Duke University Department of Pediatrics Your Pediatrics Alumni Community

FALL 2017

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We would like to hear from you! If you have news about yourself or if you would like to send us comments about this newsletter, please write Duke Pediatrics Alumni News, Box 3352, Durham, NC 27710, or e-mail us at rebecca.casey@duke.edu.

MESSAGE FROM THE CHAIR

It is my pleasure to share with you the fall 2017 issue of the Duke University Department of Pediatrics Alumni Organization newsletter. As you will see inside, Duke Pediatrics continues to make important advances in all of our mission areas — patient care, medical education, research, and advocacy — resulting in increasing national recognition of our faculty, trainees, students, staff and programs.

This summer, we welcomed 20 new faculty members spanning 11 of our divisions to the department. In addition, 17 new interns in Pediatrics, six new interns in Medicine-Pediatrics, and 22 new subspecialty fellows joined us from top institutions across the country, adding impressive diversity and talent to the department. Notably, Medicine-Pediatrics alumna, Courtney Fitzhugh, MD (2005) became a Lasker Clinical Research Scholar and is currently seeking to improve — and develop new — treatment options to achieve a cure for sickle-cell disease (SCD) at the Sickle Cell Branch, National Heart, Lung, and Blood Institute.

We are also proud and honored that Duke Children's was once again ranked among the top 50 nationally in 10 areas of specialty in the 2017-18 U.S. News & World Report's Best Children's Hospitals rankings. I firmly believe this distinction reflects the high quality care we deliver and our outstanding commitment to our patients and their families.

We are looking forward to more chances to reconnect at events this fall, including the Duke Medical Alumni Weekend scheduled for November 9-12. This weekend will include a breakfast for Duke Pediatrics Alumni and friends on Saturday, November 11 at 8:00am at the Washington Duke Inn, Ambassador Ballroom — an event I hope you can attend. Please also save the date for the Duke Pediatric Alumni reception, scheduled in conjunction with the Pediatric Academic Societies (PAS) annual meeting on Sunday, May 6 in Toronto.

I remain committed to fostering ongoing relationships with the many faculty, students and trainees who constitute our alumni and look forward to the coming year with a great sense of enthusiasm about our future. I thank all of you for the continued support, and I look forward to sharing more news as the year continues to evolve.



Steinbach wins 2017 IDSA Oswald Avery Award

William J. Steinbach, MD, whose study of invasive fungal infections has significantly expanded our understanding of these conditions, is the recipient of IDSA's 2017 Oswald Avery Award for Early Achievement. This honor recognizes members or fellows



of IDSA age 45 or younger who have demonstrated outstanding achievements in an area of infectious diseases.

Steinbach has quickly become an international leader as an investigator

studying the molecular basis and clinical manifestations of invasive fungal infections. Currently professor of pediatrics, professor in molecular genetics and microbiology, and chief of the Division of Pediatric Infectious Diseases, his interest in these infections began during his pediatric residency.

The principal investigator for three current National Institutes of Health (NIH) R01 grants as well as several other grants, Steinbach's translational work over the past 10 years has focused on defining the molecular controls of Aspergillus hyphal growth and characterizing a variety of Aspergillus cell signaling pathways, including calcineurin, Ras, and heat shock protein 90 (Hsp90).

"This is really a great honor, and it also reflects the many wonderful people and mentors at Duke who have been such a critical part of the last 15 years of my infectious disease research," says Steinbach. "I am also very excited to be one of the few pediatricians recognized in my field's larger society that is composed of mainly adult subspecialists."

Bull City Fit receives National Park Service Partnership of the Year Award

The Bull City Fit program, a shared-use partnership between Duke and Durham Parks and Recreation, received the National Park Service Partnership of the Year Award

at the 2017 annual National Recreation and Parks Association (NRPA) conference in New Orleans, September 26-28. Bull City Fit is an

integrated model of child obesity treatment,



leveraging the strengths of Duke's high quality health care and Durham's extensive parks system and recreation centers. Preliminary data has shown high levels of engagement with racially diverse and lowincome families, and a recently published prospective trial has demonstrated improvements in child physical activity, fitness, and quality of life. Duke has two ongoing studies funded by the Duke Endowment and the American Heart Association to test implementation and outcomes effectiveness.

"The National Park Service has a proud 100-year history of protecting outdoor spaces for the public good. We are honored that they have selected Duke for their Partner of the Year Award, to ensure that the public good includes child health and wellbeing," says **Sarah Armstrong**, **MD**, associate professor of pediatrics and researcher on the issue of childhood obesity. "We will continue to work with the National Parks System to promote health while conserving these spaces for future generations."

Cotten named Chief of the Division of Neonatology

C. Michael Cotten, MD, professor of pediatrics, was named chief of the Division of Neonatology in the Department of Pediatrics, effective September 1, 2017.

Cotten has dedicated his career to neonatal clinical research. He became principal investigator (PI) for the Duke site within the Eunice Kennedy Shriver NICHD Neonatal Research Network (NRN) in 2014 after serving as alternate site PI since 2001. He has been extensively involved with the NRN and its clinical trials for 15 years. His most significant contribution to the NRN has been the development of an anonymized DNA bank and database, allowing investigators to identify genetic contributions to risk of developing complex diseases unique to extremely low birth weight infants.

His work with the NRN has also included serving as site PI for the three clinical trials of therapeutic hypothermia for neonatal brain injury. These studies led to the establishment of collaborations with the maternal-fetal medicine research group and the stem cell research program to initiate a Phase I study of autologous cord blood cells for infants with hypoxic-ischemic encephalopathy.

Armstrong honored by Student National Medical Association (SNMA)

Brenda E. Armstrong, MD, professor of pediatrics and associate dean of medical education and director of admissions, was inducted into the Hall of Heroes by the Student National



Medical Association (SNMA) during the 2017 Annual Medical Education Conference (AMEC) held in Atlanta, April 12-16.

The Hall of Heroes distinction is SNMA's most prestigious recognition, honoring physicians, administrators, and others who champion the cause for a diverse physician workforce.

"The Hall of Heroes award from the Student National Medical Association, the country's largest, oldest and most influential organization of students from minority and under-represented communities is an incomparable honor," said Armstrong.

"The focus on health disparities, on growing a cadre of brilliant physicians, researchers, and leaders to address the woeful status of minority health is a legacy for a lifetime's work. I am humbled to be mentioned among those who continue to work toward equity in healthcare in this country and worldwide."

Armstrong was a member of one of the first classes at Duke to include African-American students and the only African-American woman in her medical school class at St. Louis University for three of her four years there. She is distinguished as the second African-American woman in the United States to become a board-certified pediatric cardiologist.

Armstrong's current research interests focus on gender- and race-based disparity in medical education. As the dean for medical school admissions, she is also interested in medical education and training for students, residents, and fellows, including quality improvement initiatives in medical education, quality delivery of health services, recruitment of women and minorities into the medical field, and community outreach.



NOTEWORTHY

Antibodies halt placental transmission of CMV-like virus in monkeys

Long before the Zika virus became a global fear, cytomegalovirus, or CMV, was commonly infecting developing fetuses and causing many of the same brain and developmental impairments.



The virus, one of only a handful known to be transmitted through the mother's placenta to a fetus, infects nearly 1 million infants a year worldwide and is a leading cause of microcephaly,

hearing and/or vision loss, and nervous system damage.

With effective interventions lacking, development of a vaccine remains an urgent public health mission. Now researchers from Duke University School of Medicine and Tulane National Primate Research Center report findings in monkeys that demonstrates a vaccine approach that appears to be capable of protecting the animal's fetus from infection.

"The presence of potent antibodies at the time of the mother's primary infection seems to prevent viral transmission and severe disease in the developing fetus, and therefore should be a primary target of vaccines to prevent neonatal infection," said co-senior author **Sallie Permar, MD, PhD,** professor of pediatrics and member of the Duke Human Vaccine Institute. Permar and colleagues published their findings in the July 6 issue of the journal JCI Insight.

Using rhesus monkeys — a recent advancement in modeling congenital CMV transmission in humans — the researchers tested whether the offspring of mothers exposed for the first time to the rhesus form of CMV (RhCMV) could be protected from infection if the mothers first received RhCMV-specific antibodies.

The question is important, because the answer clarifies the type of immune response a successful vaccine approach should target.

In experiments with pregnant monkeys, the RhCMV-specific antibodies protected the mothers from losing the developing fetuses, which is what can happen when the mothers are infected with RhCMV for the first time during pregnancy.

A higher dose of the antibodies completely blocked transmission of the virus in each of the three monkeys that received it, and also reduced the virus's ability to reproduce and mutate.

"Most vaccines on the market today work through an antibody mechanism, so our study demonstrates that a vaccine for CMV can likely go down that traditional path," Permar said.

Study finds children carry implicit bias towards peers who are overweight

Even children as young as 9 years old can carry a prejudice against their peers who are overweight, according to a new study led by Duke Health researchers. They might not even realize they feel this way.

The study, published online June 23 in the journal Pediatrics, sheds important insight into implicit weight bias in children and could serve as a starting point for further studies on the subject.

"When children are stigmatized for being overweight, it can cause further weight gain and other health consequences," said Asheley Skinner, PhD, associate professor of medicine at Duke

Faculty Announcements

Welcome to the newest members of the Department of Pediatrics!

Yeh-Chung (Daniel) Chang Infectious Diseases

Samrat M. Das, MD Hospital Medicine

Michael M. Deel, MD Hematology-Oncology

Mai ElMallah, MD Allergy and Immunology

Sarah F. Gall, MD Hospitalist

Danielle F. Geeting, MD Hospitalist

Sonia F. Kirmani, MD Cardiology

Daniel M. Landi, MD Hematology-Oncology

Debra F. Lugo, MD Infectious Diseases

Emily F. McCormick, MD Primary Care

Lauren F. McGill, MD Blood and Marrow Transplantation

Jennifer F. Peterson, MD Neonatology Brianna F. Scott, MD Blood and Marrow Transplantation

Michael M. Smith, MD Infectious Diseases

Neel M. Subramanian, MD Emergency Medicine

Lindsay Terrell, MD Primary Care

Amelia F. Thompson, MD Infectious Diseases

Rachel F. Torok, MD Cardiology

Rajitha F. Venkatesh, MD Gastroenterology

Muhammad M. Zafar, MD Neurology

Jennifer F. Ladd, MD Co-Chief Resident

Tobias M. Straube, MD Co-Chief Resident

For additional details about our new faculty, please visit: pediatrics.duke. edu.

University School of Medicine, and the study's lead author. "Given that, we felt that it was important to determine if we could identify unconscious attitudes towards weight in this 9-to-11 age group."

The study included 114 children. The authors used a research method that primes subjects by using quick flashes of a series of carefully selected images that depict children involved with activities who were either healthy weight or overweight, juxtaposed with neutral images. Skinner said the study is the first to



use this method, known as the affect misattribution procedure (AMP), to consider attitudes that children have about weight.

On average, participants rated 64 percent of the abstract images preceded by images of children who were healthy weight as "good," but did so for only 59 percent of second images preceded by children who were overweight, a difference that was statistically significant among the participants.

"The main takeaway is that weight bias and a preference for thin people appears to start at a fairly young age," Skinner said.



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Duke Pediatrics Alumni News is published twice a year by the Duke Department of Pediatrics Alumni Organization

NOTEWORTHY

Duke Children's Ranks in ten specialties in 2017-18 U.S. News & World Report's Best Children's Hospitals Rankings

Duke Children's has once again ranked among the nation's finest in the 2017-18 U.S. News & World Report's Best Children's Hospitals rankings announced June 27. Duke Children's ranked among the top 50 nationally in all 10 areas of specialty—cancer, cardiology and heart surgery, diabetes and endocrinology, gastroenterology and GI surgery, neonatology, nephrology, neurology and neurosurgery, orthopedics, pulmonology and urology.

The Best Children's Hospitals rankings highlight U.S. News's top 50 U.S. pediatric facilities in 10 specialties. The 2017-18 rankings were created from clinical data collected through a detailed survey sent to 187 facilities across the country.

Katz celebrates 90th birthday

Samuel Katz, MD, was joined by family and friends on Tuesday, May 23 in the Trent Semans Center to celebrate his 90th birthday. Katz has led an illustrious career in pediatrics and is world-renowned for his love of teaching, the creativity of his scientific approach, his outstanding performance as the chair of the Duke Department



of Pediatrics, and his astonishing record both as the developer of vaccines at the bench and as an international advocate for vaccination of children. He has demonstrated a unique ability to make the world a better place for children and remains an inspiration to many. To view event photos and read a detailed biography, please visit: pediatrics.duke.edu.

UPCOMING EVENTS

The School of Medicine Medical Alumni Weekend 2017

November 9-12, 2017

Medical Alumni Weekend is scheduled for November 9-12 and will include breakfast for Duke Pediatrics alumni on Saturday, November 11 at 8:00 am at the Washington Duke Inn, Ambassador Allen Ballroom. Following breakfast, please join Mary E. Klotman, MD, Dean of the Duke School of Medicine for a conversation with special guest Vincent E. Price, PhD, President of Duke University. Please RSVP to Jennifer Cody at jennifer.cody@duke.edu.

Pediatric Alumni Grand Rounds 2017

The Department of Pediatrics will host the Pediatric Alumni Grand Rounds on Tuesday, November 14, 2017, following the annual School of Medicine Medical Alumni Weekend. This year's speaker, **Terrill Bravender**, **Jr**, **MD**, **MPH** is the chief of adolescent medicine and professor of pediatrics and communicable diseases at the University of Michigan in Ann Arbor, Michigan. Dr. Bravender is a graduate of the University of Michigan and Harvard University, and previously held faculty appointments at Harvard University, Duke University, and The Ohio State University. His research interests involve adolescent nutrition and patient-centered communication.

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MAKE A GIFT

Deborah Kredich Pediatric Education Fund

The Deborah Kredich Pediatric Education Fund provides support for a variety of educational experiences for residents and subspecialty fellows at Duke, including participation in research projects, attendance at national meetings, involvement in community outreach programs, and hosting of a special Grand Rounds.

Pediatrics Excellence Fund

The Pediatrics Excellence Fund provides support for the most immediate needs of the Department of Pediatrics.

You can make your gift quickly and securely online by visiting: SupportMedTraining.duke.edu.