**Introduction**

Our Educational Programs include both Divisional and Departmental elements, and interactions between the two. Each of our Clinical Divisions design and deliver daily educational content relevant to their subgenres of Pediatrics, most frequently in the educational context of their physical location(s) in our inpatient and outpatient care settings. Beyond day-to-day patient care, each Division also offers opportunities for trainees to help pursue new knowledge and processes in ways that are ultimately intended to improve pediatric care. Done well, this appears to be producing “graduates” of each training stage (medical students, residents and fellows) who have nationally competitive career prospects.

At the Departmental level, our Pediatric Education Programs, led by the Departmental Vice Chair of Education, pursue interdisciplinary and/or integrated educational initiatives, and track and support the pediatric educational offerings available for each of our educational constituents, as detailed below.

For all faculty – and especially those on the clinician educator promotion track - we increasingly seek to assist and document the development of robust educational projects and portfolios by faculty. Ultimately, we seek to have such projects and portfolios be considered as compelling evidence in support of faculty career advancement and promotion.

**Faculty**

**Jeffrey McKinney, M.D., Ph.D.**  
Professor  
Vice Chair of Education

**Nancy Kelly, M.D., M.P.H.**  
Professor  
Medical Director, Continuity of Care Clinic, Children’s Medical Center  
Director, Community Pediatrics and Advocacy Program for Pediatric Residents

**Anne-Marie Hain, M.D.**  
Assistant Professor

**Michael Lee, M.D.**  
Associate Professor

**Angela Mihalic, M.D.**  
Professor  
Associate Dean for Student Affairs

**Dorothy Sendelbach, M.D.**  
Professor  
Assistant Dean for Undergraduate Medical Education

**Honors / Awards**

**Jeffrey McKinney**

- Promotion to Professor

**Anne-Marie Hain**

- Texas Pediatric Society’s state ADHD expert in the American Academy of Pediatrics’ Chapter Quality Network Quality Improvement Project for ADHD care
Nancy Kelly

- Elected to serve as Communications Director, Academic Pediatric Association
- UT Southwestern Academic Colleges Mentor (Seldin College)

Michael Lee

- Texas Super Doctors, Texas Monthly Magazine

Angela Mihalic

- UT Southwestern Outstanding Teacher Award, MS1 Class

Dorothy Sendelbach

- Harvard Macy Institute Scholar, January 2017

Invited Lectures

Nancy Kelly

- University of Texas Maternal and Child Health Training Program Seminar, UT School of Public Health, Dallas, TX, January 2016
  - “Immunization Concerns: Separating Fact from Fiction”

Jeffrey McKinney

- 48th Annual Kenneth C. Haltalin Pediatrics for the Practitioner, Irving, TX, April 2016
  - “Mosquito Borne Diseases: Imported, Endemic & Up in The Air”

- Population Health Forum, Dallas, TX, May 2016
  - “Pediatric Resident Education”

Angela Mihalic

- University of Texas Medical Branch Professionalism Summit, Galveston, Texas, April 2016
  - “Managing a Respectful Intergenerational Workforce”

Conference Presentations

Nancy Kelly

- “Promoting Healthy Active Living for the Children of Teen Parents”
  Gonzalez K, Bourland C, Jarcy M, Kelly N
  - Poster Presentation, Pediatric Academic Societies Annual Meeting, Baltimore, MD, May 2016

- Advocacy Training Special Interest Group (SIG) Session
  - APA Advocacy Training SIG Co-chair, Pediatric Academic Societies Annual Meeting, Baltimore, MD, May 2016
Angela Mihalic

- “Identifying Optimal Preparation Strategies for USMLE Step 1”
  Shah S, Mihalic AP, Sendelbach D
  ○ Peer-Reviewed Poster Presentation. 2017 Innovations in Health Science Education Conference, Austin, Texas

- “Impact of UT PACT Initiative on Development of Professional Identity Formation and Preservation of Physician Empathy”
  Sendelbach D, Wagner J, Scotch R, Mihalic AP
  ○ 2017 Innovations in Health Science Education Conference, Austin, Texas

Research

Nancy Kelly

Research Advisor for Resident AAP CATCH grant recipient, Dr. Paige Partridge

Current Grant Support

Nancy Kelly

- **Grantor:** American Academy of Pediatrics, Community Pediatrics Training Initiative (CPTI) and Institute for Healthy Childhood Weight
- **Title of Project:** Promoting Health Active Living for the Children of Teen Parents
- **Role:** Principal Investigator
- **Dates:** 04/2016 – 04/2017

Journal Publications


Education and Training

Medical Students

Soumya Adhikari, M.D., is Associate Professor of Pediatrics at UT Southwestern Medical Center and Director of the Pediatrics Clerkship. He 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. Dr. Adhikari assumed leadership of the medical student clerkship in 2008, and has stewarded it through the current wave of curriculum reform, the campus’s largest in decades. 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.

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Medical Student Education

As one of six 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 of Pediatrics 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 a six-week rotation through the many care units housed at Children’s Medical Center, in addition to the Newborn Nursery at Parkland Health & Hospital System. During this six-week rotation, students spend four weeks on the inpatient service units at Children’s, a week in the Emergency Department, and a week in the nursery. 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 inpatient medicine ward and two weeks on one of the hospital’s subspecialty wards.

In addition, pediatric training makes up a significant core of the newly developed Ambulatory Care Clerkship, itself a six week experience during which students rotate through the offices of one of a number of private pediatricians in the North Texas region in addition to rotations through the breadth of subspecialty clinics on the Children’s Medical Center campus.

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 and daily rounds, in addition to various didactic sessions, interactive case-based discussions, and team-based learning sessions where students work in assigned teams to solve real world case simulations. Students also participate in community advocacy through their involvement in nutrition education programs for elementary school students in the Dallas Independent School District. The entire curriculum is reviewed on an ongoing basis based on feedback from medical school faculty, national regulatory agencies and students themselves.

Student performance on objective measures continues to outpace national averages on both the National Board of Medical Examiners subject exam in Pediatrics and the AAMC Graduating Student Questionnaire administered to fourth year students prior to their graduation from medical school.

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 Department. Extended experiences in any of a number of subspecialty clinics including Pediatric Hematology-Oncology, Nephrology, Gastroenterology, Endocrinology and others are available for fourth-year students as well. In addition, ~30-40 students from outside institutions come to UT Southwestern and Children’s Medical Center annually to do visiting rotations in pediatrics. The department also offers international elective opportunities to attract top students from international medical schools to do visiting rotations in Dallas every year.

In response to significant UTSW medical school curriculum reform, our pediatric residents have directly contributed to the front line delivery of rigorous – yet friendly - pediatric education to our medical students. Our Chief Residents now directly coach medical students via their faculty sponsorship of the UTSW Medical School’s Pediatric Interest Group, and they offer medical students access to residents’ scholarly projects. All of our senior house staff also and create and present high visibility, resident-led, teaching conferences to intentionally draw medical students into deep discussions of pediatric disease processes, treatment mechanisms, and social determinants of health.

Perhaps more telling that any of the above, 108 UT Southwestern students have chosen to pursue a career in pediatrics or some combined program including pediatrics in the last three years, many here at UT Southwestern.

**Conference Presentations – Medical Students**

Poster, Pediatric Academic Society/Society of Pediatric Research, Baltimore, MD, May 2016

**Chang M** (2nd Year Medical Student), Lau M.

- “Sexually Active Latino Teens and Pregnancy: Perspectives on Risks and Prevention”

**Residents and Fellows**

Residents and Fellows in our program have become influential educational and respected intellectual leaders in our Department. This is consistent with our emphasis on graded responsibility and ownership among our post graduate MD cadre. We also seem to have a healthy social structure in which each class cohort helps – and helps elevate the performance of - the next.

Considering our different *trainee cohorts*, in turn:

**Fellows** are becoming increasingly impactful as educational and clinical career role models in our Department. As part of our residents’ Senior Apprenticeship program, advanced fellows are able to offer self-selected residents early insights into academic medicine pursuits in specific subgenres of pediatrics.

At formal educational programming levels, fellows consistently hone their analytical and presentation skills in the Weekly Fellows Conference that has been organized by Dr. Charles Rosenfeld. Senior Fellows’ academic research projects are presented and critiqued in the Annual Fellows Research Day. This features an invited guest speaker, partially supported by educational endowment funds. Fellows’ future career plans and job offers are announced in this venue as well.

All Fellows’ research endeavors are longitudinally tracked (and coached) via increasingly robust Scholarly Oversight Committee activities. Select fellows are invited to showcase their expertise via featured Departmental didactic teaching sessions such as: the Multidisciplinary Conference, Residents’ Friday Morning Report, and “in situ” teaching series in venues like Pediatric Intensive Care Unit.
At informal levels, it is increasingly clear that contemporary fellows’ success rates, experiences and perspectives are internalized by residents – and medical students. Our Fellows thus profoundly influence each successive cohort’s decision making about career paths and desired training sites. Successful fellows improve the effectiveness of our “pipeline”; an important advantage for our Department, given the nationally competitive academic abilities among our residents and medical students.

Chief residents have created new normative behaviors as they work directly with our senior residents who are leading our resident staffed ward teams. In our ongoing senior resident teaching sessions, our seniors emphasize front line approaches to: questioning dogma, the influential and effective leadership of care teams, driving safety initiatives, and teaching fundamental mechanisms of disease and principles of treatment to their more junior residents.

Commensurate with the number of impactful chief-driven educational initiatives in our program, and commensurate with the large size of our program, in 2017-18 we will have four chief residents. While each of our chiefs during 2016 has a rich portfolio of educational responsibilities, they have each made positive improvements in particular “signature” projects. For examples from 2015-2016: Kristen Disori’s thoughtful educational series on analysis of study design, Richard Graham’s development of our “Discovering Doctors” narratives, and Catherine O’Neill Buck’s improvement of the rigor of residents’ scholarly projects. From 2016-17: Athra Kaviani’s refinement of the core noon conference curriculum, Karl Kurz’s development of our new night teams curriculum, and Krista Whitney’s leadership in resident wellbeing initiatives in the Department and University.

Our senior and junior residents have fully leveraged our program’s freedom to create flexible and individualized curricula – particularly as related to their specific career development needs. We have new dedicated endowment funds to help develop and support such individualized educational experiences. These experiences are modeled on co-op educational programs in some engineering colleges, on academic exchange programs like Rhodes, Marshal and Fulbright Scholarships, and on the University of Chicago’s Metcalf Program. Direct communication between our program and our residents’ next employers suggest these experiences are part of what makes them so competitive as job candidates.

Junior residents are now routinely “banking” their illustrative teaching cases, which they present in our teaching conferences with levels of educational nuance that one would hope for from a faculty member. We are also starting high fidelity recording of these sessions, for rebroadcast as part of a new night teams teaching curriculum, and as one element of our graduates’ job application portfolios. Junior residents’ leadership roles also continue to be robust and broad based. Perhaps reflecting the highly engaged nature of our residents in program leadership, we continue to have a large number of chief resident candidates among our PL2 class. They bring a notable dedication to continuing to make our program one that is progressive, innovative, and responsive to contemporary needs and opportunities.

Interns have become dedicated to, and remarkably adept at, mechanistic thinking and problem solving – including in regular pathophysiology teaching conferences led by our Department Chair and the Chief Residents, with dedicated follow up by the Chief residents.
Intriguingly, programmatic disciplinary steps for workplace performance shortcomings and/or lapses in professionalism have now become almost unheard of. In contrast to some prior years’ high attrition rates, historically leading to depleted senior classes, we now have a greater than 99.8% successful completion rate of our residency - by all of our recruits. This includes trainees with personal needs that we take particular pride in supporting, with appropriate confidentiality and discretion. Indeed, the Pediatrics Department has assumed leadership roles in University Trainee Wellbeing initiatives.

In sum, we now seem to have an elite educational cadre mentality among our trainees – who view themselves as physician leaders and mutually supportive role models. Future goals will emphasize career development – and tracking – in ways that we hope will lead to an engaged, connected, and mutually supportive trainee alumni system.

Conference Presentations - Residents

Platform Presentation

48th Annual Kenneth C. Haltalin Pediatrics for the Practitioner, Irving, TX, April 2016

Lekshmi D (3rd Year), Lin J (2nd Year), Luan Y (3rd Year), Nguyen N (3rd Year), Penland J (2nd Year), McKinney J.

- “Mosquito Borne Diseases: Imported, Endemic & Up in The Air”

SPR Advanced Symposium on Cardiovascular Imaging, Houston, TX, October 2016

Batsi, M (3rd Year)

- "Pediatric Patients with a Superior Sinus Venosus Defect Show a Large Variability in the Number and Position of the Ostia"

Poster Presentation

American Academy of Allergy, Asthma & Immunology: 2016 Annual Meeting, Los Angeles, CA, March 2016

Nicols-Vinueza D (2nd Year)

- “Use of Rituximab in Late Onset Leaky SCID”


Sudanagunta S (1st Year), George C, Reisch, J, Norman G.

- "Association of Basic Maternal Factors and Maternal Autonomy with Malnourishment Among Children 6-36 Months Old in an Urban Slum in Bangalore, India"


- “Current Perspectives and Practices on Radiation Safety in the Catheterization Laboratory”

International Society of Pediatric Oncology, Dublin, Ireland, October 2016

Itriago E (1st Year)
Pediatric Education Programs

2016 Annual Report

• “Systematic Review of Strategies to Avert Treatment Abandonment in Childhood Cancer”
  o International presentation of e-poster

Pediatric Academic Society/Society of Pediatric Research, Baltimore, MD, May 2016

Buck C (Chief Resident), Kapadia V.
• “Predicting the Need for Significant Neonatal Resuscitation Following Delivery of Late Preterm Neonates”

Mokshagundam D (3rd Year), Schoppa S.
• “An Innovative Policy Advocacy Module to Cultivate Pediatrician-Advocates”

Southern Society for Pediatric Research Annual Meeting, New Orleans, LA, February 2016

Kurz K (3rd Year), Ghazala Z.
• “Warfarin Induced Skin Necrosis: an Adolescent with May Thurner Syndrome and Protein C Deficiency”

World Congress of Pediatric Gastroenterology, Hepatology and Nutrition, Montreal, Canada, October 2016

Odiase Elaine (3rd Year), Troendle D.
• “Rates of Adverse Events in Pediatric Patients Undergoing Delayed Cholecystectomy for Biliary Colic”

Odiase Eunice (3rd Year), Patel A.
• “The Impact of Obesity on the Natural History of Pediatric Inflammatory Bowel Disease”

Ruan W (3rd Year), Shamoun M, Schindel D, Patel A.
• “Hypercoagulation and Pediatric Inflammatory Bowel Disease – A Case Report”

Conference Presentations - Fellows

Pediatric Academic Society/Society of Pediatric Research, Baltimore, MD, May 2016

Platform Presentation

Sen S, Canseco D, Kimura W, Thet S, Sadek H.
• “The Role of Cyclin Dependent Kinase Inhibitor p27Kip 1 Regulation of Neonatal Cardiomyocyte Proliferation”

Poster Presentations

Blanco V, Mir I.
• “Whom Ought We Deem to Be Dead? The Never-Ending Dilemma about When to Diagnose Death”

DeVries L, Jaleel M, Kapadia V, Heyne R, Brion L, Brown L.
• “Relationship Between Pulmonary Hypertension and Outcomes Among Infants with Bronchopulmonary Dysplasia Who Undergo Surgery”

Garg P, Coughlin L, Mirpuri J, Koh A.
• “Candida Albicans Promotes Gram-Negative Bacterial Dissemination from the Neonatal Murine GI Tract”
Liu A, Badawy M.

- “Safety Parameters for Admission to Ward versus ICU for Infants with Bronchiolitis Treated with High-Flow Nasal Cannula”

Liu A, Badawy M, Pelletier J.

- “Does Hypoxia Predict the Need for Advanced Airway Management in Infants with Acute Bronchiolitis Treated with High-Flow Nasal Cannula?”

Loria H, Turer C.

- “The Weight of Stress: Stressful Life Events Impact Emotional Health of School-Age Children with Overweight/Obesity”

Mansuri A, Scott J, Seikaly M.

- “The Effect of Growth Hormone (rhGH0 Therapy on Children with X-Linked Hypophosphatemic (XLH) Rickets on Body Proportion and Sitting Height”

Muff-Luett M, Mansuri A.

- “EEYORE: Evaluating Eculizumab Use in Young Patients: Outcomes and Responses – A Collaboration of the Midwest Pediatric Nephrology Consortium (MWPNC)”

Weydig H, Srinivasakumar P, Blanco V, Ramon E, Ramos E, Ochieng J.

- “Creation of a Team to Reduce Blood Culture Contaminants in the NICU”

Workshop

Weydig H, Frost M.

- “Making Your Quality Improvement Effort Count Twice! Designing and Executing Your Improvement Project as Scholarly Activity”
Faculty Educator Development

Our Department explicitly and intentionally invests in faculty educational development via several ongoing internal initiatives.

- The individualized cultivation of specific faculty leaders for the educational programs we sponsor or support, now including new or restored programs teaching our residents medicine-pediatrics, child abuse prevention, complex and chronic care, global health, community advocacy, behavioral and developmental pediatrics, quality improvement, community based primary care, etc.
- One-on-one faculty development work, for our Clinical Competency Committee members and for other faculty with whom we help design and deploy educational projects, tied to faculty portfolios for promotion on the clinician-educator track.
- Support of the faculty we invite as contributors to specific Program teaching initiatives such as our resident led M&M series, our resident-led case of the week interactive teaching conference, our “difficult conversations” curriculum, team-based learning sessions, and simulation training.
- Direct coaching to the faculty we have invited to teach our residents, via chief resident analysis and feedback of their delivered lectures. We have now built an infrastructure for this to include the possibility of so-called “game film” analysis, which may also be useful as part of future educational portfolios for faculty promotion.

All of our Pediatric faculty also have access to intramural university resources for general teaching skills’ acquisition, via our strong partnership with UT GME. The UTSW Effective Teachers Series is one example.

We also have increased representation in the UT Southwestern Academy of Teachers (S.W.A.T.) and have sponsored successful applications to the S.W.A.T. educational grants program. Given the campus-wide constituents in S.W.A.T. membership, we seek to build cross-departmental partnerships in S.W.A.T. to help our faculty explicitly better connect Pediatrics with strong preclinical curriculum resources at UT Southwestern. Our goal is to have more of our faculty be readily able to contextually apply and reinforce pre-clinical subject content as part of our frontline pediatrics teaching; in support of contemporary Medical School Curriculum reforms.

We help support travel to extramural educational conference opportunities, as well, through faculty development funds.

Graduate Performance

Our American Board of Pediatrics examination pass rates for first time test takers exceed national averages and have been stable in recent years, at 94%-97%. Our trainees regularly report, “I have actually seen a child with almost every condition or question I studied for board exam review.”

Our graduates routinely secure their first or second choice jobs in remarkably diverse fields and locations. We view resident job placement and success as a key outcomes measure of our Program, and have adjusted our Clinical Competency Committee membership, structure and activities around our core goal of enthusiastically supporting and advancing our residents’ career development.

Indeed, national competitiveness for top jobs at leading institutions in now occurring for our graduates in almost every subgenre of pediatric medicine. This includes the relatively complex “four body kinetics” in job searches among couples who seek job offers in the same city at the same (or even staggered) times.

In our early (albeit limited) efforts at alumni development, graduates report satisfaction with their training, particularly in terms of it preparing them for the independent practice of medicine and for career success.

- Happily, our Program graduates have also now become influential as new, longitudinal, educational partners in our greater Dallas community – hosting residents as their longitudinal M.D. “junior partners” who are fully integrated into their practices. These residents have now supplied admitted patients from these practices special levels of personalized support in hospital. Our residents also now explore weekly teaching topics in our partnership clinics across our large and diverse metroplex. Involved attendings have become volunteer faculty members in a new appointment and promotion system run by the Department’s Vice Chair of Education.