

Division Introduction



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

The Division of Allergy and Immunology in the Department of Internal Medicine (IM) was founded in 1979, and in 2003 the Division of Pediatric Allergy and Immunology in Pediatrics was created. While administratively separate, the two Allergy and Immunology divisions function as one, blending teaching, clinical, and research under the direction of Rebecca Gruchalla, M.D., Ph.D.

Patient care and clinical activities are based at the Asthma and Allergy and Immunology Clinics at Children's Health™ and at Parkland Memorial Hospital and the James W. Aston Ambulatory Care Center, where division faculty provide comprehensive evaluation, diagnostic, and management services for children and adults, respectively, with allergy, asthma, and immunological disorders.

Faculty members participate in both clinical and basic science research efforts. As both a clinical and mechanistic site in the National Institutes of Health (NIH) Inner City Asthma Consortium (ICAC), the Division continues to expand research efforts in pediatric asthma. It also collaborate with various basic scientists on campus.

The Division has one of only 71 ACGME-accredited programs for fellowship training in allergy and immunology. Division faculty also provide the major instruction to pediatric and internal medicine residents in the evaluation and management of children and adults with allergic diseases, asthma, and immunodeficiency diseases.

Faculty

Allergy and immunology spans both Pediatrics and IM, with two pediatric-based and three internal medicine-based faculty who are all certified by the American Board of Allergy and Immunology, clinically active, and firmly committed to clinical teaching. Volunteer faculty members in private practice also participate in our clinical and educational activities.

Honors / Awards

Best Doctors in Dallas, *D Magazine*

Drew Bird
Maite de la Morena
David Kahn
Rebecca Gruchalla

Texas Super Doctors, *Texas Monthly Magazine*

Drew Bird
Rebecca Gruchalla

David Khan

- Elliot Middleton Lectureship
- Bernard Berman Lectureship
- Norman A. Sterrie Lectureship

The Allergy and Immunology divisions in the Departments of Internal Medicine and Pediatrics function as one blending of teaching, clinical, and research responsibilities.

Invited Lectures

Drew Bird

- AAAAI Annual Meeting, Houston, TX, February 2015
 - *"Trends in Provider Management of Patients with Food Protein Induced Enterocolitis Syndrome"*
- Partnership for Eosinophilic Disorders Parent Support Group, Plano, TX, March 2015
 - *"Care for Patients with EoE from an Allergist's Perspective"*

Maite de la Morena

- Primary Immune Deficiency Treatment Consortium Annual Meeting. Montreal, Canada, April 2015
 - *"Long-term Clinical Outcomes of Patients with X-linked Hyper IgM an International Collaborative Effort"*
- Immune Deficiency Foundation 2015 National Conference, New Orleans, LA, May 2015
 - *"Hyper IgM Syndrome"*
 - *"Antibiotic and Antifungal Therapy Options"*
- Texas DSHS Newborn Screening Immunology/SCID Meeting, Austin, TX, September 2015
 - *"The Newborn Screening Experience at Children's Health™ (Children's Medical Center)"*
- United Kingdom Primary Immunodeficiency Network (UKPIN), Belfast, UK, November 2015
 - *"Long Term Clinical Outcomes of Patients with X-linked Hyper IgM Syndrome, an International Collaborative Study"*

David Khan

- North American Rhinology and Allergy Conference, Boca Raton, FL, February 2015
 - *"Hereditary Angioedema"*
 - *"Perioperative Anaphylaxis"*
- AAAAI Annual Meeting, Houston, TX, February 2015
 - Workshop: *"Antibiotic Hypersensitivity Reactions"*
 - Workshop: *"Therapeutic Options for Antihistamine-Resistant Chronic Urticaria"*
 - Seminar: *"Multiple Drug Allergies"*
- Mayo Clinic Internal Medicine Grand Rounds, Scottsdale, AZ, March 2015
 - *"Drug Allergy" vs. "Drug Allergy"*
- Primary Care Conference, Palm Coast, FL, April 2015
 - *"Anaphylaxis"*
 - *"Drug Allergy"*
- AAISG Meeting, Buford, GA, May 2015
 - *"Drug Allergy Cases:"*
 - *"Anaphylaxis Updates"*
- NIAID Grand Rounds, Bethesda, MD, Ma 2015
 - *"Antibiotic Allergy: Myths, Facts and the Unknown"*
- Eastern Allergy Conference, West Palm Beach, FL, May 2015
 - *"Cutaneous Drug Reactions"*
 - *"Safety of SCIT and SLIT"*
- COMPEDIA: Mexican Congress of Asthma, Allergy and Immunology Pediatric, Mexico City, Mexico, July 2015
 - *"International Urticaria Guidelines"*
 - *"Evaluating Drug Allergies"*
- Tennessee State Allergy Meeting, Chattanooga, TN, Aug 2015
 - *"Drug Allergy Evaluation and Management"*
- AAAAI Contact Dermatitis Meeting, Washington DC, Sept 2015
 - *"Eczematous Drug Eruptions"*

- Southeastern Allergy Asthma and Immunology Society, Irvington, VA, Sept 2015
 - *“Controversies in Drug Allergy”*
- American Rhinologic Society, Dallas, TX, Sept 2015
 - *“Aspirin Desensitization in AERD”*
- Norman A. Sterrie Lectureship in Allergic Diseases, Minneapolis, MN, Oct 2015
 - *“Antibiotic Allergy: Myths, Facts and the Unknown”*
- American Society of Allergy Nurses, Hood River, OR Oct 2015
 - *“Anaphylaxis: Diagnosis and Management”*
- ACAAI Annual Meeting, San Antonio TX, Nov 2015
 - Symposium: *“Literature Review: Best of 2015”*
 - Workshop: *“Delayed Drug Reactions”*
 - Plenary: *“Adverse Reactions to Biologics”*
 - Seminar: *“Office Management of Drug Allergy”*

Christian Wysocki

- Texas Health Presbyterian Hospital, Internal Medicine Grand Rounds, Dallas, TX, February 2015
 - *“Autoimmune and Inflammatory Complications of Common Variable Immunodeficiency”*
- 19th Annual TAAIS Primary Care Resident’s Conference, Austin, TX, April 2015
 - *“The Art of Diagnosing and Treating Primary Immunodeficiency”*

Education and Training

The Division of Pediatric Allergy and Immunology is committed to providing quality medical education for medical students, residents, and fellows. It has an active fellowship program and also provides inpatient and outpatient opportunities for residents and medical students.

Fourth-Year Medical Students

Pediatric Allergy and Immunology offers a fourth-year clerkship for medical students. This course provides an in-depth exposure to pediatric allergy and immunology via:

- Clinical experience
- One-on-one discussions between student and faculty regarding pre-determined topics outside of the clinic
- Attending structured didactic sessions/conference
- Self-study through prepared curriculum material

Residents

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

An allergy and immunology elective is available for pediatric and internal medicine 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.

Residents see outpatients in the 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.

Fellows

Although recognized for its scientific achievements, the Division of Pediatric Allergy and Immunology is committed to excellence in clinical care and teaching. Toward this end, the Allergy and Immunology Training Program, directed by David Khan, M.D., has grown in both size and stature with four funded fellowship positions since it enrolled its first fellow in 1982.

Balanced Clinical Experiences

Successful training in Allergy and Immunology should consist of balanced exposure to training experiences involving adults and children, no matter what the training background or the long-term plans of any particular fellow in training. Drs. Rebecca Gruchalla, David Khan and Chris Wysocki oversee the adult teaching clinics at Parkland Memorial Hospital and the James W. Aston Ambulatory Care Center, while Drs. Maite de la Morena and Drew Bird oversee the teaching clinics at Children's Health™.

Further staffing of both adult and pediatric clinics is provided by our 17 volunteer clinical faculty. Approximately 40 percent of allergy fellows have come from pediatric housestaff programs, and approximately half of the outpatient clinics required of allergy and immunology fellows primarily involve children.

Diversified Training Experiences

The UT Southwestern program offers a diversity of clinical experiences in Allergy and Immunology. It has a strong primary immunodeficiency program and is one of the Diagnostic and Research Centers for the Jeffrey Modell Centers Network. In addition, a Food Allergy Center has been established for clinical and research purposes at Children's Health™.

The Adult Allergy Division operates the Parkland Asthma Clinic, which oversees the care of adult patients with moderate to severe asthma, and the Parkland Allergy Clinic and the clinics at the James W. Aston Ambulatory Care Center are tertiary/quaternary referral centers for patients with chronic urticaria, drug allergies, hereditary angioedema, common variable immunodeficiency, mastocytosis, and anaphylaxis.

Fellows also have exposure to other common conditions including rhinitis, asthma, sinusitis, and atopic dermatitis in both the pediatric and adult clinics.

Research

All fellows are required to participate in at least one research project. Current and past projects have been extremely diverse – most are clinically oriented and some are basic science-oriented – a reflection of the differing interests of the past and current fellows. Because training positions are fully funded by Parkland Memorial Hospital and Children's Medical Center, and not by federal training grants, fellows are encouraged to consider research opportunities in a diversity of fields.

Fellows are encouraged to present the results of their research studies at national meetings. The majority of fellows are able to publish at least one manuscript based on their fellowship training. Fellows in training are encouraged to travel to one national meeting during each of the two training years and are provided financial support for this purpose.

Success of Training Program Graduates

Within the past decade, 100 percent of the graduates of UT Southwestern's Allergy and Immunology training program have passed the American Board of Allergy and Immunology certifying examination. Most graduates are currently in private or group practice settings; however, a few have become full-time medical school faculty members. More than half of our clinical faculty are prior graduates of the Allergy and Immunology training program.

Research Activities

Since 1994, Dr. Gruchalla has had sustained NIH funding for research in inner-city pediatric asthma. In 1996, she became a member of the Inner City Asthma Multicenter Study group (Dallas-site PI), which became an NIH-sponsored contract (Inner City Asthma Consortium – ICAC) in 2002. The initial contract was a six-year contract for \$55.8 million, and its purpose was to investigate the mechanisms of asthma in inner-city children, as well as to develop novel treatments for this disease. The contract has been renewed for the third time and now extends through 2021.

UT Southwestern Medical Center is once again a participating site, along with Boston University, Children's Memorial Hospital in Chicago, Cincinnati's Children's in Cincinnati, 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, Columbia University in New York, St. Louis Children's Hospital in St. Louis, and the University of California, San Francisco.

UT Southwestern continues to be one of the top recruiting sites for ICAC.

In addition to the asthma clinical studies that have been, and that are being done, as a part of ICAC, basic mechanistic studies are being conducted as well.

Drs. Rebecca Gruchalla and Michelle Gill are involved in research that suggests allergic reactions to cockroaches, pet dander, dust mites, and mold may prevent people with allergic asthma from generating appropriate immune responses to respiratory challenges like the flu virus.

Dr. David Khan is conducting various research projects in adults focused on understanding the mechanisms of nasal polyp disease, mood disorders and asthma, rush immunotherapy, and assessment tools for rhinitis and urticaria.

As both a clinical and mechanistic site in the National Institutes of Health (NIH) Inner City Asthma Consortium (ICAC), we continue to expand research efforts in pediatric asthma.

Clinical Activities

Faculty cover an active consult service at Children's Health™, Parkland Memorial Hospital, and UT Southwestern University Hospitals, as well as outpatient clinic services in Asthma, Allergy, and Immunology at Children's and the James. W. Aston Ambulatory Care Center.

Clinical Immunology Program

The Clinical Immunology Program was awarded recognition by the Jeffrey Modell Foundation as a Center for Excellence for diagnosis and treatment of primary immunodeficiency diseases. Directed by Dr. Maite de la Morena, the Clinical Immunology Program serves a large geographical 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.

Food Allergy Center

Under the direction of Dr. Drew Bird, Dedman Family Scholar in Clinical Care, the Food Allergy Center treats a broad range of allergic diseases in both inpatient and outpatient settings and will be conducting research that is instrumental in developing treatments and therapies. This Center opened in 2010 and is the only academic-affiliated pediatric food allergy center in North Texas.

Asthma Clinic

While Drs. de la Morena and Bird focus predominately on patients with immunodeficiency and food allergy, respectively, they also see patients with asthma and allergies. In addition, three volunteer faculty members, Drs. Neaville, Ruff and Min staff a half-day/week asthma clinic where children with persistent asthma are evaluated and cared for.

2016 Patient Visits

Dallas

Food allergy new patient visits	1,100
Food allergy follow up visits	1,209
Food allergy challenge visits	314
Immunology new patient visits	284
Immunology follow up visits	539
Inpatient consults	104

Legacy (Nurse Practitioner visits only)

Food allergy new patient visits	321
Food allergy follow up visits	120
Food allergy challenge visits	17

Current Grant Support

Drew Bird

Grantor: Foundation of the American College of Allergy Asthma & Immunology

Title of Project: Mediators of Food-induced Anaphylaxis

Role: Site Principal Investigator

Dates: 2015 – 2016

Grantor: INC Research, Inc. DBV Technologies

Title of Project: A Double-Blind, Placebo-Controlled Randomized Trial to Study the Viaskin Milk Efficacy and Safety for Treating IgE-Mediated Cow's Milk Allergy in Children (MILES study)

Role: Site Principal Investigator and Program Director

Dates: 2015 – 2020

Grantor: Food Allergy Research and Education

Title of Project: Clinical Network Contract

Role: Site Principal Investigator and Program Director

Dates: 2015 – 2020

Grantor: Nestlé HealthScience

Title of Project: Evaluation of Hypoallergenicity of a New Extensively Hydrolyzed Formula

Role: Site Principal Investigator

Dates: 2015 – 2016

Grantor: DBV Technologies

Title of Project: Open-Label Follow-Up Study of the VIPES Study to Evaluate Long-Term Efficacy and Safety of the VIASKIN Peanut

Role: Site Principal Investigator

Dates: 2013 – 2018

Grantor: Aimmune (*formerly Allergen Research Corporation*)

Title of Project: Oral Desensitization to Peanut in Peanut-Allergic Children and Adults using Characterized Peanut Allergen (CPNA) Peanut Oral Immunotherapy (OIT) (ARC 001)

Role: Site Principal Investigator

Dates: 2013 – 2023

Maite de la Morena

Grantor: Jeffrey Model Foundation

Title of Project: To support clinical and translational research projects in patients with primary immunodeficiency diseases

Role: Principal Investigator

Dates: 2008– Current

Grantor: NIH / NIAID

Title of Project: Long noncoding RNAs and their contribution to 22q11.2 deletion syndrome

Role: Co- Investigator

Dates: 2015 – 2019

Rebecca Gruchalla

Grantor: University of Wisconsin / NIH

Title of Project: RACR2 (ICAC3)

Role: Site Principal Investigator

Dates: 2014 – 2021

David Khan

Grantor: NHLBI 1R01H123609K01A1

Title of Project: Treating Caregiver Depression to Improve Childhood Asthma: Impact and Mediators

Role: Co-Investigator

Dates: 2015 – 2019

Grantor: NBIB 1U01EB021952-01

Title of Project: A Wearable Asthma Trigger Monitoring System with Integrated Physiological Monitor

Role: Co-Investigator

Dates: 2015 – 2019

Grantor: Vanberg Family Foundation

Title of Project: Utilization of an Inpatient Penicillin Allergy Testing Protocol

Role: Principal Investigator

Dates: 2015 – present

Peer-Reviewed Publications

1. **Bird JA**, Crain M, Varshney P. [Food allergen panel testing often results in misdiagnosis of food allergy](#). *The Journal of Pediatrics* 2015;166:97-100.
2. **Bird JA**, Feldman M, Arneson A, et al. [Modified peanut oral immunotherapy protocol safely and effectively induces desensitization](#). *The Journal of Allergy and Clinical Immunology in Practice* 2015 May-Jun;3(3):433-5 e1-3.
3. **Bird JA**, Lack G, Perry TT. [Clinical management of food allergy](#). *The Journal of Allergy and Clinical Immunology in Practice* 2015;3:1-11; quiz 2.
4. Bonilla FA, **Khan DA**, Ballas ZK, et al. [Practice parameter for the diagnosis and management of primary immunodeficiency](#). *The Journal of Allergy and Clinical Immunology* 2015;136:1186-205 e78.
5. Chen JR, Buchmiller BL, **Khan DA**. [An Hourly Dose-Escalation Desensitization Protocol for Aspirin-Exacerbated Respiratory Disease](#). *The Journal of Allergy and Clinical Immunology In Practice* 2015;3:926-31 e1.
6. Fonacier L, Bernstein DI, Pacheco K, Holness DL, Blessing-Moore J, **Khan D**, et al. [Contact dermatitis: a practice parameter-update 2015](#). *The Journal of Allergy and Clinical Immunology In Practice* 2015;3:S1-39.
7. **Gruchalla RS**, Sampson HA. [Peanut consumption in infants at risk for peanut allergy](#). *The New England Journal of Medicine* 2015;372:2165.
8. **Gruchalla RS**, Sampson HA. [Preventing peanut allergy through early consumption--ready for prime time?](#) *The New England Journal of Medicine* 2015;372:875-7.
9. **Gruchalla RS**, Sampson HA, Liu AH, et al. [Effects of omalizumab on T lymphocyte function in inner-city children with asthma](#). *Pediatric Allergy and Immunology: Official Publication of the European Society of Pediatric Allergy and Immunology* 2015 Nov 17.
10. Hamilton RG, Scheer DI, **Gruchalla R**, Adkinson NF, Sampson HA. [Casein-related anaphylaxis after use of an Everlast kickboxing glove](#). *The Journal of Allergy and Clinical Immunology* 2015;135:269-71.
11. Har D, Patel S, **Khan DA**. [Outcomes of using omalizumab for more than 1 year in refractory chronic urticaria](#). *Annals of Allergy, Asthma & Immunology: Official Publication of the American College of Allergy, Asthma, & Immunology* 2015;115:126-9.
12. Kuruvilla M, **Khan DA**. [Eosinophilic Drug Allergy](#). *Clinical Reviews in Allergy & Immunology* 2015.
13. Kuruvilla M, **Khan DA**. [Anaphylaxis to drugs](#). *Immunology and Allergy Clinics of North America* 2015;35:303-19.
14. Lieberman P, Nicklas RA, Randolph C, Oppenheimer J, Bernstein D, Bernstein J, Ellis A, Golden DB, Greenberger P, Kemp S, **Khan D**, et al. [Anaphylaxis-a practice parameter update 2015](#). *Annals of Allergy, Asthma & Immunology: Official Publication of the American College of Allergy, Asthma, & Immunology* 2015;115:341-84.
15. Park MA, Solensky R, **Khan DA**, Castells MC, Macy EM, Lang DM. [Patients with positive skin test results to penicillin should not undergo penicillin or amoxicillin challenge](#). *The Journal of Allergy and Clinical Immunology* 2015;135:816-7.
16. Saifi M, **Wysocki CA**. [Autoimmune Disease in Primary Immunodeficiency: At the Crossroads of Anti-Infective Immunity and Self-Tolerance](#). *Immunology and Allergy Clinics of North America* 2015;35:731-52.

17. Teach SJ, **Gill MA**, Togias A, Sorkness CA, Arbes SJ Jr, Calatroni A, Wildfire JJ, Gergen PJ, Cohen RT, Pongracic JA, Kerckmar CM, Khurana Hershey GK, **Gruchalla RS**, et al. [Preseasonal treatment with either omalizumab or an inhaled corticosteroid boost to prevent fall asthma exacerbations](#). *The Journal of Allergy and Clinical Immunology* 2015.
18. Yang IV, Pedersen BS, Liu A, O'Connor GT, Teach SJ, Kattan M, Misiak RT, **Gruchalla R**, Steinbach, SF, Szeffler SJ, **Gill MA**, et al. [DNA methylation and childhood asthma in the inner city](#). *The Journal of Allergy and Clinical Immunology* 2015 Jul;136A(1):69-80.