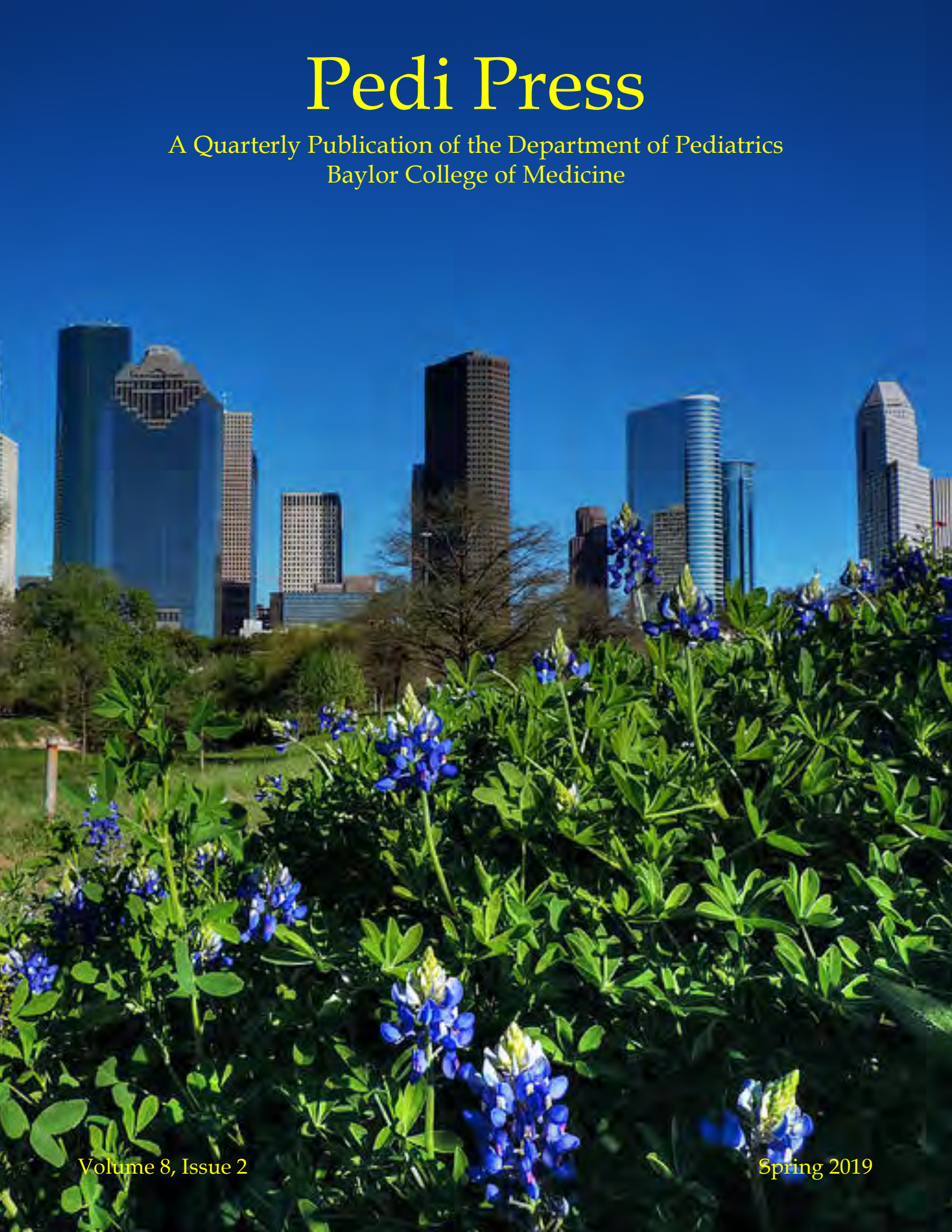
Pedi Press

A Quarterly Publication of the Department of Pediatrics
Baylor College of Medicine



Volume 8, Issue 2

Spring 2019

Pedi Press

A Quarterly Publication of the Department of Pediatrics

In this issue:

Pedi Press is a quarterly publication of the Department of Pediatrics, Baylor College of Medicine, Houston, Texas. Articles and other items should be submitted to Dr. Lee Ligon at bligon@bcm.edu.

FEATURE STORY

Department Celebrates 10 Years with Dr. Kline at the Helm

At the Department's faculty meeting held on June 18, 2019, Dr. Mark Kline, Chairman, reflected on his 10 years having "the Best Job in American Pediatrics." He began by reviewing the requirements of the position initially presented to him and the commitment that Mark Wallace, CEO of Texas Children's Hospital asked him to make, followed by a short history, dating back to 1947, when Dr. Russell J. Blattner assumed the position of the first Chair and Physician-in-Chief. Dr. Blattner held that post until 1977, when he was succeeded by Dr. Ralph D. Feigin, who assumed the responsibilities until his untimely death in 2008.

Dr. Kline then gave an overview of the amazing growth the Department has experienced during the past 10 years, since he accepted the position as the third Chairman of Pediatrics and Physician-in-Chief at TCH:

Administrative

- 1186 new faculty
- 24 new section heads
- 16 new vice-chairs
- 4 chief medical officers
- 1 pediatrician-in-chief (ChoSA)
- 701 faculty members promoted
- 454 residents graduated

Clinical

- 153% increase in total patient encounters (4,278,278)
- 65% increase in number of licensed beds (959)
- 59% increase in total patient admissions (34, 455)
- 72% increase in emergency center visits (152,316)

In addition to increasing 143% in the number of faculty members, the Department has experienced a 122% increase in the number of residency applications for U. S. graduates, a 250% increase in the number of female section heads (4 to 14), and increase from zero to 11 (of 16) female vice-chairs, a 53% increase in extramural research funding and 38% in intramural research funding.

MEDICAL FACILITIES

Texas Children's is now the largest children's hospital in the United States, with 959 beds, surpassing the next highest number by 259.

The expansion has included the opening of several new state-of-the-art facilities, beginning with the Jan and Dan Duncan Neurological Research Institute, which opened in 2010.

In March 2011, the West Campus opened, further extending the impact the Department is having on children's health and well-being in the community.

That same year, The Pavilion for Women opened in November.

In 2013, the hospital expanded to San Antonio to form the Children's Hospital of San Antonio (ChofSA), the first and only freestanding children's hospital in the country's 7th largest city.

The 200-bed hospital is staffed by 164 Department of Pediatrics faculty members and boasts a pediatric categorical residency training program, starting in 2014.

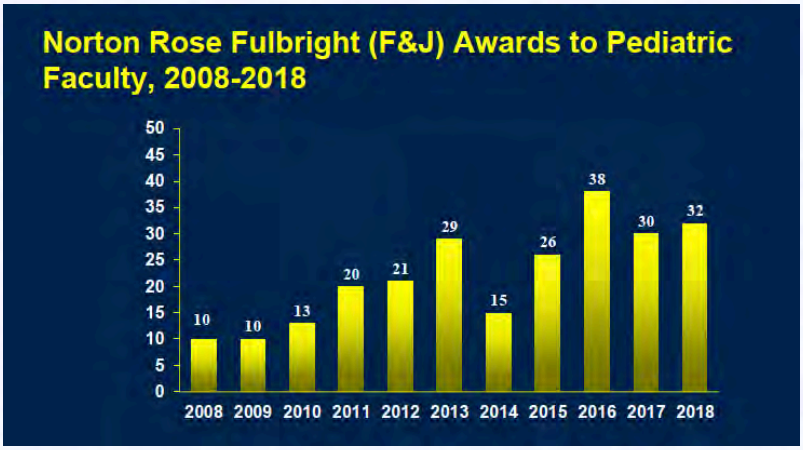
Six years later, in April 2017, TCH expanded to the north, with the opening of The Woodlands campus (right). The next year (2018), The Lester and Sue Smith Legacy Tower opened in the Texas Medical Center. The expansion now extends to Austin, Texas, where the Austin Specialty Care center opened in October 2018.

EDUCATION has always been in the forefront with the creation and development of the Center for Research, Innovation and Scholarship in Medical Education and the pilot education grants program, which has awarded 103 grants for a total of $2.1 million.

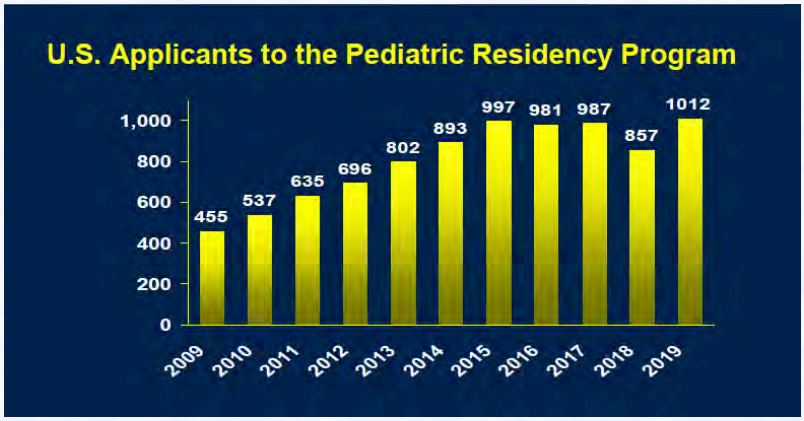
Three new Residency Tracks have been added:

- **Global Health (2010)**
- **Pediatrician-Scientist (2015)**
- **Primary Care Lead (2017)**

Faculty members have maintained a steady presence with their recognition by the Norton Rose Fulbright Awards.



Likewise, the number of U.S. applicants to the Pediatric Residency Program has more than doubled, from 455 in 2009 to 1012 in 2019.

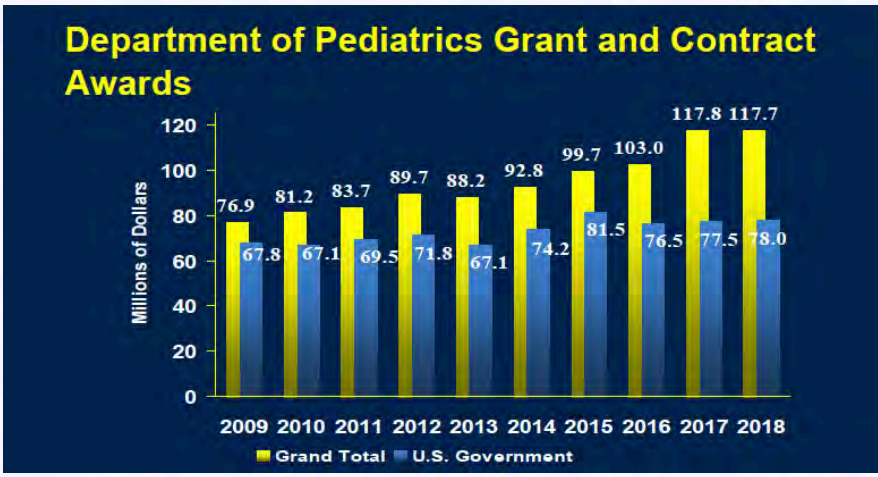


The Department also is a recognized leader in education through the publications of top-rated medical textbooks, edited by members of the faculty. The quintessential 2-volume textbook on Pediatrics, *Rudolph's Pediatrics*, now has as its editor-in-chief, Chairman Dr. Mark Kline. Other well known textbooks, including *Pediatric Infections Diseases*, and *Pediatric Oncology* are leaders in their respective fields

PATIENT CARE is always a priority. To provide optimal patient care, the Department has made significant changes since 2009. In 2010, the relationship with Harris Health was reconfigured and the pediatric inpatient unit at the Ben Taub General Hospital was closed. The number of associated Texas Children's Pediatric sites throughout the community increased from 42 to 55, and the number of care providers from 162 to 233.

Enhanced community presence and programs for the underserved were achieved with the work in Pasadena (2010) and the Centers for Children and Women (2013, 2014). A special isolation unit was created in 2015.

RESEARCH FUNDING also has increased exponentially since 2009, from a grand total of funding in 2009 of $76.9 million to $117.7 in 2018.



OUTREACH to underserved countries by The Department has expanded also, with BIPAI providing HIV/AIDS care and treatment to more children than provided care by any other organization worldwide (>300,000). A new Section of Tropical Medicine was formed in 2011, followed by a Global Tuberculosis Program in 2012. In 2017, Global HOPE was formed, and in 2018, Global Immigrant Health was formed.

RECOGNITION

The growth has not been limited to size and numbers. The excellent care that patients receive has been recognized by the *U.S. News & World Report*, with TCH tying (with Cincinnati Children's Hospital) for 3rd place on the Honor Roll in 2019. Subspecialties have also received individual recognition by *USNWR*: (see slide). The Department was ranked #8 by *USNWR* for "Best Medical Programs and Specialties – Pediatrics" for 2019-2020.

Appreciation is extended to Julie O'Brien, who created the presentation from which this information was extracted and the slides used herein.

DEPARTMENT NEWS
SECTION EVENTS

New Director for Pediatric Clerkship Announced

The Department of Pediatrics has announced that **Dr. Sanghamitra "Mitra" Misra** is the new Pediatric Clerkship Director, as of July 1, 2019.

Dr. Misra is Associate Professor in the section of Academic General Pediatrics and the Medical Director of the Texas Children's Mobile Clinic Program. Dr. Misra is the former Course Director of the BCM course named LACE. Dr. Misra will be taking over the position from Dr. Elaine Fielder who is the new Pediatric Residency Director.

Educational Research Model Wins Top Award

The 2019 Innovations in Fellowship Education Working Group awarded the "Top Abstract" to authors of the abstract entitled "Innovating a Mastery Learning Program for Point-of-Care Ultrasound (POCUS) Using the Design-Based Research Model." The abstract was submitted on behalf of the Pediatric Critical Care Fellowship, under the direction of **Dr. Mohammad Hosein Tcharmtchi**. The fellowship is an ACGME-accredited program that consists of 20 pediatric critical care fellows.

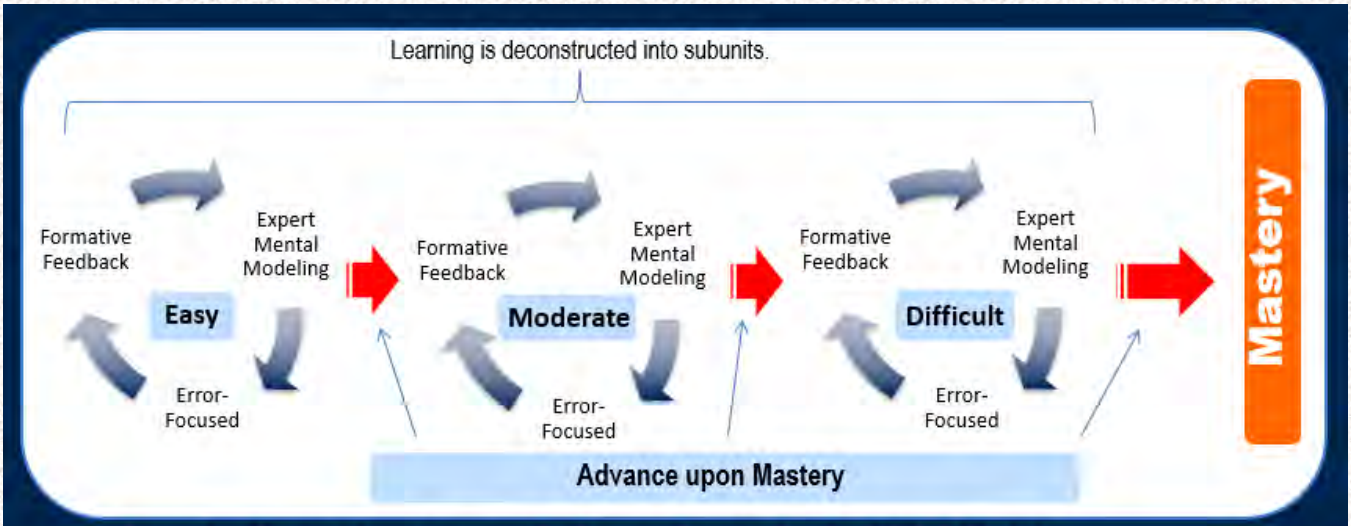


Figure 1 – Mastery Learning with Deliberate Practice for the POCUS Module

The module is divided into subunits of increasing difficulty. Each subunit incorporates key components of the deliberate practice model. Learners can move on to more difficult subunits only after demonstrating mastery on easier ones.

The authors used mastery learning (ML) and deliberate practice (DP) as conceptual frameworks to address the problem (figure 1).

They then designed a 5-unit program for competence in POCUS skills:

1) POCUS Fundamentals: online didactics with embedded assessments;

2) Image Library: a web-based "assessment for learning" module;

3) Skills Practice: a virtual simulator with probe orientation tracking technology for practice and assessment of image acquisition;

4) Deliberate Practice Workshop: a one-day, hands-on session with human volunteers and expert coaches; and

5) On-the-Job Learning: an autonomous application of learned POCUS skills in the clinical setting using a cloud-based system with timely feedback from experts (figure 2).

Using focused cardiac ultrasound (FoCUS) as an exemplar, they constructed a cardiac image library prototype comprised 90 questions organized into three levels of difficulty. Aligning with the ML and DP principles, learners were given a set of 10 questions, learned from feedback, and repeated an additional set in the same difficulty until achieving a pre-defined level of mastery. A rapid prototyping process enhanced and finalized the modules, which was then piloted with learners to evaluate the ML design principles. The image library and virtual simulator were launched three months prior to the workshop, where learners were divided into 'beginner' vs. 'advanced' levels and then performed DP at the workshop according to their levels. The authors evaluated educational process and skilled levels of learners as evidence for merit and worth of the program.

Figure 2 – A five-unit POCUS program to promote progression through the stages of skill acquisition

The results were very encouraging. For the image library, a total of 17 PICU faculty and fellows attempted to complete the module and 14 achieved master by passing all three difficulties. Learners who took the module scored 72% on a 10-question assessment, whereas experts and novices who did not take the module scored 82% and 17%, respectively. The image library was in-line with ML principles as the first-attempt score, and the time spent on each question was consistent with the level of difficulty; the number of questions needed to pass the entire module varied greatly among learners (range, 30 - 300). For the Workshop, 9 of 11 learners demonstrated competency in image acquisition by passing a pre-defined "master" level on a 5-point entrustment scale. On a 5-point scale learners' confidence increased from before to after the entire program, both with image interpretation (p=.005) and with image acquisition (p=.005), for being worth the time commitment (median, 5/5) and for useful knowledge and skills to improve clinical practice (median, 5/5).

The authors plan to use the evaluative data to enhance and develop future modules. Specifically, they will revise the teaching and feedback content and user interface with the modules to improve learners' confidence and performance.

Authors: Kyle Brown, MD, Alan Riley, MD, Danny Castro, DO, Med, Kiyetta Alade, MD, Adam Adler, MD, Mohammad Tcharmtchi, MD, Satid Thammasitboon, MD, MHPE, the TCH POCUS Collaborative Baylor College of Medicine, Texas Children's Hospital Pediatric Critical Care Fellowship

First Simulated Radiation-Injury Treatment Exercise Held

"Over the past three years, the Emergency Management team at Texas Children's has worked closely with the Radiation Injury Treatment Network to increase the fidelity and realism of the drills we have been conducting. Developing plans for such hopefully never-in-our-lifetime events is one of the many responsibilities of Emergency Management.

-- Dr. Brent Kaziny
Medical Director, Emergency Medicine

On April 28, 2019, Texas Children's Emergency Management and Bone Marrow Transplant teams conducted their first full-scale radiation injury treatment exercise, partnering with outside agencies to simulate their roles in a radiation-related event.

As a member of the Radiation Injury Treatment Network (RITN), Texas Children's conducts annual exercises as part of our emergency preparedness activities. RITN is a system of hospitals affiliated with the National Marrow Donor Program providing comprehensive evaluation and treatment for victims of radiation exposure. MD Anderson Cancer Center is the only other RITN member organization in the Greater Houston area.

Seeing plans tested first as tabletop drills and eventually as full scale exercises allow us to pinpoint where improvements need to be made. Texas Children's Hospital has come so far, and watching these plans become operational is extremely rewarding."

Texas Children's Emergency Management Manager **Aaron Freedkin** agreed and said if there was a radiation event nearby, Texas Children's would get many of the affected pediatric patients."

"That's why it's so important for us to practice and prepare for such an event," Freedkin said. "Last week's exercise gave us a great opportunity to do that."

The seven-hour event was the first full-scale radiation injury treatment exercise the organization has participated in and tested our response following the mock detonation of an improvised nuclear device that sends patients requiring bone marrow transplant or supportive medical care to Houston by way of the National Disaster Medical System.

The exercise involved various outside local, state and federal agencies including the Southeast Texas Regional Advisory Council, Veteran's Affairs, and American Medical Response. The exercise began at Ellington Field, a joint military and civilian airport that would host the Patient Reception Center during a large-scale disaster. Run by the Veteran's Affairs Federal Coordinating Center, the center would receive patients from outside Houston and coordinate available local resources.

Texas Children's Bone Marrow Team Member **Dr. John Craddock** said understanding who the local players are and how to work with them is a great addition to the annual exercise, which typically has been a tabletop exercise with the exception of last year when it expanded to a large scale functional exercise involved Texas Children's Hospital West Campus and Texas Children's Hospital The Woodlands.

"This year, the exercise was full scale, giving us a more realistic idea of what we would be dealing with," Craddock said. "I think it was very informative."

During the exercise, Craddock and another members of the Bone Marrow Transplant team helped receive, triage and assign for transport to area hospitals 50 mock pediatric patients and 50 adult patients. The pediatric patients at Ellington Field were played by high school students from Friendswood High School. The adult patients at Ellington Field were played by adult volunteers from various civic groups including Bay CERT, a local Community Emergency Response Team.

The second half of the exercise took place on the fourth floor of the Pavilion for Women, part of which was turned into a Patient Reception Center for the patients coming to Texas Children's Hospital for evaluation and/or treatment. Those mock patient and their family members were played by DeBakey High School students and saw members of our pathology, chaplain, social work, patient experience and case management teams before being transferred to a patient care room if necessary.

"This is the first time we've simulated going from plane to hospital," said **James Mitchell**, Director of Organizational Resilience and Emergency Management . "Going through the entire process really expanded our knowledge about how this would work."

Position Paper Calls for List of Essential Oncology Medicines

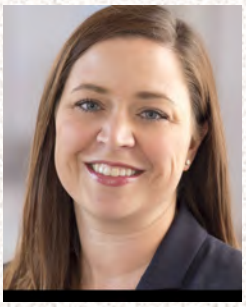
"It wasn't our goal to make the ultimate list. It was to show what it would look like as a starting point. The list by itself doesn't do anything except draw attention, but I think underpinning the idea of the list is the concept that health care, and therefore cancer care, is a right and should be available to everybody."

--Dr. Stacy Berg

"The new drugs that can charge $70,000 and up a dose, of course they're going to make those drugs. The drugs that are $2.15 a vial, that's a little bit more challenging."

--Dr. Brooke Bernhardt

Dr. Stacy Berg (left), Professor and Co-Director of TCH's Cancer Center's Developmental Therapeutics Program, along with **Dr. Brooke Bernhardt** (right), Asst. Professor, published a position paper in *JAMA Pediatrics*, calling for the development of an essential medicines list for pediatric oncology. Their recommendations were modeled after the World Health Organization's (WHO's) Essential Medicines Lists, which covers a gamut of conditions that affect both children and adults.



Their position is a more straightforward call to address an issue that is increasingly causing obstacles to providing children optimal care: namely, the short supply of numerous "old" drugs that have been part of standard care. Pointing out reasons for the growing scarcity of drugs is a complex issue, according to Dr. Berg, who noted that, "One of the things that was really appalling when we were working on the paper was how many drugs we use all the time that turned out to be in short supply some time in recent history – I was shocked." Contrariwise, newer, cutting-edge drugs are continuously being added to therapies to improve outcomes, but they also are profitable for the manufacturers and seldom are in short supply. She also noted that the problem is not exclusive to pediatric oncology…rather, it occurs in critical care, pain management, and other fields.

The list that Drs. Berg and Bernhardt proposed includes approximately 40 anticancer drugs and 35 supportive care medications. Although not all are in short supply, all are medicines that they consider to be essential to a hospital or clinic treating pediatric patients with cancer. The list is intended to begin a conversation about shortages and to encourage policy or industry change that would ensure easy accessibility of these drugs and forecast shortages well in advance.

Dr. Bernhardt noted that in conversations with drug companies, she has found that the "gap is with them understanding what the demand is in order for them to make the right amount and for them to know that they're going to have purchasers of that product." She used as an example having 20 companies making enough thioguanine for 18,000 would lead to a surplus of the drug, which would drive reduction of production, which in turn could lead to shortages. The challenge is to find a way to match the demand with the supply, so that pricing can be more realistic and manufacturers can create a system based simply on supply and demand.

The pharmaceutical companies' priorities are economic, so Dr. Berg suggests that the medical field needs to offer some incentives and perhaps initiate some regulations that spread the burden in a fair way "across the pharmaceutical landscape." Using the example of the CDC's work with the Advisory Committee on Immunization Practices to develop recommendations for production of vaccines, each year, the paper calls for implementing a similar procedure. The issue remains whether the "voters, policymakers and institutions are willing to address the underlying issues that are creating these shortages" in order to provide a solution to the problem.

Purple Songs Can Fly Documentary Wins Prize

"We're so proud of Anita and the incredible patients who created such a beautiful film. *Purple Songs Can Fly* has provided hundreds of patients and siblings the gift of sharing their journey through song, and we are so grateful for the opportunity to share this special piece with our community."

-- Carol Herron
Coordinator of the Periwinkle Arts in Medicine Program
at the TCH Cancer and Hematology Centers

Purple Songs Can Fly is the first recording studio created on a pediatric cancer floor to allow patients to make their own recordings. Founded in 2006 at TCH, it has been used to record thousands of songs. Six childhood cancer patients, Mia, Layla, Dominic, Emily, Stephen, and Christian, came together as survivors to share "Journey to Hope," an original musical featuring their own songs. They wrote and recorded it in the *Purple Songs Can Fly* studio during their individual cancer journeys, as a way to express the myriad of emotions and feelings a diagnosis of cancer my bring.

"My father must have orchestrated this from heaven, along with all the other angels watching over Mia, Layla, Dominic, Emily, Stephen, and Christian. Thank You. Your love is eternal and shows us that hope is always here. This one's for you."

--Anita Kruse
Founder & Executive Director
Purple Songs Can Fly

"Journey to Hope" was recently recognized with the Platinum Remi Award at the 2019 WorldFest-Houston, an international film festival now in its 52nd year. Founded in 1961 as an international film society, it evolved into a competitive international film festival seven years later and became the third such festival in North America (after San Francisco and New York). WorldFest's mission is to recognize and honor outstanding creative achievement in film and video. It also serves to educate and introduce excellence in cinematic arts for the promotion of cultural tourism in Houston.

This year's event showcased more than 60 new independent feature films and more than 100 award-winning shorts from around the globe.

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Section Offers Clinicians Venue for Gaining New Perspectives

By Dr. Daniel Mahoney

Each quarter, the Section of Palliative Care hosts Respite Rounds, an hour-long opportunity for clinicians practicing at BCM/TCH to come together and discuss the challenging aspects of caring for sick children. Similar to Boston-based *Schwartz Rounds*, the goal of the meetings is to "serve as an open forum and safe space to discuss the experience of being a caregiver," rather than focus on morbidity and mortality details or diagnostic case specifics.

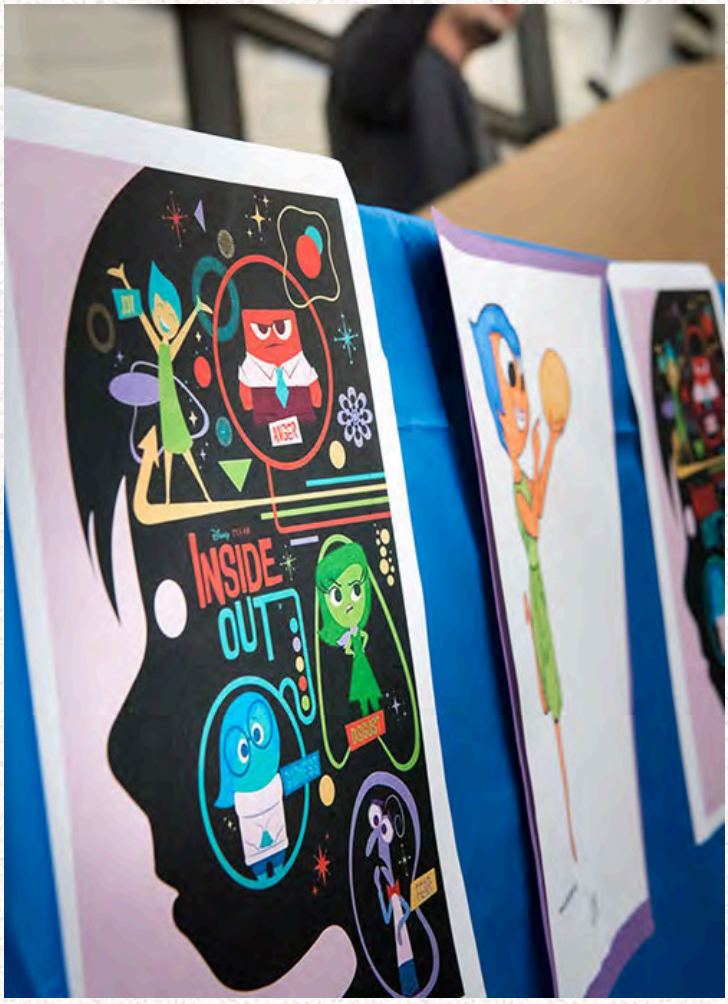
"A few audience members approached me afterwards to say that this session helped them recognize the importance of approaching families of children who suffered traumatic or preventable injuries in a more non-judgmental way. That isn't always easy to do."
-- Joy Hesselgrave, RN, MSN, CPON, Assistant Clinical Director for Palliative Care

On June 24, the Section hosted a panel discussion entitled "Expecting the Unexpected." The panel, composed of a social worker, a chaplain, a palliative care physician, and a complex care physician, led a discussion about how each clinician has personally reacted to a situation when a terminally ill patient under his or her care was disconnected from life support machines – and continued to survive. Themes included the fear of prognostic uncertainty, means of helping families process guilt when a traumatic or preventable injury led to a child requiring life support, and the range of emotions clinicians may feel after being "fired" by a family.

The Section hopes that everyone who attends a Respite Rounds leaves with a new perspective or insight into either their own reactions to a clinical situation or a better understanding of the reactions and emotions of their colleagues. Palliative Care Respite Rounds will be held again on January 20, 2020, and all clinicians and faculty are invited to attend. CME/CEU credit is available for attendance and participation.

Annual Mental Health Awareness Week Held

The **Section of Child & Adolescent Psychiatry** hosted their **3rd Annual Mental Health Awareness Week Celebration** on Tuesday, May 14th on the Mark Wallace Tower Auxiliary Bridge.



The theme of the event this year was "It's Okay to Say…" and activities highlighted characters from Disney's animated film, *Inside Out*, such as Anger, Sadness, Disgust, Fear, and Joy.

Booths included an array of interactive activities and opportunities for caregivers, faculty, and staff to obtain information regarding mental health awareness, behavior management, emotional regulation, coping, and various other topics. Resource tables were also available and provided information regarding services available through Texas Children's Hospital Behavioral and Developmental Sciences departments as well as other community partners.

Award-winning guest speaker, program director, and co-founder of the Iconoclast Artists program, Marlon Lizama, gave an inspiring speech regarding his own mental health journey and how it compelled him to commit his life to empowering incarcerated youth, as well as those in underserved communities and schools, through use of the arts. His story provided a glimpse into the many barriers that patients and families face in addressing mental health stigma and reinforced the need for continued education and community outreach by healthcare professionals.

Faculty Part of "Be Mindful" Series

During Mental Health Awareness Month (May), **Dr. Julie Kaplow**, Assoc. Professor and Chief of Psychology, and others looked at the long-term effects on survivors of the May 18, 2018, Santa Fe school shooting that killed 10 and wounded three others, as well as the effects on survivors of other mass killings. Anniversaries are a significant time for survivors and for their families and the victims' families.

Dr. Kaplow, who is also Director of the Trauma and Grief Center at TCH, noted in an episode for KHOU's "Be Mindful" series that, "We were there really the day after [the Santa Fe shooting]. We deployed our entire team of trauma and grief clinicians." The team helped establish the Santa Fe Strong Resiliency Center, which continues in operation.

"Finding healthy ways to connect to the people who died. Including living the legacy of the person who died. . . . [ask] How can I live my life in a way that the person would have been proud?"

--Dr. Julie Kaplow

Dr. Kaplow encouraged survivors to deal with the trauma in positive ways. She also cautioned about using fireworks during holidays, as they can sound like gun fire, and about being aware of the emotional toll that anniversaries play on survivors. She encourages survivors to remember that how we remember a lost loved one can be a powerful tool.

Section Holds Inaugural Dr. Doug Ris Pediatrics Grand Rounds

The 2019 Inaugural **Dr. Doug Ris Pediatrics Grand Rounds** lecture was held on May 10, 2019. It was created to honor Dr. Ris' hard work and vast impact on children, families, learners, and colleagues before his retirement this June. This annual Grand Rounds lecture will allow the department to recognize Dr. Ris for his many years of outstanding leadership, dedication, and service to the Department of Pediatrics and the Section of Psychology. One of Dr. Ris' leading principles during his tenure as Chief of the Section was that every patient encounter at TCH should be behavioral-health informed. The hope is that this annual lecture can keep everyone tirelessly focused on that goal.

Dr. Mark Kline, Chairman, congratulates Dr. Doug Ris

The 2019 Inaugural guest speaker was Dr. Terry Stancin, Professor and Chief of Pediatrics, Psychiatry and Psychology at Case Western Reserve University School of Medicine and Director of Pediatric Psychology at MetroHealth Medical Center in Cleveland, Ohio. Dr. Stancin was the recipient of the 2018 National Compassionate Caregiver of the Year Award from the Schwartz Center. She launched a nationally recognized integrated pediatric care program that teams behavioral health professionals with pediatricians directly in pediatric offices, and she has been instrumental in expanding mental health services to Cuyahoga County's foster children, Cleveland public school students, children with autism, and transgender and gender-questioning youth, among many others. Dr. Stancin has more than 20 years' experience in integrating behavioral health in pediatric primary care settings.

Her presentation, entitled "Pediatric Integrated Care: Moving From Why to How to What," provided inspiration for bringing truly integrated care to the patients of Texas Children's Hospital.

(l-r)Drs. Terry Stancin, Doug Ris, and Julie Kaplow, newly appointed Section Chief of Psychology

Section Leads Study on Understanding Needs of Children Impacted by Parental Incarceration

By: Nancy Correa, MPH

During the past year, the Section of Public Health Pediatrics conducted a needs assessment on children with incarcerated parents in the Harris County Jail. The purpose of the study, led by principal investigator **Dr. Christopher Greeley**, Professor, Chief of Public Health, and Vice-Chair of Community Health, was to better understand the needs of children with incarcerated parents in the Harris County jail, identify opportunities to support these children, and further inform how to improve their short- and long-term outcomes.

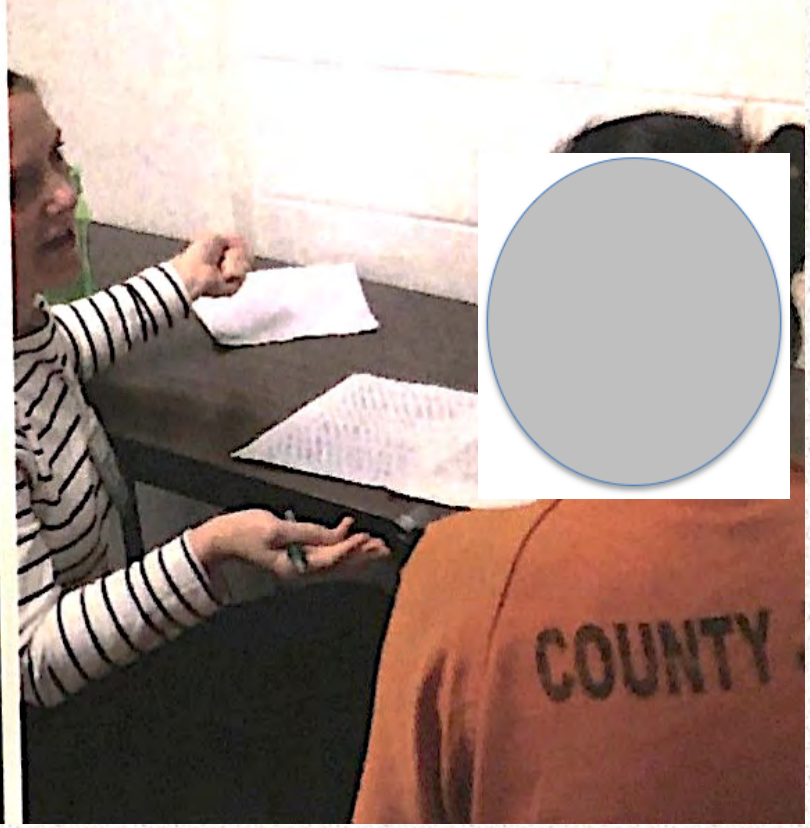
The study revealed that parental incarceration impacts more than 92,000 children in Harris County each year, and the large majority of these children are not receiving needed services despite the trauma, loss, and financial hardship that often accompany parental incarceration.

Components of the study included interviewing inmates at the Harris County Jail, interviewing caregivers that were caring for children with incarcerated parents, a literature review, and adding questions to the Harris County Jail intake form (see side bar).

Questions Added to Intake Form

- If the inmate has children under the age of 18
- How many children
- Ages of the children
- If the child(ren) lived with the inmate prior to the incarceration
- Who is caring for the child now
- The name of the child's school
- If the inmate has been to jail or prison previously
- If the inmate's parents went to jail or prison when he/she was a child

The study showed that 61% of incarcerated parents provided all or most of the financial support for their children prior to the incarceration and 62% lived with their children before the arrest. The assessment also revealed that historically our community has overlooked this vulnerable population, but there is great interest by community partners to implement new policies and programs that support these children.



Recommendations from the assessment included:

- Connect families impacted by parental incarceration with social services to address basic needs such as food, transportation, and child care
- Provide behavioral health and emotional support for children with incarcerated parents
- Improve communication and information sharing among the justice system, incarcerated parents, and children, including offering more affordable phone calls and child-friendly visitation
- Evaluate existing programs and expand research on parental incarceration

Demographics	Count	Percent
Gender		
Female	124	(17.7%)
Male	575	(82.3%)
Race		
Asian	5	(0.7%)
Black	370	(52.9%)
Pacific Islander	4	(0.6%)
White	314	(44.9%)
Unknown	6	(0.9%)
Age		
Average age	34.82	years
Range	17-75	years

Demographics of inmates with at least one child under 18 years of age at the Harris County Jail (n=699)

As a result of the assessment, the Harris County Sheriff's Office was one of five sites across the country to receive a training and technical assistance grant from the National Institute of Corrections to make the Harris County Jail more supportive of children with incarcerated parents.

Findings from the study were presented at the National Children of Incarcerated Parents Conference in April 2019 and will also be presented at the American Public Health Association's National Conference in November 2019.

The project team included Dr. Beth Van Horne, Dr. Kim Lopez, Dr. Rachael Keefe, Dr. Avni Bhalakia, Angie Hayes, Nancy Correa (TCH), Dr. Tammy Cupit (UTMB), Dr. Veronica Kwarting Amaning (UTMB), Major Mike Lee (HCSO), and Captain Ronny Taylor (HCSO). The study was funded by the TMC Health Policy Institute and was conducted in partnership with the Harris County Sheriff's Office and University of Texas Medical Branch—Galveston.

Researcher Confronts Personal Criticism for Stance on Vaccines

"It's one thing to have emotional parents or angry activists coming after you.
It's really quite another to get it from elected officials."
-- Dr. Peter Hotez

An outspoken proponent of vaccines, **Dr. Peter Hotez**, Professor and Dean of the National School of Tropical Medicine, BCM, has had his share of harassment, including being threatened online, blamed for his daughter's autism, and even accused by State Representative Jonathan Stickland of being in the drug industry's pocket (even calling Dr. Hotez's science, "self-serving 'sorcery'").

Today, the public health stakes are high, with the percentage of unvaccinated children quadrupled since 2001. Vaccine-preventable diseases such as measles and mumps are now being seen more frequently, and the concern about vaccines has moved from fringe populations to the center of American life. Due to some of the more heated accusations, some vaccine proponents appear to be silenced, not wanting to incur the wrath that Dr. Hotez and others have experienced.

The charges that he is benefiting financially from his push for vaccines have been met by his comment that "I haven't even paid off my mortgage…they keep saying that I'm making all this money off my work, and my wife keeps saying, 'If only!'" His concern is that the mistrust of science, stimulated by social media's ability to bring together like-minded individuals, has led to wildly inaccurate premises being given an aura of truth. To combat some of the mistrust, and with the hope of reversing the current trend, Dr. Hotez published a personal account of his own experience with his daughter's autism, entitled, *Vaccines Did Not Cause Rachel's Autism*.

The challenge remains to have more officials clarify the safety of vaccines, and to emphasize that they provide lifesaving and crucial protection to individuals and society at large…rather than vilifying them. In addition, political leaders need to increase funding for health departments that are best positioned to combat the growing epidemic of misinformation and to pass legislation that makes it harder for parents to skip crucial inoculations.

Last year, Dr. Hotez and his colleagues identified 15 locations across the country that were most likely to have re-emergence of measles. At least seven of those areas already are experiencing outbreaks. Rather than being some type of prophetic sorcery, the predictions are based on expertise and good science.

Source: https://www.nytimes.com/2019/06/02/opinion/vaccines-peter-hotez.html

Symposium Addresses Vaccines for Neglected Tropical Diseases

By Nathaniel Wilder Wolf

Tropical Medicine co-sponsored and hosted a one-day symposium entitled "**Tools and Vaccines for the Control of Tuberculosis and other Neglected Tropical Diseases**." Guests included researchers from various institutions around the state including a large number from both Texas A&M University and The University of Texas Medical Branch.

Drs. Bottazzi and Hotez with Dr. Stefan H.E. Kaufmann, Founding Director of the Max Planck Institute for Infection Biology

Plenary speaker Dr. Stefan Kaufmann, founding director of the Max Planck Institute for Infection Biology, gave a lecture on tuberculosis titled "How to Tackle the Most Successful Pathogen on Earth." Plenary speaker **Dr. Peter Hotez**, founding Director of the National School of Tropical Medicine and chief of the section of tropical medicine, spoke on "Blue Marble Health and Neglected Tropical Diseases."

Other talks by Tropical Medicine faculty and researchers included "Post-Disaster Epidemiology of Pediatric TB in the Philippines," by **Dr. Kristy Murray** as well as talks on Chagas disease, West Nile, and tick-borne diseases, by **Drs. Sarah Gunter**, **Shannon Ronca**, and **Job Lopez**, respectively. **Dr. Kathryn Jones** spoke regarding Tropical Medicine's therapeutic Chagas Disease vaccine, which is prepared to enter clinical trials. "This forum provided an excellent format for in-depth discussion of integrated control measures such as vaccine development," said Dr. Jones. Tropical Medicine's **Leroy Versteeg** spoke on modern technologies for new NTD Vaccines. "New technologies such as new imaging techniques allow us to look at cell-to-cell interaction and host-parasite interaction like never before," said Versteeg. "Also we are developing new platforms such as mNRA as an alternative to protein-based vaccines."

Faculty Receive Special Recognition

Dr. Peter Hotez received the Distinguished Professor Award, along with Dr. Malcolm Brenner. They both received their awards at the annual BCM Alumni Association dinner. Dr. Hotez also presented at the BCM Alumni event and discussed his book and public defense of vaccines to the Texas Children's Hospital Board of Trustees. He also served on a high-level panel on vaccines with the leadership of the U. S. Department of Health & Human Services, including DHHS Secretary Azar, and the Director General of the WHO and Gavi, at the annual World Health Assembly in Geneva. He also gave visiting lectures at the University of Vermont and London School of Hygiene and Tropical Medicine, and a book event hosted by the Royal Society of Tropical Medicine and Hygiene. Dr. Hotez was also featured on a 20-minute TV special on Al Jazeera Fault Lines, and gave numerous interviews about measles and vaccines for numerous news outlets.

Dr. Bottazzi was selected by the National Academy of Medicine as 1 of 10 Emerging Leaders in Health and Medicine Scholars, a 3-year recognition given to early- to mid-career professionals from health-related fields. The Emerging Leaders in Health and Medicine Program is an initiative designed by the Academy to improve health for everyone through advancement of science, combating traditional challenges in health, and effecting change in outdated health paradigms.

DEPARTMENT NEWS
FACULTY, FELLOWS & STAFF FEATURES

Dr. Mark Kline, Chair of Pediatrics at Baylor College of Medicine and Physician-in-chief of Texas Children's Hospital, was presented the **International Humanitarian and Global Health Leadership Award** from the **U.S. Cooperative for International Patient Programs** in recognition of his exceptional contributions to global health and international humanitarian initiatives. USCIPP is composed of American academic medical centers and health systems that work together to advance global access to United States expertise in high-quality healthcare. The membership represents the majority of American hospitals that have a focus on international concerns and includes many of the preeminent institutions of medicine in the United States. All of USCIPP's members are involved in the provision of international healthcare services. Dr. Kline received the award on June 13 at the USCIPP Leadership Awards Dinner at the Petroleum Club of Houston, which is held in conjunction with the organization's annual meeting to discuss best practices in caring for international patients and in the delivery of healthcare abroad.

Dr. Kline also celebrated his **10th Anniversary** as **Chairman of the Department of Pediatrics** and **Physician-in-Chief of Texas Children's Hospital**, on July 1, 2019.

Dr. Mark Ward Recognized for Contributions

"I consider the residency program to be one of our most important educational activities . . . . I appreciate the work that [Dr. Ward] has done keeping our program running smoothly and maintaining our national reputation. In his tenure as program director, I would estimate that he has shepherded over 500 residents through the program. His skill in working with residents in difficulty is remarkable.

--Dr. Mark Kline, Chairman

Dr. Mark Ward received his M.D. from Baylor College of Medicine and did his residency in the Baylor Pediatric Program from 1981-1983. He then went to Cincinnati Children's Medical Center for a combined fellowship in pediatric emergency medicine and pediatric infectious diseases. He served on the faculty at Rush Medical College in Chicago for the next 4 years and returned to Baylor in 1992. He was quickly recognized as an outstanding teacher, and Dr. Martin Lorin, then Director of the Residency Program, fondly recalled that in that position, he "called on him [Dr. Ward] often and worked closely with him on many projects, including helping residents in difficulty."

When Dr. Lorin stepped down as Program Director in 2005, Dr. Ward was selected to succeed him, and the two physicians worked together on almost a daily basis to ensure a smooth transition. They continued to work closely together over the years, even after Dr. Lorin's retirement in 2015. During that time, they developed a number of courses, such as Pedi 101, a 2-week didactic course for pediatric interns focusing on issues such as how physicians think, avoiding medical diagnostic errors, medical ethics, listening to patients, and using community resources.

The Baylor Residency Program is one of the largest pediatric programs in the country, and as Program Director, Dr. Ward has had the major responsibility for the overall education of the pediatric residents and for the education of medical students during their sojourn in core pediatrics and pediatric electives. This responsibility involved administrative duties as well as hands-on teaching and evaluation. Dr. Ward also has had responsibility for administering numerous special pediatric tracks and combined programs such as the Medicine-Pediatrics program, which leads to Board eligibility in both Pediatrics and Internal Medicine.

One measure of the success of a residency program is the percentage of graduates who pass the qualifying Board examination. The Board passage rate increased from a 81% in 2007 to 97% in 2017. The rolling Baylor 3-year average for 2015-2017 for first-time takers was 97%, exceeding all other pediatric programs in Texas as well as many of the nationally most prestigious pediatric programs.

Despite a staggering administrative and teaching load, Dr. Ward has managed to be involved in educational research and in the preparation of enduring educational materials. Dr. Ward's list of publications includes 7 peer-reviewed journal articles dealing with medical education, including one in *Academic Medicine* and one in the *Journal of Graduate Medical Education*. Most recently, he was first author on a study regarding the MSPE (Impact of the final adjective in the Medical Student Performance Evaluation on determination of applicant desirability, *Medical Education Online*, 2018:23:1.)

Dr. Ward was one of three editors of the *Clinician-Educator's Handbook*, published in 2008. Funded by a grant from Mead Johnson Nutritionals, more than 1,000 hard copies of the book were distributed to Pediatric Department Chairs and other pediatric leaders nationally. Additionally, the book was made available for electronic download without charge from a Baylor website, as well as through the American Association of Medical College's MedEdPORTAL website. Dr. Ward was a Section Editor, as well as a chapter author, for the book, *Communicating with Pediatric Patients and their Families: the Texas Children's Hospital Guide for Physicians, Nurses and other Healthcare Professionals*, published in 2015 and funded by a grant from the Department of Pediatrics. 1,200 hard copies were mailed to Pediatric Physicians-in-Chief, Department of Pediatric Chairs, Chief Nursing Officers and other pediatric leadership at all children's hospitals in the United States. Additionally, the book was made available for electronic download without charge from a Baylor website. Dr. Ward was an author of the *Code Card for Clinical Teaching*, a multipage, pocket-size card highlighting educational strategies and techniques for teaching in the clinical setting. Finally, Dr. Ward gives generously of his time and energy to serve on numerous Baylor Graduate Medical Education committees. He also is an active member of the National Association of Pediatric Program Directors, for which he has led several workshops and serves on the Educational Task Force.

Appreciation is extended to Dr. Teri Turner for providing documents used to write this article.

Chairman Announces Appointments to Endowed Chairs

On June 18, 2019, at the Department of Pediatrics Faculty meeting, **Dr. Mark Kline**, Chairman, announced the following appointments to endowed chairs. The descriptions are those of the individuals for whom the chairs are named.

Dr. Judith Campbell was appointed to the **Sheldon L. Kaplan, M.D. Endowed Chair**. Dr. Kaplan has been a cornerstone element of the Department of Pediatrics for more than 40 years, serving lengthy terms as Chief of Infectious Diseases, Head of the Department of Medicine and Executive Vice-Chair of Pediatrics. An internationally respected clinician, researcher and speaker, he has been a source of tremendous pride to Texas Children's and Baylor.

Dr. Carla Davis was appointed to the **Janie and Sandra Queen Endowed Chair in Immunology and HIV/AIDS**. Born HIV-positive and abandoned at birth, Janie was adopted into the Queen family at just a few months of age. Together with her mom, Sandra, Janie became an advocate for children with HIV/AIDS during a period of intense stigmatization. She was one of the first children in the world to receive highly-active antiretroviral therapy, blazing a trail that has benefited thousands of children who followed.

Dr. Deb Hsu was appointed to the **Virginia McFarland Endowed Chair**. Virginia and her late husband, Russell, were faithful supporters of Texas Children's Hospital for more than 40 years. Virginia served on the Texas Children's Board of Trustees for 38 years. For decades, she attended Pediatric Grand Rounds on a weekly basis. A classically trained musician, Virginia was an accomplished violinist in her youth and performed as a soloist with the Chicago Symphony. She is now 98 years old and lives in Ohio.

Dr. Tammy Kang was appointed to the **Jan E. Duncan Endowed Chair in Palliative Care**. Jan E. Duncan is a Houston community volunteer, educator and philanthropist who has served on the Texas Children's Board of Trustees since 2007. Jan and her late husband, Dan, made a $50 million gift – the largest in the hospital's history – to the Heal Sick Children campaign and named the Jan and Dan Duncan Neurological Research Institute. Jan says that her greatest joy in life comes from giving of herself so that individuals can experience God's love.

Dr. Julie Kaplow was appointed to the **Shannon and Mark A. Wallace Endowed Chair in Pediatric Behavioral Health**. Serving as President and CEO for almost 30 years, Mark A. Wallace has been a transformative figure in the rich history of Texas Children's Hospital. Shannon has been at his side, contributing her intuition, common sense, compassion and wisdom to countless projects. Together, Shannon and Mark constitute the "secret sauce" that has led Texas Children's to preeminence.

Dr. Bhagavatula Moorthy was appointed to the **Kurt Randerath, Ph.D. Endowed Chair**. Prof. Randerath was an eminent chemist and cancer scientist who worked in the Department of Pharmacology at Baylor College of Medicine for 30 years. He passed away in June of 2018 at 88 years of age.

Dr. Cliona Rooney was appointed to the **Thomas Rosenbalm, M.D. Presidential Endowed Chair**. A native of Bartlett, Texas, Dr. Rosenbalm suffered rheumatic heart disease at the age of four, rendering him chronically ill throughout childhood and adolescence. This experience inspired him to become a physician. After graduation from Baylor College of Medicine in 1955, he served as a physician in the U.S. Air Force before establishing a successful family practice in Houston.

Dr. Lara Shekerdemian was appointed to the **Camillo-Sullivan Endowed Chair**. Mike Camillo founded Legend Homes in 1991. Since that time, the Houston-based company has built more than 6000 homes in 30 communities across Houston. Mr. Camillo's daughters, Lauren and Lara, are attorneys, community leaders and philanthropists in both Houston and Chicago. They have been generous supporters of Texas Children's Hospital.

Dr. Teri Turner was appointed to the **Martin I. Lorin, M.D., Endowed Chair in Medical Education**. Dr. Lorin was an iconic figure in the Department and at TCH for four decades. He directed the pediatric residency training program from 1978 until 2005. "One might say that he is the personification of the consummate pediatric medical educator."

Dr. Bob Voigt was appointed to the **Leopold Meyer Endowed Chair in Developmental Pediatrics**. Leopold Meyer was born in Galveston in 1892. A highly successful retail merchant, he married Adelena Levy Goldman in 1931. The death of Adelena's daughter in 1939 at 15 years of age spurred Mr. Meyer to devote the rest of his life to raising funds for Texas Children's Hospital and several other medical charities. He died in 1982 at 90 years of age and is buried in Houston's Beth Israel Cemetery.

Appreciation is extended to Julie O'Brien, who created the slides for the faculty meeting, from which this information was extracted.

New Pediatric Residency Program Director Appointed

"Elaine brings experience, commitment and passion to this vital leadership role. She will work tirelessly to build on Mark Ward's legacy of excellence in resident recruitment and training."

-- Dr. Mark Kline, Chairman

May 17, 2019, Dr. Mark Kline, Chairman, announced that **Dr. Elaine Fielder** had accepted his invitation to become the new Pediatric Residency Program Director, effective July 1. She replaces Dr. Mark Ward, who stepped down from the position after serving 14 years (see page 23). During the transition, Dr. Ward will assist Dr. Fielder to ensure a smooth leadership transition.

Dr. Fielder is a graduate of Texas A&M University and The University of Texas Medical Branch in Galveston. She completed her pediatric residency training at the University of Arkansas for Medical Sciences/Arkansas Children's Hospital and her fellowship training in pediatric emergency medicine at BCM/TCH.

She has been a member of the BCM/TCH faculty since 2010 and is board-certified in both pediatrics and pediatric emergency medicine.

In addition, she completed the Master Teachers Fellowship Program and has been the recipient of the Fulbright and Jaworski Faculty Excellence Award (2016), the Dr. Milton H. Nirken Excellence in Teaching Award (2016), and the BCM Women of Excellence Award (2019). She has directed the Pediatric Core Clerkship since 2013.

faculty highlights…

Dr. Patricia Baxter, Asst. Professor was presented the Clinical Research Award by the Clinical Research Center/Research Resources Office, for the second quarter of 2019. The award was esablished by the Clinical Research Cener in collaboration with the Research Resources Office to recognize and honor individual contribution to protect the best interests of research subjects and compliance with applicable rules and regulations. Dr. Baxter's research in the CRC is focused on evaluating enovel therapeutic agents for recurrent pediatric cancers, with a special interest in brain tumors. She is active participant in the Pediatric Brain Tumor Consortium, the Collaborative Network for Neuro-Oncology Clinical Trials, and the Pacif Pediatric Neuro-Oncology Consortium

Dr. Susan Blaney, Professor, was honored with the **Elise C. Young Chair in Pediatric Oncology** in recognition of her service as Chief of Pediatric Hematology/Oncology and Director of the Texas Children's Cancer Center. She joined the faculty in 1995.

Dr. Kenneth McClain, Professor, received the **2019 George R. Buchanan Lectureship Award** from Dr. Buchanan himself at the annual conference of the American Society for Pediatric Oncology Conference in New Orleans. He is the fourth recipient of the award, which recognizes his outstanding clinical expertise, significant research contributions, and mentorship.

Dr. Huda Zoghbi, Professor of Pediatrics, Neurology, Neuroscience and Molecular and Human Genetics at BCM and Director of the Jan and Dan Duncan Neurological Research Institute at TCH, received the 2019 **Norman J. Siegel New Member Outstanding Science Award** at the American Pediatrics Society in Baltimore in April for her contributions to the advancement of pediatric science. The award, named for Dr. Siegel, an outstanding teacher and mentor, as well as a leader within the medical commununity, recognizes an APS New Member for considerable contribution to pediatric science. She was honored during the APS Presidential Plenary and Awards Session. In addition, BCM faculty members were inducted into the society, including Dr. Carla Davis, Dr. Heidi Schwarzwald, Dr. Jesus Vallejo, and Dr. Kristy Murray.

The following faculty members from **Cancer and Hematology Centers** were recipients of awards at the Baylor College of Medicine awards ceremony recognizing faculty for outstanding contributions to education, community service and clinical care awards ceremony:

Norton Rose Fulbright Faculty Excellence Award for Teaching and Evaluation
- Lisa Bouchier-Hayes, PhD
- Jodi Muscal, MD
- Eric Schafer, MD, MHS

Norton Rose Fulbright Faculty Excellence Award for Development of Enduring Materials
- Nino Rainusso, MD

Early Career Faculty Award for Excellence in Patient Care
- Jennifer Foster, MD, MPH
- Michael Gleason, MD, MSPH
- Ionela Iacobas, MD

Star Faculty Award for Excellence in Patient Care
- Julienne Brackett, MD
- Ricardo Flores, MD

Master Clinician Award for Excellence in Patient Care
- Judith Margolin, MD
- Phillip Steuber, MD

faculty briefs…

Dr. Carl Allen, Assoc. Professor and a member of the Dan L. Duncan Comprehensive Cancer Center, was the recipient of the 2019 Michael E. DeBakey M.D. Awards for Excellence in Research. Dr. Allen's work has focused on defining mechanisms of pathogenesis of Langerhans cell histiocytosis (LCH). LCH is characterized by granulomatous lesions with typical CD207+ dendritic cells that may arise as isolated lesions or disseminated life-threatening disease. Uncertain classification of LCH as a disorder of immune dysregulation versus neoplastic disease has blocked access to research support from National Cancer Institute-supported organizations, limiting opportunities to improve outcomes for patients through clinical trials.

Dr. Wendy Allen-Rhoades, Asst. Professor, was one of two physicians selected as an American Society of Clinical Oncology 2019-2020 Health Policy Leadership Development Program Fellow. She will receive training in leadership, communication and advocacy along with practical experience working with ASCO staff to shape cancer-related policies that directly affect individuals with cancer and clinical care.

Dr. Patricia Baxter, Asst. Professor, received from the Clinical Rsearch Center/Research Resources Office the Clinical Research Award for the second quarter of 2019.

Dr. Dennis Bier, Professor and Director of the USDA/ARS Children's Nutrition Research Center, received the Volunteer of the Year Award from the American Society for Nutrition. He and other awardees were honored at the society's flagship meeting, Nutrition 2019 in Baltimore.

Dr. Rikhia Chakraborty, Asst. Professor, has received a Peer Reviewed Cancer Research Program Career Development Award, part of the Congressionally Directed Medical Research Programs that foster novel approaches to biomedical research. The award provides support for her research on "Cancer immunotherapy as treatment option for Langerhans cell histiocytosis."

Dr. Xanthi Couroucli, Assoc. Professor, was honored with the Clinician Educator Award by the Pediatric Assembly of the American Thoracic Society in recognition of her outstanding and innovative clinical and teaching abilities. She will accept the award at the ATS International Conference May 19 in Dallas.

Dr. Carla Davis, Assoc. Professor and Chief of the Section of Immunology, Allergy and Rheumatology at BCM/TCH and Director of the Food Allergy Program, was appointed to the Board of the American Academy of Allergy, Asthma and Immunology. She will serve as an at-large director from the interest sections.

Dr. Heather Haq, Asst. Professor, was selected to participate in the highly competitive American Academy of Pediatrics Young Physicians Leadership Alliance training program, designed to develop leaders and build a leadership community amongst early career pediatricians and pediatric subspecialists.

Dr. Meenakshi Hegde, Asst. Professor, along with Dr. Sujith Joseph, was awarded the Faris D. Virani Immunotherapy Scholar Award of $300,000 over two years, by The Faris Foundation.

Dr. Sujith Joseph, Senior Staff Scientist, along with Dr. Meenakshi Hegde, was awarded the Faris D. Virani Immunotherapy Scholar Award of $300,000 over two years, by The Faris Foundation.

Dr. Imad Jarjour, Professor, of neurology and pediatrics, was elected last month to the Board of Directors of the United Council for Neurologic Subspecialties. On the board, he represents the subspecialty of Autonomic Disorders.

Dr. Katherine Y. King, Assoc. Professor, has been invited by NIH's Center for Scientific Review to serve as a member of the Molecular and Cellular Hematology Study Section through June, 2025. Membership in an NIH Study Section is merit-based and provides a unique opportunity to contribute to the national biomedical research effort. King's research work is focused on the responses of hematopoietic stem cells to infection and inflammation.

Dr. Joseph Knadler, clinical fellow, was one of 9 winners to receive the 2019 CVRI Symposium Best Abstract and Best Poster from the BCM Cardiovascular Research Institute.

Dr. Regina Lantin, Assoc. Professor,
-- received her second Norton Rose Fulbright Educational Award in Enduring Materials
-- was invited by the editors of Pediatrics to write an editorial/commentary on multi-center stud looking at the neurodevelopmental abilities of 6-year-old children who had undergone palliation for hypoplastic left heart syncrome

Dr. Christina Nance, Asst. Professor, has been invited to become the new director of the College's Federation of Clinical Immunology Societies Center of Excellence, one of 74 based in national and international academic medical centers. Through FOCIS, researchers and clinicians share knowledge across traditional disease borders, and identify commonalities between treatments and therapies that are life changing for those with immune-mediated diseases.

Dr. Sharon Plon, Professor and Co-director of the Texas Children's Cancer Center's Cancer Genetics and Genomics Program,
-- has been appointed by the Secretary of the Department of Health and Human Services to the National Advisory Council For Human Genome Research until 2020. The council advises government agencies on genetics, genomic research, training, and programs related to the human genome initiative.
-- received the 11th annual Niehaus Southworth Weissenbach Award in Clinical Cancer Genetics from the Memorial Sloan Kettering Cancer Center. As part of the award events, she delivered Medical Grand Rounds on May 3 titled "Genetic Predisposition to Childhood Cancer in the Genomic Era" and consulted with genetics clinicians.

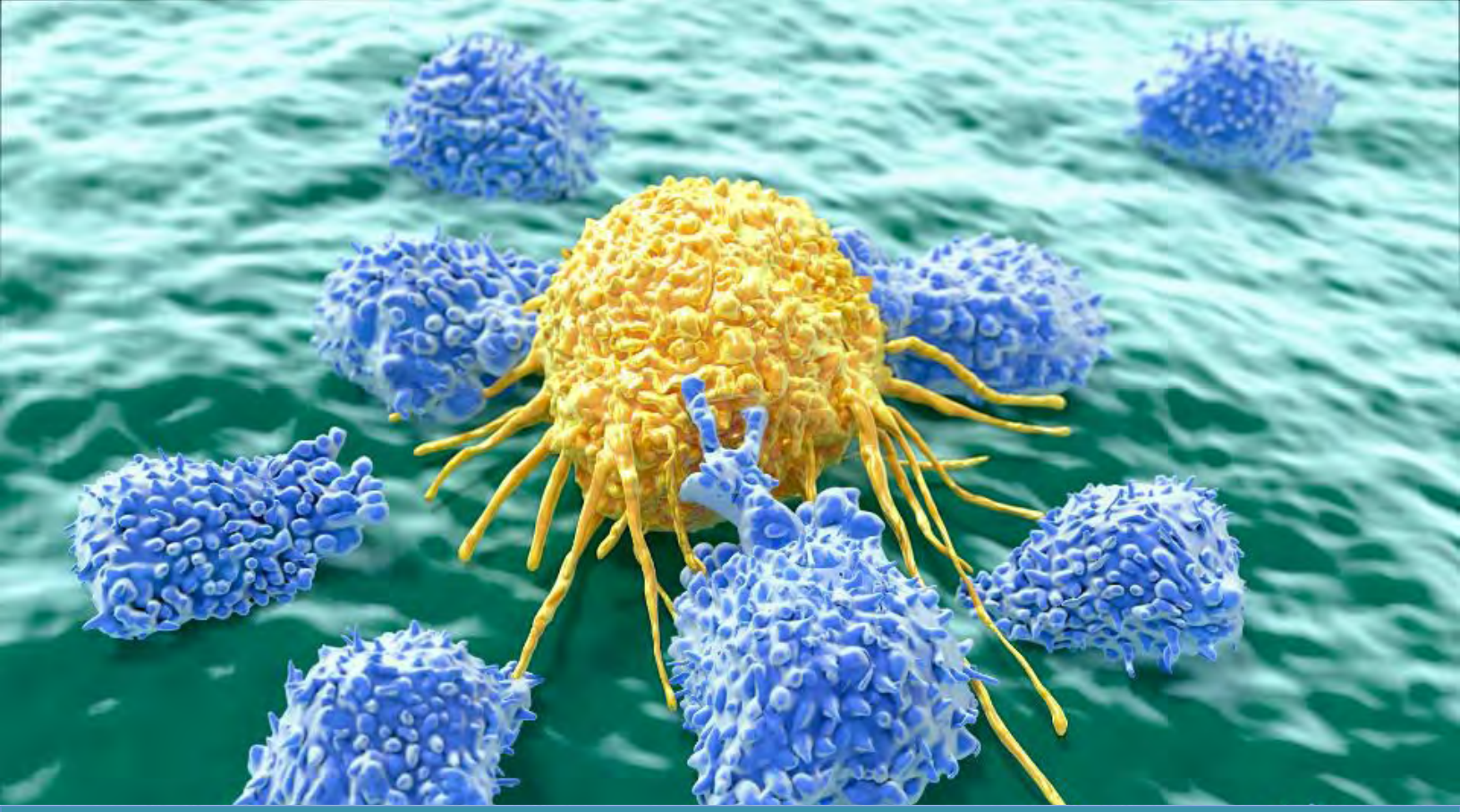
Priscila Reid, RN, NP, was selected as one of the *Houston Chronicle's* 2019 Salute to Nurses Top 15 nurses.

Dr. Rayne Rouce, Asst. Professor, was appointed as Associate Director of Community Engagement by The Office of the Provost and the Office of Institutional Diversity, Inclusion and Equity at the Baylor College of Medicine.

Dr. Jade Wulff, clinical postdoctoral fellow, has received a St. Baldrick Foundation Fellow grant for her project, "Targeting integrin-mediated signaling in metastatic Ewing sarcoma." Fellow grants support early career scientists whose research is focused on new cures and treatments for childhood cancers.

Dr. Amber Yates, Assoc. Professor and Co-director of Texas Children's Sickle Cell program in the Hematology Center explain how red blood cells get misshapen and sticky in patients with sickle cell disease in a TED-Ed video.

Dr. Jason Yustein, Assoc. Professor, is one of the experts participating in the New Agents for Ewing Sarcoma Task Force recently formed by the Children's Oncology Group Bone Tumor Committee. The mission of the task force is to evaluate and prioritize new agents for incorporation into clinical trials for metastatic and relapsed Ewing sarcoma.



DEPARTMENT NEWS
RESEARCH

CAR Trial is First for Treating Neuroblastoma with CAR

A Phase I clinical trial performed at BCM/TCH is evaluating a new CAR treatment for children with relapsed neuroblastoma. The trial, named GINAKIT2, is using, for the first time, natural killer T cells (NKT), a type of lymphocyte that destroys cancer cells and other altered cells by releasing cytotoxic granules.

The new therapy is being used for the first time on two children with relapsed neuroblastoma, a childhood cancer with poor prognosis: 1 of 5 children with neuroblastoma do not survive long-term. Both of the patients had widely metastatic disease that had failed other therapies and numerous treatment regimens, according to **Dr. Andras Heczey**, Asst. Professor and **Dr. Leonid Metelitsa**, Professor.

The first preliminary results were shown at a meeting of the American Society of Gene & Cell Therapy in Washington DC. The presentation described results from testing and safety evaluations of the therapy in mice, as well as the results from the first two patients enrolled in the phase I clinical trial.

Research Grant Will Support Immunotherapy Research

Researchers at BCM/TCH, **Drs. Sujith Joseph** (right) and **Meenakshi Hegde** (left), have received a 2-year grant from The Faris Foundation for $300,000 to conduct research on "Developing Sarcoma-specific T-cell Platform for Grafting Chimeric Angigen Receptors. The work will be conducted by Dr. Joseph in the laboratory of Dr. Hegde. The project is designed to optimize the development and testing of sarcoma-specific T-cell platform with the aim to help treat and prevent sarcoma growth and spread.

Sarcoma is an aggressive cancer of the bone and soft tissues, and it affects children and young adults; children with resistant or relapsed disease have very poor outcomes, so the researchers are looking at using immunotherapy to treat them, as it may prove beneficial and carries a lower risk of treatment-related toxicity. Of the numerous types of immunotherapies available for treating cancers, Dr. Joseph will focus on adoptive cellular therapy, which involves collecting a patient's immune cells from the blood, modifying them in the laboratory to recognize cancer-specific targets, and then replacing the enhanced immune cells so they will target the patient's cancer. This approach has shown clinical effectiveness in patients with advanced skin and other cancers.

During the past decade, research on adoptive cellular therapy strategies has used T-cells taken from patients and modified them to express a chimeric antigen receptor (CAR), which redirects the cells to find a tumor-specific target. So far, this approach for targeting leukemia and lymphoma cells has had a reported 90% complete response rate in heavily pre-treated patients. It was given the designation of "breakthrough therapy" by the U.S. Food and Drug Administration (FDA).

The research being undertaken by Dr. Joseph is a groundbreaking attempt to expand the scope of targets for CAR T cells by developing treatments that target solid tumors, including sarcoma. During the past 10 years, the Center has performed early clinical studies that established the safety of CAR T cells targeting the human epidermal growth factor receptor 2 (HER2) in patients with advanced sarcoma. Theses studies have provided evidence that the patient's own immune system can contribute to improved outcomes. This new research should enable researchers to develop personalized immunotherapeutic targets, thereby offering individualized treatment options for every patient with sarcoma.

MDS Research Funded

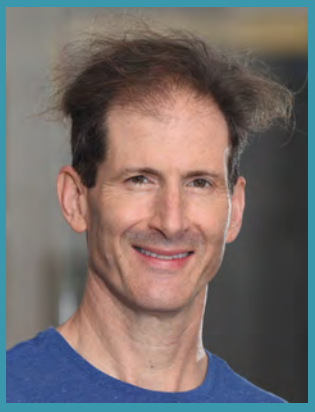
Dr. Davut Pehlivan, Instructor, was awarded by Rettsyndrome.org a 2-year Mentored Clinical Fellowship for $250,000 to study MECP2 Duplication syndrome. Rett syndrome is caused by a mutation of the MECP2 gene. Affected girls have one X chromosome with a defective MECP2 gene and one X chromosome with a healthy copy of the gene. In nearly all, the healthy X chromosome is inactivated or silenced. MECP2 Duplication Syndrome (MDS) is a rare disorder, accounting for 1- 2% of X-linked intellectual disability cases in males. Those affected often have low muscle tone, severe developmental delays with absent speech, impaired or absent gait, and restricted hand use, and seizures. Like Rett syndrome, there is no cure for this disorder, and little information on MDS is available to families with an affected individual. Dr. Pehlivan will work with Dr. Huda Zoghbi and Dr. Daniel Glaze at Texas Children's Hospital and the Blue Bird Rett Clinic to develop an assessment tool that can aid in MDS diagnosis, help gauge severity and disease course, and be used to evaluate treatment efficacy. In addition, they aim to develop an MDS biomarker to assess disease severity and progression and potentially be used to evaluate a treatment in clinical trials.

Epigenetics Research Opens New Opportunities to Study Diseases

Although it has been 15 years since scientists first mapped the human genome, many diseases still are not predictable based on one's genes. Hence, researchers now are exploring epigenetic causes of disease, but the progress has been slow. Epigenetics, a system for molecular marking of DNA, tells the different cells which genes to turn on or off in that particular cell type. The cell-specific nature of epigenetics is a challenging study because the epigenetic marks in blood DNA offer no clues about epigenetic dysregulation in other parts of the body.

Dr. Robert A. Waterland, Professor, and his team have identified a fraction of the genome that provides a "treasure map" to accelerate research in epigenetics and human disease. They reported their findings in *Genome Biology*. Their study has identified special regions of the genome where a blood sample can be used to infer epigenetic regulation throughout the body, thereby allowing researchers to test for epigenetic causes of disease. The team focused on the DNA methylation, the most stable form of epigenetic regulation. To identify genomic regions in which DNA methylation differs among individuals but is consistent across different tissues, they profiled the DNA methylation throughout the genome in three tissues--thyroid, heart, and brain--from 10 cadavers.

"Because epigenetic marking has the power to stably silence or stably activate genes, any disease that has a genetic basis could equally likely have an epigenetic basis. There is incredible potential for us to understand disease processes from an epigenetic perspective. CoRSIVs are the entryway to that."
-- Dr. Robert A. Waterland



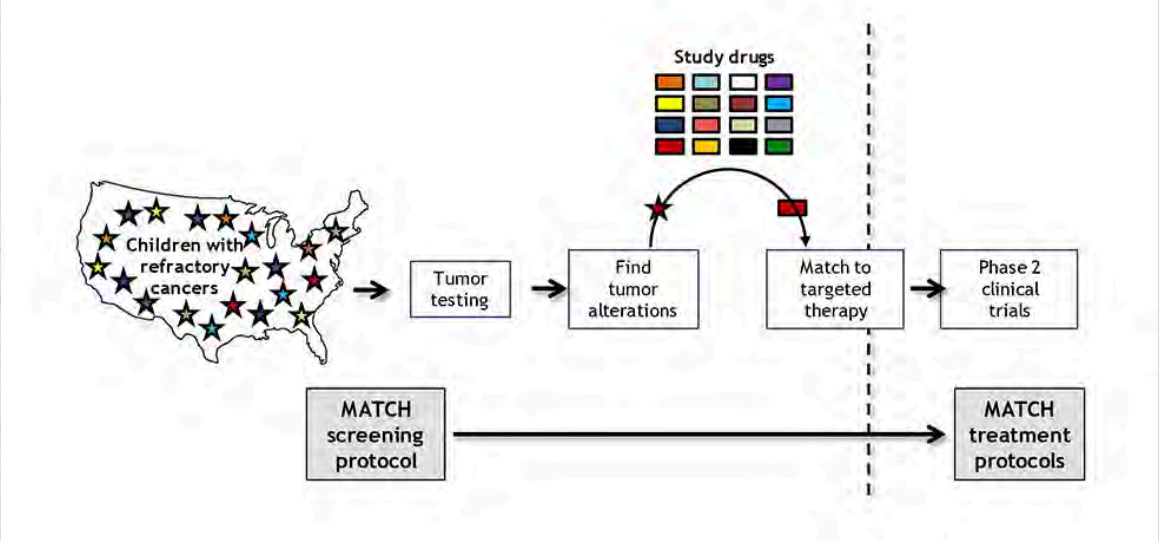
The nearly 10,000 regions the researchers mapped (correlated regions of systemic interindividual variation [CoRSIV]) comprise previously unrecognized levels of molecular individuality in humans. To map DNA methylation, they converted methylation information into a genetic signal, then sequenced the genomes. The atlas required "massive amounts of sequencing data – 370 times more than were used for the first map of the human genome in 2001," according to Dr. Waterland.

With the recent studies that have shown that methylation at these regions is associated with a range of human diseases, the findings help transform the study of epigenetics and disease, now that researchers will know where in the genome to look.

Other contributors to this work include Chathura J. Gunasekara, C. Anthony Scott, Eleonora Laritsky, Maria S. Baker, Harry MacKay, Jack D. Duryea, Noah J. Kessler, Garrett Hellenthal, Alexis C. Wood, Kelly R. Hodges, Manisha Gandhi, Amy B. Hair, Matt J. Silver, Sophie E. Moore, Andrew M. Prentice, Yumei Li, and Rui Chen.

Pediatric MATCH Shows Greater Results than Expected

Dr. William Parsons, study chair for a large precision medicine trial of children, adolescents, and young adults with advanced cancer, presented an early report at the 2019 annual meeting of the American Clinical Society of Clinical Oncology (ASCO) in May, showing that 24% of young patients who had their tumors tested for genetic changes were eligible to receive one of the targeted therapies being tested. The percentage was much higher than the 10% scientists had projected. Researchers also reported at the briefing that as of the end of 2018, 422 patients from almost 100 sites had enrolled in the screening step of the study and tumor testing had been completed for 357 (92%). Genetic changes targeted by one of the 10 study treatments had been identified in 112 patients, 95 of whom had been found to be eligible for assignment to one of the treatment arms.



In Pediatric MATCH, a patient's tumor is screened for genetic alterations that match one of the targeted drugs being tested in the trial.
Credit: Dr. William Parsons, M.D., Ph.D. / Baylor College of Medicine

The nationwide trial is known as NCI-COG Pediatric MATCH and is treating patients on the basis of the genetic alterations in their tumors, rather than the type of cancer of cancer site. MATCH was launched in 2017 and is one of the first large pediatric clinical trials to systematically test drugs that target specific genetic changes in cancers occurring in children.

Researchers initially were concerned about whether enough changes could be found to make the study feasible, as usually pediatric cancers have fewer genetic changes than do adult cancers. However, that concern has not borne out. By the end of 2018, of the 95 patients eligible for one of the study's 10 treatment arms, 39 had enrolled in an arm, each of which is testing the safety of and tumor response to a single targeted therapy. Researchers hope to enroll at least 20 patients per arm. All patients who enroll in one of the treatment arms can continue to receive the study drug as long as their tumors continue to to get smaller or not increase in size.

MATCH is also yielding information on the types and range of genetic changes that occur in advanced pediatric cancers and the frequency with which those changes occur. The analyses may reveal genetic alterations previously unknown and give a better understanding of the genetic changes that are driving certain pediatric cancers.

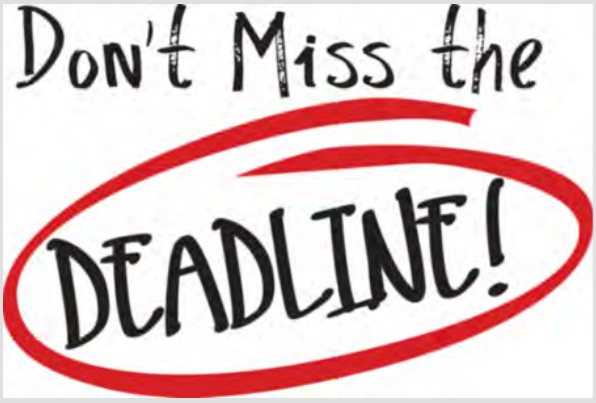
The initial screening step in the trial uses a single test that looks for changes in more than 160 genes associated with cancer that can be targeted by one of the study treatments. Patients with tumors that have a genetic change that can be targets by a drug included in the study become eligible for the second step of the trial, which is to enroll in the treatment arm for that drug. A key feature of the trial is the use of a compute algorithm that considers the strength of available evidence when deciding whether to include a specific drug as part of the study, and then match eligible patients to the drugs.

MARK YOUR CALENDAR

9th Annual BCM/TCH Department of Pediatrics Educator Orientation
September 6, 2019
8:30 am – 12 pm

The Academy of Distinguished Educators at Baylor College of Medicine will hold its
Annual Showcase of Educational Scholarship
September 20, 2019.
Deadline to submit an educational research abstract is Wednesday, August 2, 2019.

2nd Symposium on Childhood Cancer Health Disparities
Disparities and Outcomes in Acute Leukemia
November 4, 2019
(Registration Deadline is October 14, 2019)
texaschildrens.org/disparities
8:30 am – 12 pm



Pedi Press Submission
August 26, 2019

Send submissions to
bligon@bcm.edu

20th Annual
Chronic Illness and Disability Conference:
Transition from Pediatric to Adult-Based Care

SAVE THE DATE

October 24 – 25, 2019

Learn more at:
texaschildrens.org/TransitionConference

MD Anderson Mitchell Basic Sciences Research Building
Onstead Auditorium
6767 Bertner Avenue, Houston TX 77030

Activity Director: ***Albert C. Hergenroeder, MD***
Event co-provided by:

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Baylor College of Medicine

The Robbins Foundation

The broadcast is supported by AUCD through a cooperative agreement (#UA5MC11068) with the Health Resources and Services Administration's Maternal and Child Health Bureau.

This activity is approved for *AMA PRA Category 1 Credit™*.

Texas Children's Hospital is an approved provider with commendation of continuing nursing education by the Texas Nurses Association – Approver, an accredited approver with distinction, by the American Nurses Credentialing Center's Commission on Accreditation.

Continuing Education units will be available for social workers.

Contact hours (CCUs) will be applied for through TPTA and TOTA.