutritionals South Central Conference on Perinatal Research, San Francisco, CA, October 2010

UT Southwestern faculty are consistently highly ranked for

TEACHING EXCELLENCE

by medical students, residents and fellows.

Major Administrative or Leadership Responsibilities

Rashmin C. Savani, M.B.,Ch.B.

- Director, Division of Neonatal-Perinatal Medicine, UT Southwestern
- Associate Director, Division of Pulmonary and Vascular Biology, UT Southwestern
- Chief of Service, Pediatrics and Neonatal-Perinatal Medicine, Parkland
- Chief of Service, Neonatal-Perinatal Medicine, Children's Medical Center
- Member, Editorial Board, Journal of Biological Chemistry, American Journal of Physiology-Lung Cell and Molecular Physiology, and Journal of Angiogenesis Research
- Member, Consulting Editorial Board, Journal of Clinical Investigation

Timothy Brannon, M.D.

- Lead, Campus Neonatal EPIC EMR Development Team, Southwestern Medical District

Luc P. Brion, M.D.

- Director, Fellowship Training Program in Neonatal-Perinatal Medicine
- Council Member, Organization of Neonatal-Perinatal Medicine Program Directors
- Member, Editorial Board, Journal of Perinatology
- Member, Cochrane Collaboration
- Graduate Medical Education Sub-Committee: Internal Review of Training Programs in Radiation Oncology; Nephrology; and Pulmonary Disease, UT Southwestern
- Program Directors Committee, Children's Medical Center
- Co-director, Neonatal-Perinatal Evidence-Based Medicine Course, UT Southwestern

Lina Chalak, M.D.

- Director, Fellows Mortality and Morbidity Conference, UT Southwestern
- Co-director, Neonatal-Perinatal Evidence-Based Medicine Course, UT Southwestern
- Co-director, Neonatal-Perinatal Resuscitation Conference, UT Southwestern

William D. Engle, M.D.

- Billing Compliance Officer, Neonatal-Perinatal Medicine, UT Southwestern

Roy J. Heyne, M.D.

- Medical Director, Low Birth Weight Clinic
- Medical Director, Quality Resource Management, Children's
- Vice President, Board of Directors, Low Birth Weight Development Center
- Chair, Finance Committee, Low Birth Weight Development Center
- Chair, Quality Patient Safety, Children's
- Chair, Quality Review, Children's
- Chair, Clinical Resource Management, Children's

Gregory L. Jackson, M.D., M.B.A

- Co-director, Newborn Nursery, Parkland

Mambarath Jaleel, M.D.

- Medical Director, Parkland NNICU
- Chairman, Parkland Neonatal ICU Joint Practice Committee
- Member, National Perinatal Information Center (NPIC) Quality Improvement Committee
- Medical Director, Neonatal Nurse Practitioner Program
- Medical Director, Campus-wide Epic Systems Applications (Electronic Medical Records) Implementation for Division of Neonatal-Perinatal Medicine

Charles R. Rosenfeld, M.D.

- Director, Neonatal Fellows' Physiology Course
- Director, Department Core Curriculum for Subspecialty Fellows, Pediatrics
- Associate Editor, Reproductive Sciences
- Associate Editor, Early Human Development

Pablo J. Sánchez, M.D.

- Chair, Committee of Infectious Diseases and Immunizations, Texas Pediatric Society
- Member, Editorial Advisory Board, Infectious Diseases in Children
- Member, Vaccines and Related Biological Products Advisory Committee (VRBPAC), Food and Drug Administration (FDA)
- Member, NICHD Pediatrics (CHHD-A) Subcommittee Review Panel
- Member, Nominating Committee, Society for Pediatric Research
- Collaborator, (Syphilis), 2009 Red Book: Report of the Committee on Infectious Diseases, American Academy of Pediatrics

Dorothy Sendelbach, M.D.

- Co-Director, Newborn Nursery, Parkland
- Associate Program Director, Pediatric Residency Program, UT Southwestern/Children's

Philip W. Shaul, M.D.

- Director, Division of Pulmonary and Vascular Biology, UT Southwestern
- Member, Steering Committee, Medical Scientist Training Program, Southwestern Medical School, Southwestern Graduate School of Biomedical Sciences
- Member, Steering Committee, University Lecture Series, UT Southwestern
- Member, IB Qualifying Exam Committees
- Member, Ph.D. Thesis Committees
- Elizabeth Stehel, M.D.
- Chair, International Board of Lactating Consultant Examiners, 2012 Exam Development Committee
- Member, Newborn Screening Advisory Committee, Texas 81st Legislature

Myra Wyckoff, M.D.

- Director, Newborn Resuscitation Services, Parkland
- Director, Neonatal-Perinatal Resuscitation Conference
- Member, Neonatal Resuscitation Program Steering Committee, American Academy of Pediatrics
- Member, International Liaison Committee on Resuscitation, Neonatal Working Group, American Heart Association
- Academic Mentor, Pediatric Residency Program
- Co-director, Neonatal-Perinatal Evidence-Based Medicine Course, UT Southwestern

Honors / Awards

Rashmin C. Savani, M.B.,Ch.B.

- 2010 March of Dimes Physician Excellence Award (Texas)
- Gerry Elliott Memorial Lecturer, Southeastern Perinatal Research Conference

Luc P. Brion, M.D.

- Member, Organization of Neonatal-Perinatal Training Program Directors (ONTPD)
- Best Doctors in America

Lina Chalak, M.D.

- Clinical Research Scholar, Department of Clinical Sciences, UT Southwestern, 2008-2011
- NIH Young Investigator Travel Award, Perinatal Research Society

William D. Engle, M.D.

- District VII Representative, AAP Perinatal Section Executive Committee
- Member, Coding & Reimbursement Committee, AAP Perinatal Section (District VII)

Julie Mirpuri-Hathiramani, M.D.

- Fellow's Basic Science Research Award, Society for Pediatric Research
- Basic Science Young Investigator Award, Southern Society for Pediatric Research

Pablo J. Sánchez, M.D.

- Best Pediatricians in Dallas, Pediatric Infectious Diseases, *D Magazine*

Audra Stewart, D.O., M.P.H.

- AAP Chapter Champion (Texas), Early Hearing Detection and Intervention (EHDI)
- Member, Texas Deaf & Hard of Hearing Leadership Council
- Certificate of Appreciation for the TX Health Steps Provider Education Program (TX DSHS)

Nephrology

The Division of Pediatric Nephrology is the main provider of clinical services for children with renal disease and hypertension at Children's. The Nephrology inpatient and outpatient services, comprised of physicians, nurses and staff, are dedicated to the treatment of children with these diseases.

Specializing in all areas of renal-related diseases, including inherited renal disorders, chronic kidney disease, urinary tract infections, hypertension, tubular abnormalities, renal tubular acidosis and metabolic bone disease, Nephrology offers outstanding services and equipment that enables the division to provide state-of-the-art care. The physicians provide care to patients with end stage renal disease, and it is one of the largest pediatric hemodialysis, peritoneal dialysis and transplant programs in the United States.

There are usually six Nephrology fellows in training at a time, each being mentored in both clinical nephrology and either basic or clinical research. Several of the fellows have been presented the Research Award given by the American Society of Pediatric Nephrology, and some are trainees of an NIH-funded training grant, one of the very few in the country. In 2010, 2nd-year fellow Matthias Wolf, M.D., was awarded a Pediatric Scientist Development Program grant, a competitive grant awarded to only 5-7 pediatricians annually. All fellows have a first-author manuscript in a leading journal by the completion of their fellowship, and most graduating trainees continue productive careers in academic medicine.

The research productivity of the Nephrology division is outstanding. Members of the division publish both clinical and basic research manuscripts in the most prestigious Nephrology journals. Division faculty have been continuously funded by the NIH for more than 20 years.

Dr. Michel Baum is the Editor of Pediatric Nephrology, the journal of the International Society of Pediatric Nephrology. Members of the division are on editorial boards of Pediatric Nephrology, the American Journal of Physiology, and the Journal of the American Society of Nephrology.

Faculty

Michel G. Baum, M.D. is Professor and Director of the Pediatric Nephrology Division. He holds the Sarah M. and Charles E. Seay Chair in Pediatric Research. Dr. Baum's clinical expertise is in chronic kidney disease, dialysis, nephrotic syndrome, renal transplantation, tubular disorders and renal tubular acidosis. His research interests are centered on epithelial transport, renal development, and tubular disorders. Recent areas of study involve maturation of the Na⁺/H⁺ exchanger in the proximal tubule, fibroblast growth factor-23 and its role in phosphate wasting diseases, X-linked hypophosphatemia and the prenatal programming of adult hypertension. Dr. Baum graduated summa cum laude from the University of California at Los Angeles with a Bachelor of Science degree in biochemistry in 1974. He received his medical degree from UCLA in 1978 and performed his pediatric residency at Yale-New Haven Hospital from 1978 to 1981. He performed fellowships at the Children's Renal Center, University of California at San Francisco, in Pediatric Nephrology from 1981 to 1982, and at the Cardiovascular Institute, University of California at San Francisco, in Nephrology and Renal Physiology from 1982 to 1984. He has been listed as one of the Best Doctors in America from 2002 to the present and serves as a permanent member of an NIH Study Section. He is Editor of Pediatric Nephrology, the journal of the International Society of Pediatric Nephrology. He has been elected to Phi Beta Kappa, Alpha Omega Alpha, the American Society for Clinical Investigation, the Association of American Physicians, the Society for Pediatric Research, and the American Pediatric Society.



Michel G. Baum, M.D.
Director, Pediatric Nephrology

Recognized as **ONE OF THE TOP 20**

Pediatric Nephrology divisions in the nation



Amy Becker, M.D., M.S.C.S.

Assistant Professor

Clinical expertise: Chronic kidney disease, nephrotic syndrome, end stage renal disease, kidney disease in children with inborn errors of metabolism

Research expertise: Sickle cell nephropathy

Education: Southern Methodist University, Dallas, TX, B.S., summa cum laude, 1995; UT Southwestern, M.D., 2000; M.S.C.S., 2009

Post-doctoral training: Cincinnati Children's Hospital Medical Center, Resident, Pediatrics, 2000-2003; UT Southwestern, Fellow, Nephrology, 2003-2006



Jyothsna Gattineni, M.D.

Assistant Professor

Clinical expertise: Chronic kidney disease, dialysis, hypertension, renal transplantation

Research expertise: Tubular transport, FGF23 and its receptors

Education: Stanley Medical College, MGR University, Chennai, Tamilnadu, India, M.B.B.S., 1994

Post-doctoral training: Driscoll's Children's Hospital, Corpus Christi, TX, Intern and Resident, Pediatrics, 2003-2005; UT Southwestern, Fellow, Pediatric Nephrology, 2005-2009



Fangming Lin, M.D., Ph.D.

Associate Professor

Clinical expertise: Hematuria, proteinuria, renal genetics, polycystic kidney disease

Research expertise: Stem cell therapy for acute kidney injury

Education: Fujian Medical College, Fuzhou, China, M.D., 1984; New York Medical College, Valhalla, Ph.D., 1995

Post-doctoral training: Fujian Medical College Union Hospital, Fuzhou, China, Resident, Pediatrics, 1984-1988; New York University Medical Center, Resident, Pediatrics, 1995-1998; University of Washington, Seattle Children's Hospital, Fellow, Pediatric Nephrology, 1998-2001



Raymond P. Quigley, M.D.

Professor

Clinical expertise: Chronic kidney disease, end stage renal disease, dialysis, renal transplantation, tubular disorders, renal tubular acidosis

Research expertise: Development of renal water transport, effects of arachadonic acid metabolites in renal function

Education: Auburn University, Auburn, AL, B.S., 1979; University of Alabama School of Medicine, Birmingham, M.D., 1985

Post-doctoral training: UT Southwestern/Children's, Resident, Pediatrics, 1985-1988; UT Southwestern, Fellow, Pediatric Nephrology, 1988-1991



Mouin G. Seikaly, M.D.

Professor

Clinical expertise: Chronic kidney disease, dialysis, renal transplantation, metabolic bone disease in children, pediatric hypertension, pediatric renal transplant

Research expertise: Metabolic bone disease and growth in children with chronic kidney disease, X-linked hypophosphatemia and focal segmental glomerulosclerosis (FSGS)

Education: American University of Beirut, Lebanon, B.S.c., 1976; M.S.c, 1981

Post-doctoral training: American University of Beirut, Resident, Pediatrics, 1980-1983; Chief Resident, Pediatrics, 1983-1984; Georgetown University Medical Center, Washington, DC, Resident, Pediatrics, 1986-1987; Fellow, Pediatric Nephrology, 1984-1986



Katherine Twombly, M.D.

Assistant Professor

Clinical expertise: Transplant, dialysis, chronic kidney disease, endstage renal disease

Research expertise: Renal Stone Disease

Education: College of Charleston, SC, B.A., 1996; Medical University of South Carolina, Charleston, M.D., 2004

Post-doctoral training: Miami Children's Hospital, FL, Intern and Resident, Pediatrics, 2004-2007; UT Southwestern, Fellow, Pediatric Nephrology, 2007-2010

Post-doctoral Fellows

Completed June 2010



Sabeen Habib, M.D.
Assistant Professor, Louisiana State University Health Science Center

Research Interests:
Prenatal programming of hypertension



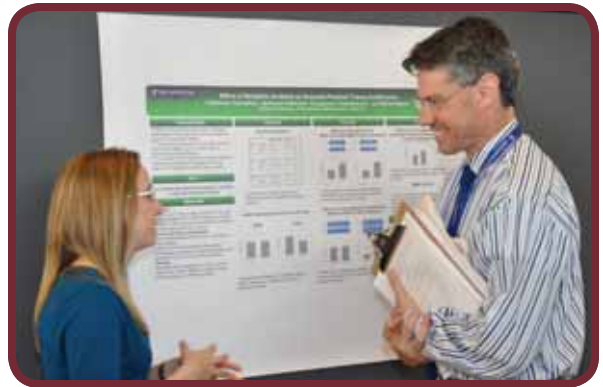
Katherine Twombly, M.D.
Assistant Professor, UT Southwestern

Research Interests:
Maturation of proximal tubule acidification



Modini Vinai, M.D.
Instructor, UT Southwestern

Research Interests
Outcomes of renal replacement therapy



*Graduating fellow Katherine Twombly with Dr. Jeffrey McKinney, Residency Program Director
1st Annual Senior Fellows Research Day
May 25, 2010*

3rd Year



Diana Zepeda-Orozco, M.D.

Research Interests:
Pathogenesis of obstructive uropathy

2nd Year



Pamela Winterberg, M.D.

Research Interests:
Transplant immunology



Matthias Wolf, M.D.

Research Interests:
Pathogenesis of inherited forms of hypertension

1st Year



Catherine J. Kottukapally, M.D.

Research Interests:
Renal acidification



Annelise Ribeiro, M.D.

Research Interests:
Outcomes of acute kidney injury



Khurram Siddique, M.D.

Research Interests:
Prenatal programming of hypertension

In 2010, Dr. Matthias Wolf was awarded a grant from the Pediatric Scientist Development Program (PSDP). This grant provides his salary plus \$20,000 per year through June 2012.

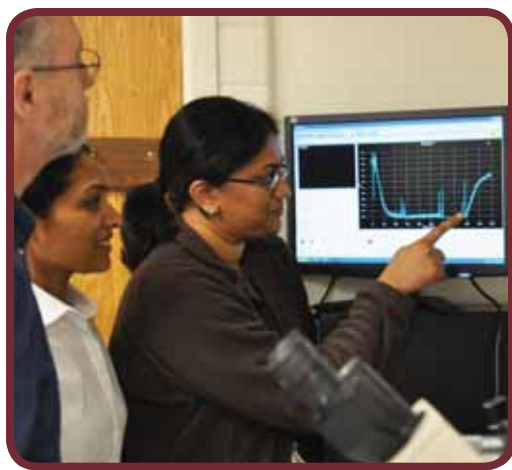
This competitive PSDP grant is awarded annually to only 5-7 pediatricians in the nation.

Clinical Research Staff

Rachel Black, B.S., Research Tech II
 Sam Bradshaw, B.S., Research Tech II
 Vangipuram N. Dwarakanath, M.S., Research Associate
 Linda [Ling] Li, M.D., Ph.D., Postdoctoral Research Fellow
 Pamela G. Waber, M.S., Research Study Coordinator
 Qiuyu Zhang, Research Associate

Research Activities

Research activities of the Division of Pediatric Nephrology are aimed at understanding the pathogenesis and treatment of kidney disease in children. The kidney starts developing at 10 weeks gestation, and the full complement of nephrons is achieved at 35 weeks gestation. A healthy child is born with one million kidney units called nephrons in each kidney. However, there are diseases of the kidney that occur because of insults that happen in utero or because of inherited diseases of the kidney that result in mild to severe renal disease.



The faculty works to determine how prenatal insults result in kidney disease and hypertension in later life. They also examine inherited diseases that affect kidney development such as autosomal recessive polycystic kidney disease. Even if the kidney develops normally, it can be injured by nephrotoxic drugs or an interruption in the blood supply to the kidney that leads to acute kidney injury. The prognosis for acute kidney injury has not improved significantly over the past two decades and acute kidney injury is a major cause of chronic kidney disease.

Investigators are examining how hormones such as FGF-23 and Klotho affect renal electrolyte homeostasis, vitamin D levels and cause bone disease. They are examining novel treatments to improve the outcome of acute kidney injury using bone marrow stem cells. Sometimes renal disease causes permanent loss of kidney function and requires extensive therapy such as dialysis. The division conducts clinical studies examining how to improve the lives of children on dialysis and improve the likelihood that a kidney transplant will be successful. Finally, there is a connection between kidney disease and debilitating bone disease. Investigators have taken basic discoveries made at the bench to clinical studies in patients with bone disease. Funding for research is provided by the NIH, the American Heart Association and Children's.

Clinical Activities

The Nephrology division at UT Southwestern is one the largest programs in the United States for the treatment of children with end stage renal disease, and the primary healthcare provider for children with end stage renal disease in North Texas. The hemodialysis unit, at which outpatient hemodialysis is performed six days a week, is a child-friendly environment that provides laptop computers to children while they are being dialyzed. The peritoneal dialysis program is staffed by devoted physicians and nurses dedicated to the families treating children with outpatient peritoneal dialysis. There is an average of 30 hemodialysis patients and 34 patients treated with home peritoneal dialysis annually. There were 27 renal transplants performed per year making ours one of the largest programs in the country.

The inpatient Pediatric Nephrology Service has a mean census of 11 patients, with all patients treated on the same floor by nurses and physicians who are dedicated to the treatment of renal disease and hypertension.

As the sole renal consultants for the intensive care services at Children's, the division performed an average of 16 acute hemodialysis treatments, 52 acute peritoneal dialysis treatments and 41 continuous venovenous hemofiltration procedures per month last year.

Dr. Baum, along with Drs. Raymond Quigley, Mouin Seikaly, Amy Becker, Jyothsna Gattineni, Fangming Lin, and Katherine Twombly provided the inpatient attending responsibility for the Pediatric Nephrology service over the previous 12 months. In addition to responsibility for providing consults at Children's and Parkland Memorial Hospital, with an average of 21 consults per month, the inpatient attending provides the majority of teaching for students, residents, and fellows during the month they are on service.

The Pediatric Nephrology Clinic at Children's Dallas is now in operation Monday through Friday, and clinics have been initiated at Children's at Legacy. In addition to the clinical responsibilities at Children's, doctors see patients at Texas Scottish Rite Hospital for Children, where Dr. Seikaly is the Director of the Metabolic Bone Clinic.



During 2009 - 2010 there was a monthly average of about 450 outpatients. Over the next year, plans include expanding outpatient services to accommodate patients and the private physicians in Dallas.

Presentations/Teaching Activities

The division of nephrology provides teaching to medical students, interns, residents and fellows. We provide didactic discussions in formal conferences at Children's and at the Medical School. Nephrology rounds are accompanied by teaching with every patient and a formal discussion of a topic. We also participate in teaching of internal medicine and pediatric nephrology fellows at UT Southwestern.

Michel Baum, M.D.

- "Prenatal Programming of Hypertension," University of California, San Diego, February 2010
- "Prenatal Programming of Hypertension," Chinese Society of Nephrology, May 2010
- "FGR23 and its Receptors," Sun Yat-Sen University, Guangzhou, China, May 2010

Fangming Lin, M.D.

- "Reprogramming of Hematopoietic Stem and Progenitor Cells to Treat Acute Kidney Injury," 43rd American Society of Nephrology Annual Meeting, Denver, CO, November 2010 (Poster presentation)

Raymond Quigley, M.D.

- "Hypertension for the Primary Care Pediatrician," Pediatric Grand Rounds, UT Health Science Center at Tyler, April 2010
- "Fundamentals of Acid-Base," 15th Annual International Pediatric Nephrology Association (IPNA) Meetings, New York, NY, September 2010

Mouin Seikaly, M.D.

- "Metabolic Bone Disease in Children," Texas Scottish Rite Hospital for Children, Dallas TX, June 2010
- "Vitamin D Deficiency: New Concepts For an Old Disease," 42nd Kenneth C. Haltalin Pediatrics for the Practitioner Annual Seminar, UT Southwestern, April 2010
- "XLH in Children: From Bench to Bedside," American University of Beirut, Lebanon, April 2010
- "Management of FSGS Post Renal Transplant," American Transplant Congress, Sunrise Symposium, San Diego CA, May 2010
- "History of Pediatric Renal Transplant in Dallas, Children's Medical Center, September 2010
- "Pediatric Renal Transplant. An Update," Louisiana State University, Shreveport LA, December 2010
- "Vitamin D Deficiency: New Concepts For an Old Disease," Weil Cornell Medical College, New York City, NY, December 2010
- "Vitamin D Deficiency: New Concepts For an Old Disease," Pediatrics Dietitian Network of DFW, Dallas, TX, December 2010

Major Administrative or Leadership Responsibilities

Michel Baum, M.D.

- Director, Pediatric Nephrology
- Editor, Pediatric Nephrology
- Renal Editor, Current Opinions in Pediatrics
- Member, NIH Study NIDDK, Kidney, Urologic and Hematologic Diseases D Study Section 2009
- Reviewer for NIH Loan Repayment Awards
- Member, Program Directors Committee, American Society of Pediatric Nephrology
- Councillor Ex Officio, International Society of Nephrology
- Member, Renal Physiology Editorial Board, American Journal of Physiology
- Member, Promotion and Tenure Committee, UT Southwestern

Amy Becker, M.D., M.S.C.S.

- Section Editor, Urinary Tract Disorders, Pediatric Nephrology
- Director, Pediatric Nephrology Fellowship Program

Fangming Lin, M.D.

- Abstract Category Chair in “Cell Signaling: Cell Growth, Proliferation, Apoptosis, and Neoplasia”, the American Society of Nephrology Annual Meeting
- Member, Board of Directors, and Chair of Communication and Membership Committee, The Chinese American Society of Nephrology
- Director, Animal Models Core of the UTSW O’Brien Kidney Center

Raymond Quigley, M.D.

- Associate Editor, Pediatric Nephrology
- Medical Director, Dialysis Unit, Children’s Medical Center, 2006-present
- Medical Director, Camp Reynal, 2005-present (Camp for Renal Patients Sponsored by the NKF of North Texas)
- Served as Mentor for eight house staff officers

Mouin Seikaly, M.D.

- Director, Renal Testing Services, Children’s Medical Center
- Medical Director, Pediatric Renal Transplant, Children’s Medical Center
- Director, Metabolic Bone Disease Clinic, Texas Scottish Rite Hospital for Children
- Co-director, Dialysis Program, Children’s Medical Center
- Member, Participating Centers Committee, North American Pediatric Renal Transplant Cooperative Study
- Member, Pediatric Accreditation Committee, American Society of Transplant
- Member, Abstract Review Committee, American Transplant Congress



*Graduating fellow Sabeen Habib with Dr. Michel Baum at the department’s 1st Annual Senior Fellows Research Day
May 25, 2010*

Awards and Honors

Michel Baum, M.D.

- Best Doctors in America
- Texas Superdoc
- Editor-in-Chief elect Pediatric Nephrology

Mouin Seikaly, M.D.

- Best Pediatricians in Dallas, *D Magazine*
- Best Doctors in America
- Guide to America’s Best Pediatrician Texas Super doctors
- Marquis Who is Who in America
- Presidential Who is Who
- Editorial Board, Pediatric Nephrology, Springer Verlag, Heidelberg Germany
- Editorial Board, World Journal of Transplantation Baishideng Publishing Group Co., Limited
- Associate Editor, Dialysis and Transplantation, Wiley Periodicals Inc
- Lead Guest Editor, International Journal of Pediatrics. Hindawi Publishing Cooperation

Neurology

The Division of Pediatric Neurology represents an academic practice with commitment to patient care, teaching and research. Formed in the 1980s as part of the Department of Neurology, the division maintained a successful academic and training program through the 1990s.

Dr. Susan Iannaccone became Division Chief in 2004, and the division joined the Department of Pediatrics in 2006. The faculty represents a mix of young and mature individuals, each of whom brings special talents and experience that promise to contribute to further growth and development of the division. Additional faculty are being recruited to join the team.

The national shortage of pediatric neurologists has been deemed a crisis by both the American Academy of Neurology and the Child Neurology Society. For this reason, a high priority for the division is to maintain a competitive Pediatric Neurology (PN) Training Program that will help supply high-quality faculty for many years to come. PN residents complete two years of pediatric residency before entering the program. The PN training is three years in duration and includes one full year of Adult Neurology. Beginning in 2009, the Department of Pediatrics offered medical students an opportunity for five years of training so that they can complete both their Pediatric and PN training at UT Southwestern. There are nine PN residents, three per year. Each sees his/her own patients in their weekly PN Continuity Clinic (CC); there are two CCs per week, each staffed by two faculty. In 2009 the PN Training Program, under the direction of Dr. Rana Said, achieved full accreditation from the ABPN for five years, a rare and excellent tribute to the hard work of all involved in the program.

An integrated six-year program is available for training in Pediatric Neurodevelopment (PND). One candidate is accepted every other year for this program. Fellowship training for PN sub-specialties is available in the division for epilepsy and neuromuscular medicine. This training is available for one year after completion of the PN residency but in some cases may be extended for two years in order to include a year of research. Each resident completes a research project and presents at one or more national meetings during their 3 year training.

Each year, the division, in collaboration with the Department of Neurology, Children's and the Muscular Dystrophy Association, presents the Carrell-Krusen Neuromuscular Symposium. Dr. Iannaccone is the Program Director for this meeting and most residents and fellows from the division and from the Department of Neurology participate by presenting at the symposium.

The division is committed to providing high-quality care in an appropriate timeframe and to utilizing resources efficiently. Thus, referrals to the PN Clinic are reviewed weekly to determine the appropriateness of the referral and to ensure that the neurologist receives supporting records and documentation. Attending neurologists are available 24/7 to answer any questions regarding referrals and to provide guidance to general practitioners and pediatricians.

Faculty

Susan T. Iannaccone, M.D., Professor, is the Jimmy Elizabeth Westcott Distinguished Chair in Pediatric Neurology and Director of the Pediatric Neurology program at UT Southwestern. Dr. Iannaccone's clinical interests are focused on neuromuscular medicine and neurorehabilitation. Her research includes clinical trials in Duchenne muscular dystrophy (DMD) and spinal muscular atrophy. She was Principal Investigator for American Spinal Muscular Atrophy Randomized Trials (AmSMART), 2000 to 2008, with funding from the National Institutes of Health (NIH). Current projects include a Phase II clinical trial of PTC124 (ataluren) in DMD and establishment of a registry for heredity neuropathy. Dr. Iannaccone received her medical degree from State University of New York Health Science Center, Syracuse, in 1969. She performed her residency training in pediatrics at the State University of New York Upstate Medical University Hospital, Syracuse, from 1969 to 1971 and at St. Louis Children's Hospital, Washington University, from 1971 to 1972. She was a resident in the neurology department of Strong Memorial Hospital, University of Rochester, New York, from 1972 to 1975.



Susan T. Iannaccone, M.D.
Director, Pediatric Rheumatology



Jose Luis Aceves, M.D.

Assistant Professor, Pediatrics and Neurology

Clinical expertise: General neurology

Education: University Nacional Autonoma de Mexico, Mexico, M.D., 1985

Post-doctoral training: Hospital General de Mexico, Mexico City, Intern, 1985; Hospital de la Nutrición, Mexico City, Fellow, 1986-1988; Texas Tech University, El Paso, Resident, 1991-1993; Cleveland Clinic Foundation, OH, Resident, Pediatrics, 1993-1994; Fellow, Child Neurology, 1994-1995 and 1998-2000



Susan T. Arnold, M.D.

Associate Professor, Pediatrics and Neurology

Clinical expertise: EEG/neurophysiology, epilepsy, surgical management of epilepsy

Research expertise: Antiepileptic drug treatment in children, Landau-Kleffner syndrome

Education: Wesleyan University, Middletown, CT, B.A., 1984; Cornell University Medical College, New York, NY, M.D., 1988

Post-doctoral training: Yale-New Haven Hospital, New Haven, CT, Resident, Pediatrics, 1988-1991; Resident, Neurology, 1991-1992; St. Louis Children's Hospital, MO, Resident, Pediatric Neurology, 1992-1994; Washington University School of Medicine, St. Louis, MO, Fellow, Pediatric Epilepsy/Neurophysiology, 1994-1996



Michael M. Dowling, M.D., Ph.D., M.S.C.S., F.A.H.A.

Assistant Professor, Pediatrics and Neurology

Clinical expertise: Stroke in children, cerebrovascular disease in children, neurologic complications of sickle cell disease

Research expertise: Neurologic injury in children with acute anemia, alternative etiologies for stroke in sickle cell disease, pediatric stroke, Sturge-Weber syndrome

Education: Harvard University, Cambridge, MA, A.B., 1985; Columbia University, New York, NY, Ph.D., 1994; Columbia University College of Physicians and Surgeons, New York, NY, M.D., 1995; UT Southwestern, M.S.C.S., 2009

Post-doctoral training: UT Southwestern/Children's, Resident, Pediatrics, 1995-1997; UT Southwestern/Children's, Resident, Pediatric Neurology, 1997-2000



Patricia Evans, M.D.

Associate Professor, Pediatrics and Neurology

Clinical expertise: Medical ethics, neurobehavior, neurodevelopmental disorders

Research expertise: Neurodevelopmental disorders

Education: Texas Tech University, Lubbock, B.A., 1978; Texas Tech University Health Sciences Center, Lubbock, M.D., 1983

Post-doctoral training: Lubbock General Hospital, Texas Tech University School of Medicine, Residency, Pediatrics, 1983-1986; UT Southwestern, Resident, Adult and Pediatric Neurology, 1992-1995; Johns Hopkins School of Medicine, Kennedy Krieger Institute, Baltimore, MD, Cognitive Development, 1995-1996



Sailaja Golla, M.D.

Assistant Professor, Pediatrics and Neurology

Clinical expertise: Autism, traumatic brain injury, ADHD, cognitive delay, developmental delay

Research expertise: Mitochondrial encephalomyopathy, lactic acidosis and stroke-like episodes, dystrophinopathy in young girls, autism and learning disabilities

Education: Vijayanagar Institute of Medical Sciences, Bellary, India, M.B.B.S., 2000

Post-doctoral training: Brooklyn Hospital Center, NY, Intern, Pediatrics, 2002-2003; University of Buffalo, NY, Resident, Pediatrics, 2003-2004; UT Southwestern, Fellow Pediatric Neurology, 2006-2008; Fellow, Neurodevelopmental Disabilities, 2007-2010

Muna Q. Khan, M.D.

Assistant Professor, Pediatrics and Neurology

Clinical expertise: EEG/neurophysiology, epilepsy-intractable, genetic epilepsy syndromes

Research expertise: Epilepsy-intractable

Education: Aga Khan University Medical College, Karachi, Pakistan, M.D., 1997

Post-doctoral training: State University of New York Upstate Medical Center, Syracuse, Intern, Pediatrics, 2002-2003; UT Southwestern, Resident, Child Neurology, 2003-2005; UT Southwestern/Children's, Resident, Pediatrics, 2005-2007; UT Southwestern, Resident, Child Neurology, 2007-2008; Fellow, Clinical Neurophysiology, 2008-2009

**Saadat A. Khan, M.D.**

Assistant Professor, Pediatrics and Neurology

Clinical expertise: EEG/neurophysiology, epilepsy-intractable, genetic epilepsy syndromes

Research expertise: Antiepileptic drug treatment in children

Education: Sind Medical College, University of Karachi, Karachi, Pakistan, M.D., 1994

Post-doctoral training: UT Southwestern/Children's, Resident, Child Neurology, 2000-2002; University of Tennessee School of Medicine, Knoxville, Resident, Pediatrics, 2002-2004; UT Southwestern/Children's, Resident, Child Neurology, 2004-2005; UT Southwestern, Fellow, Clinical Neurophysiology, 2005-2006

**Fares Kokash, M.D.**

Assistant Professor, Pediatrics and Neurology

Clinical expertise: Headaches, epilepsy, neurodegenerative disease

Research expertise: Drug clinical research

Education: Damascus University, School of Medicine, Syria, M.D., 1988

Post-doctoral training: Damascus University Children's Hospital, Syria, Resident, Pediatrics, 1988-1991; UT Southwestern, Fellow, Child Neurology, 1999-2000; Texas Tech University, El Paso, Resident, Pediatrics, 2000-2002; UT Southwestern, Fellow, Child Neurology, 2002-2003 and 2007

**Juan M. Pascual, M.D., Ph.D.**

Assistant Professor, Neurology, Physiology and Pediatrics

Clinical expertise: Rare and complex diseases, mitochondrial diseases, neurogenetic disorders, neurometabolic diseases

Research expertise: Brain metabolism, functional-brain imaging, neural excitability: synaptic transmission

Education: University de Granada, Granada, Spain, M.D., 1990; Baylor College of Medicine, Houston, TX, Ph.D., 1995

Post-doctoral training: Washington University School of Medicine, St. Louis Children's Hospital, Resident, Pediatrics, 1998-1999; Columbia University Medical Center, The Neurological Institute of New York, NY, Resident, Neurology, 1999-2000; Resident, Pediatric Neurology, 2000-2002; Columbia University College of Physicians and Surgeons, Center for Molecular Recognition, New York, NY, Fellow, Postdoctoral Research, 1995-1998

**Rana R. Said, M.D.**

Assistant Professor, Pediatrics and Neurology

Clinical expertise: Epilepsy-intractable, ketogenic diet

Research expertise: Treatment of refractory epilepsy, ketogenic diet and medical education

Education: University of Jordan, Amman, M.D., 1995

Post-doctoral training: The Specialty Hospital, Amman, Jordan, Rotating Intern, 1995-1996; New England Medical Center, Boston, MA, Resident, Pediatrics, 1996-1999; Resident, Child Neurology, 1999-2002; Children's Hospital Boston, MA, Fellow, Epilepsy, 2002-2004





Deepa Sirsi, M.D.

Assistant Professor, Pediatrics and Neurology

Clinical expertise: EEG, epilepsy

Research expertise: Antiepileptic drug treatment in children

Education: Bangalore Medical College, India, M.D., 1998

Post-doctoral training: Victoria & Bowring Lady Curzon Hospitals, Bangalore, India, Rotating Intern, 1997-1998; Christian Medical College, Vellore, India, Pediatric Registrar, 1999-2000; Children's Hospital of New Jersey at Newark Beth Israel Medical Center, Resident, Pediatrics, 2002-2004; Cornell University/New York Presbyterian Hospital, NY, Fellow, Child Neurology, 2004-2007; Albert Einstein College of Medicine/Montefiore Medical Center, Bronx, NY, Fellow, Clinical Neurophysiology, 2007-2008



William E. Zinser, M.D.

Associate Professor, Pediatrics and Neurology

Clinical expertise: Medical ethics, neonatal neurology, spasticity, neurodevelopment, and cerebral palsy

Research: Regional and general anesthesia study

Education: Instituto de Ciencias, A.C., Guadalajara, Mexico, B.S., 1975; University Autonoma de Guadalajara, Mexico, M.D., 1979

Post-doctoral training: Hospital Sta. Maria Chapalita, Universidad Autonoma de Guadalajara, Guadalajara, Mexico, Junior Rotating Internship, 1979-1980; Hospital Angel Leano (Servicio Social), Universidad Autonoma de Guadalajara, Guadalajara, Mexico, Senior Rotating Internship, 1980-1981; Oklahoma University Tulsa Medical College, Residency, Pediatrics, 1982-1985; Baylor College of Medicine, Houston, TX, Fellow, Neurology, 1985-1988

Residents, Fellows, Volunteer Faculty and Clinical/Research Staff

Residents

3rd Year

Mazen Almidani, M.D.

Diana Castro, M.D.

Cherie Herren, M.D. (Chief Resident)

- 2010 Scholarship Recipient, American Epilepsy Society Annual Meeting, San Antonio, TX, December 2010

2nd Year

Allen DeSena, M.D.

Saima Kayani, M.D.

Lina Shah, M.D.

1st Year

Asra Akbar, M.D.

Jorge Munoz, M.D.

Fellows

Completed 2010

Cristian Ionita, M.D., Neuromuscular Medicine

Sailaja Golla, M.D., Neurodevelopmental Disabilities

Naseeruddin Khan, M.D., Clinical Neurophysiology

1st Year

Adrian Lacy, M.D., Clinical Neurophysiology

Clinical and Research Staff

Clinical Nurses

Amanda Brill, RN
Crystal Carpio, RN
Keely Dagley, RN
Christine Griffith, RN
Jennifer Hogg, RN

Chloe Miller, RN
Jackie McAfee, RN
Stephanie Montalvo, RN
Jennifer Murdock, RN
Jessica Rivera, RN

Pediatric Nurse Practitioners/Physician Assistants

Juanita Dale, Ph.D., RN, CPNP-PC
Heather Gilbreath, M.P.A.S., PA-C
Melanie Gleich, FNP

Evelyn Hildebrandt, RN, M.S., APN, PNP-BC
Diana Mendoza, PA
Sue Polachek, RN, PNP

Coordinator Psychometrician

Mary Ann Morris, Ph.D.

Research Coordinators

Mariam Andersen, M.A., CCRP

Medrith Greene, RN, B.S.N.

Academic Support

Sandy Pacholick, Administrative Associate
Lisa Berry, Sr. Administrative Assistant

Alicia Ponce, Sr. Administrative Assistant
Kellie Shaw, C-TAGME, Education Assistant

Clinical and Support Staff

Elizabeth Chapman, RRT, MPH, Program Administrator
Eric Dominguez, Practice Manager - Epilepsy
Elia Esquivel, RN, B.S.N., Neuromuscular Case Manager
Mary Susan Spears, RD, CSP, LD, Dietitian
(Neuromuscular & Ketogenic Diets)
Stacy Roush, Social Worker (Epilepsy)
Crystal DeLuna, Patient Access Representative
Patty Gonzales, Sr. Patient Access Representative
Christina Gonzalez, Scheduler
Jacquie Haney, Administrative Assistant
Linda Hernandez, Language Access Services
Temika Hopkins, Medical Assistant
Karen Horn, Sr. Patient Access Representative
Liza Lopez, Administrative Assistant - Epilepsy
Sandra Lopez, Medical Assistant
Sandra Lovo, Medical Assistant
Michell Pernell, Sr. Patient Access Representative
Amelia Robledo, New Patient Scheduler
Kari Wood, Medical Assistant
Ammy Yanez, Patient Access Representative



Research Activities

Division faculty conduct a variety of neurologic bench/basic research and clinical studies, including clinical trials. Current studies are focused in five areas: metabolic disorders of the nervous system, neuromuscular disease clinical trials, anti-epileptic drug trials, clinical trials in pediatric stroke and clinical studies in the autism spectrum. Research funding from a variety of sources, including the NIH, exceeded \$400,000 in 2010.

Faculty present results of their work at many national and international meetings and published 13 articles in peer-reviewed journals in 2010. Dr. Iannaccone is the Site Principal Investigator for a Phase II Efficacy and Safety Study of PTC124 in subjects with nonsense-mutation-mediated Duchenne and Becker muscular dystrophy. DMD is a disabling and life-threatening X-linked genetic disorder affecting young boys. Becker muscular dystrophy (BMD) is a phenotypically milder form of the dystrophic muscle disease. Boys with DMD/BMD develop progressive proximal muscle weakness that leads to deterioration of ambulation, wheelchair dependency, and eventual respiratory and cardiac failure. There is no cure for DMD/ BMD. Dr. Iannaccone is the site director for the Charcot-Marie Tooth (CMT) Center of Excellence grant for the Charcot-Marie Disease (hereditary progressive peripheral neuropathies).

Dr. Michael Dowling serves as Site Co-investigator for a study called “Validation of the NIH Stroke Scale in Children.” Stroke affects approximately 3.3 per 100,000 children under age 18 every year in Europe and North America, and ranks among the top 10 causes of death in childhood. Long-term motor and cognitive deficits that interfere with activities of daily life and academic attainment affect 40 to 60 percent of survivors of childhood stroke. The public health significance of these problems is magnified when considering that children live with the sequelae of stroke for the duration of their childhood and throughout their adult lives. Despite the magnitude of the public health impact of childhood stroke, there are no proven or widely accepted strategies for acute management or prevention of childhood stroke, other than blood transfusion for children with sickle cell anemia. Uncertainty regarding treatment of children with stroke derives from the lack of clinical trials of stroke interventions in children, as well as the limited data available from existing cohort studies regarding the factors that determine outcome.

Progress in defining factors that determine outcome has been hindered by the lack of a validated clinical stroke scale for children. The NIH Stroke Scale (NIHSS) is a quantitative measure of stroke-related neurologic deficit that has proven intra- and interrater reliability, and has predictive validity for stroke outcome. Consequently, the NIHSS is employed in nearly every current acute stroke study in the United States as a measure of the initial and final neurological deficit. However, children were expressly excluded from prior validation studies of the NIHSS. This study will address these gaps by evaluating a pediatric modification of the NIHSS that will describe and quantify the severity of acute neurologic deficit as well as test its validity and reliability. This study began enrolling patients in early 2006, and UT Southwestern leads in enrollment in this international multicenter study.

Dr. Susan Arnold serves as Principal Investigator of a study to evaluate the efficacy and safety of Perampnel given as adjunctive therapy in patients with refractory partial seizures as well as serving as PI for the study of Clobazam in patients with Lennox-Gastaut Syndrome. Drs. Saadat Khan and Rana Said serve as Co-Investigators on the two studies along with Dr. Arnold.

Dr. Rana Said serves as Principal Investigator of a retrospective study of the efficacy and safety of high dose Levetiracetam in a pediatric population with a variety of seizure disorders.

Dr. Juan M. Pascual participated in nine funded research studies:

- A major investigator-initiated grant from the National Institutes of Health titled “Modulation of brain activity by control of the inspired air” (as Co-Investigator) studying human cerebral oxygen consumption and electrical (EEG) activity changes under CO₂, a component of breathing air that has vasodilatory properties and mediates the action of some drugs used to treat epilepsy.
- A contract from the National Institutes of Health, Office of Rare Disorders titled “Glucose transporter type 1 deficiency syndrome (GD) collaboration, education and test translation (CETT) program at UT Southwestern Medical Center and Childrens Medical Center” (as Principal Investigator). This program has positioned our group as the sole provider of comprehensive clinical and genetic diagnosis and care for this genetic disorder that causes epilepsy and developmental delay.
- A grant from the National Institutes of Health sponsored by the American Reinvestment and Recovery Act titled “Genotype and metabolic phenotype in glioblastoma” (as Co-Investigator). This challenge grant represents the expansion of novel MRI methodology and the additional development of MRI methods for the study of the human brain to search for metabolic alterations in cancer that can become predictors of disease severity and help identify therapeutic targets.
- A second American Reinvestment and Recovery Act grant from the National Institutes of Health titled “Developing a North American mitochondrial diseases consortium (NAMDC)” (as Co-Investigator and Site Principal Investigator). This 11-institution infrastructural grant constitutes the first initiative worldwide to

recruit and characterize a broad range of mitochondrial disease patients to facilitate clinical trials across the U.S. and Canada aimed to treat these frequent but still incurable disorders.

- A National Institutes of Health / UT Southwestern Medical Center pilot grant titled “Diagnostic signatures of metabolic diseases by high-field NMR spectroscopy” (as Pilot Award Recipient PI and Co-Investigator of the institutional award). This project helped develop skeletal (leg) muscle MRI spectroscopy, a non-invasive methodology that is available at most institutions that perform MRIs. These studies will help us understand mechanisms of energy failure in muscle and brain disorders, improve the diagnosis of several metabolic disorders and identify potential biomarkers (disease indicators) for clinical trials.
- A National Institutes of Health training grant titled “Epilepsy in primary cerebral energy failure” (as Sponsor to a Ph.D. postdoctoral fellow trainee). The goal of the proposed research plan is to understand, as quantitatively as possible, the dependence of brain excitability on brain energy metabolism by studying both the normal and a prototypic disease state.
- A Billingsley Fund/ Dallas Women’s Foundation grant devoted to study “Childhood brain metabolism: function relationships” (as Principal Investigator). This gift was established to support research on childhood epilepsies that arise from cerebral glucose (fuel) use deficits.
- An International European Union Postdoctoral Fellowship titled “Studies of Brain Metabolism in Epilepsy” (as Mentor to Postdoctoral Fellowship Recipient). This competitive fellowship was awarded based on the merits of the applicant, mentor and research project proposal to support salary, fringe and small expenses of a current postdoctoral fellow who will spend two years with us in the U.S.
- A National Institutes of Health grant titled “Quantitative Assessment of Spinal Cord Blood Volume with MRI” (as Co-Investigator) which will develop a new approach to study blood supply in the spinal cord.

Clinical Activities

The expertise of the faculty is focused on several sub-specialties: comprehensive epilepsy management including seizure surgery; neuromuscular medicine clinics including myasthenia gravis, muscular dystrophy, Charcot Marie Tooth and transitional care for adolescent muscle; cardiovascular disease; neonatal intensive care follow-up; Zero-2-3 neurodevelopment clinic; rare disorders clinic; and neurodevelopmental disabilities clinics including autism, neurocognitive delay, attention-deficit hyperactivity disorder/learning disabilities (ADHD/LD) and traumatic brain injury.

Neurodevelopmental Disabilities Program

As the Neurodevelopmental Disabilities Program (NDD) concludes its third year at UT Southwestern, the program continues to experience significant growth specifically with regard to clinical opportunities, research, education, and community outreach. NDD clinics are multi-disciplinary in structure and are specifically created to serve children with autism, developmental delay, traumatic brain injuries and ADHD/LD issues. The program will expand to provide full-time NDD services to both the Dallas and Legacy campuses beginning in July 2010. Plans are now underway to build an NDD-dedicated space at the Legacy campus to open in 2011.

From an education standpoint, in the year since it was created and ACGME accredited, the NDD program has trained its first fellow, Dr. Sailaja Golla. Dr. Golla finished her child neurology training at UT Southwestern, where she also served as chief resident, and recently published in *Journal of Clinical Neuromuscular Disease*. She brings a wealth of experience as well as solid research and clinical skills, and, started as assistant professor of neurology and pediatrics in July 2010.



The NDD team continues to work diligently to serve the North Texas community at large. The team attends special needs children on site at the Dallas-based Autistic Treatment Center on a quarterly basis, and works closely with Dr. Carolyn Garver and her outstanding team of specialists. Drs. Evans and Morris both continue to speak throughout the metroplex in various educational settings, including the Dallas ISD, the Dallas Theological Seminary, and other specialty programs regarding children with special needs.

Clinic Directors

Dallas Campus:

Adolescent Clinic
 Attention and Learning Disorders
 Autistic Spectrum Disorders
 Brachial Plexus Clinic

Charcot-Marie Tooth Clinic (Center of Excellence)

Cognitive Development Clinic
 Comprehensive Epilepsy Clinics
 Comprehensive Pediatric Stroke Clinic
 Epilepsy Surgery Clinic

Headache Clinic

Ketogenic Diet Clinic
 Muscle Clinic
 Myasthenia Gravis Clinic
 Pediatric Neurology Continuity Clinic
 Rare Disorders Clinic
 Rett Syndrome/Angelman Syndrome Clinic
 Sickle Cell Neurology Clinic
 Traumatic Brain Injury
 Zero-2-3 Neurodevelopment Clinic

Legacy Campus:

Attention and Learning Disorder
 Autistic Spectrum Disorder
 Epilepsy

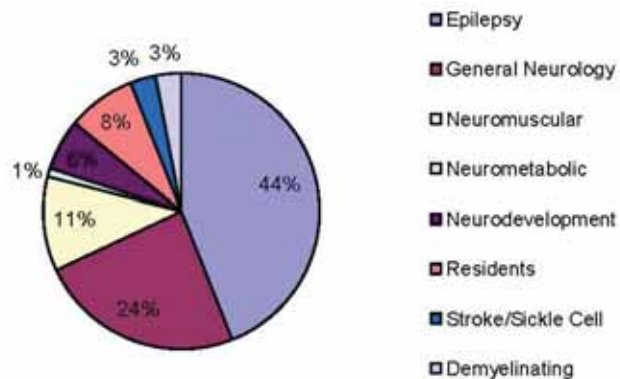
Susan Iannaccone, M.D.
 Patricia Evans, M.D.
 Patricia Evans, M.D.
 William Zinser, M.D.
 Jonathan Cheng, M.D.
 Susan Iannaccone, M.D.
 Patricia Evans, M.D.
 Susan Arnold, M.D.
 Michael Dowling, M.D., P.D., M.S.C.S.
 Susan Arnold, M.D.
 Rana Said, M.D.
 Jose Aceves, M.D.
 Rana Said, M.D.
 Susan Iannaccone, M.D.
 Susan Iannaccone, M.D.
 Rana Said, M.D.
 Juan Pascual, M.D., Ph.D.
 Susasn Arnold, M.D.
 Mchael Dowling, M.D., Ph.D., M.S.C.S.
 Patricia Evans, M.D.
 William Zinser

Patricia Evans, M.D.
 Patricia Evans, M.D.
 Susan Arnold, M.D.
 Saadat Khan, M.D.
 Deepa Sirsi, M.D.

The inpatient Neurology service includes two teams: the Epilepsy Monitoring Unit and the C7/Consult Team. Both provide 24/7 coverage for patient units and in the pediatric intensive care unit (PICU), the neonatal intensive care unit (NICU) and the emergency department. The Epilepsy Monitoring unit provides six beds and performed more than 500 procedures; the C10/Consult Team provides eight beds. Both teams include an attending and support staff; the C7/Consult Team includes at least one PN resident and several third-year medical students on their required Neurology rotation plus rotating residents from Adult Neurology, Psychiatry or other specialties.

Patient Visits

Attending Providers	7,732
PAs / PNP's	1,898
Total Visits	9,630



Presentations/Teaching Activities

Dr. Rana Said, Program Director for the PN residency and clerkship, with the assistance of Program Coordinator Kellie Shaw, leads the teaching program that educates residents and medical students for inpatient and outpatient rotations. There are two adult neurology residents for three four-week blocks, seven Children's fellows for 10 weeks each in the outpatient clinic, seven UT Southwestern Internal Medicine residents for two months each, one to three adult and pediatric neurophysiology/epilepsy fellows and one to three neuromuscular medicine fellows for one year each. More than 200 neurology clerkship students rotate for two-week intervals on either inpatient or outpatient rotations each year.

Faculty participate in up to eight neurology teaching conferences per week as well as a series of pediatric teaching conferences on neurologic topics.

Susan T. Iannaccone, M.D.

- "Discussion of Outcome Measures in Children and Establishing their Reliability/validity," Teleconference for North American Charcot-Marie-Tooth Disease Network, Wayne State University, Detroit, MI, February 2010
- "Consensus Building for Rare Disorders (with Robert Bash)," Pediatric Grand Rounds (Ethics), UT Southwestern, September 2010
- "Myasthenia Gravis: Immunology and Pathology," Rare Neuroimmunologic Disorders Symposium, Westin Galleria, Dallas, TX, September 2010

Michael M. Dowling, M.D., Ph.D., M.S.C.S.

- "Stroke in Children", DFW Stroke Coordinator Meeting, Dallas, TX, September 2010

Sailaja Golla, M.D.

- "Current advances in Diagnosis and Management of Autism," Pediatric Neurosurgery Grand Rounds, UT Southwestern, September 2010

Juan M. Pascual, M.D., Ph.D.

- "The Brain Within the Reasons of Limit Alone," Honor Lecture, Universidad de Málaga, Málaga, Spain, June 2010
- "Clinical Studies of Glucose Transporter Type I Deficiency Syndrome," 2nd Symposium on Glucose Transporter Deficiency, Louisville, Kentucky July 2010

Rana R. Said, M.D.

- "The Idiopathic Childhood Epilepsies," Invited Speaker, Pediatric Neurology Symposium, Cook Children's Hospital, Fort Worth, TX, August 2010

Major Administrative or Leadership Responsibilities

Susan T. Iannaccone, M.D.

- Safety Officer, NIH NINDS Ad hoc review, Data and Safety Monitoring Board for 5-U54-AR-050733, Phase I gene transfer clinical trial for alpha-SG-deficient limb girdle muscular dystrophy (Type 2D) using AAV1
- Director of the Carrell-Krusen Symposium
- Member, Expert Panel to develop comprehensive care for DMD, National Center on Birth Defects and Developmental Disabilities, Centers for Disease Control
- Ad hoc reviewer, Medical Advisory Committee, Muscular Dystrophy Association of America
- Member, Executive Council, American Neurologic Association
- Physician-in-charge, Annual MDA Summer Camp, Camp John Marc, Cleburne, TX
- Member, Editorial Board, Journal of Pediatric Rehabilitation Medicine, Journal of Clinical Neuromuscular Disease, Neuromuscular Disorders

Susan T. Arnold, M.D.

- Director, Epilepsy Program and Neurophysiology Lab, Children's
- Chair, Professional Advisory Board for the Epilepsy Foundation of Texas
- Member, American Epilepsy Society Committee for Epilepsy Monitoring Unit Safety

Michael M. Dowling, M.D., Ph.D., M.S.C.S.

- Co-Director, Pediatric Stroke Program, Children's
- Medical Director, Pediatric Stroke Clinic, Children's
- Medical Director, Sickle Cell Neurology Clinic, Children's
- Topic Chair, Ethics, Pain and Palliative Care for American Academy of Neurology Annual Meeting
- Child Neurology Topic Work Group, American Academy of Neurology
- Moderator/Reviewer, ANA/ASA International Stroke Conference, Pediatric Stroke Section
- Implemented small group instruction with MS3 and MS4 medical students in the Pediatric Neurology rotation to review the social and emotional impact of a neurologically-impaired child in the family. All students read the play, Joe Egg, by Peter Nichols, and submitted an essay describing their response. Approximately 250 medical students have been involved to date, UT Southwestern 2007-present

Patricia Evans, M.D.

- Member, Neurodevelopmental Disabilities Task Force, Child Neurology Society
- Chair, Section on Ethics, American Academy of Neurology
- Director, Neurodevelopmental Disabilities Residency
- Medical Director, Traumatic Brain Injury Clinic
- Medical Director, Autism spectrum Disorders Clinic
- Medical Director, Cognitive Delay Disorders Clinic
- Medical Director, Fragile X Syndrome Clinic
- Medical Director, Phelan-McDermid / 22q13 Deletion Syndrome Clinic

Juan M. Pascual, M.D., Ph.D.

- Member, Scientific Review Board of the Alzheimer's Association
- Associate Editor, Neuroscience Letters
- Reviewer, Genetics Home Reference National Center on Birth Defects and Developmental Disabilities, Centers for Disease Control and Prevention
- Grant proposal reviewer: Calipio Foundation, Italy, 2010

Rana R. Said, M.D.

- Director, Child Neurology Residency Program
- Site Director, UT Southwestern Pediatric Neurology Medical Student Clerkship
- Director, Ketogenic Diet Program
- Associate Director, Children's Medical Center
- Member, Graduate Education Subcommittee, American Academy of Neurology
- Member, University of Texas Southwestern Medical Center Graduate Medical Education Committee
- Member, Citation Subcommittee, University of Texas Southwestern Medical Center Graduate Medical Education Committee
- Member, Pediatric Content Committee, American Epilepsy Society (AES)
- Member, Clinical Skills Examination Workgroup, American Academy of Neurology

Awards and Honors**Susan T. Iannaccone, M.D.**

- Special Award from graduating Pediatric Neurology residents for mentoring

Jose Aceves, M.D.

- Excellence in Education Teaching Award, Core Clerkship, Class of 2010 for MS3
- Teaching Award, Pediatric Neurology Residents

Michael M. Dowling, M.D., Ph.D., M.S.C.S.

- Clinical Research Scholar, Department of Clinical Sciences, UT Southwestern, 2006-2009
- Doris Duke Innovations in Clinical Research Award
- Excellence in Education Teaching Award, Core Clerkship, Class of 2010 for MS3



Pulmonary & Vascular Biology

The Division of Pulmonary and Vascular Biology provides a programmatic research home for pediatric faculty and trainees pursuing basic research in Pulmonary Biology and Vascular Biology. It is an exclusively research-driven division in the Department of Pediatrics, thereby representing a novel concept that amplifies the efforts and effectiveness of pediatric faculty and trainees alike. In addition, Pulmonary and Vascular Biology has provided a valuable resource for campus-wide investigative endeavors. This is represented by active collaborations between Pulmonary and Vascular Biology faculty and other UT Southwestern faculty in the Departments of Internal Medicine, Cell Biology, Physiology, Pharmacology and Biophysics, and by the participation of Pulmonary and Vascular Biology faculty in numerous training and center grants across the campus. Recently a shared effort by Pulmonary and Vascular Biology and the Division of Pulmonary and Critical Care Medicine (PCCM) in the Department of Internal Medicine resulted in procurement of a coveted T32 training grant from the National Institutes of Health to support postdoctoral research training at UT Southwestern in Lung Biology and Disease. Pulmonary and Vascular Biology is one of but a handful of research divisions in Pediatric departments nationwide.

The division's mission is to expand our basic understanding of lung and vascular diseases, striving to gain new knowledge that will ultimately lead to new diagnostic, prophylactic and therapeutic strategies. Within the context of lung and vascular diseases, the division focuses on lung and vascular development and responses to inflammation and injury.

The faculty members in Pulmonary and Vascular Biology are physician-scientists from the Pediatric divisions of Neonatal-Perinatal Medicine (Drs. Rashmin Savani and Phil Shaul), Pediatric Critical Care Medicine (Drs. Margaret Schwarz and Julio Pérez Fontán), Pediatric Infectious Disease (Dr. Michelle Gill), Pediatric Respiratory Medicine (Drs. Carolyn Cannon and Olatunji Williams) and Pediatric Endocrinology (Dr. Ellen Grishman); and Drs. Chieko Mineo and Michi Umetani, who are basic scientists working in partnership with the physician-scientists.

Faculty

Philip W. Shaul, M.D., Professor, is Director of Pulmonary and Vascular Biology and holds the Lowe Foundation Professorship in Pediatric Critical Care Research at UT Southwestern. He specializes in neonatal-perinatal medicine, and his research interests are focused on signaling molecules in endothelial cell caveolae/lipid rafts that influence vascular health and disease. Dr. Shaul received his B.A. from Dartmouth College, Hanover, New Hampshire, in 1977 and his medical degree from the University of Cincinnati, Ohio, in 1981. He received residency training in pediatrics at the Children's Medical Center of Cincinnati, University of Cincinnati, from 1981 to 1984, and was a fellow in neonatal-perinatal medicine at the Women and Infants Hospital of Rhode Island, Brown University, Providence, RI from 1984 to 1986. He joined the faculty of UT Southwestern in 1986. Dr. Shaul was elected to the American Society for Clinical Investigation in 1999, and he was President of the Society for Pediatric Research in 2005-2006.



Philip Shaul, M.D.
Director, Pediatric Pulmonary & Vascular
Biology

ONE OF BUT A HANDFUL

of pediatric research divisions nationwide.



Rashmin C. Savani, M.B.Ch.B.

Professor and Director, Division of Neonatal-Perinatal Medicine
Associate Director, Pulmonary and Vascular Biology
William Buchanan Chair in Pediatrics

Clinical/research expertise: Neonatal-perinatal medicine, bronchopulmonary dysplasia, chronic lung disease, inflammation, lung injury, surfactant, role of hyaluronan in tissue injury

Education: King Edward VII School, Sheffield, England, U.K., A-Levels, 1977; University of Sheffield Medical School, England, U.K., M.B.Ch.B., 1982

Post-doctoral training: Duke University Medical Center, Durham, NC, Resident, Pediatrics, 1984-1987; Cincinnati Children's Medical Center, OH, Fellow, Neonatology, 1987-1989; Fellow, Pulmonary Biology, 1989-1991



Carolyn L. Cannon, M.D., Ph.D.

Assistant Professor, Pediatric Respiratory Medicine

Clinical expertise: Cystic Fibrosis, asthma, pediatric pulmonology

Research expertise: Pathogenesis of pulmonary infection in the lungs of patients with CF and the development of novel therapies to treat these infections

Education: Texas A&M University, College Station, B.S., cum laude, 1982; Worcester Polytechnic Institute, Worcester, MA, M.S., 1985; UT Houston, M.D., 1993; UT Graduate School of Biomedical Sciences, Houston, Ph.D., 1993

Post-doctoral training: Children's Hospital, Boston, MA, Intern and Resident, Pediatrics, 1993-1996; Fellow, Pulmonology, 1996-1999; Channing Laboratory, Harvard Medical School/Brigham & Women's Hospital, Boston, MA, Research Fellow, 1998-1999



Michelle A. Gill, Ph.D., M.D.

Assistant Professor, Pediatric Infectious Disease

Clinical/research expertise: General infectious diseases, immunity, RSV

Education: Louisiana State University, Baton Rouge, B.S., summa cum laude, 1988; Louisiana State University Medical Center, Shreveport, Ph.D., 1993; Louisiana State University Medical Center, M.D., 1995

Post-doctoral training: University of Arkansas for Medical Sciences, Little Rock, Intern and Resident, Pediatrics, 1995-1998; Chief Resident, Pediatrics, 1998-1999; UT Southwestern, Fellow, Pediatric Infectious Diseases, 1999-2003



Ellen K. Grishman, M.D.

Assistant Professor

Clinical expertise: Pediatric endocrinology

Research expertise: Gene expression in leukocytes in Type 1 and Type 2 diabetes

Education: Washington University, St. Louis, MO, B.A., 1996; Creighton University School of Medicine, Omaha, NE, M.D., 2000; UT Southwestern, Clinical Research Scholar, Clinical Sciences, 2008-2011

Post-doctoral training: University Hospitals of Cleveland/Rainbow Babies and Children's Hospital, OH, Resident, Pediatrics, 2000-2003; UT Southwestern, Fellow, Pediatric Endocrinology, 2003-2006



Chieko Mineo, Ph.D.

Assistant Professor

Research expertise: Vascular biology and atherosclerosis

Education: University of Tokyo, Japan, B.S., 1982; M.S., 1984; Ph.D., 1992

Post-doctoral training: UT Southwestern, Post-doctoral Research Fellow, Cell Biology, 1994-1999

Julio Pérez Fontán, M.D.

Professor and Vice Chairman, Department of Pediatrics
 Interim Director, Division of Respiratory Medicine
 Joel B. Steinberg, M.D., Chair in Pediatrics

Clinical expertise: Pediatric cardiac critical care

Research expertise: Airway smooth muscle, autonomic nervous system, neurogenic inflammation

Education: Colegio Marista Santa Maria, Spain, B.S., 1971; University De Santiago De Compostela, Spain, M.D., 1977

Post-doctoral training: Universidad Autonoma de Barcelona, Resident, Pediatrics, 1978-1981; University of California San Francisco, Fellow, Pediatric Critical Care Medicine, 1981-1984; Cardiovascular Research Institute, University of California San Francisco, Research Fellow, 1982-1985



Margaret A. Schwarz, M.D.

Associate Professor, Pediatric Critical Care Medicine

Clinical expertise: Pediatric critical care

Research expertise: Pulmonary morphogenesis and vascularization, endothelial-monocyte activating polypeptide II, 5 1 integrin / FN / VEGFR interactions, pancreatic tumor growth

Education: University of Missouri, Kansas City, B.A., 1986; University of Missouri Six-year Medical School, Kansas City, M.D., 1987

Post-doctoral training: Children's Hospital, Columbus, OH, Intern and Resident, Pediatrics, 1987-1990; Children's Hospital of Pittsburgh, Fellow, Pediatric Critical Care, 1990-1993



Michihisa Umetani, Ph.D.

Assistant Professor, Pediatrics and Pharmacology

Research expertise: Oxysterols, nuclear receptor biology, vascular disease

Education: University of Tokyo, Japan, B.S., 1991; M.S., 1993; Ph.D., 2000

Post-doctoral training: University of Tokyo, Japan, Postdoctoral Research Fellow, 2001-2002; UT Southwestern, Post-doctoral Research Fellow, Pharmacology and Biochemistry, 2002-2007



Olatunji W. Williams, M.D.

Assistant Professor, Pediatric Respiratory Medicine

Clinical expertise: Respiratory diseases, pulmonary hypertension, lung mechanics

Research expertise: Lung development, lung injury

Education: UNT, B.A., 1994; UT Medical Branch at Galveston, M.D., 1999

Post-doctoral training: Oklahoma University Medical Center, The Children's Hospital, Norman, Resident, Pediatrics, 1999-2002; Chief Resident, Pediatrics, 2002-2003; Baylor College of Medicine, Texas Children's Hospital, Houston, Fellow, Pediatric Pulmonology, 2003-2006



Postdoctoral Fellows, Other Research Trainees and Research Staff

Fellows

Completed 2010

- Ashfar Resheidat, M.D. (PICU)
- Cristina Tarango, M.D. (Hematology-Oncology)
- Rodica Catrinel Marinescu, M.D. (Neonatal-Perinatal Medicine)
- Katherine Bennett, M.D. (Neonatal-Perinatal Medicine)
- James Reid, M.D. (PICU)
- Sarah Oltmann, M.D. (Surgery Resident)
- Christopher Todd, M.D. (PICU)

6th Year

Keiji Tanigaki, Ph.D.

5th Year

Qian Wu, Ph.D.

3rd Year

Maria Afandor, M.D. (Neonatal-Perinatal Med.)

Sonika Saddar, Ph.D.

Nathan Sundgren, M.D., Ph.D. (Neonatal-Perinatal Med.)

2nd Year

Jose Barrera, Ph.D.

Natalie Frost, M.D. (Neonatal-Perinatal Med.)

Wan-Ru Lee, Ph.D.

Anne Mahan, M.D. (PICU)

Elizabeth Persad, M.D. (PICU)

David Pyle (Graduate Student)

Parth Shah, Ph.D.

Victoria Ulrich (Grad. Student)

1st Year

Jenitha Jeyaraj, M.D. (Neonatal-Perinatal Med.)

Lane Lanier, M.D. (PICU)

Research Staff

Anupama Aditham, M.S., Research Associate
Mohamed Ahmed, B.S., Research Technician II
Rajiha Alsaadi, M.S., Senior Research Associate
Gagan Bajwa, M.S., Research Associate
Ken Chambliss, Ph.D., Senior Research Scientist
Naeun Cheong, Ph.D., Senior Research Scientist
Caroline Dong, Ph.D., Research Associate
Daniel Han, B.S., Research Assistant I
Kevin Han, B.A., Research Technician I
Susan Legan, Ph.D., Senior Research Associate
Jie Liao, Ph.D., Senior Research Associate
Jason Mitchell, Research Technician II
Janet Thornton, B.S., Senior Research Associate
Junko Umetani, B.S., Research Assistant II
Haiming Xu, Ph.D., Senior Research Associate
Ivan S. Yuhanna, M.S., Senior Research Associate



Research Activities

The research efforts of Pulmonary and Vascular Biology are focused on lung and vascular development and responses to inflammation and injury. Through these efforts, the division strives to more fully understand lung and vascular diseases with the end goal of developing new diagnostic, prophylactic and therapeutic approaches. The studies of lung biology are pursued primarily by the laboratories of Drs. Rashmin Savani, Margaret Schwarz, Olatunji Williams, Michelle Gill, Julio Pérez-Fontán, and Caroline Cannon. The studies of vascular biology are pursued primarily in the laboratories of Drs. Philip Shaul, Chieko Mineo and Michihisa Umetani.

Faculty Research Interests

Philip W. Shaul, M.D.

- Regulation of endothelial cell phenotype and vascular development, health and disease by estrogen
- Role of 27-hydroxycholesterol in modifying the impact of estrogen on vascular biology
- Regulation of endothelial cell phenotype and vascular development, health and disease by HDL
- Regulation of endothelial cell phenotype and vascular development, health and disease by CRP
- Role of nitric oxide synthases in developmental pulmonary biology and diseases of the developing lung
- Molecular basis of the antiphospholipid syndrome

Carolyn L. Cannon-McCullough, M.D., Ph.D.

- Pathogenesis of pulmonary infections in cystic fibrosis
- Novel therapies for pulmonary infections in cystic fibrosis

Michelle A. Gill, Ph.D., M.D.

- The host mucosal immune response to respiratory viral infections
- The role of dendritic cells in the pathogenesis of RSV infection

Ellen Grishman, M.D.

- Type 1 diabetes immunology

Chieko Mineo, Ph.D.

- The mechanisms by which high density lipoproteins modulate endothelial cell function
- The mechanisms by which C-reactive protein modulates endothelial cell function
- The role of eNOS antagonism in the antiphospholipid syndrome

Julio Pérez-Fontán, M.D.

- Neural contribution to lung injury
- Biology of neurokinins in the lung

Rashmin C. Savani, M.B.Ch.B.

- The role of HA and its receptors in the response to lung injury, using transgenic and knockout mice, in particular CD44 and RHAMM
- Investigation of the molecular signals arising from oxidative and nitrative stresses after injury that initiate the inflammatory cascade, including the effects of post-translational modification on inflammation and surfactant protein gene expression after lung injury
- Examination of the cellular and molecular signals regulating angiogenesis and alveolar formation
- Studying endothelial cell behavior in vitro and animal models of decreased alveolar septation (hypoxia and hormonal regulation of alveogenesis) to determine the regulation of this intricate process
- The regulation of signaling mechanisms mediated by HA and its receptors within lipid microdomains and caveolae that regulate macrophage, endothelial and vascular smooth-muscle cell migration

Margaret Schwarz, M.D.

- Vascular contribution to BPD
- Vascular mediation of alveolar differentiation
- Floxed EMAP II KO mice that can selectively KO EMAP II in different cell types
- Identify the mechanism of EMAP II's induced pulmonary fibrosis
- Map the promoter region and determine factors that regulate transcription
- Determine the mechanism by which Ephrin B2 induces pulmonary fibrosis
- Identify the intracellular region of Ephrin B2 that regulates fibronectin deposition that leads to fibrosis

Michihisa Umetani, Ph.D.

- Regulation of estrogen receptor function by cholesterol metabolites
- Role of oxysterols in atherosclerosis and metabolic diseases

Olatunji W. Williams, M.D.

- Pulmonary vascular disease, lung development, lung mechanics
- TGF-beta mediated regulation of pulmonary vascular development

Fellow Research Interests**Maria Afanador, M.D.**

- Role of Ephrin B2 on lung morphogenesis; Dr. Margaret Schwarz, Mentor

Jose Barrera, Ph.D.

- Impact of the first identified endogenous SERM, 27-hydroxycholesterol, on metabolic and vascular health; Drs. Philip Shaul and Michihisa Umetani, Mentors

Katherine Bennett, M.D.

- Role of Ephs and Ephrins in lung vascular and parenchymal development; Dr. Margaret Schwarz, Mentor

Natalie Frost, M.D.

- Role of estrogen receptor beta in lung development and bronchopulmonary dysplasia; Dr. Philip Shaul, Mentor

Anne Mahan, M.D.

- Role of $\alpha 5\beta 1$ integrin on epithelial cell; Dr. Margaret Schwarz, Mentor

Rodica Catrinel Marinescu, M.D.

- Hyaluronan (HA) receptor RHAMM and its role in VEGF-stimulated endothelial cell migration and angiogenesis; Dr. Rashmin Savani, Mentor

Sarah Oltmann, M.D.

- Role of nongenomic estrogen receptor action in breast cancer progression; Dr. Philip Shaul, Mentor

Elizabeth Persad, M.D.

- Role of $\alpha 5\beta 1$ integrin in lung fibrosis; Dr. Margaret Schwarz, Mentor

James Reid, M.D.

- Impact of CRP on angiogenesis; Dr. Philip Shaul, Mentor

Sonika Saddar, Ph.D.

- Structure-function characterization of SR-BI and PDZK1; Dr. Philip Shaul, Mentor

Parth Shah, Ph.D.

- Metabolic, toxicology and efficacy studies of the potential medicinal uses of silver-based therapeutics; Dr. Carolyn Cannon, Mentor

Nathan Sundgren, M.D., Ph.D.

- Role of Fc gamma RI and Src in CRP actions in the vasculature; Drs. Philip Shaul and Chieko Mineo, Mentors

Keiji Tanigaki, Ph.D.

- Molecular basis of CRP antagonism of insulin signaling, Drs. Philip Shaul and Chieko Mineo, Mentors

Cristina Tarango, M.D.

- Role of LDL receptor family members in the pathogenesis of the antiphospholipid syndrome; Drs. Philip Shaul and Chieko Mineo, Mentors

Christopher Todd, M.D.

- Endothelial-monocyte activating polypeptide II (EMAP II) role in mediating adhesion through $\alpha 5\beta 1/\alpha V\beta 3$ mechanisms; Dr. Margaret Schwarz, Mentor

Qian Wu, Ph.D.

- Molecular basis of protein-protein interactions between ER α and Ga and G β γ ; Dr. Philip Shaul, Mentor

Presentations/Teaching Activities

The primary teaching activities of the Pulmonary and Vascular Biology faculty occur at the laboratory bench. There they train residents, clinical pediatric subspecialty fellows, graduate students and Ph.D. post-doctoral fellows in pulmonary biology research and vascular biology research. Pulmonary and Vascular Biology faculty also perform didactic teaching in various settings and make presentations at national and international meetings.

Philip W. Shaul, M.D.

- “Manipulating Molecular Events in Endothelial Cell Caveolae to Prevent Cardiovascular Disease: Think Globally, Act Locally,” The Strauss Lecture, Vanderbilt Children’s Hospital, Nashville, TN, April 2010
- “Vascular Biology of the HDL Receptor SR-BI and its Adaptor Protein PDZK1,” Department of Medicine, Vanderbilt Children’s Hospital, Nashville, TN, April 2010
- “Non-nuclear Estrogen Receptors and a Novel Selective Estrogen Receptor Modulator,” Featured Topic Symposium, Experimental Biology Annual Meeting, Anaheim, CA, April 2010.
- “Extranuclear Actions of Estrogen in the Vasculature,” Basic Science Symposium, Endocrine Society 92nd Annual Meeting, San Diego, CA, June 2010
- “Basic Biology of Hormone Replacement Therapy (HRT) with Estrogen to Prevent Cardiovascular Disease: How to Help and not HRT,” UT Southwestern Obesity Alliance Seminar Series on Nutrition, Metabolism and Obesity, September 2010
- “Biology of Bronchopulmonary Dysplasia (BPD) and Rationale for Inhaled Nitric Oxide Therapy,” NIH Consensus Development Program, Bethesda, MD, October 2010

Carolyn L. Cannon, M.D., Ph.D.

- “Common Drug Resistant Pathogens in the Cystic Fibrosis Patient and Current Inhaled Antimicrobial Treatment Options,” Center for Silver Therapeutics Research, Akron, OH, July 2010

Michelle Gill, Ph.D., M.D.

- “Rhinovirus, Spectrum of Disease Associated with the Diagnosis of Rhinovirus,” Pediatric Academic Societies Annual Meeting, Vancouver, Canada, May 2010 (Poster Presentation)
- “IgE Crosslinking on Human Plasmacytoid Dendritic Cells Interferes with CD4 Alloproliferation,” American Academy of Allergy Asthma & Immunology Meeting, New Orleans, LA, Month 2010 (Poster Presentation)
- “Allergen Interference with Viral-induced Plasmacytoid Dendritic Cell Function; Mechanisms of Disease,” NIH/NIAID Inner City Asthma Consortium Steering Committee Meeting, Chicago, IL, September 2010

Rashmin C. Savani, M.B.,Ch.B.

- “Insights into BPD: The Inflammation Superhighway: Tolls, Signals and Pathways,” Jerry Elliot Memorial Lecturer, Key West, FL, Month 2010
- “Pulmonary Surfactant, Extracellular Matrix & Innate Immunity: Novel Insights into the Regulation of Inflammation,” Vanderbilt Pediatric Research Conference, Nashville, TN, Month 2010
- “Bronchopulmonary Dysplasia: New Insights into Inflammation and an Arrest of Lung Development,” Vanderbilt Pediatric Grand Rounds, Nashville, TN, Month 2010
- “RHAMM Knockout Mice are Protected after Bleomycin-induced Lung Injury,” HA 2010 Inflammation and Immunity Session, Kyoto, Japan, Month 2010

Margaret Schwarz, M.D.

- “Growth Factor Circuitry in Vascular Morphogenesis,” 3rd Annual Neonatal and Childhood Pulmonary Vascular Disease Conference, Banff, Canada, March 2010

Michihisa Umetani, Ph.D.

- “LXRbeta Promotes Vascular Reendothelialization Via a Novel Mechanism Involving Non-nuclear Signaling in Endothelium,” Keystone Symposium, Keystone, CO, March 2010
- “Role of 27-hydroxycholesterol, the First Identified Endogenous SERM, in Cardiovascular Health and Disease,” FASEB Summer Research Conference, Snowmass, CO, August 2010
- “Role of 27-hydroxycholesterol in Cardiovascular and Metabolic Dysfunction, University of Tokyo LSBM Seminar Series, Tokyo, Japan, December 2010

Major Administrative or Leadership Responsibilities

Philip W. Shaul, M.D.

- Director, Division of Pulmonary and Vascular Biology, UT Southwestern
- Member, Steering Committee, Medical Scientist Training Program, UT Southwestern Medical School, UT Southwestern Graduate School of Biomedical Sciences
- Member, Steering Committee, University Lecture Series, UT Southwestern
- Co-Program Director, NIH T32 Training Program in Lung Biology and Disease
- Co-Program Director, Howard Hughes Medical Institute Medicine into Graduate Program
- Training Director, Child Health Research Career Development Award (K12)

Carolyn L. Cannon, M.D., Ph.D.

- Member, American Thoracic Society (ATS) Pediatric Assembly Program Committee
- Cystic Fibrosis Stakeholder, Texas Newborn Screening Program
- Chief Scientific Officer, Akron Research Commercialization Corp., DBA Nebusil, Inc.
- Associate Director, Division of Respiratory Medicine, Children’s Medical Center, Dallas
- Director, Cystic Fibrosis Therapeutics Development Center, Children’s Medical Center, Dallas
- Director, Pediatric Pulmonary Fellowship Program, Children’s Medical Center, Dallas
- Member, Process Improvement Committee, Children’s Medical Center, Dallas
- Member, Children’s Clinical Research Advisory Committee, Children’s Medical Center, Dallas
- Member, Core Interview Committee, UT Southwestern Medical Center, Dallas

Michelle Gill, Ph.D., M.D.

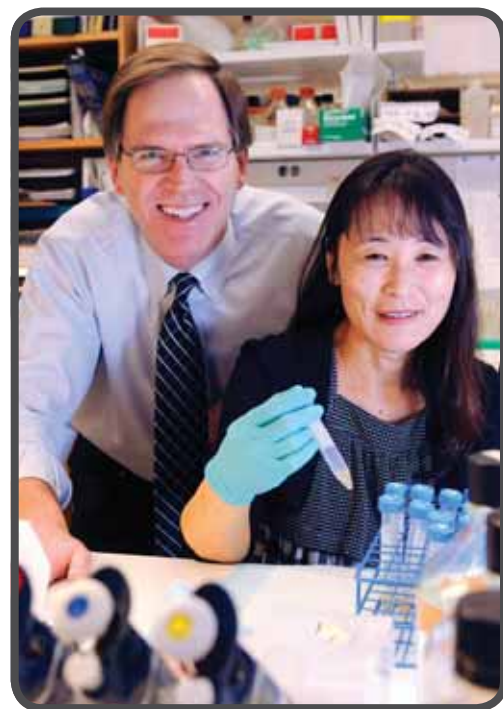
- Course Director, Pediatric Infectious Diseases Core Curriculum Series
- Reviewer for SPR Research Abstract Submissions in the Area of Infectious Disease for the 2010 Pediatric Society Meetings
- Member, NIH/NIAID Inner City Asthma Consortium PROSE (Preventative Omalizumab Therapy for Severe Fall Exacerbations) Clinical Trial Protocol Team
- Member, Immunology Graduate Program Student Committee
- Member, NIH/NIAID Inner City Asthma Consortium Publications and Presentations Committee
- Member, NIH/NIAID Inner City Asthma Consortium PROSE Mechanistic Studies Development Committee

Ellen Grishman, M.D.

- Member, Pediatric Endocrinology Scholarship Oversight Committee

Julio Pérez Fontán, M.D.

- Vice Chairman, Department of Pediatrics, UT Southwestern
- Executive Vice President for Medical Affairs, Children’s
- Associate Dean for Pediatric Services and Program Development, UT Southwestern
- Interim Director, Division of Pediatric Respiratory Medicine, UT Southwestern
- Chairman, CTSA Pilot Grant Program
- Co-Chair, Chair of Radiology Search Committee
- Associate Director, T32 Training Grant
- Chairman, Anesthesiologist for Children Board of Directors



Rashmin C. Savani, M.B.,Ch.B.

- Director, Division of Neonatal-Perinatal Medicine, UT Southwestern
- Associate Director, Division of Pulmonary and Vascular Biology, UT Southwestern
- Chief of Service, Pediatrics and Neonatal-Perinatal Medicine, Parkland
- Chief of Service, Neonatal-Perinatal Medicine, Children's
- Member, Editorial Board, Journal of Biological Chemistry and American Journal of Physiology-Lung Cell and Molecular Physiology
- Member, Consulting Editorial Board, Journal of Clinical Investigation
- Associate Editor, Vascular Cell

Margaret Schwarz, M.D.

- Member, NHLBI Respiratory Integrative Biology and Translational Research Study Section
- Member, Integrative Biology Graduate Program Qualifying Exam Committee of Christopher Javadi

Olatunji W. Williams, M.D.

- Medical Director, Pulmonary Function Laboratory, Children's
- Pediatric Site Consultant, Hereditary Telangiectasia Center
- Counselor, Camp Broncho of North Texas
- Member, The Consortium of Children's Asthma Camps

Awards and Honors

Philip W. Shaul, M.D.

- Hall of Honor, Cincinnati Children's Hospital Medical Center, University of Cincinnati College of Medicine

Carolyn L. Cannon, M.D., Ph.D.

- Chief Scientific Officer, NorTech Innovation Award to Nebusil, Inc. CEO Wiley Youngs, PhD

Rashmin C. Savani, M.B., Ch.B.

- March of Dimes (Texas) Perinatal Physician Excellence Award

Respiratory Medicine

The Division of Respiratory Medicine provides care for infants through adolescents with a variety of respiratory disorders, including acute and chronic lung parenchyma and airway diseases, ventilatory muscle weakness, and disorders of neurologic control of breathing. For example, the division cares for a large cohort of chronically ventilated children, children with pulmonary artery hypertension, children in the accredited Cystic Fibrosis Care and Teaching Center, as well as children served by the multi-bed Sleep Disorders Center. Created in 2006, Respiratory Medicine encompasses eleven physicians and numerous associated healthcare professionals who together, form a truly multidisciplinary program at the two Children's campuses.

Respiratory Medicine continued to grow with the addition of a new faculty member. Dr. Preeti Sharma joined us as a board-certified pediatric pulmonologist after completing her pediatric pulmonary medicine fellowship at the University of Chicago, Comer Children's Hospital.

Additional faculty has allowed the enhancement of existing programs. For example, the respiratory inpatient service, serving the patients in the general pulmonary program and the various specialized programs including sleep, pulmonary vascular disease, asthma and cystic fibrosis, has expanded substantially. In 2010, the Respiratory Medicine Division began providing separate coverage of the respiratory service on the seventh floor of the C-Tower at Children's and the consultative service provided throughout the inpatient services at both Children's campuses, as well as the neonatal intensive care unit at Parkland.

Faculty



Julio Pérez Fontán, M.D.
Interim Director, Pediatric Respiratory
Medicine

Julio Pérez Fontán, M.D., Professor and Vice Chairman of Pediatrics, holds the Joel B. Steinberg, M.D. Chair in Pediatrics and serves as the Interim Director of Respiratory Medicine at UT Southwestern. He is also Associate Dean for Pediatric Services and Program Development at UT Southwestern and Executive Vice President of Medical Affairs at Children's. The neural contribution to lung injury and biology of neurokinins in the lung are the focus of Dr. Pérez Fontán's research. Dr. Pérez Fontán received his medical degree summa cum laude from the Universidad de Santiago De Compostela, Spain, in 1977. He performed his residency in Pediatrics at the Universidad Autonoma de Barcelona from 1978 to 1981, and a fellowship at the University of California and the Cardiovascular Research Institute in San Francisco from 1981 to 1984. Prior to joining the UT Southwestern faculty, Dr. Pérez Fontán was a member of the faculty at the University of California in San Francisco, Yale University and Washington University in St. Louis, Missouri. He was honored as the Alumni Endowed Professor of Pediatrics at Washington University School of Medicine in 2001.

Carolyn L. Cannon, M.D., Ph.D.

Assistant Professor

Clinical/research expertise: Cystic fibrosis (CF), pediatric pulmonology, respiratory diseases including asthma, interstitial lung disease, chronic lung disease, bronchoscopy, pathogenesis of pulmonary infection in the lungs of patients with CF and the development of novel therapies to treat these infections including targeted nanoparticles to provide depot delivery of a new class of silver-based antimicrobials

Education: Texas A&M University, College Station, B.S., cum laude, 1982; Worcester Polytechnic Institute, Worcester, MA, M.S., 1985; UT Houston, M.D., 1993; UT Graduate School of Biomedical Sciences, Houston, Ph.D., 1993

Post-doctoral training: Children's Hospital, Boston, MA, Intern and Resident, Pediatrics, 1993-1996; Fellow, Pediatric Pulmonology, 1996-1999; Channing Laboratory, Harvard Medical School/Brigham & Women's Hospital, Boston, MA, Research Fellow, 1998-1999





Steven C. Copenhaver, M.D.

Clinical Associate Professor

Clinical/research expertise: Cystic fibrosis, chronic mechanical ventilation, premature neonates with chronic lung disease, muscle disorders, pulmonary hypertension, bronchoscopy and invasive pulmonary interventions, asthma, microbiology of cystic fibrosis airways, Steven Johnson syndrome/TENs, lung transplant

Education: Sterling College, KS, B.S., 1984; Texas A&M University Medical Center, College Station, M.D., 1989

Post-doctoral training: Duke University Health Center, Durham, NC, Resident, Pediatrics, 1989-1992; University of Colorado Health Science Center, Denver, Fellow, Pediatric Pulmonology, 1992-1995



Andrew S. Gelfand, M.D.

Clinical Associate Professor

Clinical/research expertise: Chronic mechanical ventilation, premature neonates with chronic lung disease, asthma, cystic fibrosis

Education: UT Austin, B.A., 1986; Baylor College of Medicine, Houston, TX, M.D., 1990

Post-doctoral training: Baylor College of Medicine, Houston, Resident, Pediatrics, 1990-1993; University of Colorado Health Science Center, Denver, Fellow, Pediatric Pulmonology, 1993-1996



Peter M. Luckett, M.D.

Professor

Clinical/research expertise: Pediatric pulmonology, respiratory disease associated with neuromuscular diseases and critical care medicine

Education: University of Kentucky, Lexington, B.G.S., 1975; University of Kentucky College of Medicine, Lexington, M.D., 1978

Post-doctoral training: University of Kentucky, Lexington, Resident, Pediatrics, 1978-1981; Columbia University College of Physicians and Surgeons, New York, NY, Fellow, Pediatric Pulmonology, 1981-1984, Fellow, Cellular Physiology, 1984-1987



Tanya M. Martinez-Fernandez, M.D.

Assistant Professor

Clinical/research expertise: Pediatric pulmonology, infant lung disease/infant pulmonary function and sleep medicine

Education: University of Chicago, IL, B.A., 1993; University of Puerto Rico School of Medicine, Rio Piedras, M.D., 1997

Post-doctoral training: University Pediatric Hospital, University of Puerto Rico School of Medicine, Rio Piedras, Resident, Pediatrics, 1997-2000; Indiana University, Indianapolis, Fellow, Pediatric Pulmonology, 2000-2003; Research Fellow, 2003-2004



S. Kamal Naqvi, M.D.

Assistant Professor

Clinical/research expertise: Sleep disorders, non-invasive ventilation, narcolepsy, obstructive sleep apnea in children, pediatric pulmonology, respiratory diseases

Education: Dow Medical College, University of Karachi, Pakistan, M.B.B.S., 1989

Post-doctoral training: The Brookdale University Medical Center, Brooklyn, NY, Resident, Pediatrics, 1992-1995; SUNY Health Sciences Center, Brooklyn, Fellow, Pediatric Hematology/Oncology, 1995-1996; Tulane University Medical Center, New Orleans, LA, Fellow, Pediatric Pulmonology, 2001-2004; Fellow, Sleep Medicine, 2004-2005



Claude B. Prestidge, M.D.

Clinical Assistant Professor

Director, Cystic Fibrosis Clinic

Clinical/research expertise: Cystic fibrosis

Education: UT Southwestern, M.D., 1968

Post-doctoral training: UT Southwestern/Children's Medical Center, Intern, Pediatrics, 1968-1970; U.S. Navy Camp Pendleton and Sasebo, Japan, Pediatrics, 1970-1972; UT Southwestern/Children's Resident, Pediatrics, 1972-1973

Yadira M. Rivera-Sanchez, M.D.

Assistant Professor

Clinical/research expertise: Pediatric pulmonology respiratory diseases including premature neonates with chronic lung disease, interstitial lung disease, asthma, bronchoscopy

Education: University of Puerto Rico, Humacao, B.S., 1994; Ponce School of Medicine, Puerto Rico, M.D., 1998

Post-doctoral training: University Pediatric Hospital, University of Puerto Rico, Rio Piedras, Resident, 1998–2001; Children’s Hospital, Harvard Medical School, Boston, MA, Fellow, Pediatric Pulmonary Medicine, 2001-2004



Peter N. Schochet, M.D.

Clinical Assistant Professor

Clinical/research expertise: Chronic respiratory failure, chronic lung disease, neuromuscular disorders, bronchoscopy, asthma, sickle cell-related lung disease, chronic aspiration, restrictive lung disease and chest wall disorders, non-invasive ventilation, respiratory consequences of early onset scoliosis, as well as the respiratory complications of neuromuscular disease

Education: University of Pennsylvania, Philadelphia, B.A., 1986; Temple University School of Medicine, Philadelphia, PA, M.D., 1990

Post-doctoral training: Texas Children’s Hospital/Baylor College of Medicine, Houston, Resident, Pediatrics, 1990-1993; Boston Children’s Hospital/Harvard Medical School, MA, Fellow, Pediatric Pulmonology, 1993-1996



Preeti Sharma, M.D.

Assistant Professor

Clinical/research expertise: General pediatric Pulmonology, asthma, Cystic Fibrosis

Education: University of Chicago, IL, A.B., with honors, 1998; University of Chicago/Pritzker School of Medicine, IL, M.D., 2002

Post-doctoral training: Albert Einstein College of Medicine, Children’s Hospital at Montefiore, Bronx, NY, Resident, Pediatrics, 2002-2005; Fellow, Pediatric Pulmonary Medicine, 2005-2006; University of Chicago, Comer Children’s Hospital, IL, Fellow, Pediatric Pulmonary Medicine, 2007-2010; University of Chicago, Maclean Center for Clinical Medical Ethics, IL, Fellow, Clinical Bioethics, 2008-2009



Olatunji W. Williams, M.D.

Assistant Professor, Pediatric Respiratory Medicine

Clinical/research expertise: Respiratory diseases, pulmonary hypertension, acute asthma therapy, lung mechanics

Education: UNT, B.A., 1994; UT Medical Branch at Galveston, M.D., 1999

Post-doctoral training: Oklahoma University Medical Center, The Children’s Hospital, Norman, Resident, Pediatrics, 1999-2002; Chief Resident, Pediatrics, 2002-2003; Baylor College of Medicine, Texas Children’s Hospital, Houston, Fellow, Pediatric Pulmonology, 2003-2006



Clinical/Research Staff

- Suja Abraham, RN
Clinical Nurse
- Barbara Baum, LMSW
CF Social Worker
- Genelle Beerbower, RD, CSP, LD
CF Clinical Dietitian
- Linda Blane, RN
Clinical Nurse
- Amy Boronow, RN, BSN
CF Clinical Nurse
- Cindy Contreras, MA
CF Medical Assistant
- Ashlee Dillow, RRT
Respiratory Care Practitioner
- Katherine Gapp, RN, MSN, CPNP
Clinical Nurse Practitioner
- Jamie Grollman, Ph.D.
CF Clinical Psychologist

- Andrew Hebert, BSRC, RRT, RCP
CF Research Coordinator
- Maria Izaguirre, MA
Medical Assistant
- LuAnn Jackson, RRT, CPFT
Respiratory Care Practitioner
- Paul Klemm, RRT, RPFT
Respiratory Care Practitioner
- William Kreul, RRT, RCP
Respiratory Care Practitioner
- Elizabeth Lopez, MA
Medical Assistant
- Robin Luffy, RN, MSN, CPNP
Clinical Nurse Practitioner
- Vivian Ojeda, MA
Medical Assistant
- Poonam Patel, RN, BSN
CF Clinical Nurse

- Pamela Petersen, RN
Clinical Nurse
- Jennifer Powell, RN, BSN, MHA
CF Practice Manager
- Rachel Rosen, RN, MSN, CPNP
Clinical Nurse Practitioner
- William Ruiz, RRT, AE-C
Respiratory Care Practitioner
- Laura Smith, RRT-NPS, RPFT, AE-C
Respiratory Care Practitioner
- Margaret Smith, RN, BSN
CF Clinical Nurse
- Brenda Urbanczyk, RN, BSN, BBA
Practice Administrator
- Kathleen Dunn-Richmond, RRT
CF Respiratory Care Practitioner
- Christine Wagner, RN, CPNP
Clinical Nurse Practitioner

Research Activities

Although the first priority of the Division of Respiratory Medicine has been the establishment of an excellent clinical program, research efforts have expanded. Each faculty member is developing areas of interest for scholarship, which includes research in cystic fibrosis, lung development, pulmonary consequences of neuromuscular diseases and asthma.

Researchers in Dr. Julio Pérez Fontán's laboratory investigate the influence of the nervous system on the structure and function of the airways. Physiological and neuroanatomical studies have contributed to the present view of the bronchomotor system as an integral part of breathing control through the relationships between vagal and phrenic outflows and the overlap between the bronchomotor and breathing networks. Recent attention has been focused on the participation of sensory neuropeptides in the regulation of the inflammatory response.

Dr. Carolyn Cannon's group focuses on the pathogenesis of pulmonary infection with several related bacterial species found in the lungs of patients with cystic fibrosis (CF) and development of novel therapies to treat these infections. Using both in vitro and mouse models of infection, the Cannon laboratory explores the role that the defective gene and protein underlying CF, the cystic fibrosis transmembrane conductance regulator (CFTR) plays in clearance of *Pseudomonas aeruginosa* and *Burkholderia cepacia* complex (Bcc) organisms. The group also studies the activity of a series of novel silver-based antimicrobials, silver N-heterocyclic carbene complexes (SCCs), which inhibit the growth of all bacterial species tested to date including the CF lung pathogens *P. aeruginosa*, methicillin-resistant *Staphylococcus aureus* (MRSA) and Bcc organisms. Nebulized SCCs, formulated both as a solution and after incorporation into nanoparticles, have efficacy in mouse infection models. To understand silver toxicity and detoxification, the Cannon group also studies the impact of silver on bacteria and lung cells. Insights from these studies may lead to methods to abrogate the development of silver toxicity or, through inhibition of bacterial detoxification pathways, resistance.

Dr. Peter Luckett's research interests center on acute lung injury, mechanical ventilation, near-fatal asthma, pulmonary outcomes in neuromuscular disease, and clinical trials in pediatric critical care. Recent work includes development of a clinical trial of strict glucose control in critically ill children using a computer-driven protocol.

Dr. Peter Schochet investigates the respiratory consequences of early-onset scoliosis. Additionally, Dr. Schochet continues to work with Dr. Susan T. Iannaccone, the Jimmy Elizabeth Westcott Distinguished Chair in Pediatric Neurology, to study the respiratory complications of neuromuscular disease.

Bronchopulmonary dysplasia (BPD) affects 30 to 50 percent of premature infants in the United States and results in part from the disruption of normal lung development. Dr. Olatunji Williams strives to understand the molecular mechanisms that regulate lung development, an understanding that is vital to disease prevention and treatment. It is now known that in addition to prematurity, environmental stresses such as hypoxia (low oxygen) and hyperoxia (high oxygen) can also disrupt lung development and that these processes are associated with elevated activation of transforming growth factor-beta (TGF- β), a growth factor that regulates lung development. Dr. Williams' research focus is dedicated to defining and manipulating molecules that regulate TGF- β signaling and activation in order to promote alveolar and vascular growth in BPD. Dr. Williams work has been presented in three international conferences in the last year.

Clinical Activities

Inpatient Service

Dr. Yadira Rivera and Dr. Carolyn Cannon oversee the Pediatric Pulmonary Medicine inpatient administrative duties. Dr. Rivera has been instrumental in the development of several process improvement initiatives. The Inpatient Pulmonary Service as it exists now was created in 2009 and consists of an Admissions Service and a Consult/Bronchoscopy Service. Assigned at all times to the Pulmonary Admissions Service are one Pediatric Pulmonary Medicine physician, one senior Pediatrics resident, two general Pediatrics interns and an Anesthesia resident. A Pharm-D, a nutritionist, a social worker, a care coordinator, a respiratory therapist and a registered charge nurse participate in rounds on a regular basis.

The patient population on this service consists primarily but is not limited to patients with chronic respiratory failure on mechanical ventilation and patients with neuromuscular diseases hospitalized for an acute respiratory process, acute asthma exacerbations and status asthmaticus, complicated pneumonias, patients status post airway surgery including but not limited to obstructive sleep apnea, chronic bronchiectasis with an acute exacerbation, chronic lung

disease of prematurity with an acute respiratory illness, interstitial lung disease with an acute respiratory illness or for steroid pulses or other immunosuppressive agents. The pulmonary service has been designated the pilot service for a new program named “Revitalizing Care at the Bedside.” Among other things this program will actively incorporate patients and family members into daily rounding activities. This program intends to improve patient care, as well as satisfaction of patients and their families.

The Consult Service provides service to both the entire Children’s Dallas Medical Center, as well as the Parkland Health system NICU. One Respiratory Medicine physician and an inpatient pulmonary nurse practitioner are assigned to the Consult Service at all times. Inpatient bronchoscopies are performed either in the Main Operating Room (OR), Pediatric Intensive Care Unit (PICU) or Neonatal Intensive Care Unit (NICU). Bronchoscopies are assisted by the Main OR Respiratory Therapy department.

The Respiratory Medicine Inpatient Service faculty continue to provide a once or twice a week rotating lecture schedule for the residents. Teaching is also provided on a rotating schedule by a pulmonary nurse practitioner, asthma educator, speech pathologist and respiratory therapist. A core group of pulmonary and general pediatrics textbooks has been incorporated into the inpatient pulmonary rotation. These textbooks are stored in the pulmonary floor and can be utilized by general pediatrics and anesthesia residents rotating through the inpatient pulmonary service.

The inpatient pulmonary service remains sub-divided into the current two components (Admissions and Consults/ Bronchoscopy), each of which is headed by a pediatric pulmonary physician. An inpatient nurse practitioner assists the consult pulmonary attending. A leader respiratory therapist participates in daily rounds along with the team of physicians and the charge nurse. The pulmonary service began incorporating family-centered, bedside rounds on a twice weekly basis to improve team communication. As a quality improvement initiative, the service began tracking days without blood stream infections. Further, the care team now holds afternoon “huddles” to identify the patients with worrisome courses that warrant closer monitoring overnight.

Outpatient Services

Dr. Tanya Martinez leads the development and organization of the outpatient clinics and also oversees the Comprehensive Asthma Program at Children’s. The outpatient care activities of the Respiratory Medicine Division encompass a comprehensive center with the capability of evaluating a variety of respiratory disorders in a multidisciplinary approach. The outpatient clinical area is housed on the 5th floor of the Pavilion Outpatient Building at Children’s Medical Center in Dallas with a limited number of clinics at the Children’s at Legacy Outpatient Center in Plano. Consultative services are provided through the combined effort between physicians and advanced nurse practitioners.

The outpatient clinic staff includes nursing, respiratory therapy, social work and nutrition who are available to supply support and help coordinate equipment and home nursing needs. In addition, the staff is qualified to provide education in respiratory equipment use and asthma management in the clinic setting.

A pulmonary function laboratory is conveniently located adjacent to the outpatient pulmonary clinic area. Dr. Olatunji Williams serves as the Medical Director for the pulmonary function laboratory, supervising the execution and interpretation of studies. The laboratory has the capacity to perform comprehensive respiratory function evaluation. Available testing includes simple spirometry, lung volumes, diffusing capacity, exhaled nitric oxide, evaluation of airway reactivity and cardiopulmonary exercise testing. In addition, Children’s Dallas has the only infant pulmonary function laboratory in North Texas.

Specialized outpatient clinical activities include:

Pulmonary Aerodigestive Disorders Clinic (PAD)

Dr. Yadira Rivera-Sanchez staffs the pulmonary component of the PAD clinic, a multidisciplinary effort between Respiratory Medicine, ENT, Gastroenterology and Speech Therapy that provides comprehensive evaluation of children with complex problems involving the upper airway, pulmonary and upper digestive tract. Clinics occur on the first Monday of each month.

Asthma Outpatient Services

Drs. Martinez and Rivera-Sanchez serve as liaisons between the Respiratory Medicine and the Allergy Divisions that jointly staff the High Risk Multidisciplinary Asthma Clinic that provides comprehensive evaluation of patients with

uncontrolled asthma and life threatening asthma. The team that includes six certified asthma educators works closely with the Asthma Management Program at CMC to provide ongoing education to our asthma patients. Patients are seen in the shared Pulmonary and Allergy Clinic area. Initial funding for the clinic through the Crystal Charity Ball has been approved and expected for 2011.

Cystic Fibrosis Care and Teaching Center

Dr. Claude Prestidge serves as director of the Cystic Fibrosis Care and Teaching Center at Children's Medical Center Dallas, which cares for the largest population of patients with cystic fibrosis in North Texas. Other physicians caring for the children with cystic fibrosis include Drs. Michael Brown, Carolyn Cannon, Steven Copenhaver and Andrew Gelfand. The center is fully accredited by the Cystic Fibrosis Foundation. The care team includes dedicated nurses, as well as a social worker, respiratory therapist, nutrition specialist, child life specialist and clinical psychologist. Dr. Meghana Sathe, a pediatric gastroenterologist with an interest in cystic fibrosis participates in clinics on a weekly basis. Clinics are held on Monday at the Legacy campus and on Tuesday, Thursday and Friday at the Dallas campus.



Neuromuscular Disorders Clinic

Dr. Peter Luckett holds one pulmonary clinic per week focused on caring for the respiratory needs of patients with neuromuscular disease.

Drs. Peter Schochet and Peter Luckett staff the Adolescent Muscle clinic, which is a multi-disciplinary clinic devoted to the unique needs of older teenagers with various Neuromuscular Diseases. The clinic is a joint effort with the Neurology Department and provides evaluation and management of children with pulmonary involvement secondary to neuromuscular disease. The multidisciplinary clinic focused on adolescent patients is held once a month.

Pulmonary Hypertension Clinic

Dr. Olatunji Williams has remained closely involved with improving the care of patients with pulmonary vascular disease, including caring for patients with pulmonary hypertension and serving as the pediatric pulmonology consultant for the Hereditary Hemorrhagic Telangiectasia Center here at UT Southwestern.

- Comprehensive evaluation of patients diagnosed or presenting with symptoms suggestive of pulmonary hypertension
- Clinics occur once a month

Sleep Disorders Center

Dr. Kamal Naqvi directs the sleep program, which provides clinical services on a variety of sleep- and respiratory-control-related disorders.

- Comprehensive center for the evaluation of sleep disorders in children
- Dedicated monthly clinic to provide follow up care for children using non-invasive positive pressure therapy to treat sleep disordered breathing
- State of the art equipment and technologies available to perform polysomnography, multiple sleep latency test, positive airway pressure/non-invasive ventilation titrations and actigraphy
- Sleep technology staff available for equipment education and support
- Five half-day clinics a week

Presentations/Teaching Activities

Members of the Respiratory Medicine division actively engage in teaching medical students and residents at UT Southwestern.

Carolyn L. Cannon, M.D., Ph.D.

- “Common Drug Resistant Pathogens in the Cystic Fibrosis Patient and Current Inhaled Antimicrobial Treatment Options,” Center for Silver Therapeutics Research, Akron, OH, July 2010

Peter M. Luckett, M.D.

- “Evaluating the Evidence for Management of RSV Bronchiolitis,” Annual Respiratory Care Week Regional Seminar, Dallas, TX, October 2010

Major Administrative or Leadership Responsibilities

Julio Pérez Fontán, M.D.

- Vice Chairman, Department of Pediatrics, UT Southwestern
- Executive Vice President for Medical Affairs, Children’s
- Associate Dean for Pediatric Services and Program Development, UT Southwestern
- Interim Director, Division of Pediatric Respiratory Medicine, UT Southwestern
- Chairman, CTSA Pilot Grant Program
- Co-Chair, Chair of Radiology Search Committee
- Associate Director, T32 Training Grant
- Chairman, Anesthesiologist for Children Board of Directors

Carolyn L. Cannon, M.D., Ph.D.

- Member, American Thoracic Society (ATS) Pediatric Assembly Program Committee
- Cystic Fibrosis Stakeholder, Texas Newborn Screening Program
- Chief Scientific Officer, Akron Research Commercialization Corp., DBA Nebusil, Inc.
- Associate Director, Division of Respiratory Medicine, Children’s

Andrew S. Gelfand, M.D.

- Medical Director, Our Children’s House, Baylor, Dallas, Texas

Peter M. Luckett, M.D.

- Medical Director, Respiratory Care Department, Children’s
- Member, American Thoracic Society (ATS) Nominating Committee

Tanya M. Martinez-Fernandez, M.D.

- Medical Director, Comprehensive Asthma Center, Children’s
- Medical Director, Pulmonary Outpatient Services

S. Kamal Naqvi, M.D.

- Medical Director, Sleep Disorders Center, Children’s
- Site Director, Sleep Medicine Fellowship
- Fellow, American Academy of Sleep Medicine

Yadira M. Rivera-Sanchez, M.D.

- Medical Director, Pulmonary Inpatient Services

Peter N. Schochet, M.D.

- Chairman of Pediatrics, Texas Health Presbyterian Hospital, Plano
- Chairman, Pediatric Peer Review Committee, Texas Health Presbyterian Hospital, Plano
- Member, Medical Board, Texas Health Presbyterian Hospital, Plano

Olatunji W. Williams, M.D.

- Medical Director, Pulmonary Function Laboratory, Children’s
- Counselor, Camp Broncho of North Texas
- Member, The Consortium of Children’s Asthma Camps

Awards and Honors

Carolyn L. Cannon, M.D., Ph.D.

- Chief Scientific Officer, NorTech Innovation Award to Nebusil, Inc. CEO Wiley Youngs, PhD

S. Kamal Naqvi, M.D.

- Achieved American Board of Pediatrics Certification, Sub-board in Sleep Medicine

Rheumatology

The Division of Pediatric Rheumatology at UT Southwestern serves as the major resource for Pediatric Rheumatology in North Texas. Its clinics are unique in the region and are staffed by the only board-certified pediatric rheumatologists in North Texas.

The division was one of the first pediatric rheumatology subspecialties in the country, founded in the 1950s by Dr. Chester Fink, one of the first pediatric rheumatologists elected as a Master of the American College of Rheumatology. It has continuously trained fellows from all over the world for more than 20 years, many of whom now head divisions of their own. The Arthritis Clinic, also established by Dr. Fink in the late 1950s, has grown from a few patients seen only a half-day each month to one of the country's largest clinics for children with rheumatic diseases.

The rheumatology clinics at Children's Medical Center Dallas and Texas Scottish Rite Hospital for Children (TSRHC) strive to provide the highest quality of care to their patients. The multidisciplinary team at TSRHC now includes three nurse coordinators, two pediatric nurse practitioners, a physical therapist, an occupational therapist and a dietician. Disease-specific templates for history, physical exams and new patient consults ensure a standardized and thorough collection of information from each patient on each clinic visit. Patient-reported outcomes are monitored with visual analog scales and questionnaires.

Individual disease-specific flow sheets, unique to the clinic, allow tracking of all aspects of a patient's care across time. They also function as care maps, prompting attention to preventive care and quality indicators of care. These include evaluation of bone health, assessment of coronary risk factors in lupus patients, assessment of pneumococcal immunization in immunosuppressed patients, radiographic surveillance for bone erosions in arthritis patients, and a schedule for ophthalmologic exams to assess uveitis, retinal vasculitis and possible drug toxicity. Additionally, the Rheumatology division is involved in both translational and clinical research, with 60 percent of patients participating in a research study.

Faculty

Marilynn G. Punaro, M.D., Professor, is Director of Pediatric Rheumatology at UT Southwestern. Dr. Punaro's clinical interests focus on juvenile arthritis, lupus, scleroderma, systemic arthritis and vasculitis. She is the Site Principal Investigator for several NIH treatment trials for lupus and systemic onset arthritis. Dr. Punaro received her medical degree from Tulane University School of Medicine, New Orleans, Louisiana, in 1977. She was a resident in Pediatrics at UT Southwestern/Children's from 1977 to 1980 and held a fellowship in Pediatric Rheumatology at UT Southwestern from 1980 to 1982. Dr. Punaro is the elected leader of the pediatric rheumatology program directors and the elected representative for pediatric rheumatology to the Council of Pediatric Subspecialties. She was elected to Best Doctors in America and was named a Texas Super Doctor by *Texas Monthly* magazine in 2008 and 2009. In May 2010, Dr. Punaro was featured in a *D Magazine* article as one of the best pediatricians in Dallas. She was invited by the American College of Rheumatology to serve as an expert in the development of treatment guidelines for juvenile arthritis and also was selected as an international expert in pediatric lupus to serve on a committee establishing definitions for outcome measures.



Marilynn G. Punaro, M.D.
Director, Pediatric Rheumatology

Translational research by our division that impacts our patient care

was published in 2010 in *NATURE*

the highest ranked science journal in the world.



Alisa C. Gotte, M.D., M.S.C.S.

Assistant Professor

Clinical/research expertise: Juvenile idiopathic arthritis, clinical genetic and immunologic characteristics of children with oligoarthritis that predict a poor response to therapy

Education: UT Austin, B.A., 1998; UT Southwestern, M.D., 2002; UT Southwestern, M.S.C.S., 2009

Post-doctoral training: UT Southwestern/Children's, Resident, Pediatrics, 2002-2005; UT Southwestern, Fellow, Pediatric Rheumatology, 2005-2008; K-30 Graduate Certificate Student, Clinical Sciences, 2006-2007



Lorien Nassi, M.D.

Instructor

Clinical/research expertise: Pediatric rheumatology, psychological and cognitive symptomatology in pediatric lupus patients

Education: Stanford University, Palo Alto, CA, B.A., *with honors*, 1999; UT Southwestern, M.D., 2003

Post-doctoral training: UT Southwestern/Children's, Resident, Pediatrics, 2003-2006; UT Southwestern, Fellow, Pediatric Rheumatology, 2006-2009



Matthew L. Stoll, M.D., Ph.D.

Assistant Professor

Clinical/research expertise: Subgroups within juvenile idiopathic arthritis, early-onset versus late-onset juvenile psoriatic arthritis

Education: Wesleyan University, Middletown, CT, B.A., 1994; SUNY Upstate Medical University, Syracuse, M.D., Ph.D., 2001, UT Southwestern, Clinical Research Scholar, Clinical Sciences, 2008-2011

Post-doctoral training: Long Island Jewish Medical Center, New Hyde Park, NY, Resident, Pediatrics, 2001-2004; Children's Hospital Boston, MA, Fellow, Pediatric Rheumatology, 2004-2007



Tracey B. Wright, M.D.

Assistant Professor

Clinical/research expertise: Health disparities in rheumatic disease, obesity and Vitamin D deficiency in pediatric systemic lupus erythematosus

Education: Yale University, New Haven, CT, B.S., 1997; Medical College of Pennsylvania-Hahnemann School of Medicine, Philadelphia, M.D., 2001; University of Pennsylvania School of Medicine, Philadelphia, M.S., 2006-present

Post-doctoral training: The Children's Hospital of Philadelphia, PA, Intern, Pediatrics, 2001-2002; Resident, Pediatrics, 2002-2004; Fellow, Pediatric Rheumatology, 2005-2008

Post-doctoral Fellows

3rd Year



Katie L. Stewart, M.D.

Research interests:
Vitamin D deficiency in lupus



Sarwat Umer, M.D.

Research interests:
Antiphospholipid antibodies



Andrew Shulman, M.D.

Research interests:
Basic science of juvenile dermatomyositis

We are **ONE** of only **30** accredited programs for fellowship training in Pediatric Rheumatology.

2nd year



Julie Fuller, M.D.

Research interests:
Juvenile dermatomyositis

1st year



Ashley Cooper M.D.

Research interests:
Genetics of rheumatic disease

Clinical Research Staff

Heather M. Benham, ND, RN, CPNP, Pediatric Nurse Practitioner/Research Assistant (TSRHC)

Shirley H. Henry, RN, PNP, Pediatric Nurse Practitioner/Research Assistant (TSRHC)

Jolene Wesley, RN, Nurse Coordinator (TSRHC)

Alex Almanza, LVN, Nurse Coordinator (TSRHC)

Terry Spencer, RN, (Children's)

Elizabet Pullman, RN, (Children's)

Laura Salazar, Patient Access Representative (Children's)

Research Activities

The Division of Pediatric Rheumatology is actively involved in both translational and clinical research endeavors directed toward improving pathophysiologic understanding, treatment options and outcomes in a variety of pediatric rheumatologic disorders.

The use of gene-expression analysis in children with systemic onset juvenile idiopathic arthritis (SOJIA) performed by members of this division has led to great advances in the understanding of the pathophysiology of this disorder. This insight directed the novel application of the Interleukin-1 (IL-1) receptor antagonist anakinra for treatment of SOJIA, which provided impressive evidence of the long-term efficacy and safety of anakinra in the treatment of children with SOJIA. Another IL-1 blocker, Riloncept, also has been studied in a Phase I trial. Gene-expression analysis has been applied to the study of children with systemic lupus erythematosus (SLE) and, again, has provided important insight into potential pathophysiologic mechanisms by identifying increased Type 1 interferon production in these patients that correlated with clinical disease activity.

The Rheumatology division also is participating in two multi-site, NIH-funded trials in pediatric SLE:

- Development of autoimmunity during puberty
- **R**andomized **P**lacebo **P**hase study **O**f **R**iloncept in the **T**reatment of systemic juvenile idiopathic arthritis (RAPPORT)

Nutrition-related problems such as obesity may modify outcomes in pediatric lupus because of potential contribution to the increased risk of cardiovascular disease. A pilot, cross-sectional study to examine the prevalence and determinants of obesity and insulin resistance in pediatric SLE is near completion. The nutrition and body composition assessment, using whole body DXA and anthropometry, has revealed greater adiposity in children with SLE compared to controls. Future analysis will clarify the role of glucocorticoid use and disease specific factors to the risk of obesity and dyslipidemia in pediatric SLE.



Why corticosteroids help lupus patients

Researchers at UT Southwestern have uncovered the biological rationale for why large doses of corticosteroids given repeatedly over several weeks may help individuals with lupus, a chronic inflammatory disease that affects more than 1 million people in the U.S.

The Dallas Registry for Pediatric Rheumatic disease is a comprehensive database designed to characterize the clinical features and outcomes of subjects with autoimmune connective tissue disease. Since 2009, approximately 200 subjects with SLE followed at our center since 1994 have been enrolled. Currently the data analysis is elucidating traditional risk factors for cardiovascular disease and characterizing the use of glucocorticoids during induction therapy. The data is also being used for the epidemiological characterization of a cohort of pediatric lupus participating in a translational project sponsored by our collaborators which examines gene expression patterns.

Clinical Activities

This year there were 430 inpatient consultations/admissions at Children’s and TSRHC. The types of admission at the two hospitals vary significantly in the acuteness of the illness and the types of therapy given. Inpatients at Children’s are primarily patients with lupus and patients seen for consultation who have been admitted for other services. They are more acutely ill or have difficult diagnostic problems.

Patients at the TSRHC Rheumatology Clinic may be admitted for intensive occupational or physical therapy and rehabilitation, or for a short period of time for intravenous pulses of steroid, cyclophosphamide or other drugs. Historically, TSRHC has served as the major site for outpatient clinics. Currently about 1,500 active patients are seen in approximately 3,500 outpatient visits per year, including approximately 400 new patient visits in six half-day clinics per week. Dr. Punaro is Director of Arthritis Services at TSRHC and all pediatric rheumatology faculty members staff at least one clinic per week. Outpatient clinics at Children’s staffed by rheumatology faculty also operate four days per week. These clinics primarily evaluate new patients, with more than 500 new patient visits per year, and those with systemic lupus.

Those patients who have clearly defined rheumatic diseases with a primary musculoskeletal component, such as juvenile arthritis, dermatomyositis and scleroderma, are managed at TSRHC. Patients with rheumatic diseases affecting multiple organ systems, such as systemic lupus, and those with benign causes of musculoskeletal pain are managed at Children’s.

Presentations/Teaching Activities

The division provides the major instruction to pediatric residents in the evaluation of the musculoskeletal system and the assessment of rheumatic diseases. It also provides didactic teaching for the pediatric residents on the basics of rheumatology and directs teaching for the pediatric residents in the regular departmental clinical conferences and as part of inpatient consultation services.

A rheumatology elective is available for pediatric residents and fourth-year medical students. The objectives of this elective are to:

- Develop a working differential diagnosis of arthritis in childhood
- Learn a complete joint examination and a physical evaluation of rheumatologic patients
- Examine and discuss patients from all major collagen vascular disease categories: juvenile arthritis, dermatomyositis, scleroderma and SLE

Outpatient clinic visits handled by staff	4,537
Inpatient consultations/admissions per year	430
Juvenile arthritis patients receiving treatment	798
New patients	910

2010 Active Rheumatology Patients	
Juvenile Arthritis	794
Systemic Lupus	117
Dermatomyositis	95
Scleroderma	59
Miscellaneous Other Rheumatic Diseases	<u>588</u>
	1,653

The pediatric residents see outpatients in clinics under the supervision of one of the members of the rheumatology faculty. A notebook of selected articles about rheumatic disease, including original material, has been developed by Dr. Punaro as curriculum for the elective. Residents are encouraged to attend clinical conferences offering didactic teaching for fellows. This elective has been very popular with residents.

Trainees in other departments also spend time in the rheumatology clinics. Residents in Physical Medicine and other specialties may receive some of their training through the division. In addition to resident training, the division has one of only 30 accredited programs for fellowship training in Pediatric Rheumatology. Dr. Punaro is Program Director for the Pediatric Rheumatology fellowship program, and she serves as faculty for the Internal Medicine Rheumatology training program.

Marilynn G. Punaro, M.D.

- Course Director, Pediatric Rheumatology Elective for Fourth-year Students
- Course Director, Pediatric Rheumatology Elective for Pediatric Residents
- “Pediatric Lupus: Bench to Bedside,” 17th Pediatric Rheumatology European Society Annual Congress, Valencia, Spain, September 2010
- “What’s New and Coming in Juvenile Arthritis Research” and “Milestones in Pediatric Rheumatology: Where We Have Been, Where We Are, Where We Are Going,” Arthritis Foundation Juvenile Arthritis Conference, Grapevine, TX, September 2010
- Punaro L, Gotte C, Blankenship DN, Stoll ML, Allantaz F, Xu Z, Pascual V, “Clinical and Microarray Follow-up of SOJIA Patients treated with Anakinra: Lessons Learned Over the Past Seven Years,” 17th Pediatric Rheumatology European Society Congress, Valencia, Spain, September 2010 (Podium Presentation)
- Schanberg LE, Sandborg CI, Barnhart HX, Ardoin SP, Yow E, Evans GW, Mieszkalski KL, Ilowite NT, Ebehard A, Imundo LF, Kimura Y, Von Scheven E, Silverman E, Bowyer SL, Punaro L, Singer NG, Sherry DD, McCurdy D, Klein-Gittelman M, Wallace CA, Silver R, Wagner-Weiner L, Higgins GC, Brunner HI, Jung L, Soep JB, Reed A, Tegler C, and APPLE Investigators, “Does Atorvastatin Reduce Progression of Carotid Intimal Medial Thickening (CIMT) in Childhood SLE? Results from the Atherosclerosis Prevention in Pediatric Lupus (APPLE) Trial: A Multicenter, Randomized, Double-Blind Placebo-Controlled Study,” American College of Rheumatology 74th Annual Scientific Meeting, Atlanta, GA November 2010 (Podium Presentation)
- Thompson SD, Marion M, Sudman M, Ramos PS, Thomson W, Hinks A, Haas JP, Prahalad S, Bohnsack JF, Wise C, Punaro MG, Rose CD, Ryan M, Tsoras M, Wagner M, Keddache M, Howard T, Langefeld C and Glass DN, “A Genome-Wide Association Study for Juvenile Idiopathic Arthritis Identifies Chromosome Region 3q13 Near the T Cell Receptor Co-Stimulatory Molecule CD80,” American College of Rheumatology 74th Annual Scientific Meeting, Atlanta, GA, November 2010 (Podium Presentation)
- Mina R, Beresford M, Eberhard B A, Giannini EH, Levy DM, Pilkington C, Punaro MG, Ravelli A, Reiff AO, Saad-Magalhaes C, Schanberg LE, Tucker LB, Klein-Gitelman MS, Nelson SL, Eaton J, Ying J, Brunner HI, “Preliminary Criteria for Global Disease Flares in Juvenile Systemic Lupus Erythematosus (jSLE),” American College of Rheumatology 74th Annual Scientific Meeting, Atlanta, GA, November 2010 (Poster Presentation)
- O’Neil KM, Kickingbird LM, Zeft AS, Brunner H, Punaro MG, Myones BL, Li SC and Wright T, “Pre-Pubertal Onset Systemic Lupus Erythematosus in Girls: Clinical and Serologic Manifestations Differ from Post-Pubertal Onset SLE,” American College of Rheumatology 74th Annual Scientific Meeting, Atlanta, GA, November 2010 (Poster Presentation)
- Mina R, Brunner H, Eberhard A, Punaro MG, Ardoin SP, Klein-Gitleman MS, Hsu JJ, Moorthy LN, Wagner-Weiner L, Muscal E, Radhakrishna SM, Palter J, Schanberg L, Wallace CA, Ilowite NT, Von Scheven E and for the CARRA Lupus Disease-Specific Group, “Towards the Development of Standardized Treatment Protocols for Proliferative Nephritis in Juvenile Systemic Lupus Erythematosus (jSLE),” American College of Rheumatology 74th Annual Scientific Meeting, Atlanta, GA, November 2010 (Poster Presentation)
- Finkel TH, Zhang H, Lie BA, Behrens EM, Becker ML, Wise C, Punaro M, Reuschel E, Shivers D, Flato B, Forre O, Munro J, Ellis J, and Hakonarson H, “Discovery and Replication of JIA Predisposition Genes by Genome-Wide Association and Validation of Candidates in Fibroblast-Like Synoviocytes,” American College of Rheumatology 74th Annual Scientific Meeting, Atlanta, GA, November 2010 (Podium Presentation)
- “Juvenile Arthritis,” Pediatric Grand Rounds, Cooks Children’s Hospital, Fort Worth, TX, December 2010

Alisa C. Gotte, M.D., M.S.C.S.

- “Juvenile Dermatomyositis,” Pediatric Physical Medicine and Rehabilitation Lecture Series, UT Southwestern, October 2010

Matthew L. Stoll, M.D., Ph.D.

- “Pediatric Connective Tissue Diseases,” Regional X Medical Conference for School-based PTs and OTs, TSRHC, January 2010
- “Clinical Research in Pediatrics,” Rheumatology Fellows Conference, UT Southwestern, April 2010
- “Gut Inflammation and Arthritis,” Gastroenterology Noon Conference, UT Southwestern, August 2010

- “Kids Get Spondyloarthritis, too!” Rheumatology Grand Rounds, UT Southwestern, September 2010
- “Mucosal Immunity in and Outcome of Spondyloarthritis,” Rheumatology Grand Rounds, University of Alabama, Birmingham, December 2010

Tracey B. Wright, M.D.

- Casanova V, Punaro M and **Wright T**, “An Assessment of Demographic and Environmental Risk Factors for Obesity in Pediatric Systemic Lupus Erythematosus” and Carroll B, Punaro M and **Wright T**, “Traditional Risk Factors for Premature Atherosclerosis Are Prevalent in Pediatric Systemic Lupus Erythematosus,” UT Southwestern Medical Student Research Forum, January 2010 (Poster Presentations)

Major Administrative or Leadership Responsibilities

Marilynn G. Punaro, M.D.

- Member, Committee on Education, American College of Rheumatology
- Rheumatology Representative (elected), Council of Pediatric Subspecialties (CoPS)
- Division Director, Pediatric Rheumatology, UT Southwestern
- Program Director, Pediatric Rheumatology Fellowship Training Program, UT Southwestern
- Director, Arthritis Services, TSHRC
- Chief, Pediatric Rheumatology, Children’s

Alisa C. Gotte, M.D., M.S.C.S.

- Assistant Program Director, Pediatric Rheumatology Fellowship Training Program, UT Southwestern

Awards and Honors

Marilynn G. Punaro, M.D.

- Texas Super Doctor, Texas Monthly
- Best Doctors in America

Alisa C. Gotte, M.D., M.S.C.S.

- Clinical Research Scholar, Department of Clinical Sciences, UT Southwestern, 2007-2010

Matthew L. Stoll, M.D., Ph.D.

- Clinical Research Scholar, Department of Clinical Sciences, UT Southwestern, 2008-2011

Grants

NIH and Other Government Grants and Contracts

James F. Amatruda, M.D., Ph.D.

- Generation and Rapid Mapping of Low-penetrance Disease Alleles in Zebrafish
NIH, 1R01CA13573101
08/01/08 - 07/31/13

Theresa Barton, M.D.

- Human Immunodeficiency Virus-perinatal Prevention, 28246
Department of State Health Services
06/01/08 - 12/31/10
- Ryan White Care Act Title IV Adolescent Initiative
HRSA, 5H12HA230520800
09/01/08 - 08/31/12
- Ryan White Care Title IV Program
HRSA, 2H12HA000361900
08/01/07 - 07/31/12

Michel Baum, M.D.

- Neonatal Proximal Tubular Acidification
NIH, 2R01DK04161214A2
04/01/09 - 03/31/14
- Effect of Prenatal Programming on Renal Tubular Transport
NIH, 1R01DK07859601A2
09/01/09 - 03/31/14

Kamal Bharucha, M.D.

- Neuroendocrine Control of Energy Balance by the Drosophila
AKH/GLU, 1-K08-DK75922-01A1
09/01/09 - 07/31/13

George R. Buchanan, M.D.

- Health Care and Other Facilities
HRSA, 1-C76-HF10995-01-00
09/01/08 - 08/31/10
- Pediatric Hematology and Oncology Research Training
NIH, 5T32CA00964019
07/01/08 - 06/30/10
- Southwestern Comprehensive Sickle Cell Center
NIH, 5U54HL07058807
04/01/09 - 03/31/10

Scott Cameron, M.D., Ph.D.

- Regulation of Programmed Cell Death in C. Elegans
NIH, 5R01GM06966705
07/01/08 - 03/15/10

Carolyn L. Cannon, M.D., Ph.D.

- Integrated Nanosystems for Diagnosis and Therapy
HHS/Washington University, HHSN 268201000046C
8/20/10 - 8/19/11

Deborah Carlson, Ph.D.

- Project 2-Pathophysiologic and Biochemical Changes of Thermal Injury
NIH, 5P50GM02168144
09/01/08 - 8/31/11

Matthew J. Cox, M.D.

- Forensic Assessment Center Services
UT Health Science Center Houston
09/01/07 - 08/31/10

Ralph DeBerardinis, M.D., Ph.D.

- Metabolic Regulation in Growth Factor-Dependent Cells
NIH, 5K08DK07256505
07/01/08 - 6/30/11

Andrew P. Feranchak, M.D.

- Mechanosensitive ATP Release and Signaling in Cholangiocyte
NIH, 1R01DK07858701A1
03/01/08 - 02/28/13

Glenn Flores, M.D.

- A Randomized Trial of Effects of Parent Mentors on Insuring Minority Children
NIH, 1-R01-HD066219-01
09/01/10 - 05/31/15

Vidu Garg, M.D.

- Genetic Regulation of Cardiac Septation
NIH, 5R01HL08896502
07/16/07 - 04/30/12

Jyothsna Gattineni, M.D.

- Fibroblast Growth Factor 23 (FGF23) and It's Receptors
NIH, 1-K08-DK089295-01
08/01/10 - 08/31/15

Halim Hennes, M.D.

- EMSC Targeted Issues Grant
5-H34-MC11116-02-00
07/01/08 - 08/31/10

Michele R. Hutchison, M.D., Ph.D.

- Examination of the Pre-pubertal Mammalian Growth Plate
NIH, 5K08DK07344703
7/01/08 - 6/30/11
- Effect on Murine Growth of BDNF Receptor & P38 Knockouts at the Growth Plate
NIH, 1-R03-DK089151-01
07/1/10 - 06/30/12

Janna Journeycake, M.D., M.S.

- Identification and Treatment of Clinically Silent Catheter-related Deep Vein Thrombosis in Children with Cancer
NIH, 5K23HL08409703
05/01/08 - 04/30/11

Steven Kernie, M.D.

- The Role of Neural Stem Cells in Traumatic Brain Injury
NIH, 5R01NS04819204
05/01/2008 - 04/30/11
- The Role of Neural Stem Cells in Traumatic Brain Injury
ARRA NIH, 5R01NA048192-04S1
07/27/09 - 03/02/10

Bassil M. Kublaoui, M.D.

- Role of Sim1 in Hyperphagic Obesity
NIH, 5K08DK07322803
07/01/08 - 06/30/11

Fangming Lin, M.D.

- Stem Cell Therapy for Acute Kidney Injury
NIH, 5R01DK083411-01A1
09/24/09 - 07/31/14
- Use of Umbilical Cord Blood Derived HSC to Treat Acute Kidney Injury
ARRA-NIH, 1-RC1DK086886-01
09/30/09 - 07/31/11

George Lister, M.D.

- National Children's Study
NIH/NICHD, HHSN27520080035C
09/26/08 - 09/25/13
- Establish a Referral and Consultation Network of Medicaid Patients
Texas Health and Human Services
06/02/09 - 08/31/10
- Antecedents Sequelae of Childhood Onset Disease
NIH, 1-K12-HD068369-01
12/5/10 - 11/30/15

George H. McCracken, Jr., M.D.

- Pediatric Pharmacology Research Unit
NIH, 5U10HD04600005
01/01/08 - 12/31/10

Matthew H. Porteus, M.D., Ph.D.

- Using Zinc Finger Nucleases to Stimulate Gene Targeting in HSC
NIH, 5R01HL07929504
09/01/07 - 01/31/10

Zora R. Rogers, M.D.

- Pediatric Hydroxyurea Phase III Clinical Trial-Clinical Center
NIH, N01HB007159
07/01/08 - 06/30/12
- Promoting Education and Outreach of Persons with Hereditary Blood Disorders
CDC, 1U58DD00046501
09/30/09 - 09/29/10

Charles R. Rosenfeld, M.D.

- Studies of Uteroplacental Circulation
NIH, 5R01HD008783-34
09/01/77 - 04/30/14

Pablo Sanchez, M.D.

- NICHD Co-operative Multicenter Neonatal Research Network
NIH, 5U10HD04068909
04/01/08 - 03/31/10

Rashmin Savani, M.B.Ch.B.

- ABCA3 and the Response to Lung Injury
NIH, R01HL09353502
02/01/10 - 01/31/13
- ABCA3 and the Response to Lung Injury
ARRA NIH, 3R01HL093535-01A1S1
06/01/09 - 08/31/10
- ABCA3 and the Response to Lung Injury
ARRA NIH, 3R01HL093535-01A1S2
07/01/09 - 01/31/11

Philip W. Shaul, M.D.

- Breast Cancer Modulation by 27-Hydroxycholesterol, First Identified
U.S. Army, W81XWH-09-1-0263
03/15/09 - 08/31/11
- Estrogen Modulation of Endothelial Cell Phenotype
NIH, 5R01HD03027617
3/1/08 - 2/28/11
- Oxysterols, Estrogen, Receptors Antagonism and Vascular Diseases
NIH, 5R01HL08756404
6/1/08 - 5/31/10
- CRP, eNOS and Endothelial Dysfunction
ARRA NIH, 2R01HL075473-05S1
09/01/09 - 08/31/11

Rashmi Shetgiri, M.D.

- Why Adolescents Fight: Study of Attitudes and Ambulatory Care Program for the Development and Evaluation of Model Community Health Initiatives in Dallas (PDEMCHID), Department of Clinical Sciences, UT Southwestern
10/01/10 - 05/31/11
- North and Central Texas Clinical and Translational Science Initiative (KL2)
NIH, 5 KL2 RR024983-04
06/01/10 - 05/31/12

James Thomas, M.D.

- Project 1-Pathophysiologic and Biochemical Changes of Thermal Injury
NIH, 5P50GM02168144
09/01/08 - 08/31/11

Michihisa Umetani, Ph.D.

- UT Southwestern O'Brien Kidney Research Pilot
ARRA NIH, 3P30DK07932803S1
08/11/09 - 08/10/11

NIH and Other Government Subcontracts**Daniel C. Bowers, M.D.**

- Childhood Cancer Survivor Study
St. Jude Children's Research Hospital, 5U24CA05572714
12/01/07 - 11/30/10

George R. Buchanan, M.D.

- Oklahoma/UT Southwestern Hemostasis Consortium
NIH/University of Oklahoma, 5U01HL07228306
09/01/07 - 08/31/10

Carolyn Cannon, M.D., Ph.D.

- Integrated Nanosystems for Diagnosis and Therapy
HHS/Washington University, HHSN 268201000046C
8/20/10 - 8/19/11

Michael M. Dowling, M.D., Ph.D.

- PFAST: Patent Foramen Ovale and Stroke in Sickle Cell Disease
Doris Duke Foundation
11/01/09 - 10/31/12
- Validation of the NIH Stroke Scale in Children
NIH/Children's Hospital of Philadelphia, 1R01NS05048801A1
09/01/06 - 08/31/10

Rebecca S. Gruchalla, M.D., Ph.D.

- Inner City Anti-IgE Therapy for Asthma
NIH/NIAID, N01AI25496-9
09/30/02 - 09/29/10
- Inner City Anti-IgE Therapy for Asthma (Mechanistic)
NIH/NIAID, N01AI25496
09/30/05 - 07/31/10
- Mechanistic Analysis of Anti-IgE Therapy of Asthma
NIH/NIAID, R01AI49570-01
09/29/02 - 9/29/10

Susan T. Iannaccone, M.D.

- Phenylbutyrate in Pediatric Subjects with Spinal Muscular Atrophy
Westat Inc./NIH, HHSN265200423611C
06/08/07 - 06/07/09

Janna Journeycake, M.D., M.S.

- Dose Finding Pharmacokinetic Safety and Effect of Bivalirudin in Children
Children's Hospital/LA, 1R01HL9511-001
08/01/09 – 07/31/10
- Prevention of Complications of Bleeding Disorder Through Hemophilia
UT Health Science Center, Houston, SU01DD00019604
09/30/09 – 09/29/10
- Region IV Comprehensive Hemophilia Program
UT Health Science Center, Houston, 5H30MC000292000
06/01/09 – 05/31/10

George Lister, M.D.

- Study of Attitudes and Factors Affecting Infant Care
NIH/Boston University Medical Center, 1U10HD05920701A1
08/01/09 – 07/31/10
- Contract Services for the REACH Clinic
Dallas County
10/01/09 - 09/30/10
- Fellowship for Robert Silge
NIH/Yale University, 5K12HD00085024
07/01/09 – 06/30/10

Lynn Mahony, M.D.

- Pediatric Heart Disease Clinical Research Network
New England Research Institute/NIH, 5U01HL06827008
09/01/07 - 08/31/10

Pamela J. Okada, M.D.

- Lorazepam Efficacy and Safety Study
NIH/Children's Research Institute, N01HD43393
09/01/07 - 08/31/10
- Pediatric Traumatic Brain Injury Consortium Hypothermia
St. Joseph's Hospital, 1U01NS05247801A2
05/01/08 - 04/30/10
- EMSC Targeted Issue Grant
Children's National Med., 1H34MC105780200
09/01/08 – 08/31/10

Matthew Porteus, M.D., Ph.D.

- Nanomedicine Center for Nucleoprotein Machines
NIH/Georgia Institute of Technology, 5PN2EY01824402
09/30/08 – 09/29/10

Marilynn G. Punaro, M.D.

- Safety and Efficacy of Lipitor (Atorvastatin) in Reducing the Progression of Caratoid IMT in Early Childhood SLE
NIH/Duke University Medical Center, N01AR22265
09/04/03 – 8/31/11
- Trial of Early Aggressive Therapy in Juvenile Idiopathic Arthritis (TREAT)
NIH/Seattle Children's Institute, R01AR049762-01A2
09/01/06 - 04/30/11

Charles T. Quinn, M.D., M.S.

- Silent Cerebral Infarct Multi-center Clinical Trial (WU07196)
NIH/Washington University, U01NS04280402
12/01/04 - 03/30/10
- Silent Cerebral Infarct Multi-center Clinical Trial (WU08164)
NIH/Washington University, 5U01NS04280405
12/07/07 - 11/30/10

Norberto Rodriguez-Baez, M.D.

- A Multi-center Group to Study Acute Liver Failure in Children
Children's Hospital of Pittsburgh/NIH, U01DK072146
09/01/05 - 08/31/10

Pablo Sanchez, M.D.

- The Natural History of CMV-related Hearing Loss and Feasibility of CMV Screening as Adjunct to Hearing Screening in the Newborn
NIH/University of Alabama-Birmingham, HHSN260200500008C
07/01/05 - 06/30/12
- Multiple Dose Pharmacokinetic Study of Meropenem in Young Infants (<91 Days) with Suspected or Complicated Intra-Abdominal Infections
NIH/Duke University
07/01/05 - 09/27/10
- Controlled Trial of Live Attenuated Influenza Vaccine in Very Premature Infants
University of Rochester
090209 - 08/30/11

Mouin Seikaly, M.D.

- Optimal Treatment of Focal Segmental Glomerulosclerosis (Fsgs)
Suny Stonybrook/NIH, 5U01DK06338502
09/01/08 - 08/31/10
- Chronic Renal Insufficiency in Naprtcs
Children's Mercy Hospital, 5U01DK06614302
08/01/04 - 07/31/10

Naomi J. Winick, M.D.

- Children's Oncology Group/Agreement #97452-1021
National Childhood Cancer Foundation, U01CA9745207
08/01/08 - 07/31/11
- Children's Oncology Group/Agreement #1233
National Childhood Cancer Foundation, 5U10CA9854303
03/01/05 - Open
- Children's Oncology Group/Agreement #16827
National Childhood Cancer Foundation, 5U01CA09745206
08/01/07 - 07/31/10
- Children's Oncology Group/Agreement #16883
National Childhood Cancer Foundation
07/01/07 - 06/30/10

Ilana Zeltser, M.D.

- Early Cardiovascular Screening Pilot (CVSP)
Championship Hearts Foundation
01/15/08 - 12/31/10

Non-governmental Organization Grants and Contracts**James F. Amatruda, M.D., Ph.D.**

- Fellowship for Stephanie Leacock
American Cancer Society, PF-08
09/01/09 - 08/31/11
- Chemical Genetic Approaches to the Biology and Treatment of Childhood Cancers
Robert A. Welch Foundation, 1679
06/01/08 - 05/31/11
- Kevin Weir Ewing Sarcoma Fund
Catholic Foundation/G. Platt/D. Weir
11/20/07 - Open

Monica Ardura, D.O.

- RI-001 in Medically Immunosuppressed RSV Patients at Risk of Lower Tract RSV Illness
Adma Biologics, ADMA001
02/01/08 - 09/02/11

Michel Baum, M.D.

- Services for Linda Bridges-Halcomb
Inter Pediatric Nephrology
10/01/09 - 12/31/11

Daniel C. Bowers, M.D.

- Phase II Gleevec/Imatinib Mesylate (Sti-571, NSC 716051)
Neurofibromatosis (NF1) Subjects with Plexiform Neurofibromas
Indiana University, CSTI571BUS248
12/20/06 - Present
- • A Pharmacokinetic and Phase II Study of Oral Cyclophosphamide and Oral Topotecan for Children with Recurrent Solid Tumors
Children's Clinical Research Advisory Committee (CCRAC), 1862168
10/18/02 - Present

George R. Buchanan, M.D.

- North American Chronic ITP Registry
Children's Hospital Boston
12/03/06 - Open
- The Children's Cancer Fund District Chair/Pediatric Oncology-Hematology
CCF/Anonymous, GL#623180
03/19/92 - Open
- TKC Integration Services
Diamond Blackfin Anemia Outreach
01/01/09 - 02/28/10

Suzanne Dakil, M.D.

- APA Young Investigator Award
American Pediatric Association
07/15/10 - 07/14/12

M. Teresa (Maite) de la Morena, M.D.

- Diagnostic Center for Primary Immunodeficiency Diseases
Jeffrey Modell Foundation Inc.
09/01/08 - Open

Ralph Deberadinas, M.D., Ph.D.

- Dynamic Nuclear Polarization of Small Molecule Metabolic Probes: Novel Reagents for Monitoring Cancer Cell Metabolism
Welch Foundation
6/1/10 - 5/31/12
- Can Glioblastoma Growth be Suppressed by Targeting Glutamine Metabolism
CPRIT/State of Texas - HIRP100437
4/1/10 - 3/31/12

Michael Dowling, M.D.

- Detection of Neurologic Injury in Children with Sickle Cell Disease Presenting with Acute Anemia or Acute Chest Syndrome
Children's Clinical Research Advisory Committee (CCRAC), 3000866
05/01/07 - Present

Amal Dutta, Ph.D.

- Regulation of Biliary Secretion and Bile Formation by the Ca²⁺-activated Channel TMEM16A
American Liver Foundation
7/1/10 - 6/30/13

Andrew P. Feranchak, M.D.

- Regulation of Biliary Secretion By Mechanosensitive Pathways
Cystic Fibrosis Foundation
04/01/08 - 03/31/11

Glenn Flores, M.D.

- Pediatric Services
Los Barrios Unidos Community
07/01/10 - 06/30/12

Rebecca S. Gruchalla, M.D., Ph.D.

- Inner-city Anti-IgE Therapy for Asthma
Genentech CTA # 290H824
07/31/06 - 07/31/09
- The Role of Dendritic Cells in the Pathogenesis of Asthma
ExxonMobil
09/01/07 - 08/31/10
- The Role of Dendritic Cell Maturation in the Pathogenesis of Allergic Asthma
Natalie Potter Funds
09/01/07 - 08/31/08

David A. Khan, M.D.

- Mechanisms of Rush Immunotherapy
Vanberg Family Foundation
04/01/02 - Present
- Effect of Esomeprazole on Non-allergic Rhinitis in Patients with Symptoms of Gastric Reflux
Astra-Zeneca
09/01/04 - Present
- Fellowship Stipend, American Academy of Allergy, Asthma, and Immunology
American College of Asthma, Allergy and Immunology
07/01/07 - 08/31/11

Bassil M. Kublaoui, M.D.

- Mechanisms of Hyperphagic Obesity Due To Sim 1 Haploinsufficiency
American Heart Association, Central, 0865266F
07/01/08 - 06/30/10

Fangming Lin, M.D., Ph.D.

- Induction of Renal Cells from Hematopoietic Cells to Treat Acute Kidney Injury
American Heart Association, Central, 0855162F
07/01/08 - 06/30/10

Lynn Mahony, M.D.

- Testing the Pediatric Quality of Life Inventory
Cincinnati Children's Hospital, 225040105
07/01/07 - 06/30/10

George H. McCracken, Jr., M.D.

- Postgraduate Training Program in Pediatric Infectious Diseases
Pediatric Infectious Disease Society
01/27/95 - Present

Ashish Patel, M.D.

- Risk Stratification & Identification of Immunogenetic and Microbial Markers of Rapid Disease Progression in Children with Crohn's Disease
Crohn's and Colitis Foundation/Emory University
7/1/10 - 6/30/11

Matthew Porteus, M.D., Ph.D.

- Cancer Awards in the Biomedical Sciences
Burroughs Wellcome Fund
02/01/03 - 08/31/10

Claude Prestidge, M.D.

- Cystic Fibrosis Care and Teaching Center
Cystic Fibrosis Foundation, C10908
07/01/08 - 06/30/11

Pablo Sanchez, M.D.

- Perform Cytokine Culture Assays
Medimmune Inc., MI-CP141
11/03/00 - 06/09/11

Rashmin Savani, M.D.

- RHAMM, BPD and Inhaled Nitric Oxide
Ikaria Pharmaceuticals
12/1/10 - 11/30/12

Margaret Schwarz, M.D.

- Postdoctoral Fellowship Award for Katherine Bennett
American Academy of Pediatrics
07/01/09 – 06/30/10
- CCRAC Award #125
Children's Medical Center of Dallas
11/1/10 – 10/31/11

Philip W. Shaul, M.D.

- Cancer Research
Mary Kay Ash Charitable Foundation
06/01/09 – 12/31/11
- Fellowship for Natalie Frost
IKARIA
12/01/09 – 11/30/10
- Fellowship for Sonika Saddar
American Heart Association, National, 0825031F
7/1/08 - 6/30/10
- Postdoctoral Fellowship for Qian Wu
American Heart Association, 09POST2250860
07/01/09 – 06/30/11

Michihisa Umetani, Ph.D.

- Crosstalk Between Liver X Receptor and Estrogen Receptor in Vascular Function
American Heart Association, South Central, 0865158F
7/1/08 - 6/30/10

Perrin C. White, M.D.

- Inflammation in Type 1 Diabetes
Juvenile Diabetes Research Foundation
12/01/08 - 01/31/11

Tracey B. Wright, M.D.

- Obesity and Insulin Resistance in Pediatric Systemic Lupus Erythematosus
American College of Rheumatology
09/01/08 - 06/30/10

Myra Wyckoff, M.D.

- Evaluation of the Ergonomics of Cardiac Compression during Neonatal Cardiopulmonary Resuscitation
American Academy of Pediatrics
01/02/08 – 10/07/11
- CCRAC Award #119
Children's Medical Center of Dallas
6/1/10 – 5/31/11
- CCRAC Award #123 – John Sparks
Children's Medical Center of Dallas
10/1/10 – 9/30/11

Sponsored Clinical Trials**Victor M. Aquino, M.D.**

- Pediatric Blood and Marrow Consortium
Children's Mercy Hospital, 1U01HL6925401
04/01/02 - Present
- Intravenous Temsirolimus (Cc10779) in Pediatrics Subjects
Wyeth Pharmaceuticals, 3066K1139US
10/23/07 - Present
- Cytokine Gene Polymorphisms in Pediatric Patients Receiving Tacro
North Shore University Hospital
10/01/02 - Present
- Myeloablative Therapy and Allogenic Hematopoietic Stem Cell Transplantation
Amgen Inc., 20010133
08/01/06 – Present

Soumya Adhikari, M.D.

- Comparisons of Insulins Detemir, Glargine and NPH
Novo Nordisk Pharmaceuticals, 50810
08/10/06 - Present

John M. Andersen, M.D.

- Pharmacodynamics of Intravenous Mepolizumab in Pediatrics Subjects
GlaxoSmithKline, MEE103219
11/27/06 – Present
- Reslizumab (CTX55700) in the Treatment of Eosinophilic Esophagitis
Ception Therapeutics
08/01/02 – Present
- Study of Reslizumab in Pediatric Subjects with Eosinophilic Esophagitis
Premier Research
10/06/09 – Present

Theresa Barton, M.D.

- An Open-Label, Multicenter, Multiple-Dose Pharmacokinetic and 48-Week Safety and Efficacy Trial of Maraviroc in Combination with Optimized Background Therapy for the Treatment of Antiretroviral-Experienced CCR5-Tropic HIV-1 Infected Children 2-18 Years of Age
Pfizer, Inc., A4001031
03/01/09 – 10/30/09
- A Phase II, Open-Label Trial to Evaluate the Safety, Tolerability and Antiviral Activity of TMC125 in Antiretroviral Experienced HIV-1 Infected Children and Adolescents
Tibotec Pharmaceuticals, TMC125-TiDP35-C213
07/01/2008 – 04/30/2010

Daniel Bowers, M.D.

- Transfusional Iron Overload in Children Treated for Cancer
Novartis CICL670AUS41T
08/31/10 – 09/01/12
- A Randomized Phase 2 Study of Single-agent Erlotinib vs. Oral Etoposide in Patients w/Recurrent or Refractory Pediatric Ependymoma (PETEY)
OSI Pharmaceuticals Inc. OSI-774-205
05/01/10 – 04/30/12

George R. Buchanan, M.D.

- Transfusion Medicine/Hemostasis (TMH) Clinical Trials Network
New England Research Institute
09/01/07 – Present
- Pediatrics Subjects with Chronic Immune (Idiopathic) Thrombocytopenia
Amgen, Inc., 20060195
09/26/07 – 08/31/12

Jennifer A. Cox, M.D.

- A Multicenter Trial of the Pediatric Blood and Marrow Transplant
PDL Biopharma Inc., ONC0313
08/24/05 - Present

Shelley Crary, M.D.

- The VWD International Prophylaxis (VIP) Study
CSL Behring/Rho Inc.
01/01/09 – 12/31/11

Cindy Darnell, M.D.

- Pediatric Off-patient Study (PODS) Center for Lorazepam Sedation
Case Western Reserve University, HHSN275200403367C
11/01/04 - Present

William Engle, M.D.

- Absorption and Metabolism of Oral Codeine
Research Foundation of SUNY
09/18/09 – 08/31/10

Paul Harker-Murray, M.D. PH.D.

- An Open Label Study of Bendamustine Hydrochloride for the Treatment of Pediatric Patients w/Relapsed or Refractory Acute Leukemia
Cephalon Inc. C18083/2046
08/01/10 – 07/30/12

Michele R. Hutchison, M.D., Ph.D.

- Norditropin National Registry Program
Novo Nordisk Pharmaceuticals
10/01/02 - Present
- Pfizer International Growth Study
Pfizer Inc., A62812761
06/01/06 - Present
- Increlex (Mecasermin [Rdna Orgin] Injection) Growth Forum Database
Tercica Inc./Mednet Solutions
01/14/08 - Present
- Genotropin in Idiopathic Short Stature Patients: Comparing an Individualized, Target-driven Regomen to Standard Dosing of Genoprin
Pfizer Inc.
05/28/08 - Present
- NCGS Post Marketing Survey Program Protropin/Nutropin for Injection
Genentech Inc.
12/27/95 - Present

Susan T. Iannaccone, M.D.

- Phase 2b, Study of PTC124 in Subjects W/Nonsense-Mutation-Mediated Duchenne and Becker Muscular Dystrophy
PTC Therapeutics - PTC124GD007DMD
12/20/07 - Present

Janna Journeycake, M.D., M.S.

- Evaluation of Prophylaxis Treatment and Characterization of B-domain
Wyeth Pharmaceuticals
02/17/09 – Present
- A Prospective Multicenter, Open-label, Phase 3B Study of Human Plasma-Derived Factor XIII Concentrate in Subjects w/ Congenital Factor XIII Deficiency
CSL Behring Inc. B171023-3001
01/01/10 – 02/28/11

Patrick J. Leavey, M.D.

- Phase I/II Study of Cp-751,871 in Patients With Relapsed and/or Refractory Ewing's Sarcoma Family of Tumors
Pfizer Inc./Research, A4021020
03/17/08 - Present

George H. McCracken, Jr., M.D.

- Micafungin Lock Therapy to Clear Fungemia while Attempting to Preserve the Central Line
Astellas Pharma US Inc., DS05001
07/10/06 - Present
- GlaxoSmithKline Chair of Pediatric Infectious Diseases
GlaxoSmithKline, GL#624702
08/28/01 - Present

Jon D. Oden, M.D.

- Safety and Efficacy of Exenatide As Monotherapy and Adjunctive Therapy To Oral Antidiabetic Agents in Adolescents with Type 2 Diabetes
Eli Lilly, H80-MC-GWBQ
06/23/08 - Present

Cindy Neunert, M.D.

- An Open Label Study Evaluating the Safety and Efficacy of Long-Term Dosing of Romiplostin in Thrombocytopenic Pediatric Subjects w/Immune (Idiopathic) Thrombocytopenia Purpura (ITP)
Amgen Inc. 20090340
12/16/09 – 12/15/12

Claude Prestidge, M.D.

- A Phase 3, International, Multi-Center, Randomized, Double-Blind, Parallel-Group, Efficacy and Safety Study of Denufosal Tetrasodium Inhalation Solution in Patients with Cystic Fibrosis Lung Disease FEV₁ ≥ 75% Predicted
Inspire Pharmaceuticals Inc., Protocol No. 08-110
10/02/08 - Present
- Open-label Extension of Study 08-110 - A Multi-Center Study of Denufosal Tetrasodium Inhalation Solution in Patients with Cystic Fibrosis Lung Disease
Inspire Pharmaceuticals Inc., Protocol No. 08-114
07/21/09 - Present

Marilynn G. Punaro, M.D.

- IL-1 Trap Administered Subcutaneously In Pediatric Subject with Active Systemic Juvenile Idiopathic Arthritis (SJIA)
Regeneron Pharmaceuticals Inc., ILITAI0504
03/31/06 - Present

Norberto Rodriguez-Baez, M.D.

- Pediatric Subjects with Chronic Hepatitis B Virus Infection
Bristol-Myers Squibb Company, A1463028
04/01/07 - Present
- Assessment of the Safety, Efficacy, Tolerability and Pharmacokinetics of PEG-Intron Plus REBETOL in Pediatric Patients with Chronic Hepatitis C
Schering-Plough Research Institute, P02538
11/01/05 - Present

Pablo Sanchez, M.D.

- Clinical Trials for Antiviral Therapies (Collaborative Antiviral Study Group's)
University of Alabama at Birmingham/NIH, Primary Contract #N01AI30025
08/01/03 - Present
- A Phase I Open Label Study of the Safety and Pharmacokinetic of Repeated-Dose Micafungin (FK463) in Children (2-5 years and 6-11 years) and Adolescents (12-16 years) with Esophageal Candidiasis or Other Invasive Candidiasis
Astellas Pharma US Inc., 9463CL2101
09/08/07 - Present
- A Phase 2, Randomized, Double-Blind, Placebo-Controlled Study to Evaluate a Single Intravenous Dose of Motavizumab (Medi-524), a Humanized Enhanced Potency Monoclonal Antibody Against Respiratory Syncytial Virus (RSV), for the Treatment of Children Hospitalized with RSV Illness
Medimmune Inc., MI-CP141
01/03/08 - Present
- Fluconazole Prophylaxis for the Prevention of Candidiasis in Infants <750 Grams Birth Weight
Duke University/NIH, 1R01HD05795601
06/30/10 - Present
- An Open-label Prospective, Pharmacokinetic/Pharmacodynamic and Safety Evaluation of Intravenous Oseltamivir (Tamiflu®) in the Treatment of Infants Less than One Year of Age with Influenza Infection
Study Protocol NP25138
08/27/10 - Present
- A Phase 2b/3, Multi-Center, Randomized, Double-Blind, Placebo Controlled Trial to Evaluate the Safety and Efficacy of Pagibaximab Injection in Very Low Birth Weight (VLBW) Neonates for the Prevention of Staphylococcal Sepsis
Clinimetrics/Biosynexus, Protocol MAB-N007
1/29/10 - Present

Rinarani M. Sanghavi, M.D.

- Pharmacokinetics of Lubiprostone in Pediatric Patients with Constipation
Sucampo Pharmaceuticals, SPI0211SC0641
02/01/08 - Present

Mouin Seikaly, M.D.

- North American Pediatric Renal Transplant Cooperative Study
Emmes Corporation
08/12/05 - Present
- Iron Maintenance Regimens in Pediatric Chronic Kidney Disease
NAPRTCS, IVEN03017
08/06/06 - Present
- Trial Evaluating Conventional and High Dose Oseltamivir (Tamiflu®) in the Treatment of Kidney Transplant Patients with the Flu
Roche/Quintiles Inc., NV20234
03/12/08 - Present

Grace M. Tannin, M.D.

- The Genetics and Neuroendocrinology of Short Stature International Study (GeNeSIS)
Lilly Research Laboratories, B9R-EW-GDFC(a)
11/01/00 - Present

Lewis Waber, M.D., Ph.D.

- Study of Phenotin in Subjects with Phenylketonuria Who Participated in Studies PKU 004 and PKU 006
Biomarin Pharmaceuticals Inc., AA3143920
09/18/06 - Present

Thomas Zellers, M.D.

- Post Market Surveillance Plan for the Amplatzer Duct Occluder
AGA Medical Corporation, IDE G980103
05/15/07 - Present
- Multicenter Continued Access Study of the Helex Septal Occluder
W.L. Gore & Associates Inc., HLX0301
01/01/04 - Present
- Closure of Muscular Ventricular Septal Defects with the Amplatzer Duct Occluder
AGA Medical Corporation
02/17/06 - Present
- Closure of Muscular Ventricular Septal Defects: Post Approval Study
AGA Medical Corporation, AGA016
05/14/08 - Present
- Coarctation of the Aorta Stent Trial (COAST)
Johns Hopkins University
05/01/08 - Present
- Gore Helex Septal Occluder: Post Approval Study
W. L. Gore & Associates Inc., HLS0604
12/12/07 - Present

Publications

1. Abu Libdeh A, Levy-Khademi F, Abdulhadi-Atwan M, Bosin E, Korner M, White PC, Zangen DH. Autosomal recessive familial neurohypophyseal diabetes insipidus: onset in early infancy. *Eur J Endocrinol*;162:221-6.
2. Ang JY, Lua JL, Asmar BI, Shankaran S, Heyne RJ, et al. Nasopharyngeal carriage of *Streptococcus pneumoniae* in very low-birth-weight infants after administration of heptavalent pneumococcal conjugate vaccine. *Arch Pediatr Adolesc Med*;164:1173-5.
3. Auerbach SR, Richmond ME, Lamour JM, Blume ED, Addonizio LJ, Shaddy RE, Mahony L, Pahl E, Hsu DT. BNP levels predict outcome in pediatric heart failure patients: post hoc analysis of the Pediatric Carvedilol Trial. *Circ Heart Fail* 2010;3(5):606-11.
4. Awasthi N, Schwarz MA, Schwarz RE. Combination effects of bortezomib with gemcitabine and EMAP II in experimental pancreatic cancer. *Cancer Biol Ther*;10:99-107.
5. Aziz PF, Tanel RE, Zeltser IJ. The Congenital Long QT Syndrome and 2:1 Atrioventricular Block: An optimistic outcome in the current era. *Heart Rhythm* 2010;7:781-5.
6. Ballas SK, Lieff S, Benjamin LJ, Dampier CD, Heeney MM, Hoppe C, Johnson CS, Rogers ZR, et al. Definitions of the phenotypic manifestations of sickle cell disease. *Am J Hematol*;85:6-13.
7. Barth BA, Channabasappa N. Single-balloon enteroscopy in children: initial experience at a pediatric center. *J Pediatr Gastroenterol Nutr*;51:680-4.
8. Baum M. Effect of catecholamines on rat medullary thick ascending limb chloride transport: interaction with angiotensin II. *Am J Physiol Regul Integr Comp Physiol*;298:R954-8.
9. Baum M. Overview of chronic kidney disease in children. *Curr Opin Pediatr*;22:158-60.
10. Baum M. Renal Fanconi syndrome secondary to deferasirox: where there is smoke there is fire. *J Pediatr Hematol Oncol*;32:525-6.
11. Baum M. Role of the kidney in the prenatal and early postnatal programming of hypertension. *Am J Physiol Renal Physiol*;298:F235-47.
12. Beigelman A, Mikols CL, Gunsten SP, Cannon CL, Brody SL, Walter MJ. Azithromycin attenuates airway inflammation in a mouse model of viral bronchiolitis. *Respir Res*;11:90.
13. Benjamin DK, Jr., Smith PB, Arrieta A, Castro L, Sanchez PJ, et al. Safety and pharmacokinetics of repeat-dose micafungin in young infants. *Clin Pharmacol Ther*;87:93-9.
14. Benjamin DK, Jr., Stoll BJ, Gantz MG, Walsh, MC, Sanchez PJ, et al. Neonatal candidiasis: epidemiology, risk factors, and clinical judgment. *Pediatrics*;126:e865-73.
15. Berg SL, Winick N, Ingle AM, Adamson PC, Blaney SM. Reasons for participation in optional pharmacokinetic studies in children with cancer: a Children's Oncology Group phase 1 consortium study. *Pediatr Blood Cancer*;55:119-22.
16. Bird JA, Burks W. Peanut allergy saves a patient with cold-induced hypotension and urticaria. *J Pediatr*;156:687.
17. Blalock SE, Matulevicius S, Mitchell LC, et al. Long-term outcomes with ambrisentan monotherapy in pulmonary arterial hypertension. *J Card Fail*;16:121-7.
18. Blanco CL, Liang H, Joya-Galeana J, DeFronzo RA, McCurnin D, Musi N. The ontogeny of insulin signaling in the preterm baboon model. *Endocrinology*;151:1990-7.
19. Blanco VM, Blalock SE, Ramaciotti C, Lemler M, Heistein L, Moore J, Ikemba C. Oxygen supplementation is helpful for the echocardiographic detection of anomalous left coronary artery from the pulmonary artery. *J Am Soc Echocardiogr*;23:1099-102.
20. Blumer J, Rodriguez A, Sanchez PJ, Sallas W, Kaiser G, Hamed K. Single-dose pharmacokinetics of famciclovir in infants and population pharmacokinetic analysis in infants and children. *Antimicrob Agents Chemother*;54:2032-41.
21. Boppana SB, Ross SA, Novak Z, Shimamura M, Tolan RW Jr., Palmer AL, Ahmed A, Michaels MG, Sanchez PJ, et al. Dried blood spot real-time polymerase chain reaction assays to screen newborns for congenital cytomegalovirus infection. *JAMA*;303:1375-82.
22. Bouche C, Lopez X, Fleischman A, et al. Insulin Enhances Glucose-Stimulated Insulin Secretion in Healthy Humans *Proc Natl Acad Sci U S A* 2010;107(10):2770-5.

23. Bowers DC, Kucejova B, Margraf L, Gargan L, Brugarolas J. mTORC1 activation in childhood ependymoma and response to sirolimus. *J Neurooncol*.
24. Brown RM, Klesse LJ, Le LQ. Cutaneous features predict paraspinal neurofibromas in neurofibromatosis type 1. *J Invest Dermatol*;130:2167-9.
25. Brunner HI, Higgins GC, Klein-Gitelman MS, Lapidus SK, Olson JC, Onel K, Punaro M, et al. Minimal clinically important differences of disease activity indices in childhood-onset systemic lupus erythematosus. *Arthritis Care Res (Hoboken)*;62:950-9.
26. Brunner HI, Higgins GC, Wiers K, Lapidus SK, Olson JC, Onel K, Punaro M, et al. Prospective validation of the provisional criteria for the evaluation of response to therapy in childhood-onset systemic lupus erythematosus. *Arthritis Care Res (Hoboken)*;62:335-44.
27. Brunner HI, Klein-Gitelman MS, Higgins GC, Lapidus SK, Levy DM, Eberhard A, Singer N, Olson JC, Onel K, Punaro M et al. Toward the development of criteria for global flares in juvenile systemic lupus erythematosus. *Arthritis Care Res (Hoboken)*;62:811-20.
28. Buie T, Campbell DB, Fuchs GJ, 3rd, Furuta GT, Levy J, Vandewater J, Whitaker AH, Atkins D, Bauman ML, Beaudet AL, Carr EG, Gershon MD, Hyman SL, Jirapinyo P, Jyonouchi H, Kooros K, et al. Evaluation, diagnosis, and treatment of gastrointestinal disorders in individuals with ASDs: a consensus report. *Pediatrics*;125 Suppl 1:S1-18.
29. Buie T, Fuchs GJ, 3rd, Furuta GT, Levy J, Vandewater J, Whitaker AH, Atkins D, Bauman ML, Beaudet AL, Carr EG, Gershon MD, Hyman SL, Jirapinyo P, Jyonouchi H, Kooros K, et al. Recommendations for evaluation and treatment of common gastrointestinal problems in children with ASDs. *Pediatrics*;125 Suppl 1:S19-29.
30. Carlo WA, Finer NN, Walsh MC, Rich W, Gantz MG, Lupton AR, Yoder BA, Faix RG, Das A, Poole WK, Schibler K, Newman NS, Ambalavanan N, Frantz ID 3rd, Piazza AJ, Sanchez PJ, et al. Target ranges of oxygen saturation in extremely preterm infants. *N Engl J Med*;362:1959-69.
31. Castillo L, Rohatgi A, Ayers CR, et al. Associations of four circulating chemokines with multiple atherosclerosis phenotypes in a large population-based sample: results from the dallas heart study. *J Interferon Cytokine Res*;30:339-47.
32. Chambliss KL, Wu Q, Oltmann S, Konanah ES, Umetani M, Korach KS, Thomas GD, Mineo C, Yuhanna IS, Kim SH, Madak-Erdogan Z, Maggi A, Dineen SP, Roland CL, Hui DY, Brekken RA, Katzenellenbogen JA, Katzenellenbogen BS, Shaul PW. Non-nuclear estrogen receptor alpha signaling promotes cardiovascular protection but not uterine or breast cancer growth in mice. *J Clin Invest*;120:2319-30.
33. Channabasappa N, Johnson-Welch S, Mittal N. De novo cholangiocarcinoma after liver transplantation in a pediatric patient. *Pediatr Transplant*;14:E110-4.
34. Cheng E, Fustino N, Klesse L, Chinnakotla S, Sanghavi R. Post-transplant lymphoproliferative disorder resembling Wilms tumor. Diagnostic dilemma: Renal biopsy or nephrectomy? *Pediatr Transplant*.
35. Christman C, Hemway RJ, Wyckoff MH, Perlman JM. The two-thumb is superior to the two-finger method for administering chest compressions in a manikin model of neonatal resuscitation. *Arch Dis Child Fetal Neonatal Ed*;96:F99-F101.
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