



Pedi Press

A Quarterly Publication of the Department of Pediatrics

2

4

24



Volume 7, Issue 2

FEATURE ARTICLE

DEPARTMENT NEWS Events & Happenings

DEPARTMENT NEWS

FACULTY, FELLOWS & STAFF FEATURES

DEPARTMENT RESEARCH HIGHLIGHTS & UPDATES 31



FEATURE ARTICLE . . .



First Phase of Legacy Tower Opens

On May 22, the Legacy Tower opened, and critically ill children were transferred to the new state-of-the-art building. Texas Children's Legacy Tower will house new and expanded operating rooms, as well as a new pediatric intensive care unit (ICU). It will span four floors and will have 84 beds, including dedicated neurology ICU rooms, surgical ICU rooms, and a progressive care unit. Prior to the official opening, a "soft opening" was held on May 10.

For more information on the transfer of the first patients, please see page 6.

"Soft Opening" of Legacy Tower Celebrates Expansion

On May 10, a "soft opening," complete with a ribbon cutting ceremony and blessing of the new 400-foot-tall tower, was held to celebrate the official opening of Texas Children's Legacy Tower, 12 days later. Two hundred guests, including members of Texas Children's Board of Trustees and Executive Council, Services-in-Chief, In-Chiefs, Chiefs of Service, donors, patients' families, and Legacy Tower leadership team members and construction partners, gathered outside the tower. TCH CEO Mark Wallace delivered the opening remarks, in which he thanked everyone in attendance for their participation in the fulfillment of this vision.

Mark Wallace noted that "The opening of Legacy Tower is another dream come true for Texas Children's. There are so many people who worked tirelessly to bring us to this day. With 640,000 square feet of space, Legacy Tower will help us continue to serve our patients and their families, particularly children who are critically ill and have complex needs.

"It's remarkable to walk through the intensive care units and to see the way the equipment has been located, the size of the rooms, the layout, the flow that will occur in patient care in those rooms. Every detail has been addressed in the most thoughtful manner, and the input from the families has been really extraordinary and absolutely critical to that process."



ef

TCH Physician-in-Chief **Dr. Mark Kline**, Chairman of the Department of Pediatrics at Baylor College of Medicine, and Surgeon-in-Chief Dr. Larry Hollier also delivered messages of appreciation, explaining the impact that Legacy Tower will have on patients and their families. Dr. Kline also thanked the crowd for their commitment to the project and expressed special gratitude to **Dr. Lara Shekerdemian**, Chief of Critical Care Services, and **Dr. Daniel Penny**, Chief of Cardiology, for their "instrumental leadership" in making Legacy Tower possible.

TCH Chaplain James Denham delivered a blessing, after which the yellow ribbon was cut to symbolize the completion and imminent opening of the first phase. Bailey, TCH's new Legacy Tower therapy dog, also made an appearance, and guests were invited to tour the Tower.





DEPARTMENT NEWS . . . Events & Happenings

Sections Merge Under New Leadership

"Since my own appointment as chair and physician-in-chief in 2009, Angelo has been an absolutely wonderful colleague and friend and an indispensable source of wisdom. While I will miss him tremendously, I could not be happier or prouder that he has been selected to fill this prestigious and influential position at the University of Utah and Primary Children's. Our loss is their gain." ---Dr. Mark Kline, Chairman



On April 19, 2018, **Dr. Mark Kline**, Chairman, announced that Dr. Angelo Giardino, former Chief of Academic Medicine, had been named Professor and Chair of the Department of Pediatrics at the University of Utah and Chief Medical Officer at Primary Children's Hospital in Salt Lake City, effective June 4.

Dr. Giardino had been with Texas Children's since 2005, first as Medical Director of the TCH Health Plan and most recently as System Chief Quality Officer. He served concurrently from 2013-2018 as Professor of Pediatrics and Section Chief for Academic General Pediatrics.

With his departure, the Section was merged with Public Health Pediatrics, under the leadership of **Dr. Chris Greeley**, and a new section, **Public Health Pediatrics and Primary Care**, was created. Dr. Greeley previously was Chief of Public Health Pediatrics.

Special Camp Provides for Cardiology Patients

This spring, almost 130 children, aged 8 to 12 years old, attended **"Camp Pump It Up,"** a camp for patients with cardiac disease and their siblings.

In its nearly 20 years, the camp has grown considerably, allowing more children to experience a weekend away with other children with heart disease. For many of these children, the camp is their first time away from home, as medical concerns have precluded having this opportunity. However, at Camp Pump It Up, the specialized medical team is prepared to handle situations that would be an issue at other camps.

"Having been the physician for many of them, it is very evident how much this weekend means both to the patients but also to their families. What this camp does for these children has kept me coming back and supporting camp for all of these years."

> --Dr. Heather Anne Dickerson, Cardiologist and Camp Director

During the three-day camp, campers experience horseback riding, zip lining, canoeing, fishing, and archery, among other activities, many for the first time. The camp provides them the opportunity to take a short break from their lifestyles defined by medicines, clinic visits, tests, surgeries, and all else that is involved with having a chronic disease. Long-term friendships often are formed as they learn that they are not alone and other children are dealing with the same issues.

Staff attending the camp were from the following departments: Cardiology, Cardiac Intensive Care Unit, Congenital Heart Surgery, Child Life, Social Work, Occupational and Physical Therapy, Respiratory Care, Perfusion, Biomedical Engineering, and Pediatric Radiology. Also in attendance were residents, patients, and friends of Texas Children's.

Legacy Tower Phase 1 Officially Opens



Texas Children's Critical Care Teams arrived early in the morning on May 22, 2018, to begin the transport of patients to Legacy Tower. Beginning at 7:00 A.M. seven specially trained clinical teams safely transported 45 critically-ill patients to their new, spacious, stateof-the-art critical care rooms.



More than 150 TCH staff members were involved in the move. The careful and methodical transfer of patients took seven hours.



Dr. Lara Shekerdemian, Professor and Chief of Critical Care Services, inspected the rooms and the patients as they were settled into their new rooms.

DEVELOPMENTAL PEDIATRICS

Book on Developmental Issues Published



Dr. Robert Voigt, Professor and Chief of Service in Developmental Pediatrics, collaborated with BCM colleague, **Dr. Carl Tapia**, Asst. Professor, to release the second edition of their textbook entitled *Developmental and Behavioral Pediatrics*.



The American Academy of Pediatrics recently announced the availability of the new textbook that focuses on caring for children with developmental and behavioral issues from medical evaluation and initiation of care to the transition to adult care. American Academy of Pediateks Developmental and Behavioral Pediatrics



Physician Addresses Issues of Transition



"Parents should begin to transition tasks over to their children, such as making appointments or taking care of prescriptions. Although a parent may decide to keep routinely managing these tasks, the patient should still know how to do the task in case of an emergency." -Dr. Siripoom McKay

Dr. Siripoom McKay, Asst. Prof., recently published online advice for caregivers and patients with diabetes who are facing the transition of care from a pediatric to an adult environment, including financial and life-style changes if the patient is moving away from home or going to college. She noted the importance of young diabetics learning to manage their health with exercise and good nutrition, emphasizing that "30 minutes of brisk walking every day can lower A1C, a measurement of glucose levels in the blood, by one percent." For young adults who are more

resistant to exercise, she suggested gearing activities towards the patient's interest in such activities as games and sports. For patients who suffer from diabetic neuropathy, which can cause foot pain, she recommended participating in modified physical activities, such as exercises that develop upper body strength that can get the heart rate up, modifications with shoes, and swimming and water aerobics. In addition to being knowledgeable about nutrition, patients transitioning to adult care should seek out supportive resources, such as diabetes support groups.



Legendary Basketball Player Makes Surprise Visit



Shaquille O'Neal, retired legendary professional basketball player, made a special visit to Texas Children's Cancer Center on April 9 prior to being honored at the Marriott Marquis Houston for the 13th annual An Evening with a Legend.

During one-on-one room visits, O'Neal enjoyed shooting hoops, playing games, and talking with patients about their cancer journeys. He also offered words of encouragement and let the families know they are not alone.

O'Neal's individual accomplishments include seven MVP awards, two scoring titles, 15 All-Star game selections, and much more. He is one of only three players in history to win NBA MVP, All-Star game MVP, and Finals MVP in the same year. He led his teams to four NBA Finals championships during his career and was inducted into the Basketball Hall of Fame in 2016.

Later that evening, the 7-foot-1-inch tall NBA legend was honored at the annual An Evening with a Legend event benefiting Texas Children's Cancer Center. Nearly 500 guests enjoyed an exciting evening kicked off by a rally by the University of Houston cheerleaders and followed by a seated dinner, exciting "Slam Dunk" paddle raise, and an intimate conversation with O'Neal. Co-chaired by Julie Bergen and Kathy Zay, the event raised more than \$700,000 for Texas Children's Cancer Center. Monica and Kevin King and Stephanie and Brad Tucker served as honorary chairs for the event.



Global HOPE Celebrates First Anniversary

One year ago, Texas Children's Cancer and Hematology Centers partnered with BIPAI, the Bristol-Myers Squibb Foundation, and leaders in Botswana, Uganda, and Malawi announced a \$100 million grant to create an innovative hematology-oncology pediatric treatment network in sub-Saharan Africa. The Bristol-Myers Foundation is committing \$50 million over 5 years, and Global HOPE will raise the remaining \$50 million needed. The initiative was named Global HOPE (hematologyoncology pediatric excellence) and established to build long-term management of children with cancer and blood disorders such as sickle cell disease in sub-Saharan Africa, where most pediatric patients do not survive. The mortality rate is thought to be as high as 90 percent, due to an inadequate infrastructure and lack of



physicians and other healthcare providers trained specifically to deal with these pediatric patients. It was modeled after the largest pediatric HIV treatment network in the world, created in 2003 by the Bristol-Myers Squibb Foundation, Baylor International Pediatrics AIDS Initiative (BIPAI), and the governments of Botswana, Uganda, and Malawi. It has trained 52,000 healthcare providers and now provides care for nearly 300,000 children with HIV and their families in sub-Saharan Africa, where the mortality rate for these children has been lowered to 1.2 percent.

Since its creation, Global HOPE has treated more than 1,000 patients, 369 healthcare providers have been trained, eight physician fellows have enrolled in the first Pediatric Hematology Oncology Fellowship Program in East Africa, and seven cancer awareness and survivor events have been organized in Botswana, Uganda, and Malawi. Through the partnership, Global HOPE has 51 faculty and staff working in global sites, called Centers of Excellence, in the three countries mentioned, where they will serve as regional hubs for pediatric hematology/oncology programs. The new 2-year fellowship, designed to develop local leaders in Africa, has been accredited by the Uganda Medical and Dental Practitioners Council and offers training through on-line means, live lectures, rotations for sub-specialists, and professional development opportunities.

A video can be viewed at http://txch.org/global-hope/

Patients at West Campus Enjoy Visit from Kendra Scott Jewelry

On May 18, B.I.G. Love Cancer Care teamed up with Kendra Scott, a popular jewelry boutique, to bring the Kendra Cares Program to Texas Children's Hospital. The program allows patients to experience the customizable Color Bar designed by Kendra Scott at pediatric hospitals across the country. The 2-hour event was held at the West campus location, where they provided refreshments and offered patients and their family members an opportunity to make a customized jewelry piece at no cost to them. B.I.G Love Cancer Care Services is a non-profit, volunteer-based organization committed to providing basic necessities and personalized care to children with cancer and their families. To date, the program has donated more than 6,000 pieces of jewelry and has rapid national growth plans.



A "Walk" and a "Run" Raise Funds to Benefit Patients with Different Disease

... "Walk" for A. Jay's Fight



"I started A. Jay's Fight because we need a cure; we want a cure! I watch his resiliency and his strength and his daily drive in the face of the constant reminders of what he is missing. This foundation is how we fight back as a family . . . A. Jay's fight will support legitimate research for better treatment, diagnosis and a cure. We will also offer a safe community for children who share in this disease, those who sit alone at lunch, whose meals don't look like everyone else's and for those who don't share meals at all. Together we will find a cure. Together we will make a difference!"

--Kimberley Alexander, Executive Director, Mother and Advocate

On May 5, A. Jay's Fight, an emerging nonprofit organization, partnered with Texas Children's Hospital for their Second Annual 3K Super Hero

Walk for Eosinophilic Esophagitis (EoE) Awareness at Hackberry Park on S. Dairy Ashford from 9 am to 2 pm. EOE is a chronic inflammatory disease of the digestive system that robs children, like A. Jay, of the joys of eating certain foods such as birthday cakes and ice cream. It also hinders social opportunities, replacing them with pain, swelling, vomiting, bone degeneration, and a lifetime of medication, pokes, biopsies, and isolation. Anyone with EOE faces daily challenges. A. Jay meets each challenge with a warrior spirit. Of course, he's human and gets down too, but more times than not, A. Jay meets life with his signature smile.

After watching her son A. Jay suffer, Kimberley Alexander decided to take action and make a difference in her son's life and in the lives of other children with the same condition by founding A. Jay's Fight. The "walk" was formed to raise funds to fight this debilitating disease. Along with the walk, participants enjoyed a science booth, bounce houses, coloring booth, face painting, games, and more! All proceeds from the "walk" benefit the EGID Program at Texas Children's Hospital.





"David's Dream Run"

The annual David's Dream Run took place on Saturday, April 21, 2018. This year marked the 25th anniversary of this event, which honors the memory of David Vitner. David was born with severe combined immune deficiency (SCID), which required that he spend most of his time in a protected area, called a "bubble," most of the time at Texas Children's Hospital. In 1984, at the age of 12, David underwent an unsuccessful bone marrow transplant that the doctors hoped would allow him to live in a normal environment, but David lost his battle with the disease.

David Elementary School, located in The Woodlands, is named for David, and each year it holds an annual David's Dream Run. The community-wide 5k run/walk raises money for the David Center at Texas Children's Hospital, which was established after David's death.

To commemorate this 25th anniversary milestone, Dr. Jordan Orange presented plaques with artwork done by patients at Texas Children's to



the David Elementary School/PTO and to David's mother, Ms. Carol Ann Demaret, and family.

TCH/BCM staff and families from the IARR medical center campus and the David Clinic at The Woodlands campus provided a great representation.

Every year, 100% of the funds raised through the David's Dream Run are donated to the David Center in IARR and the David Clinic in the Woodlands to advance care and research for patients with immunodeficiency. The David's Dream Run has donated more than \$450,000 to the David Center during these last 25 years.

The picture above shows the presentation of the check to Dr. Carla Davis, Section Chief of Immunology, Allergy, Rheumatology, and Retrovirology.

Children's Mental Health Awareness Week How Do You COPE with Stress?



In recognition of Mental Health Awareness Week, the Psychiatry Department, led by Dr. Laurel L. Williams in collaboration with **Developmental Pediatrics**, Psychology, Social Work Department, Child Life, and the Employee Assistance Program held the 2nd Annual Mental Health Bridge Event. This year our teams expanded to have similar events take place at our West and Woodlands Campuses also.

Recent studies show that the number of individuals affected by mental health disorders are increasing at a rapid rate. In fact, one in five young people has a diagnosable mental health disorder. Developmental disorders, such as autism, also are on the rise. For adolescents, suicide remains the third leading cause of death in the United States. We know that treatment is available and can be effective, but it takes everyone involved in pediatric health care to pay close attention to our young people's socio-emotional development, so the goal with the annual bridge events is to get the message out- and realize is "It's Okay to Not be Okay."





This TCH vear, our team welcomed Elizabeth McIngvale, Ph.D., who is an Assistant Professor in the Menninger Department of Psychiatry and Behavioral Sciences at BCM and a national Expert and Advocate for people with Obsessive Compulsive Disorder (OCD). Dr. McIngvale presented her story on personally struggling with OCD as a child. Her battle with OCD starting in early childhood spurned her educational and professional career towards the treatment of mental health disorders. She is the founder of the nonprofit organization The Peace of Mind Foundation, based in Houston, Texas, and is a tireless advocate for evidence-informed



treatments of OCD and other anxiety disorders.

Personalized drawings of the characters from Disney's Inside Out movie were hung to display the artistic side of our pediatric patients. Brain stress balls, bubble wands, and other small items were given to individuals as outlets to relieve their stress, anxiety, or frustrations. As an additional way to help inform our TCH system, child and adolescent mental and behavioral health specialists posted informative blogs related to mental health during the month of May. For more information see page 34.

Center Issues New Policy Brief

The Center for Child Health Policy and Advocacy at TCH, a collaboration between the BCM Department of Pediatrics and TCH, released a new policy brief entitled "Social Determinants of Health: Screening in the Clinical Setting." The Center is "focused on serving as a catalyst to impact legislative and regulatory action on behalf of vulnerable children at local, state, and national levels."

With the increasing awareness of the relevance of social determinants of health (SDH), many healthcare organizations are developing ways to address SDH within clinical settings. One approach endorsed by the American Academy of Pediatrics is SDH screening, which occurs within clinical care settings and relies on clinical teams to administer a validated and standardized survey designed to identify a patient's



unmet social needs or adverse social circumstances.

The Center's policy brief reviews existing screening tools for assessing social determinants of health and provides recommendations on selection and implementation of tools. Contributors were **Aman Narayan, BA, Dr. Jean Raphael, Tiffany Rattler, BS,** and **Dr. Claire Bocchini**. Among the insights provided are summaries and evaluations of, and internet links to, the following assessment tools: WE CARE (Well-child Care Visit, Evaluation, Community Resources, Advocacy, Referral, Education), IHELP, ISCREEN, and SEEK (Safe Environment for Every Kid).

The Policy Brief is available online at https://bit.ly/2wDk1Go

Online Resource Defines Policy Terms for Pediatrics

The Center for Child Health Policy and Advocacy now has an online resource to provide policy terms for pediatrics. The website notes that "Given the dynamic landscape of health and health care policy, child advocates may feel challenged in understanding and responding to the major issues that impact children." The Center addressed this situation by creating Policy Terms for Pediatrics to "empower individuals invested in improving child health through policy and advocacy." An example of one Issue (one of seven) is "Telemedicine." An excerpt from that link is on the next page. More excerpts will be provided in future issues of *Pedi Press*, with the intent of encouraging readers to go to the site and read the entire information.

https://www.texaschildrens.org/departments/center-child-health-policy-andadvocacy/policy-terms

Policy Terms for Pediatrics

By: Hannah Todd

Given the dynamic landscape of health and health care policy, child advocates may feel challenged in understanding and responding to the major issues that impact children. We created Policy Terms for Pediatrics (PTP) to empower individuals invested in improving child health through policy and advocacy.

Telemedicine

WHAT DOES IT MEAN

Telemedicine - the use of medical information exchanged from one site to another, via electronic communications, for the health and education of the individual or provider, and for the purpose of improving patient care, treatment, and services. It is often used interchangeably with telehealth, a term that covers clinical care for patients.



Telemedicine uses technology that includes:

- Live interactive videoconferencing
- Streaming video
- Peripheral devices such as electronic stethoscopes, otoscopes, and ophthalmoscopes that transmit information normally obtained in an in-person physical exam
- "Off the shelf "devices (e.g. webcams/laptops, tablets, and smart phones)

Telemedicine Applications	Characteristics	Who's involved	Benefits	Limitations
Tele-education	Virtual classrooms or one-way streaming video links used for continuing medical education	Provider to provider	Can educate physicians with the current information in a convenient manner about conditions, treatments, and other relevant facts for optimal care of patients	One-way streaming Learners cannot ask questions
Teleconsultation	Video conferencing used to provide distant consult	Provider to patient, provider to provider	Useful in providing care to children in rural or underserved areas Can be used to bring in a specialist on critical and out-patient cases.	Does not replace in person visit
Telepractice	Videoconferencing used to provide remote care for children in group facilities such as a child care center, school, or juvenile detention facility	Provider to patient	Convenient for caregivers and patients	Does not replace the in-person visit

WHY DO WE CARE

Children under 15 years old in the United States account for 71 million doctor's office visits each year for acute problems, which has made this the leading cause of parents having to miss time from work. Furthermore, more than a quarter (27%) of children in the U.S. live with chronic health conditions (e.g. asthma, diabetes). By using telemedicine to reconsider how and when children access care, there is potential to alleviate some of the social and economic burden on their families and the patients themselves.

Telemedicine bridges the urban-to-rural gap in healthcare

Telemedicine offers an opportunity to bridge the gap between rural children and their urban counterparts. Notably, about 18% of children in the United States live in rural areas.

CONTINUED ON NEXT PAGE

Article Describing the Department's Medical Education Enterprise Receives Special Recognition

"A commitment to excellence in all of our educational endeavors is central – to who we are, to how we are perceived by our community and colleagues, and to everything we hope to accomplish on behalf of the children and families we serve." --Dr. Mark Kline, Chairman, quoted in the article

On June 19, 2018, members of the former Section of Academic Medicine and the Center For Research, Innovation and Scholarship in Medical Education (CRIS) received official recognition from the Academic Pediatric Association for their article describing the Department of Pediatric's efforts to build and sustain a Medical Education Enterprise.



The article, "Creating a medical education enterprise: leveling the playing fields of medical education vs. medical science research within core missions" (authors: **Drs. Satid Thammasitboon**, **B. Lee Ligon**, **Geeta Singhal**, **Gordon E. Schutze**, and **Teri L. Turner**) explains how Bolman and Deal's (B&D) four frames of organization (structural, human resource, political, and symbolic) were used for the creation of the Enterprise. The Medical Education Enterprise enhanced the *structural* frame by creating a decentralized medical education unit, incorporated the *human resource* component with an endowed chair to support faculty development, leveraged the *political* model by providing grant support and expanding venues for scholarship, and used the *symbolic* frame by endorsing the value of education and public recognition from leaderships.

The article notes that in 5 years, the department experienced an increased number of faculty interested in becoming clinician-educators, had an increased number of faculty winning Educational Awards for Excellence and delivering conference presentations, and received 12 of the 15 college-wide awards for educational scholarship. The authors emphasize that the B&D organizational frames can be used to identify strategies for addressing the pressing need to promote and recognize clinician-educators' scholarship, and that whereas our department's situation is unique in several respects, the approach is flexible within an institution and transferable to any other institution and its medical education program.

Dear Dr. Satid Thammasitboon

It is my pleasure, as Chair of the APA Education Committee, to notify you that your article entitled Creating a medical education enterprise: leveling the playing fields of medical education vs. medical science research within core missions was selected for inclusion in the "Top Articles in Medical Education 2017" invited science presentation at the Pediatric Academic Societies. Your study was selected based on its potential direct, immediate impact on pediatric educators. This session was attended by nearly 150 PAS attendees, and we intend to submit a summary of the articles to Academic Pediatrics this summer.

You should be commended for your unique and robust contribution to the literature in pediatric education. Our field benefits from investigators like you, and we look forward to reviewing your publications in the future.

Sincerely,

Teri Turner, MD, MPH, MEd Chair, Education Committee

Steve Selbst, MD President

Jessica Konrath O'Hara Executive Director



Physician Praised for Help Transitioning

Dr. Sarah Swartz, Assoc. Prof., was featured in an article by a patient transitioning from pediatric to adult care, published on the Texas Children's Blog. Jackie Benavides describes her own experience and encourages others facing the same life-changing experience. Her medical journey began with swollen ankles that ultimately led to Dr. Swartz's diagnosis of focal segmental glomerulosclerosis (FSGS), a chronic kidney disease. Six months after Jackie first noticed her swollen ankles, her kidneys were too damaged to function, and she was faced with deciding between having peritoneal dialysis or hemodialysis. She opted for the former and underwent a procedure to place a catheter in her abdomen. When a week later she began having several seizures a day, she returned to the hospital for a stay of 20 days, during which she started her dialysis. When she left, she took with her a dialysis machine she dubbed "Big Bertha" and a dialysis catheter she named "Timothy."

During the course of her treatment at TCH, Jackie became a candidate for a kidney transplant, which led to testing of family members. Her mother was a match but was ineligible because she had a tiny kidney stone. Her brother also was a perfect match and donated his kidney, which has been functioning well for 6 years now. Throughout her experience, Jackie says that Dr. Swartz was gently preparing her for eventual transition to adult care, while assuring Jackie that she would continue to provide pediatric care until she was confident it was time for the transition. Jackie attributes her relatively easy transition to the "grooming" provided by Dr. Swartz, who made sure Jackie knew her medications by name, dosage, and schedule; could read lab work to know when levels were elevated or dropped; knew what symptoms indicated certain ailments; and was in tune with her body.

Jackie wrote her TCH Blog for the benefit of other patients facing transition and encouraged them with these words, "Transitioning from a pediatric to adult health care provider shouldn't cause anxiety. It's a sign you're getting older and maturing along the way. For me, it signaled stability and improvement in my health. Dr. Swartz believed I was ready for the real world and able to handle anything coming my way. It's scary at first, as are most big changes, but it will get easier. You will find yourself comfortable in these next steps, even if your clinic isn't painted in bright colors."

Book Addresses Vaccine / Autism Charges

"When Peter Hotez—an erudite, highly trained scientist who is a true hero for his work in saving the world's poor and downtrodden—shares his knowledge and clinical insights along with his parental experience, when his beliefs in the value of what he does are put to the test of a life guiding his own child's challenges, then you must pay attention. You should. This book brings to an end the link between autism and vaccination."

-from the foreword by Arthur L. Caplan, NYU School of Medicine

"In 1994, Peter Hotez's nineteen-month-old daughter, Rachel, was diagnosed with autism. Dr. Hotez, a pediatrician-scientist who develops vaccines for neglected tropical diseases affecting the world's poorest people, became troubled by the decades-long rise of the influential antivaccine community and their inescapable narrative around childhood vaccines and autism.

The alleged link between the two was first espoused in a fraudulent scientific paper, long since retracted, but the story shows no signs of letting up. As a result, we've seen deadly and disabling outbreaks of vaccinepreventable diseases around the country, and Texas, where Hotez lives, is at particular risk.

In Vaccines Did Not Cause Rachel's Autism, Hotez draws on his experiences as a pediatrician, vaccine scientist, and father of an autistic child. Outlining the arguments on both sides of the debate, he examines the science that refutes the concerns of the anti-vaccine movement, debunks current conspiracy theories alleging a cover-up by the CDC, and critiques the scientific community's failure to effectively communicate the facts about vaccines and autism to the general public, all while



sharing his very personal story of raising a now-adult daughter with autism.

A uniquely authoritative account, *Vaccines Did Not Cause Rachel's Autism* persuasively provides evidence for the genetic basis of autism and illustrates how the neurodevelopmental pathways of autism are underway even before a newborn receives vaccines. Dr. Hotez reminds readers of the many victories of vaccines over disease while warning about the growing dangers of the anti-vaccine movement, especially in the United States and Europe. A former US Science Envoy for the Department of State, he also explains what's at stake if the movement continues to gain ground."

Source: https://jhupbooks.press.jhu.edu/content/vaccines-did-not-cause-rachels-autism

Interview Addresses Topics of NTDs and Autism

Dr. Peter Hotez was interviewed recently by Rebecca Cruise for the NPR program "World Views." His interview is called *Peter Hotez on "The Most Important Disease You've Never Heard Of.*"

During the interview, Dr. Hotez had the opportunity to raise awareness concerning the fact that, despite rapid increases in the pace of medical advancements such as gene therapy, treating some of the most devastating diseases is a matter of economics and political will, rather than science. He said this charge is particularly true with regard to a group of parasitic and bacterial infections now identified as "Neglected Tropical Diseases" or "NTDs." Dr. Hotez explained that the diseases are not even rare but are hidden among the poor, being chronic and debilitating and reinforcing poverty. He and other global health leaders have worked diligently to devise low-cost public health interventions for treating and preventing NTDs, with the result that the global distribution of the diseases is changing, some from underserved areas in sub-Sarahan Africa to the poor living in wealthy countries. Dr. Hotez has described this situation in a recent book, Blue Marble Health, in which he estimates that 12 million Americans living at the poverty level suffer from at least one NTD. He also has taken on the challenge to public health posed by the anti-vaccine movement. In his most recent book (Vaccines Did Not Cause Rachel's Autism; see page 18), he looks at the neurobiology of autism, with the intent of undoing false assumptions about the association between autism and vaccines. Below are a few highlights of the interview:

Why he coined the term "Neglected Tropical Diseases":

"The term rose out of the Millennium Development Goals. Back in the year 2000, when all global leaders assembled to U.N. headquarters to address the bottom billion and look at poverty reduction... Of the eight goals was one that was specifically tackling infectious diseases, and that was to combat AIDS, malaria and other diseases... And, believe it or not, you didn't see Bono and Angie Jolie taking on "other diseases." So we went about and embarked on our branding exercise to identify them and classify them as NTD's, or Neglected Tropical Diseases, in order to identify them as important targets for intervention."

An audio recording of the entire interview can be heard at: http://kgou.org/post/peter-hotez-most-important-diseases-youvenever-heard



His views on "Vaccine Diplomacy":

"Our research laboratories at Baylor College of Medicine and Texas Children's Hospital are focused on developing new vaccines for Neglected Tropical Diseases.... And over the last 20 years we've built up an extraordinary research group of about 50 scientists that are developing these vaccines, so we have the ability to teach others how to do what we're doing, as opposed to, if you're running a big multinational pharmaceutical company, you know a Merck or Pfizer. You can't walk into Merck or Pfizer and say teach us how to make a vaccine, but we can.

"It's a concept that really began, in my opinion, when Albert Sabin ...who discovered the oral polio vaccine. Now, many people don't realize that he actually did this jointly with the Soviets at the height of the Cold War... So the idea is two countries setting aside their ideologies to work together for making lifesaving interventions. . . And one of the big hot zones now for new world's neglected tropical diseases is the Middle East, Central Asia and North Africa and partly because of the wars and conflicts there. They've collapsed the public health structure. So we've had a massive resurgence of Neglected Tropical Diseases in the Middle East, Central Asia and Africa. And there's no... zero vaccine development capacity in those countries, so I took on this role to help other countries learn how to develop vaccines.

".... So at a time when tensions between the U.S. and the USSR was at an all-time high, Sabin was sent to the USSR, to the Soviet Union, to actually work with Russian scientists to jointly develop the oral polio vaccine, and it was tested on 10 million Soviet schoolchildren and shown to be safe and effective. And that's what ultimately led to licensure of the oral polio vaccine now being used to eradicate polio worldwide. So the idea is two countries setting aside their ideologies to work together for making lifesaving interventions and and trying to apply that to a modern day situation that we face in the Middle East than elsewhere. "



Pictured 1-r: Dr. Lumumba Mwita (Baylor-Tanzania), Khosie Hlatshwayo (Baylor-Swaziland), Dr. Heidi Schwarzwald (Texas Children's), Dr. Addy Kekitiinwa (Baylor-Uganda), Dr. Stephanie Marton (Texas Children's), Dr. Mogo Matshaba (Baylor-Botswana), Agustina Perez (Baylor-Argentina), Ana-Maria Schweitzer (Baylor-Romania), Dr. Diane Nguyen (BIPAI) and Texas Children's physicians at The Center - Southwest.

Annual BIPAI Executive Directors Meeting Held

The annual BIPAI Executive Directors meeting was held in early May at Texas Children's Hospital. The headquarters team facilitated educational sessions and program planning meetings with Texas Children's service lines interested in creating or expanding global health programs, including Surgery, Pediatric Emergency Medicine, Neurology, Neonatology, Cancer & Hematology, and Global Tuberculosis.

BIPAI Executive Directors also visited the Texas Children's Center for Children and Women – Southwest where Texas Children's Global Health Corps alumni **Dr. Heidi Schwarzwald** and **Dr. Stephanie Marton** provided a tour of the center to observe how similar healthcare issues are addressed locally.

New Leader Appointed for Lesotho



Dr. Lineo K. Thahan has been appointed as Executive Director of Baylor College of Medicine Children's Foundation-Lesotho (Baylor-Lesotho), effective August 1, to succeed Dr. Edith Mohapi, who retired September 2017. Dr. Thahan was Dr. Mark Kline's first recruit for the 2005 launching of the Pediatric AIDS Corps (PAC), made possible by a \$22.5M grant from the Bristol-Myers Squibb Foundation. Later, she returned to her home in Maseru to begin her clinical service for BIPAI at the Baylor-Lesotho Children's Clinical Centre of Excellence, where she served for five years as Associate and Clinical Director. Since 2012, she has been an attending physician at Children's National Health System in Washington, DC, Mary Washington in Fredericksburg, Virginia, Stafford Hospital in Stafford, Virginia, Virginia Hospital in Arlington, Virginia and Assistant Professor of Pediatrics at George Washington University School of Medicine and Health Sciences. Dr. Thahane received her Bachelor of Arts from Princeton University, Doctor of Medicine from Washington University School of Medicine and completed her residency training at Children's Hospital of Philadelphia.

Baylor-Argentina: Maternal-Child Health Care Program Receives Equipment



Chris Stevens, country manager for Chevron Argentina, said, "Providing valuable solutions to the communities where Chevron operates is a fundamental pillar for our company. Being part of this public-private initiative allows us to contribute to the search for solutions that represent a better quality of life in terms of health, and facilitate access to maternal-child health care for the residents of Añelo."

The town of Añelo, Argentina, has seen a lot of change since Chevron and BIPAI launched a maternal-child health care program in the area in late 2016. Recognizing the need for the growing population, particularly mothers and children, to have sustainable access to quality health care, Chevron and a national oil company, YPF, partnered with Baylor College of Medicine Children's Foundation - Argentina (Baylor-Argentina) and the Health Ministry of Neuquén Province to develop a program.

Since the program launched, 170 local medical professionals have been trained in various skills, according to community needs, and more than 2,000 pediatric and obstetrics patients have been seen at clinics in Añelo and the nearby towns of San Roque and Chihuido.

To advance the program, Chevron recently donated obstetric and gynecology equipment to be used at the newly built Añelo public hospital. The equipment will help strengthen health care services in the area, which has experienced challenges in the provision of public services and infrastructure, particularly in the health area, due to the recent population growth.

More than 40 people, including representatives from the Neuquén Health Ministry, Chevron, BIPAI, and Añelo Zona V, participated in the equipment purchase process to guarantee transparency and ensure that local needs were being met. The donation included four pediatric scales, three fetal heartbeat detectors, one childbirth chair, two fetal monitors, one therapy incubator, two transport incubators, four pulse oximeters, two cardio-defibrillator, one ultrasound machine multipurpose, two dental units, and two cars.

Baylor-Swaziland: Selected as Pilot Site

Baylor-Swaziland has been selected as one of five pilot sites in the country for the self-serve, self-testing of cervical cancer. The technique uses a tampon to obtain a specimen that can be used to process papillomavirus (HPV) mRNA and diagnose cervical cancer. The pilot will generate data on HPV genotypes prevalent in Swaziland, including those among the adolescent population, to help guide HPV vaccination protocols.



Baylor-Uganda:

Summit on Leadership Held

Baylor-Uganda in collaboration with PEPAL and Ministry of Health hosted a two-day International Summit on Leadership Healthcare that attracted 150 participants from across Tanzania, Rwanda, USA, and the UK. The Summit, which was opened by Prime Minister of Uganda, Hon. Ruhakana Rugunda, showcased the results of the **Caring Together Project** under PEPAL, focused on a theme of "Sharing Strategies for Success," and concluded with a recommendation that Baylor-Uganda champions the creation of a leadership academy in Uganda based on the successful implementation of the Caring Together Project in 270 facilities across Eastern and Rwenzori regions from 2015-2018.

Fight Against AIDS Continues

Baylor-Uganda patients shared their messages of HIV awareness with U.S. Ambassador to Uganda The Honorable Deborah Malac. Baylor-Uganda was recently a Centers awarded for Disease Control and Prevention 5-year grant (ACE-Fort) provide to comprehensive pediatric HIV/AIDS and care treatment and orphans and vulnerable children (OVC) services in the Rwenzori



region of Uganda. ACE-Fort was officially introduced to the political and technical leaders in the Fort Portal region in April 2018. The primary objective is to accelerate HIV/AIDS epidemic control and attain the UNAIDS 90-90-90 goals using the Test and Start approach and efficient models of service delivery, while scaling up combination prevention interventions.

Commitment for Children's Camp Renewed

"In partnership with SeriousFun Children's Network, we launched Camp Hope-Botswana in 2004 with the aim of replicating the incredible impact that both BIPAI and SeriousFun were having with our respective programs in the U.S., and elsewhere around the world. We're so proud that today our camp programs serve hundreds of youth with HIV who are now thriving in large part because of the support they receive through this partnership. We look forward to working together for the next five years to continue to serve as many youth as possible and change lives." – Michael B. Mizwa CEO and Sr. Vice President, BIPAI

On May 16, 2018, SeriousFun Children's Network and BCM's International Pediatric AIDS Initiative (BIPAI) renewed their joint commitment to provide life-changing camp experiences, as well as medical and psychosocial support, to children living with or vulnerable to contracting HIV/AIDS in Africa. On May 21, 2018, BIPAI was honored at the annual SeriousFun Children's Network gala in New York City. BIPAI was recognized for its significant and far-reaching impact during the celebration of the new 5-year commitment.



SeriousFun Children's Network is a global community of 30 camps and programs serving children with serious illnesses, always free of charge to the parents. The first camp was founded by Paul Newman in 1988. Since the founding, the camps and programs have delivered more than one million life-changing camp experiences to children and family members from more then 50 countries.

SeriousFun Children's Network's presence in Africa began in 2001, initially providing camp experiences to children in Botswana, Namibia, Malawi, and South Africa. In 2004, BIPAI sent 60 children to the camp in Botswana. In 2018, SeriousFun and BIPAI partnered in five African countries (Uganda, Swaziland, Malawi, Tanzania, and Botswana) to provide camp programs to children in those areas.





DEPARTMENT NEWS... FACULTY, FELLOWS, STAFF FEATURES

Section Head to Step Down



Effective July 1, 2018, Dr. David Poplack will step down as Section Head of the Section of Hematology/Oncology and as Medical Director of the Cancer Center. Dr. Poplack has served as the Director of Texas Children's Cancer and Hematology Centers since 1993. He is Deputy Director of BCM's Dan L. Duncan Cancer Center and is the Elise C. Young Professor of Pediatric Oncology. A graduate of Tufts University, he received his M.D. degree from Boston University School of Medicine, and completed his pediatric internship at Stanford University, his residency in pediatrics at the Children's Hospital in Boston, and his fellowship in pediatric hematology-oncology at the National Cancer Institute in Bethesda, Maryland. An internationally recognized leader in the field of pediatric cancer, Dr. Poplack has authored more than 365 original articles and book chapters in the field of pediatric oncology. He is co-editor of Principles and Practice of Pediatric Oncology, the leading textbook of pediatric oncology, which is in its seventh edition. He is also the developer of Passport For Care, an interactive website that addresses the need to provide long-term survivors of childhood cancer and their caregivers with screening guidelines and resources individualized to the survivor's treatment history.

New Chairs for Research Appointed

I am pleased to announce two new Department of Pediatrics leadership appointments. . . . I could not be more pleased that two individuals as talented and accomplished as Drs. Murray and King have agreed to accept appointment to these key leadership positions within the Department of Pediatrics.

-- Dr. Mark Kline, Chairman

On June 4, 2018, **Dr. Mark Kline** announced two new leadership appointments: **Dr. Kristy Murray**, Professor, to serve as the new Vice-Chair for Research, and **Dr. Katherine King**, Assoc. Prof., to serve as Association Vice-Chair of Research, filling the position vacated by Dr. Murray.

Dr. Murray is a national and international authority on vector-borne and zoonotic diseases. In addition to having continuous funding from the NIH and many other sources, she has authored a number of important original papers on conditions as diverse as rabies, West Nile virus infection, dengue, Chagas disease, and murine typhus. She is an active international investigator with key ongoing studies in the Philippines, Nicaragua, and elsewhere. Dr. Murray is one of the world's leading infectious disease epidemiologists and someone who uniquely combines molecular epidemiology and clinical investigations. In addition, Dr. Murray is a gifted teacher in both the classroom and laboratory, as well as an outstanding mentor to young investigators.

Dr. King leads a strong NIH-funded research program in stress hematopoiesis. Her work is aiding in the understanding of the inflammation-associated bone-marrow suppression observed in acquired aplastic anemia, acute viral infections, and chronic infections such as tuberculosis, hepatitis C, and HIV. Dr. King is an infectious diseases clinician and a gifted and awarded teacher, as well.

New Radiologist-in-Chief Named

Dr. Thierry A.G.M. Huisman has been named to the position of Radiologist-in-Chief at Texas Children's, effective September 1. Dr. Huisman comes from the Johns Hopkins Hospital, where he has been serving as Professor of Radiology and Director of Pediatric Radiology and Pediatric Neuroradiology, at Johns Hopkins Bayview Medical Center, where he has been Chairman of the Department of Imaging and Imaging Sciences. He also is Co-Director of the Neurosciences Intensive Care Nursery at Johns Hopkins. Previously, he served as an Associate Professor and Radiologist-in-Chief at University Children's Hospital Zurich. In addition to his expertise at the bedside, he is an accomplished clinician-investigator with more than 300 scientific papers, 60 textbook chapters, and five books to his credit. Dr. Huisman speaks English, Dutch, French, and German. In making the announcement, Mark A.

Wallace, President and CEO of TCH, thanked **Dr. Mark W. Kline**, Chairman, for chairing the search process and **Dr. Gordon Schutze**, Professor, for his exceptional leadership while serving as the Interim Radiologist-in-Chief.







Eric is a creative problem-solver and proven leader who has a vision for more effectively utilizing information, innovation and improvement science in a transformative way to advance the quality and safety of the care we deliver to children and families. He was selected from among a pool of very talented internal candidates after an exhaustive interview process and a vision presentation to Texas Children's and Department of Pediatrics leadership.

-- Dr. Mark Kline, Chairman



Dr. Eric Williams, Assoc. Prof., has been selected as TCH's new System Chief Quality Officer, replacing Dr. Angelo Giardino. Dr. Williams, who is part of the Critical Care Section, served previously as Chief Quality Officer for Medicine and more recently as Chief Medical Information Officer, both at TCH. He earned a biomedical engineering degree (B.S.) from Boston University in 1989, followed by a M.S. in biomedical engineering and a M.D. degree from Duke University in 1991 and 1996, respectively. He completed his pediatric residency training at BCM and TCH and a postdoctoral fellowship in pediatric critical care at Duke. Dr. Williams joined the faculty in the Department of Pediatrics as an assistant professor in 2004 and was promoted to associate professor in 2013. In making the announcement, Dr. Mark Kline, Chairman, expressed his gratitude to **Dr. Susan Blaney** for chairing the committee that conducted candidate interviews and to Trudy Leidich and Mark Mullarkey, as well as the candidates.

New Residency Coordinator Announced



Dr. Mark Ward, Assoc. Prof., and Director of the Pediatric Residency Program, announced on June 15, that the department has recruited a new coordinator for the pediatric residency program, **Cassandra Shorter**. Dr. Ward noted that Ms. Shorter is "an experienced residency coordinator, currently serving as the coordinator for the Baylor Pediatric Residency in San Antonio, as well as serving

as the fellowship coordinator for their subspecialty fellowships. Ms. Shorter has been involved at the national level with the pediatric coordinators group within the Association of Pediatric Program Directors (APPD). In

addition to being highly qualified, I have found her to have a warm and generous personality. Her start date will be June 25." He invited the department to "join me in welcoming her to the Houston pediatric family."



Faculty Elected to Prestigious Academy



Dr. Peter Hotez, Professor and Dean of the National School of Tropical Medicine, and **Dr. Huda Zoghbi**, Professor and Director of the Jan and Dan Duncan Neurological Research Institute at TCH, were elected to membership in the American Academy of Arts and Sciences (AAAS), considered one of the nation's most prestigious honorary titles.

Founded in 1780, the AAAS is one of the nation's oldest learned societies and independent policy research centers and has served the nation as "a champion of scholarship, civil dialogue, and useful knowledge." As part of the Academy's commitment to



recognizing and celebrating excellence, it elected a total of 213 individuals from various disciplines and professions. It seeks to honor exceptional scholars, leaders, artists, and innovators, as well as engage them in sharing knowledge and addressing challenges facing the nation and the world.

The new class will be inducted in October 2018 at a ceremony held in Cambridge, Massachusetts, and will join "the Academy members who came before them, including Benjamin Franklin (elected 1781) and Alexander Hamilton (1791) in the eighteenth century; Ralph Waldo Emerson (1864), Maria Mitchell (1848), and Charles Darwin (1874) in the nineteenth; and Albert Einstein (1924), Robert Frost (1931), Margaret Mead (1948), Milton Friedman (1959), and Martin Luther King, Jr. (1966) in the twentieth."

https://www.amacad.org/content/news/pressReleases.aspx?pr=20291

Dr. Bottazzi Receives Lifetime Achievement Award

By Nathaniel Wilder Wolf

Dr. Maria Elena Bottazzi, Professor, was awarded the 2018 Carlos Slim Foundation Health Award for Lifetime Achievement in Research on June 6 in Mexico City, Mexico. The prize is given annually to a researcher who has dedicated his or her career to the "creation of solutions to the problems faced by the populations of Latin America and the Caribbean."

"I am very honored to receive this prize," said Dr. Bottazzi, "but it is clear to me that I would have not been able to receive this recognition just based on individual merit. It reflects all the hard and collaborative work contributed



by each and every one of the researchers I work with at the National School of Tropical Medicine and throughout Baylor College of Medicine, as well as those I worked with at George Washington University before coming to Houston."

Previous recipients of the Slim Health Award for Lifetime Achievement include some of the world's most renowned names in public health and disease research such as Jean William Pape, Reynaldo Martorell, Ana Flisser, and Rafael Lozano.

Faculty briefs ...

Dr. Alli Antar, Asst. Prof.,

-- received an American Heart Associaton Career Development Award for "Dissecting the Role of ChREBP in Brown Adipose Tissue."

-- was elected Associate Director of the Southwest Region for Sigma Xi.

Dr. Fida Bacha, Assoc. Prof., was elected to membership in the American Pediatric Society, the oldest and most prestigious academic pediatric organization in North America. Members are recognized as academic leaders in the field of pediatrics.

Dr. Carol Baker, Professor, received the 2018 Baylor College of Medicine's Alumni Award, the Lifetime Achievement Award.

Dr. Brooke Bernhardt, Asst. Prof., Director of Pharmacy for Global HOPE

-- was nominated by the Editorial Staff of the *American Journal of Health-Systems Pharmacy* for the 2018 ASHP Foundation Literature Award in Pharmacy Practice Research.

-- was appointed to the Board Certification in Oncology Pharmacy Oversight Committee for the Hematology/Oncology Pharmacy Association.

Dr. Maria Elena Bottazzi, Professor, was awarded the 2018 Carlos Slim Health Award, presented in Mexico City.

Dr. Douglas Burrin, Professor, along with Dr. Hashem El-Serag, received the National Institutes of Health Silvio O. Conte Digestive Diseases Research Core Center Grant, worth \$3.67 million over 5 years, to continue the work of the Texas Medical Center Digestive Diseases Center.

Dr. Rikhia Chakraborty, Instructor, was one of 20 early career hematologists selected to participate in the 2018 Translational Research Training in Hematology program, a joint program of the American Society of Hematology and the European Hematology Association.

Dr. Hsiao-Tuan Chao, Instructor, was awarded the highly competitive 2018 Burroughs Wellcome Fund Career Award for Medical Scientists. The award will help Dr. Chao establish an independent research program to understand the mechanisms underlying transcriptional dysregulation of inhibitory signaling pathways in childhood neurodevelopmental disorders.

Dr. Kwon Soo Chun, Instructor, along with colleagues Dr. Henri Justino and Dr. Daniel Harrington of UTHealth, won first place in the American College of Cardiology Medical Devices Innovation Challenge. Their innovation, a new type of heart valve for children with congenital heart disease, has resulted in a startup company, and their work was featured in the *TMC Pulse*.

Dr. Brenda Cowan, Instructor, graduated from the Cizik School of Nursing at the University of Texas Health Science Center, Houston with a Doctorate of Nursing Practice.

Dr. Carla M. Davis, Assoc. Prof., was awarded a Certificate in Academic Medical Department Leadership from the George McMillan Fleming Center for Healthcare Management at the University of Texas Health Science Center at Houston School of Public Health.

Dr. Rochelle Coleen Tan Dy, Asst. Prof., received the BCM Clark Faculty Service Award, which honors exemplary service, with professionalism.

Dr. Ricardo Flores, Asst. Prof., was awarded a travel grant to participate in the 2018 Society for Advancement of Chicanos/Hispanics and Native Americans in Science-Howard Hughes Medical Institute Advanced Leadership Institute in Washington, DC, in June. The institute prepares participants for expanded leadership roles in their organizations.

Dr. Sanjiv Harpavat, Asst. Prof., along with Dr. Mary Tessler, received \$100,000 from the 12th annual Men of Distinction awards luncheons for their child health project. Among the event's honorees was Dr. David Poplack, Professor and Elise C. Young Chair in Pediatric Oncology.

Dr. Peter Hotez, Professor,

-- was elected as one of the newest members of the American Academy of Arts and Sciences, one of the nation's most prestigious honorary titles. The Academy recognizes exceptional scholars, leaders, artists, and innovators, emgaging them in sharing their knowledge and addressing challenges that face the world. -- delivered Medical Grand Rounds at the Henry Ford Medical Center.

-- gave Keynote addresses for the Houston Health/Harris County Zika Symposium, the Baylor College of Medicine Alumni Reunion, and the CTSA Science of Team Science (SciTS) Conference in Galveston. -- delivered the Commencement Address for the Baylor College of Medicine Academy at Ryan.

Dr. Henri Justino, Assoc. Prof., along with colleagues Dr. Kwon Soo Chun and Dr. Daniel Harrington of UTHealth, won first place in the American College of Cardiology Medical Devices Innovation Challenge. Their innovation, a new type of heart valve for children with congenital heart disease, has resulted in a startup company, and their work was featured in the *TMC Pulse*.

Dr. Katherine King, Assoc. Prof., was one of two new members (of nearly 150) honored by the Society for Pediatric Research with the New Member Outstanding Research Award, in recognition of her work on how inflammation affects blood and immune cell production by hematopoietic stem cells in the bone marrow, with the long-term goal of reducing deaths from infectious diseases.

Dr. Heather Lukolyo, Asst. Prof., was elected to a 3-year term on the Executive Committee of the American Academy of Pediatrics Section on Internal Child Health. As a member of th committee, she will assist in fulfilling the section's mission of improving the health or children worldwide by empowering members to make meaningful contributions to global child health.

Dr. Philip Lupo, Assoc. Prof., is the 2018 recipient of the F. Clarke Fraser New Investigator Award from the Teratology Society. In addition to accepting the award, he will deliver a special lecture about his research looking at birth defects and childhood cancer risks at the society's annual meeting in June.

Dr. James Phillips, Professor, received the Distinguished Faculty Award at the 2018 Baylor College of Medicine's May 3 ceremony.

Dr. Ricardo Quinonez, Assoc. Prof. and TCH's Service Chief of Pediatric Hospital Medicine, was selected as a 2018 Pediatric Hospital Medicine Excellence in Clinical Care Award winner in recognition of his outstanding leadership and contributions to the advancement of care of hospitalized children. The award will be presented in Atlanta in July at the Pediatric Hospital Medicine Conference, co-sponsored by the Academic Pediatric Association, the American Academy of Pediatrics, and the Society of Hospital Medicine,.

Dr. Karen Rabin, Assoc. Prof., was invited to participate on an expert panel at the Capitol Hill briefing on cancer, leukemia, and Down syndrome. She will update members of Congress on research investigating the interplay between trisomy 21 and Down syndrome.

Dr. Amber Robinett, Asst. Prof., was honored as a Rising Star by Houston Business Journal.

Dr. Rayne Rouce, Asst. Prof., has been named an Amy Strelzer Manasevit Scholar by the Be the Match Foundation. The grant program supports early-career researchers who are studying the complications of post-transplant patients. Her research is on T cells that target the CD19 molecule to treat relapse and viral infection in patients with high risk for developing B-cell malignancies after undergoing bone marrow transplant.

Dr. William T. Shearer, Professor, was invited to review and score 16 abstracts for the Primary Immune Deficiency Treatment Consortium (PIDTC) in Philadelphia, and was moderator for the Best Abstracts session at the meeting.

Dr. Gordon Schutze, Professor, was appointed to serve as the TCH interim Radiologist-in-Chief while a national search is underway to replace Dr. George Bisset, who accepted the position of Chief Medical Officer at Children's Hospital New Orleans.

Dr. Benjamin Shneider, Professor, is an editor of the recently released *Walker's Pediatric Gastrointestinal Diseases*, 6th edition, published by PMPH USA. This standard reference text includes new chapters devoted to nutrition.

Dr. Geeta Singhal, Assoc. Prof., was the recipient of BCM's most prestigious, college-wide, competitive award for faculty educational service, the Barbara and Corbin J. Robertson, Jr., Presidential Award for Excellence in Education.

Dr. Joseph Spinner, Postdoctoral Fellow, was awarded the Department of Defense Peer Reviewed Medical Research Program Discovery Award for his proposal entitled "Composition, Function, and Role of the Intestinal Microbiome in Pediatric Heart Failure and Heart Transplantion." The \$317,000 award is for 2 years.

Dr. Mary Tessler, Asst. Prof., along with Dr. Sanjiv Harpavat, received \$100,000 from the 12th annual Men of Distinction awards luncheon for their child health project. Among the event's honorees was Dr. David Poplack Professor and Elise C. Young Chair in Pediatric Oncology.

Dr. Lineo K. Thahane was appointed as Executive Director of Baylor College of Medicine Children's Foundation-Leso, effective August 1, 2018.

Dr. Teri Turner, Assoc. Prof. and Vice-Chair of Education, was awarded the 2018 American Association of Pediatrics 2018 AAP Education Award. This award recognizes a member of the AAP whose career reflects educational contributions that have had a broad and positive impact on the health and well-being of infants, children, adolescents, and young adults.

Dr. Laila Woc-Colburn, Assoc. Prof., was awarded the Baylor Star Faculty Award for Excellence in Patient Care.

Dr. Amber Yates, Assoc. Prof. and Co-director of the TCH Cancer and Hematology Centers Sickle Cell Program, was recently elected to a 3-year term on the Executive Committee of the American Academy of Pediatrics Section of Hematology Oncology. As a member of the committee, she will assist the section in fulfilling its mission of educating pediatricians on hematology-oncology issues.

Dr. Huda Zoghbi, Professor,

-- was elected as one of the newest members of the American Academy of Arts and Sciences, one of the nation's most prestigious honorary titles. The Academy recognizes exceptional scholars, leaders, artists, and innovators, engaging them in sharing their knowledge and addressing challenges that face the world. -- was presented the Ross Prize in Molecular Medicine at the New York Academy of Sciences ceremony on June 5. The Prize is awarded annually by *Molecular Medicine* to scientists who have made a demonstrable impact on the understanding of the pathogenesis and/or treatment of human diseases, with promise for making even greater contributions to the general field of molecular medicine. The award recognizes her research on identifying the genetic causes of neurological diseases such as spinocerebellar ataxia and Rett syndrome.



DEPARTMENT RESEARCH . . . HIGHLIGHTS & UPDATES

Global TB Program Receives Stop TB Partnership: TB Reach Grant

Tuberculosis (TB) is the top infectious killer worldwide. In 2016, there were an estimated 10.4 million new TB cases globally, of which 1 million were children. Providing children younger than 5 years of age with tuberculosis preventive therapy (TPT) after exposure to TB significantly reduces morbidity and mortality rates; however, most vulnerable children in TB-high-burden settings do not receive TPT.

To address this global public health concern, Texas Children's Hospital and Baylor College of Medicine's Global TB Program submitted a grant to the Stop TB Partnership's TB Reach Initiative. From a pool of 570 applications, the Global TB Program was among approximately the top 7% of projects selected for funding.

The project's title is "**Vikela Ekhaya** (*Prevention at Home*): Novel Strategies to Manage Child TB Contacts at Home"; it will be implemented in eSwatini (formerly Swaziland). The project is comprised of contact management teams and active case finders that will go into eSwati communities to complete household evaluations, identify optimal strategies to promote initiation and completion of TPT, and use novel approaches to diagnose child TB at home while ensuring that children are linked to care. The concept of contact management teams and active case finders going directly into the community is vital, as nearly 70% of the world's children combatting TB are never detected and never treated.

In addition to this active method for case detection, the project will use the innovative 3-month, child-friendly, isoniazid and rifampin (3HR) regimen, in place of the 6-month isoniazid (6H) treatment. 3HR is a novel short-course regimen recommended for use by the World Health Organization in March of 2018. This short-course treatment promises to improve treatment completion rates among children, as families often struggle with the 6-month regimen. The Global TB will launch the new initiative in the fall of 2018 – in collaboration with the BCM Children's Foundation-Swaziland and the eSwati National TB program.

Researchers Publish Pan-Cancer Genomic Analysis

According to a study presented at the American Association for Cancer Research (AACR) on April 15, children born with non-chromosomal birth defects such as congenital heart malformations or nervous system disorders have twice the chance of developing childhood cancer, compared to children without a birth defect. Chromosomal anomalies, single-gene syndromes, or other causes account for the 3 percent of children born in the United States with a birth defect, with 86.5 percent of those birth defects due to various causes.

Dr. Jeremy Schraw, Postdoctoral Fellow, noted during a press conference at AACR, that previous studies have focused on connections between specific defects and their associations with the risk of developing cancer, or specific cancers and their relationships to birth defects in general, but that "what's missing [are] good, population-based estimates of the risk of specific cancers and associations with specific birth defects."



In order to meet the recognized need for "very large population-based studies that allow for estimation of those risks," Dr. Schraw and his colleagues collected data from birth defect and cancer registries in Texas, Michigan, Arkansas, and North Carolina for the years of 1992 -2013. The goal was to identify associations between specific cancers and certain non-chromosomal defects. Ultimately, they examined 60 birth defects and 31 childhood cancers; they identified 539,891 children with non-chromosomal defects; 14,733 children with cancer; and 1,787 with both. The results of the study revealed that the rate of cancer in children with non-chromosomal birth defects was 2.6 times that of children without a defect, and that certain birth defects had much higher associations with particular cancers. They found that children with ventricular septal defect have above a 10.5-fold greater risk of developing hepatoblastoma, and children with different craniofacial or central nervous system defects have increased risks, ranging from 10 to 70 times that of healthy children.

Physician Explores New Radiation Treatment

"Until the past decade, if you were diagnosed with a brain tumor and needed to get radiation therapy, you would get photon, or X-ray radiation. Now, there is a newer technology called proton beam radiation therapy, which uses protons instead of photons."

- Dr. Lisa Kahalley



Dr. Lisa Kahalley, Assoc. Prof. and Director of Research in Psychology, is exploring a new radiation treatment technology that appears to have less impact on the cognitive functioning of children with brain tumors than do other approaches. Traditionally, if a child was diagnosed with a brain tumor and needed radiation therapy, standard of care was photon, or X-ray radiation. Children who receive conventional photon radiation therapy risk developing cognitive changes because the radiation impacts the healthy tissue surrounding the tumor. The new technology, called *proton beam radiation therapy*, uses protons instead of photons. It allows the radiation oncologist to more precisely apply radiation to the tumor without exposing the child's healthy brain tissue to as much radiation. Dr. Kahalley notes that, because Texas Children's Psychology Service had "access to this technology very early on, we've established one of the largest cohorts in

the world of pediatric brain tumor patients treated with proton beam radiation therapy. We have been able to gather data from their neurocognitive evaluations and monitor their progress over a long time span."

Study Reveals Variants in POMP in Two Patients

Researchers in the **Section of Immunology, Allergy, Rheumatology & Retrovirology*** published the results of their study on proteasome maturation protein (POMP), reporting "two unrelated individuals with a neonatal-onset autoinflammatory disease characterized by striking inflammatory neutrophilic dermatosis, autoimmunity, and primary immune deficiency (PID). The disorder is caused by *de novo* heterozygous *POMP* frameshift variants that escape nonsense-mediated mRNA decay (NMD) and result in a truncated protein that disrupts proteasome assembly and leads to increased expression of type-1-IFN-inducible genes." The article describes the POMP-related auto-inflammation and immune dysregulation disease (PRAID) "discovered in two unrelated individuals with a unique constellation of early-onset combined immunodeficiency, inflammatory neutrophilic dermatosis, and autoimmunity" and the initial delineation of " a complex genetic mechanism whereby de novo heterozygous frame-shift variants in the penultimate exon of POMP escape nonsense-mediated mRNA decay (NMD) and result in a truncated protein that perturbs proteasome assembly by a dominant-negative mechanism." Results are described of two patients, both of whom presented during the first week of life "with a perplexing constellation of papulo-erythematous skin lesions on the face, trunk, and extremities that progressed to necrotizing lesions and subsequent scarring."

Both patients also had severe viral and bacterial infections. The researchers initially suspected a genetic cause, but clinical sequencing of one infant did not identify a cause of immune dysregulatory disease. Studies showed that both patients had frameshift variants, located fewer than 50 nucleotides upstream of the last exon-exon junction. Both patients also had almost identical histologic and immunologic findings, and the proportion of mutant to wild-type POMP in Western blots of PBMCs and fibroblasts did not differ significantly.

The researchers' conclusion is that PRAID in two unrelated individuals was characterized "by neonatalonset immune dysregulation and combined immunodeficiency caused by truncating variants in POMP, whereby transcripts that escape NMD result in a truncated protein that leads to a dominant-negative ...allele. PRAID is, therefore, an inherent immunological defect mechanistically characterized by" escape of NMD.

The article, "Heterozygous Truncating Variants in POMP Escape Nonsense-Mediated Decay and Cause a Unique Immune Dysregulatory Syndrome" was published in the *American Journal of Human Genetics*.

*M. Cecilia Poli, Fre´de´ric Ebstein, Sarah K. Nicholas, Marietta M. de Guzman, Lisa R. Forbes, Ivan K. Chinn, Emily M. Mace, Tiphanie P. Vogel, Alexandre F. Carisey, Felipe Benavides, Zeynep H. Coban-Akdemir, Richard A. Gibbs, Shalini N. Jhangiani, Donna M. Muzny, Claudia M.B. Carvalho, Deborah A. Schady, Mahim Jain, Jill A. Rosenfeld, Lisa Emrick, Richard A. Lewis, Brendan Lee, Undiagnosed Diseases Network members, Barbara A. Zieba, Se´bastien Ku¨ry, Elke Kru¨ger, James R. Lupski, Bret L. Bostwick, and Jordan S. Orange

Psychiatry... continued from page 13

Blog post are available below for viewing. <u>Self-harm. Why does this happen?</u> (Laurel Williams, DO) <u>Helping our kids – what are we missing?</u> (Corley Fichera, CPNP) <u>Supporting the whole child with therapy</u> (Katherine Gallagher, PhD, Nicole Schneider, PsyD)

For further information we direct our readers to two additional media reports (NBC and NPR) that feature Dr. Laurel L. Williams

Major depression on the rise among everyone, new data shows – NBCNews.com Hospitals see growing numbers of kids and teens at risk for suicide- NPR

Pedi Press is a quarterly news publication of the Department of Pediatrics Baylor College of Medicine

Dr. Mark Kline, Editor-in-Chief Dr. B. Lee Ligon, Managing Editor / Graphics Design Dr. Gordon Schutze, Consulting Editor Julie O'Brien, Copy and Content Editor

Articles and other items should be submitted to Dr. Lee Ligon at bligon@bcm.edu

The next deadline is August 31, 2018