Letter from the Chief

Welcome to the first edition of the newly formatted newsletter, Immuno-gram. We are sending this to our alumni and friends via email as well as posting it on our website. The Duke Divisions of Allergy and Immunology and Pulmonary and Sleep Medicine have both had highly productive and successful years thanks to the combined efforts of our faculty, fellows, residents and staff. Important news includes the scheduling of the Susan Dees Symposium for April 26 and the retirement of several key members. I look forward to the coming year with a great sense of enthusiasm about our future. Thank you all for your continued support, and I look forward to sharing more news as the year continues to evolve.

Advocacy, Programs and Outreach

Jeffrey Modell Diagnostic and Research Center for Primary Immunodeficiencies The Division of Allergy and Immunology (AI) continues to be actively involved with the Jeffrey Modell Foundation (JMF) since the Jeffrey Modell Diagnostic and Research Center for Primary Immunodeficiencies was established at Duke in 2016. Our AI faculty members promote outreach and education on behalf of JMF to both healthcare providers and families living with primary immune deficiency disease. The first Jeffrey Modell Kids Day was held at the Durham Bulls Athletic Park on August 12, 2018 and was a great success. Twelve families living with primary immune deficiency disease joined us along with faculty and staff for a total of 87 attendees.

Primary Immune Deficiency Foundation (IDF) Rebecca Buckley, MD, continues to serve as the chair of the IDF Medical Advisory Committee. Over the past year, she has made several national presentations focused on the long-term outcomes of Severe Combined Immune Deficiency (SCID) patients following transplantation.

American Lung Association Airways Clinical Research Center Network (ALA ACRC) Under the direction of Jason Lang, MD, the Division of Pulmonary and Sleep Medicine continues to serve as a key site in the ALA ACRC network, a multi-center clinical research trial network dedicated to treating asthma, COPD and other chronic lung conditions.
Advocacy, Programs and Outreach (Cont’d)

**Thymus Transplantation Program**

Our unique thymus transplantation program for complete DiGeorge anomaly continues to grow under the leadership of Louise Markert, PhD, MD. Through her collaboration with Enzyvant, Inc., Duke plans to submit a Biological License Application with the FDA with the goal to gain FDA approval in two years (http://www.enzyvant.com/complete-digeorgesyndrome.html). We hope that the use of thymus tissue for transplantation will be an approved therapeutic product for all children with complete DiGeorge Syndrome. This represents a major step forward in the care of these children.

**Faculty Updates**

**Joseph Linton Roberts, MD, PhD**

In December 2018, Dr. Joe Roberts retired and became an Emeritus Professor. Dr. Roberts has been a member of our Department for 21 years. He joined us in April 1997 as an Assistant Professor in the Division of Pediatric Allergy and Immunology and was promoted to full Professor after spending his entire career at Duke. Joe has been a vital member of our division playing pivotal roles in our fellowship training program. Without his unselfish dedication to Duke our success as an internationally recognized program in primary immune deficiency would not have been possible. He has been vital to our bone marrow and thymus transplantation program and throughout his 20+ years at Duke, has demonstrated excellence and dedication to the educational, clinical and research missions of the division. Dr. Roberts received his Bachelor of Arts degree from Marshall University and graduated with a Doctor of Medicine Degree from Emory University. He completed his pediatric training at Yale-New Haven Hospital, Yale University School of Medicine and fellowship in Allergy and Immunology at Duke University. He completed his Ph.D. training at Duke in 1992 and did a postdoctoral fellowship at the Experimental Immunology Branch, National Cancer Institute in the laboratory of Dr. Alfred Singer. He then became a research associate with Dr. Michael Krangel at Duke University. He is a Fellow of American Academy of Allergy and Immunology and is a member of the American Academy of Pediatrics and the American Association of Immunologists. He was also elected into the Society for Pediatric Research. His honors and accomplishments include selection into Alpha Omega Alpha medical honor society, a Lange Medical Publications award in 1981, a National Cancer Institute Biotechnology Fellowship and selection by US News and World Reports as one of the Top Doctors in the United States.

Dr. Roberts has gained national recognition as a leader in his discipline of primary immune deficiency diseases. He has served the State of North Carolina in the development of newborn screening for Severe Combined Immunodeficiency Disease by serving as a member of the North Carolina SCID Newborn Screening Advisory Committee. Dr. Roberts has remained actively engaged in his academic interests related to primary immune deficiency diseases and its diagnosis and treatment. He has over 30 peer reviewed publications in high impact journals. In 2012, Dr. Roberts took on a new and critical role for the division by assuming directorship of the Allergy and Immunology Fellowship Training program and played a pivotal role in the successful renewal of our T32 training grant in 2015. He is an outstanding teacher in the context of patient care both at the bedside as well as didactic teaching in conferences and journal clubs.

During his retirement, he will continue to be engaged in our division’s teaching mission. We wish Joe, and his wife Joan, the best in retirement.
Faculty Updates (Cont’d)

Debra Sedlak, CPNP

As of February 28, 2019, Deb Sedlak retired from the division. Deb joined the division in August 1983. Over the years, she was active in organizations beyond Duke. She served on the Primary Immune Deficiency Foundation’s (IDF) Nurse Advisory Committee (NAC) from October 2000 to June 2015 and was the chair of the NAC from October 2000 to June 2007. In June 2015, Deb was the recipient of IDF’s Art of Nursing Award. Deb was also an active member of the Allied Health Assembly at the American Academy of Allergy and Immunology (AAAAI). She was the recipient of three travel grants including an Education and Research Trust travel grant in 2005.

From March 2013 through March 2015, along with Dr. Stephen McGeady, Deb served as the co-chair for the Allied Health Assembly. In retirement, Deb plans to spend time with family and hit the road to the next fishing spot in the RV that she and Rick always wanted.

In Memorandum: Charles Edward Buckley III, MD,

We sadly report the passing of Dr. Charles Edward Buckley III on June 29, 2018. Dr. Buckley received his medical degree from Duke University School of Medicine in 1954. He then served in the U.S. Navy before returning to Duke University as a research fellow in the Department of Medicine and as a research associate in the Department of Biochemistry. During that time Dr. Buckley published novel findings on the unfolding and renaturation of a specific univalent antibody fragment. He completed his residency in both Internal Medicine and in Allergy and Immunology.

Dr. Buckley joined the Duke University School of Medicine faculty in 1960. He spent his professional career as a professor of Medicine and associate professor of Microbiology-Immunology and served as director of the Clinical Immunology Laboratory. He trained dozens of residents and fellows in Internal Medicine and Allergy and Immunology, and treated countless patients. Dr. Buckley was one of the transformational physician-scientists that brought science to bedside teaching at Duke.

Dr. Buckley authored over 100 research articles and other publications and wrote chapters in 18 medical text books. He served as president of the Southeastern Allergy Association, president of the North Carolina Thoracic Society and president of the North Carolina Lung Association.

As we all know, he was the beloved husband of Dr. Rebecca Buckley.

Louise Markert, MD, PhD

On April 26, 2018, Louise Markert, MD, PhD received the 2017 Duke Presidential Award for Executive Leadership for her contributions in developing the thymus transplantation program.

Mai ElMallah, MD, MS

Dr. ElMallah received the 2018 Parker B. Francis Foundation’s Parker B. Francis Jo Rae Wright Award at the 2018 American Thoracic Society Meeting. This award is given for scientific excellence in pulmonary research.

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New Faculty and Fellows

Talal Mousallem, MD

As of January 2019, Dr. Mousallem has come home to Duke as an Associate Professor in Allergy and Immunology. Talal received his Bachelor of Science in Biology, with distinction, in 1999 and his MD in 2003, both from American University of Beirut (AUB). Following his graduation from medical school, he was a postdoctoral research fellow at AUB and then came to Duke University to do a second post doc under Rose Mary Boustany, which he completed in 2007. He completed his Pediatric Residency in 2010 in the Department of Pediatrics at Duke School of Medicine and his Allergy and Immunology Fellowship in 2013 also at Duke. Following completion of his Allergy and Immunology training, he joined the faculty at Wake Forest University School of Medicine as Assistant Professor in Allergy and Immunology. Dr. Mousallem is an outstanding teacher and mentor. While at Duke he received the 2009 Appleseed Teaching Award as well as the Medical Student Teaching Award in 2010. As a faculty member at Wake Forest he has mentored several Allergy and Immunology fellows in training. Talal has an impressive academic portfolio with twelve peer-reviewed publications, two book chapters and one peer reviewed review article. His first authored publication in Blood, 2014, a nonsense mutation in IKBKB causes combined immunodeficiency, is a highly cited study describing the molecular pathogenesis of a novel form of combined immune deficiency disease. His academic expertise is in the application of whole genome sequencing in the diagnosis of immune deficiency. His academic expertise is in the application of whole genome sequencing in the diagnosis of immune deficiency. Talal will replace Dr. Joseph Roberts as Duke’s representative to the North Carolina Physician Advisory Committee and Physician Panel for Newborn Screening for Severe Combined Immunodeficiency (SCID). It is great to have Talal back at Duke as faculty.

Laura Dosier, MD

Dr. Dosier joined Duke as an Assistant Professor in Pediatric Pulmonary and Sleep Medicine in September 2018. She completed her Pediatric Pulmonary fellowship at Duke (with combined training at UNC) and her Sleep Medicine fellowship at UNC. She is practicing at our new Duke Children’s Specialty clinic in Apex. She has interests in general pulmonary and sleep problems. Her fellowship research focused on red blood cell properties that facilitated nitric oxide signaling and oxygen delivery. She is now transitioning her focus to clinical translational research focused on obstructive sleep disorders.

Matthew Bruehl, MD

Dr. Bruehl joined the division in September 2018 as an Assistant Professor of Pediatrics and Associate Director of the Pediatric Cystic Fibrosis Center. Dr. Bruehl completed his pediatric residency and pediatric pulmonic fellowship at the University of North Carolina at Chapel Hill. He was previously a Clinical Assistant Professor of Pediatrics at East Carolina University. His clinical interests include cystic fibrosis and pediatric bronchoscopy. His research interests include clinical informatics and electronic health record utilization as well as precision medicine strategies to restore the function of CFTR, the defective protein in cystic fibrosis.

Suzanne Barshow, MD

Allergy and Immunology Fellow

Dr. Barshow is a graduate of Sidney Kimmel Medical College at Thomas Jefferson University. She completed her pediatric residency at Phoenix Children’s Hospital and her clinical and research interests are in investigating the use of Cytosponge, a cutting-edge non-invasive tool, to enhance the diagnosis of eosinophilic esophagitis.

Elizabeth Hicks, MD

Allergy and Immunology Fellow

Dr. Hicks is a graduate of Duke University School of Medicine. She completed her residency at Virginia Commonwealth University Health System. Her research interests include rates of cytomegalovirus disease in primary immunodeficiency patients, and complications associated with CMV.
Fellowship Corner

Amy Stallings, MD
Dr. Stallings will replace Dr. Joe Roberts as the new fellowship training director.

Haley Hostetler, MD
Dr. Hostetler is a first-year fellow with clinical and research interests in adult survivors of pediatric immune deficiencies. She is actively involved in resident education including developing educational tools for residents who rotate with the allergy and immunology division. She is also involved in quality improvement surrounding peri-operative anaphylaxis with the pediatric anesthesia team. In order to maintain sharp general medicine skills, she also works at the Veteran's Hospital emergency room and volunteers at Samaritan Health Center, a clinic for the homeless.

Renee Kleris, MD
After completion of her fellowship in August 2018, Dr. Kleris began working as a medical officer at the U.S. Food and Drug Administration's Center for Drug Evaluation and Research (Division of Pulmonary, Allergy and Rheumatology Products). She will additionally join the Division of Allergy and Immunology at Children's National for clinic later this year.

Olga Hardin, MD
Dr. Hardin is a first-year fellow with an interest in primary immunodeficiency diseases. Her main research efforts focus on long term clinical follow up for patients with Severe Combined Immunodeficiency (SCID) who received bone marrow transplantation. Secondarily, she is interested in optimizing care for children with immunodeficiencies as they transition to adult primary care providers.

Duke/UNC T32 Research Training in Allergy and Clinical Immunology Update

Carolyn Baloh, MD
3rd year Duke AI fellow; research project is A Novel Approach to Develop a Genetic Model of Common Variable Immune Deficiency (CVID). Dr. Baloh is supported by Duke's National Human Genome Research Institute T32. Mentors: Sandeep Dave MD, MS, Patricia Lugar MD, MS.

Monica Tang, MD
3rd year Duke AI fellow; research project is Factors in the Acquisition of Respiratory Tract Infections in Children with Asthma. Primary Mentor: Jason Lang, MD

Johanna Smeekens, MD
Dr. Smeekens obtained her PhD from Georgia Institute of Technology, and is currently a postdoctoral research associate in the Food Allergy Initiative at UNC. Her research focuses on understanding the mechanisms that lead to failure of oral tolerance and the development of food allergy, and identifying novel therapies to treat food allergy. Mentor: Edwin Kim, MD

Amika Sood, MD
3rd year UNC fellow, part of the Center of Environmental Medicine, Asthma and Lung Biology; research focus centers on the impact of environmental agents on respiratory physiology and novel non-steroidal therapeutics for asthma. Mentor: Michelle Hernandez.

Jacob Kilgore, MD
2nd year Duke Pediatric Infectious Diseases fellow and MPH candidate at the UNC Gillings School of Global Public Health; research focus is antimicrobial stewardship within immunocompromised hosts with current emphasis on thymic dysplasia patients. Mentors: Michael J. Smith, MD and John Sleasman, MD

Mark Ihrie, MD
1st year Postdoc in the Duke Department of Medicine, Division of Pulmonary, Allergy and Critical Care Medicine; research focuses on how metabolic changes in obesity influence inflammation and airway remodeling in asthma. Mentor: Jennifer Ingram, PhD

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The AAAAI Foundation is pleased to honor the life work of Dr. Michael Frank with the creation of the Michael M. Frank, MD FAAAAI Lectureship. Throughout his long career, Dr. Frank has made an important mark on the Allergy/Immunology specialty, especially in the area of hereditary angioedema and as a beloved mentor to many in our field. Dr. Frank is the Samuel L. Katz Professor Emeritus of Pediatrics in the School of Medicine at Duke University and is an internationally respected physician-scientist. The research of Dr. Frank's laboratory revolves around effector mechanisms of immune damage. Specifically, the laboratory is interested in understanding how antibody and complement contribute to the damage of tissues and micro-organisms.

Carolyn Baloh:
Dr. Baloh is serving on the Fellows in Training (FIT) committee for the 3rd year, and will be a Chrysalis program mentor for the second year.
Abstract Title: A study of cancer incidence in the most common immunodeficiency, common variable immunodeficiency (CVID)
Session Title: Updates on Common Variable Immune Deficiency Syndrome and Humoral Immune Deficiency

Olga Hardin:
Case Report Title: Recurrent Infections in a Child with Heterotaxy and Polysplenia

Monica Tang:
Abstract Title: The effect of gastroesophageal reflux and proton pump inhibitors on respiratory tract infections in patients with asthma
Session Title: Asthma Pathogenesis and Inflammation

Tyler Yates:
Case Report Title: Delayed diagnosis of Ataxia Telangiectasia: lessons learned

Anusha Vadlamudi:
Abstract Title: Wood Smoke Particles increase markers of systemic inflammation in healthy volunteers
Session Title: Air Pollutants and Toxicants

New Research Awards

Stallings (PI) Regeneron Pharmaceuticals, Inc., REGN-22, Dupilumab Food Allergy Program 08/16/2018-04/18/2021


ElMallah (PI) Savara Inc., Sav005-04, A Phase III, Randomized, Double-blind, Placebo-controlled Study of AeroVanc for the Treatment of Persistent Methicillin-resistant Staphylococcus Aureus Lung Infection in Cystic Fibrosis Patients 12/01/2017-12/31/2019

ElMallah (PI) Cystic Fibrosis Foundation, CC011, CF Center Award 07/01/2018-06/30/2019

ElMallah (PI) Parker B. Francis Foundation, Parker B. Francis Jo Rae Wright Award for Scientific Excellence 05/15/2018-11/14/2018

ElMallah (PI) Cystic Fibrosis Foundation, CMHC-011-18, Mental Health Screening in Duke Pediatric CF Patients 09/01/2018-08/31/2019

Sleasman (PI) NIH/NICHD 5U24-HD089880-03 (UNC) Primary and Secondary Analysis of ATN 101-071 10/01/2017-05/31/2018

Lang (PI) National Heart, Lung and Blood Institute, 1R21-HL145415-01, Multifactorial spatiotemporal analyses to evaluate environmental triggers and patient-level clinical characteristics of severe asthma exacerbations in children 03/04/2019 – 02/28/2021

Lang (PI) University of Arkansas for Medical Sciences/National Institutes of Health, U24OD024957, Vitamin D Supplementation in Children with Obesity-Related Asthma 09/01/2018 – 08/31/2020
Upcoming Events

Susan Dees Symposium
Washington Duke Inn
3001 Cameron Blvd.
Durham, NC 27705
April 26 – 28, 2019

Hotel Registration
Washington Duke Inn & Golf Club
3001 Cameron Blvd.
Durham, NC 27705
(800) 443-3853 or (919) 490-0999
Reservation Link: 2019 Susan Dees Symposium
Enter Code: 694309
Rate $199.00/Per Night
Deadline for Special Rates: March 26, 2019

Meeting Registration
https://events.duke.edu/susan-dees-2019

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Gifts to support our divisions are as unique as the people whose passion and creativity inspire them to give. Whether you want to endow a fellowship for future pediatricians, fund cutting-edge research, or give a boost to a particular area, donations and estate commitments provide meaningful support while helping you achieve your own personal and financial goals. Duke offers a range of imaginative giving strategies that allow you to make a difference while maximizing tax advantages and financial flexibility. Our team can help you create a lasting legacy that shapes our future.

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