# pulse



News from Drexel University College of Medicine

# New Protein Structure Holds Answers to PKU

College of Medicine researchers are part of an international team of scientists that has made a critical step toward understanding a disorder that affects patients from birth into adulthood.

Phenylketonuria, or PKU, is an inherited metabolic disease that affects one in 20,000 babies born in the United States each year. The enzyme that breaks down the amino acid phenylalanine is either missing or defective in newborns with the disorder. Patients must adhere to a protein-restricted diet throughout their lives to prevent mental and behavioral abnormalities.

But maintaining this strict diet can be a challenge, which intensifies the need for new, non-dietary treatments to combat PKU symptoms.

In a study recently published in *Proceedings* of the National Academy of Sciences, researchers made significant strides toward that goal by determining the structure of phenylalanine hydroxylase (PAH) — the enzyme that is defective in PKU patients.\*

"We have solved the first X-ray crystal structure of full-length PAH," says the study's principal investigator, Eileen K. Jaffe, professor of molecular therapeutics at Fox Chase Cancer Center–Temple Health. "This structure will help us understand the molecular origins of PKU and is an important advance in developing much-needed drugs for patients."

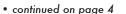
Defects in the PAH enzyme cause phenylalanine to build up to toxic levels in the body. Because nerve cells in the brain are particularly sensitive to phenylalanine levels, excessive amounts of this substance can cause brain defects.

Researchers had tried for decades to determine the structure of the PAH enzyme, says Emilia Arturo, a doctoral student in Drexel's Biochemistry & Molecular Biology program and first author of the study. (Jaffe is Arturo's thesis adviser.)

"Knowing the structure at this high resolution is expected to speed up any current drug discovery pursuits that would otherwise be

based only on models of the full-length protein," Arturo says.

The research team purified the enzyme and then crystalized the proteins. The researchers ultimately discovered that the PAH enzyme is represented by two distinct structures rather than one. Once the researchers could separate the two, they were able to grow crystals where scientists had not been able to in the past.







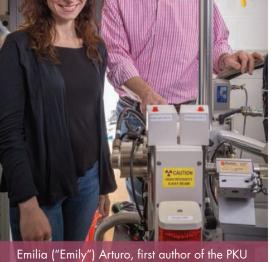
Class of 2016 achieves a dazzling residency match



Annual talent show raises \$21,000 for pediatric AIDS



Global health panel: Student presents project from Uganda



Emilia ("Emily") Arturo, first author of the PKU study, is in the fourth year of her PhD program. Patrick Loll, PhD, is her co-mentor.

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> Marsha Braverman Chief Marketing Officer

> > Jean Tracy Editor

Heidi Karl

Art Director, Hollister Creative

**Contributing writers:** 

Dan Heinkel, Adrienne Hovev. Lauren Ingeno, Nancy West

**Editorial Advisory Council:** 

Leah Cianfrani, Danielle Kane, Michael Lombardo, Paul McGonigle, PhD, Michael Nonnemacher, PhD, Brent Simmons, MD

Submissions may be mailed to Pulse C/o the Marketing & Communications Department, emailed to pulse@drexelmed.edu, or faxed to 215.255.7301.

For questions, comments or additional copies of Pulse, call 215.255.7330 or email pulse@drexelmed.edu.

> drexel.edu/medicine drexelmedicine.org









# Dean's Message

We said farewell to the Class of 2016 just weeks ago, and its members have dispersed, perhaps for a well-deserved vacation before taking the next steps in their professional lives. They are ready. Whether they are entering residency, postdoctoral research, further degree programs or careers, we are confident they will have a positive impact as scientists

and physicians.

Our students come to us with exceptional talents, and they receive outstanding teaching, but just as important are the values and commitment that they bring to their own education, each other and the wider community. Each year, the College of Medicine shines a little more as it reflects their contributions, and our graduates take what they have learned and put it into the service of the greater good.

Alumni and current students represent our guiding principles to future students and the larger world. Among them are the promotion of research for the benefit of humanity, a commitment to local and global communities, a tradition of providing educational opportunity to those who might not otherwise have it, the delivery of compassionate care, and



a culture of collaboration and diversity.

This year's Commencement speaker, the Honorable Louis W. Sullivan, has been a significant figure in the history of diversity in this country, in health care, in health literacy, and particularly in the access of African Americans to medical education.

Dr. Sullivan was the founding dean and longtime president of Morehouse School of Medicine. As secretary of the U.S. Department of Health & Human Services under the first President Bush, he established what became the National Institute on Minority Health and Health Disparities, inaugurated the Women's Health Research Program at NIH, and appointed the first female director of NIH, the first female (and first Hispanic) Surgeon General, and the first African American Commissioner of the Social Security Administration. He has built his life around fighting for health equity.

Dr. Sullivan reminded us that in spite of what we have learned from biomedical research, we are not the healthiest nation on earth. "We have a distribution problem in our health system," he said.

"This is the unfinished business that you must take on in your professional careers. To the degree that you take responsibility for [improving our system] — to that degree the health of our nation will be improved," he added.

"I challenge you to live up to the ideals of your profession. You now are leaders. I challenge you to lead and serve." Good words for all to live by and a precept I believe our graduates already take to heart.

Dhidlo M

Daniel V. Schidlow, MD Walter H. and Leonore Annenberg Dean Senior Vice President of Medical Affairs

# **Destination Excellence**

# The Challenge of Unconscious Bias

Bias is something that all people have. Originating in fear or issues of safety, it is part of what has kept humankind around so long — helping us to know when to run and when to stay. Bias can be conscious (I know I don't like green tea) or unconscious (I often order green tea, but for some reason I don't drink it). Unconscious bias is shaped by previous experiences, what we have learned, stereotypes of society, what we read, what we see on TV. There are countless influences on unconscious bias.

Unconscious bias is important to acknowledge and understand because it drives our behavior.

In our impression of the living world, an overwhelming amount of information comes at us. What we see, what we hear, what we touch — all of our senses are giving us data, and from that data we have to figure out what to do, so a lot of it happens unconsciously. Often unconscious behavior keeps us safe, saves us time, stops us from proverbially reinventing the wheel. But it also may express unwanted biases that are hidden from our conscious selves.

One way we can discover our hidden biases is through the Implicit Association Test (IAT), developed by the psychologists Anthony G. Greenwald and Mahzarin R. Banaji, and extensively studied by them and others. Banaji and Greenwald are the authors of a fascinating book on the topic, *Blindspot: Hidden Biases of Good People* (Delacorte Press, 2013). "By 'good people,'" the authors explain, "we refer to those, ourselves included, who intend well and who strive

to align their behavior with their intentions."

There are Implicit
Association Tests
related to different
topics, but let's
consider perhaps the
most daunting, the
Race IAT. In *Blindspot*,
Banaji, an IndianAmerican woman,
recounts how horrified
she was when the test
showed that she tilted

pro-white, anti-black. How could this be? She expected to be midline at least. Most people who want to be fair and balanced are upset by their results because they are at odds with their conscious beliefs.

The question is "How can we mitigate hidden bias on an ongoing basis?" The literature reveals that even simple interventions can make a difference. For herself, Banaji created a screensaver with rotating

images of a diverse array of people, especially counter-stereotypes. Her goal is to build up a different set of unconscious associations. Raising awareness can be effective. Some students at an orientation saw a short video; the other group were told to find a study partner. The video had two dissimilar seeming students talking about how they became amazing study partners and great friends. The video watchers ended up having increased interest in exploring and meeting their fellow classmates (aka inclusive behavior) compared to those who had not watched.

In health care, unconscious bias can adversely impact the patient. It was long held that women were at low risk for heart disease, and this thinking affected their treatment. New guidelines reflect that while women's risk is generally lower than men's, it is still significant enough to call for screening. Does the doctor follow the guideline or make a judgment based on the stereotype? On an institutional basis, a practice that intends to give excellent care to everybody, regardless of who they are, can look at the data. The gap between good intention and good action is in the record.

At the College of Medicine, as we seek to be a truly inclusive environment, all search committees now have some unconscious bias training. We're not pursuing diversity for diversity's sake or inclusion for inclusion's sake. It is not a little side thing; it really is integral to our mission if we're going to get to destination excellence.

- Ana E. Núñez, MD



Dr. Núñez is the associate dean for diversity, equity and inclusion at the College of Medicine. She is also the director of the Women's Health Education Program and a professor of medicine in the Division of Internal Medicine.

## PKU Research

continued from the cover

Key to understanding the enzyme's structure was the work of Patrick Loll, PhD, a professor in the College of Medicine's Department of Biochemistry & Molecular Biology, who is an expert crystallographer. Arturo grew crystals of the protein that were then exposed to high-intensity X-rays. The scattered radiation from these crystals was collected in the form of images. Together, Loll and Arturo used these images to determine the three-dimensional structure of the protein.

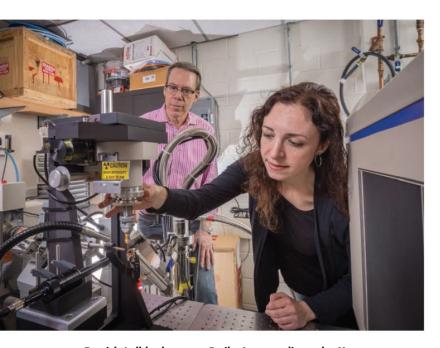
"Our work was all about visualizing the structure, which is our specialty," says Loll. "Once the research team had figured out how to make the crystals, we joined forces to tell them what was in those crystals, what the enzyme looked like, and how it was arranged."

Using what they have learned from this study, the team is now working to determine the structure of activated PAH, which functions to prevent blood phenylalanine from rising to neurotoxic levels. Knowledge of both PAH structures will help in the use of structure-based drug design techniques to develop medications that will favor activated PAH as a therapeutic approach.

In the end, this research could pave the way for new treatment strategies not only for PKU, but also for cancer and other diseases.

Both inborn errors of metabolism and cancer occur when proteins do not function as they should. The research team's focus how different protein assemblies can be harnessed to control protein function — has tremendous potential for drug discovery, and promises to expand our view of how small molecule therapeutics can work.

\* "First Structure of Full-Length Mammalian Phenylalanine Hydroxylase Reveals the Architecture of an Autoinhibited Tetramer" in Proceedings of the National Academy of Sciences, vol. 113, no. 9, March 1, 2016. In addition to researchers mentioned in this article, the study included contributors from the University of Pennsylvania Perelman School of Medicine, Brookhaven National Laboratory, the University of Canterbury and the University of Auckland in New Zealand.



Patrick Loll looks on as Emily Arturo adjusts the X-ray diffraction equipment. The crystal is placed into the highintensity beam, and the diffraction pattern is recorded by the detector at right.













# The Match!

On March 18, the Drexel MD Class of 2016 opened their envelopes to learn the outcome of the National Resident Matching Program. Our match rate was significantly higher than the national average this year, and our students matched in outstanding programs all across the country. Congratulations to the new graduates as they transition into the next phase of their journey as physicians, and to the faculty who prepared them to do it.











## **Honorable Mention**

A total of 55 new members were inducted into Alpha Omega Alpha Honor Medical Society at the Delta Zeta Chapter banquet on March 23: two alumni, five faculty members and three graduate trainees, along with 45 medical students. Scott Richard, MD, associate professor of obstetrics and gynecology, received the AOA Volunteer Faculty Award, and Sarah Long, MD, professor of pediatrics, gave this year's June F. Klinghoffer, MD, AOA Lecture.

The alumni inductees were Joseph M. Becker, MD, HU '71, clinical associate professor, Cooper Medical School of Rowan University, and Katherine A. Behan, MD, MCPHU '01, vice president and medical director for Aria Health Physicians Services. The faculty inductees were Anahita Deboo, MD, assistant professor of neurology; Joel Horwitz, PhD, professor of pharmacology and

Back row (I-r): Drs. White, Becker, Weber, Koutroulis, and Richard; front: Drs. Schlichting, Deboo, Kathy Ryan (AOA councilor), Brodie, Katz, Long and Horwitz. Not pictured: Dr. Behan

physiology; Christine M. Schlichting, MD, associate professor of pediatrics; Valerie D. Weber, MD, MS, William Maul Measey Chair in Medical Education and vice dean for educational affairs; and Michael M. White, PhD, professor of biochemistry and molecular biology, and pharmacology and physiology.

The graduate trainees inducted were Nicola Brodie, MD, third-year resident; Sophia E. Katz, MD, chief resident; and Ioannis Koutroulis, MD, PhD, assistant professor and second-year emergency medicine fellow, all in the Department of Pediatrics. The graduating senior inductees were listed in the Winter/Spring issue of Pulse (page 13).



## Pain Specialist Appointed Chair of Neurology

Ricardo A. Cruciani, MD, PhD, was appointed chair of the Department of Neurology at the College of Medicine

effective February 1. Cruciani joined the College from Capital Health, where he was director of neurology, and director of the Center for Pain Management & Palliative Care and the Laboratory for Neuromodulation & Plasticity, both part of the Institute for Neurosciences at Capital Health.

Previously, he served as vice chair of the Department of Pain Medicine & Palliative Care at Beth Israel Medical Center in New York City, and director of the Institute for Noninvasive Brain Stimulation of New York, based at Beth Israel. He served on the faculty at Albert Einstein College of Medicine as a professor of clinical neurology and of clinical anesthesiology.

After earning his medical degree at the University of Buenos Aires School of Medicine, Cruciani became a fellow of the Institute of Pharmacological Research, National Research Council, in Buenos Aires. In 1984, he came to the United States, where he held a succession of visiting fellowships at the National Institutes of Health. A large portion of his research dealt with opioid receptors, which led him to pain management.

Recognizing the serious psychological effects that pain can have on patients, Cruciani completed a dual residency

in neurology and psychiatry at Weill Cornell Medical College. "It wasn't typical to do both neurology and psychiatry in those days, but it absolutely helps me as a pain management physician," he says. He finished his PhD

> in pharmacology at his medical alma mater in Buenos Aires in 1996.

> When he joined Beth Israel in 2001, Cruciani served first as director of clinical trials in the Department of Pain Medicine & Palliative Care, then was promoted to chief of the department's research division.

At Drexel, he sees patients with cancer pain and non-cancer pain, in addition to continuing his research. "We take a multidisciplinary approach that includes procedural interventions and pharmacological treatment," he says.

Cruciani is board certified in neurology and in pain medicine. He has received many

awards for patient care, among them inclusion in New York Super Doctors and several years of Patients' Choice Awards and Compassionate Doctor Recognition.

Cruciani has been a member of numerous NIH study sections, most recently "Emerging Technologies and Training in the Neurosciences." A prolific presenter and author, he serves on the editorial boards of several journals and is an ad hoc reviewer for more than a dozen. His research has been funded by the NIH, the U.S. Cancer Pain Relief Consortium and the Reflex Sympathetic Dystrophy Syndrome Association, among other organizations.



## **Dean Schidlow Receives Disability Rights Award**

Dean Daniel V. Schidlow, MD, recently received the Physical Health and Wellness Award of Excellence from the Philadelphia Department of Behavioral Health and Intellectual Disability Services. The award was one of the 2016 My City, My Place Brighter Futures awards sponsored by Philadelphia Intellectual disAbility Services to recognize community members who go out of their way to enable citizens with disabilities to take their rightful place in the community. The awards were presented at the Sheraton Downtown Philadelphia Hotel, where more than 500 people gathered to honor the winners.

Dean Schidlow's award recognizes his commitment to support access to compassionate care for people of all abilities, as evidenced through the College's Health Outreach Project at The Arc of Philadelphia, where medical students, supervised by faculty physicians, perform weekly health assessments of patients who often have difficulty expressing themselves. After the assessments, the students write up reports that are given to the patients to share with their families, support coordinators and ultimately their primary physicians for follow-up.



Dean Schidlow and Sabra Townsend, adult advocacy director, The Arc of Philadelphia

cott Weiner

## Marcus Engel Speaks From Experience

Marcus Engel, a charismatic speaker whose story has inspired countless health care professionals, brought his message to Drexel on March 11 and 12 at the invitation of the College of Medicine and the College of Nursing & Health Professions.

Engel's keynote speech, "The Other End of the Stethoscope," given at a multidisciplinary grand rounds, is the story of how health care providers sustained body and mind in the face of incredible trauma. Engel speaks from his own experience: After being blinded and severely injured by a drunk driver, he overcame daunting obstacles to reclaim his life. His



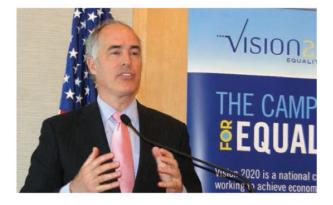
second presentation, "I'm Here: Compassionate Communication for Patient Care," offers practical advice for navigating between twin truths: Modern technology helps patients recover faster but human interaction between patient and caregiver is still essential for healing.

The night before, Engel spoke at a dinner for Hahnemann University Hospital medical staff and Drexel clinical faculty.

## Sen. Casey Joins Vision 2020's Efforts to Celebrate 19th Amendment Centennial in Philadelphia

U.S. Sen. Robert P. Casey Jr., D-Pa., recently announced the introduction of a Senate resolution designating Philadelphia as the site of the national centennial commemoration of the 19th Amendment to the Constitution, in coordination with Vision 2020 (congress.gov/ bill/114th-congress/senate-resolution/405/text).

Calling also for Drexel University's Vision 2020 to "orchestrate, lead and coordinate that momentous occasion in Philadelphia" in the year 2020, the resolution



points to the city's historic identification with leaders who fought to bring about equality for women.

"This resolution not only celebrates the 100th anniversary of the ratification of the 19th Amendment, but it also celebrates women's role and voice in our history and the shaping of our democratic values," Casey said in making the announcement at the National Constitution Center.

Vision 2020 — a project of the Institute for Women's Health and Leadership at the College of Medicine — is a coalition of individuals and organizations throughout all 50 states and Puerto Rico, united in pursuit of shared leadership among women and men, economic security for women, youth education and civic engagement. During the year 2020, the organization intends to convene the largest gathering of women leaders in U.S. history in Philadelphia.

The year-long centennial commemoration will focus on honoring the past, enriching the present and shaping the future, with major activities related to history planned for March 2020, a celebration of achievement in August and a call for record-breaking voter turnout in November. Women and girls from all over the United States are expected to participate.

## **Drexel AMA Students Launch** MEDTALKS @ Drexel

More than 150 medical students and health care professionals from across metropolitan Philadelphia attended MEDTALKS @Drexel, a TED Talk-style mini-conference conceived and hosted by the Drexel chapter of the American Medical Association-Medical Student Section in February. "Our goal was to showcase important current issues and innovative solutions to cultivate medical student perspectives and a deeper understanding of the career they are entering," says Brian Park, co-president of the chapter. Among the seven invited speakers were Marilyn Heine, MD, former president of the Pennsylvania Medical Society; Loren Robinson, MD, deputy secretary for health promotion and disease prevention at the Pennsylvania Department of Health; and Carol Hammal, Egypt's first trained art therapist, who received a master's degree from Drexel's College of Nursing and Health Professions. The guests discussed health policy, public health, technology, and humanities in medicine.

In addition, five Drexel medical students presented research related to conference topics. Third-year student Winifred Wolfe presented "Living ProACTively with HIV." First-year student Yoon-Kyu Sung spoke about "Hearing Loss



Speaker Peggy Tileston leads a short session of laughter therapy. An adjunct professor of music therapy at Temple University, Tileston is a certified laughter yoga therapist.

and Healthy Aging." Yetunde Adekemi Fatade, a secondyear student, presented "A Comparison of Older Adults with Low-Risk and High-Risk Alcohol Use in the Emergency Department." "Teledermatology and Its Implications for Skin Care" was the subject of third-year student Neha Jariwala's presentation. Second-year student Shaharyar Ahmad presented "Efficacy of Stereotactic Radiosurgery for Brain Metastases: Is There a Difference in Survival Between First and Second Brain Metastatic Event?"

"Our MEDTALKS not only served as a platform to share local passion and inspiration, but also established a forum for medical students to help each other along our lifelong journey in medicine," says Park. "We received so much support and encouragement from the Philadelphia County Medical Society and Pennsylvania Medical Society, as well as medical students from other schools in the city, that we plan to host MEDTALKS @Drexel again next year."

## College Receives Half-Million-Dollar Gift for Cancer Research

Drexel University College of Medicine has received a gift of \$555,904 from the Charles T. Leonard Trust. Under the terms of Leonard's will, the funds are designated for cancer research. The College of

Medicine has robust research programs in prostate, breast, pancreatic and liver cancer, as well as fundamental research on metastatic mechanisms, impaired DNA regulation and other pathological processes related to cancer. These programs have generated novel technologies and therapeutic drug candidates, including an agent that has entered the National Cancer Institute's Experimental Therapeutics Program (NeXT).

## Berman Building Rededicated

A rededication ceremony was held in the sparkling new lobby of the Arnold T. Berman, MD, Building on April 28 to celebrate the completion of renovations to the first floor and to honor Arnold Berman for his generosity and leadership. During the ceremony, a commemorative plaque was unveiled to mark the rededication of the building, which



is at 219 North Broad Street:

"Dr. Arnold Berman is a 1965 graduate of Hahnemann Medical College, an outstanding orthopedic surgeon, medical educator, residency director, clinical researcher, innovator and administrator. During his tenure, he served as professor of orthopedic surgery and chairman of the Department of Orthopedic Surgery and Rehabilitation at

Hahnemann Medical College and Hahnemann University Hospital, as well as hospital medical director and associate dean of the School of Medicine. He has been widely published in the areas of total hip and knee replacements and spinal disorders. He was a dedicated advocate for the creation of the Drexel University College of Medicine."

The honoree (center), Arnold T. Berman, MD, is flanked to the left by his fiancée, Donna Stein, RN, MA, and her daughter, Alexandra Stein; and to the right by his daughter, Abigail Tripp Berman, MD; and his brother, Myron J. Berman.

## Recognition for **PMP** Expertise

The PMP Research Foundation has awarded a \$50,000, two-year grant to Wilbur Bowne, MD, associate professor in the Department of Surgery, and Hao Cheng, PhD, an assistant professor in the Department of Materials Science & Engineering, Drexel College of Engineering. Their translational research project, "Developing a Novel Drug Delivery Platform for Targeting Hyaluronan," is focused on developing a system that will expand and improve current and future treatment options to eradicate pseudomyxoma peritonei, or PMP, a rare condition in which mucinous ascites builds up in the abdominal cavity. The most common cause is appendix cancer.

Bowne, who specializes in surgical oncology for the pancreas, liver, bile duct and gastrointestinal tract, leads a multidisciplinary team that treats patients with advanced abdominal cancers. He recently chaired a symposium on appendiceal cancer and PMP, sponsored by the College of Medicine and Hahnemann University Hospital, which covered



the latest advances in diagnosis and management, including the role of state-of-the-art radiologic evaluation, genomic profiling and personalized medicine. More than 125 medical oncologists, surgeons and other providers involved in the care of cancer patients attended the April event.

## **Researchers Testing** Seizure Treatments

College of Medicine researchers are conducting an emergency medicine study to determine the most effective drug for treating established status epilepticus — a life-threatening condition in which the brain is in a state of persistent seizure.

Patients with established status epilepticus (ESE) have one seizure, or repeated seizures, lasting longer than five minutes and do not respond to a full dose of typical medication, such as Valium (diazepam). There are an estimated 120,000 to 180,000 episodes of SE in the United States each year; in about one-third of them, the status continues in spite of first-line therapy. Emergency rooms across the country use a variety of drugs to treat the condition.

The Established Status Epilepticus Treatment Trial (ESETT) is a randomized, four-year, multicenter study to learn which treatment is most effective at stopping a seizure quickly.

Hahnemann University Hospital is one of more than 40 sites participating in the trial. Each will look at three commonly used medications given in emergency rooms to treat ESE: fos-phenytoin, levetiracetam and valproic acid.

"The longer the seizures go on, there are possibilities for permanent brain damage or even death, so it is very important to stop them as soon as possible," says Ralph Riviello, MD, a professor of emergency medicine at the College of Medicine, who will lead the study at Hahnemann.

Because the ESE trial has the potential to save the life of an unconscious person, and a seizure must be treated quickly, the study is being performed under the U.S. Food

and Drug Administration's "exception from informed consent" rule, which allows certain research studies to be conducted without consent when a person's life is at risk, current treatment does not work and the patient is unable to give permission.

Any patient admitted to the Hahnemann emergency room who is more than 2 years old, is having a long-lasting seizure, and is not responding to an adequate dose of benzodiazepines, could be enrolled in the study. Study

patients will randomly receive one of three medications. As the study goes on, a higher proportion of patients will be randomized to the drug or drugs that better stop seizures.

"Right now, you can pick one of those three drugs, or a combination of the three, and hope that it works," Riviello says. "We hope the study will show which of those is the most beneficial, and that will become the go-to agent."

## Wellness Week Attracts 450 Students

Drexel medical students enjoyed their second annual Wellness Week from February 15-19 at the Queen Lane Campus. The nine organized activities were attended by about 450 people, most of them first- and second-year students. Offerings included a health fair, a presentation on thriving in medical school, yoga and a comedy performance by an improv group. Dog therapy was the most popular event: seven volunteers from Therapy Dogs International came to campus with their dogs for students to pet and play with to destress and relax.









# **Pediatric AIDS Benefit Shines**

The annual student-organized Pediatric AIDS Benefit, held February 20, offered a variety show of professional-caliber talent and raised more than \$21,000 for the Dorothy Mann Center for Pediatric and Adolescent HIV, based at St. Christopher's Hospital for Children. The center is a one-stop shop for HIV-positive children, adolescents and their families to receive medical and psychosocial support services at the same site. The center is the largest of its kind in the tri-state area.

















# Calendar

#### **June**

Men's Health Month

#### 27–30 Intersession for Third-Year Students

Queen Lane Campus 27th: Student Clinician Ceremony 28th: Preclinical Awards Ceremony Contact: Caitlin Kaltenbach, caitlin.kaltenbach@drexelmed.edu

## July

Cord Blood Awareness Month

## 11-12 Fundamentals of Medical Research & Scholarship

Seminar for faculty, residents and fellows Contact: Michele Taylor, michele.taylor@drexelmed.edu

#### 12 Manuel Stamatakis Golf Classic

Philadelphia Cricket Club, Flourtown Course Contact: Alyssa Abrohms, alyssa.abrohms@drexelmed.edu

## August

National Immunization Awareness Month

#### 1-5 **Year 1 Orientation**

#### 5 White Coat Ceremony

Philadelphia Hilton City Avenue Information: caitlin.kaltenbach@drexelmed.edu

## September

World Alzheimer's Month

5 Labor Day

#### October

National Breast Cancer Awareness Month

### 20 **Discovery Day: New Venue!**

Research day for medical students, graduate students, residents, fellows and postdoctoral trainees
Pennsylvania Convention Center
Contact: Alyssa Abrohms, alyssa.abrohms@drexelmed.edu

Alumni: For additional information about alumni events, please call 215.762.2371, email medical.alumni@drexel.edu, or visit drexel.edu/medicine/alumni/events.

Ahmed Abdulrahman, MD, chief resident in the Drexel/ Hahnemann Pathology Residency program, presented a poster, "Histologic Characteristics of Breast Carcinomas with Genetic Variants of Uncertain Significance," at the annual meeting of USCAP (United States and Canadian Academy of Pathology) held March 12-18 in Seattle.



Pathology residents (I-r) Drs. Guanjun Xia and Ahmed Abdulrahman were at USCAP when they learned that their residency program had matched all of next year's spots, four in total.



Ms. Akella

Neha Akella, a PhD candidate in the Biochemistry program, received the Graduate Student Association Travel Award to attend the March 2016 Keystone Symposium: Stem Cells and Cancer in Breckenridge, Colo., to present her research "Tumor-initiating Activity of Breast

Cancer Cells Is Regulated by O-GlcNAc Transferase." She is doing thesis work in the laboratory of Mauricio Reginato, PhD, associate professor in the Department of Biochemistry & Molecular Biology.

Anshu Aggarwal, a fourth-year medical student, has received a grant in the amount of \$4,950 from the AMA Foundation Seed Grant Research Program for her project "Overexpression of HDM-2 in Various Leukemia Cell Lines and Its Use in Targeted Anti-cancer Therapy." Aggarwal has been working with Wilbur Bowne, MD, associate professor of surgery.



Dr. Allen

Drs. Herbert B. Allen, professor and chair, Department of Dermatology; Christine M. Shaver, and Chloe A. Etzler, dermatology residents; and Suresh G. Joshi, director of the Center for Surgical Infections and Biofilms; assistant professor, Department of Microbiology

& Immunology; and adjunct professor in the School of Biomedical Engineering, Science & Health Systems, published "Autoimmune Diseases of the Innate and Adaptive Immune System Including Atopic Dermatitis, Psoriasis, Chronic Arthritis, Lyme Disease, and Alzheimer's Disease" in Immunochemistry & Immunopathology, 2015; 1(2): 112-116.

Drs. Allen; Diego Morales, dermatopathology fellow; Krister Jones, former fellow; and Joshi published a research article entitled "Alzheimer's Disease: A Novel Hypothesis Integrating Spirochetes, Biofilm, and the Immune System" in Journal of Neuroinfectious Diseases, 2016; 7(1): 200-203.



Peter Baas, PhD, professor, Department of Neurobiology & Anatomy, presented a seminar, "Microtubule-Severing Proteins in the Nervous System," at the University of Cyprus (Nicosia, Cyprus) on April 4, and at the University of Tel Aviv (Tel Aviv, Israel) on April 6. Baas is funded by a Louis and

Bessie Stein Fellowship for his collaborative work with Israeli partners.



**Dr. Barrett** 

James Barrett, PhD, professor, Department of Pharmacology & Physiology, and director of the Clinical & Translational Research Institute, is the editor of Pharmacological Mechanisms and the Modulation of Pain (Elsevier, Academic Press, 2016), a new volume in the series Advances in

Pharmacology. Last September, Barrett was an invited speaker for the Virginia Commonwealth University Department of Pharmacology and Toxicology Student's Choice Seminar, where he presented "The Re-emergence of Sigma Pharmacology in the Context of Neurological and Substance Abuse Disorders." In October 2015, he was the distinguished lecturer for the Elizabeth Fitzgerald Sporar Distinguished Initiatives in Addiction Research, University of Texas Medical Branch, Galveston, Texas, and presented "Re-examining, Resolving and Repurposing the Pharmacological Role of the Sigma-1 'Receptor.'"

In April of this year, Barrett was the honored guest speaker at the Graduate Student Colloquium of the Louisiana State University Health Sciences Center in New Orleans. His topic was "Academic Drug Discovery."



Dr. Barson

Jessica Barson, PhD, assistant professor, Department of Neurobiology & Anatomy, gave an invited panel session talk, "Subregions of the Paraventricular Thalamus: Differential Involvement in Drug-Taking Behavior," at the Winter Conference on Brain Research, held

January 23-28 in Breckenridge, Colo.



Dr. Bowne

Wilbur B. Bowne, MD, associate professor of surgery, was among the authors of "Hyaluronidase Embedded in Nanocarrier PEG Shell for Enhanced Tumor Penetration and Highly Efficient Antitumor Efficacy" published in Nano Letters (online April 8). The other authors

were Drs. Hao Zhou, Zhiyuan Fan, Junjie Deng and Pelin K. Lemons, Department of Materials Science & Engineering in the College of Engineering; Dimitrios C. Arhontoulis, School of Biomedical Engineering, Science & Health Systems; and Hao Cheng, with appointments in both

Materials Science & Engineering and the School of Biomedical Engineering.



Paul Campbell, PhD, assistant professor, Department of Pharmacology & Physiology, has been selected to receive a Research Starter Grant in Translational Medicine and Therapeutics from the Pharmaceutical Research and Manufacturers of America Foundation. The award

provides \$100,000 for a one-year period. The title of the funded research is "Targeting Paracrine Mediators in the Primary and Metastatic Tumor Microenvironments." It is new research that has developed from a previous pilot award from Drexel's Clinical & Translational Research Institute.



Dr. Chaiken

Irwin Chaiken, PhD, professor in the Department of Biochemistry & Molecular Biology, has received a \$75,000 grant from The Campbell Foundation, a nonprofit organization dedicated to funding HIV/ AIDS research. The Chaiken team is looking to develop an effective delivery system

targeting reservoirs of the HIV virus with killer peptides.



Dr. Chandler

Daniel Chandler, PhD, instructor, and Barry Waterhouse, PhD, professor, Department of Neurobiology & Anatomy, co-edited and contributed articles to a recent special edition of the journal Brain Research entitled "Heterogeneous Organization and Function of the Central Noradrenergic System."



Christof Daetwyler, MD, associate professor in the Department of Family, Community & Preventive Medicine, who specializes in integrating technology into medical education, presented the webinar "Training for Appropriate Family Approach" for the Transplantation Society-

International Society for Organ Donation and Procurement on February 23. The webinar, co-presented by Theresa Daly, director of the Gift of Life Institute, explained how the institute is using the College of Medicine's WebPatientEncounter<sup>TM</sup> technology to train organ donation coordinators.



Itzhak Fischer, PhD, professor and chair; MD/PhD student Christopher Haas; Ramesh Raghupathi, PhD, professor; and Ying Jin, PhD, research assistant professor, all in the Department of Neurobiology & Anatomy, are authors of "Spinal Cord Concussion: Studying the

Potential Risks of Repetitive Injury," published in the January issue of Neural Regeneration Research.

In addition, Fischer, Haas and Jin with former faculty Xiao-bing Yuan, PhD (lead author); Lihua Yao, research assistant; Kazuo Hayakawa, MD, PhD, postdoctoral fellow, all in the Department of Neurobiology & Anatomy, and colleagues at the Hussman Institute for Autism, Baltimore, Md., published "Guiding Migration of Trans-

planted Glial Progenitor Cells in the Injured Spinal Cord" in Scientific Reports, an online, open-access journal from the publishers of Nature. Yuan is now at the Hussman Institute.



Dr. Gaskill

Peter Gaskill, PhD, assistant professor in the Department of Pharmacology & Physiology, has received a Drexel University Career Development Award in the amount of \$7,500 for one year for his project "Seminar Series Exploring the Mechanisms by Which Dopaminergic

Signaling Modulates HIV Infection."



Dr. Gelo

Florence Gelo, DMin, NCPsyA, associate professor, Department of Family, Community & Preventive Medicine, conducted a workshop at the first Regional Gold Humanism Honor Society Conference, sponsored by Gold Humanism Honor Societies at Drexel, Commonwealth,

Cooper, Jefferson, Penn and Temple and held January 30 on the Jefferson campus. The theme of the conference was Practicing Humanism: Empathy in a Challenging Practice Environment, and Gelo's topic was "See, Pause and Feel: How to Become a Physician Who Cares About Patients."



Dr. Giszter

Simon Giszter, PhD, professor, Department of Neurobiology & Anatomy, is a co-author with colleagues in Drexel's College of Nursing & Health Professions of "Trunk Postural Muscle Timing Is Not Compromised in Low Back Pain Patients Clinically Diagnosed with Movement

Coordination Impairments" in Motor Control, December 1, 2015 [published online ahead of print].

Giszter was also an invited speaker at the American Spinal Cord Injury meeting Pre-course 2 in April for the Basic Science – Motor Control section on locomotion. His topic was "Combination of Viral Therapies With Robot-Driven Epidural Stimulation, Robot Rehabilitation, in Treating Adult Spinal Cord Injury: Potential Risks and Gains."



Dr. Goldenthal

Dr. Legido

Michael J. Goldenthal. PhD, research associate professor of pediatrics, and scientific director of the Mitochondrial Disease Laboratory at St. Christopher's Hospital for Children;

Shirish Damle, PhD, research associate; and Agustin Legido, MD, PhD, MBA, professor of pediatrics and neurology, and chief, SCHC Neurology Section, and medical director of the Mitochondrial Disease Laboratory, are among the authors of "Mitochondrial Dysfunction May Explain Symptom Variation in Phelan-McDermid Syndrome" published in the January 29, 2016, edition of Scientific Reports, an online, open-access journal from the publishers of Nature. The study revealed extensive mitochondrial bioenergetic dysfunction in a cohort of 51 children with Phelan-McDermid syndrome, a disorder clinically characterized by dysmorphic findings, developmental delay and autistic features, resulting from a 22q13 deletion.



Dr. Goldsmith

Donald Goldsmith, MD, professor of pediatrics, was the invited speaker for the Fourth Annual H. Ralph Schumacher, MD, Lectureship of the Philadelphia Rheumatism Society on April 19. He presented "The Expanding Mosaic of Autoinflammatory Diseases." Goldsmith is chief of the Section

of Rheumatology at St. Christopher's Hospital for Children.





resident; Nadia Nashed, hematopathology fellow; J. Steve Hou, professor and Hematopathology Fellowship director; and Jing Zhou, assistant professor, all in the

Drs. Chelsey Gracia,

Department of Pathology & Laboratory Medicine, presented a poster, "Post-Polycythemic Myelofibrosis With Acquired 5q and 7q Deletions: A Case Report," at the Pennsylvania Association of Pathologists Annual Scientific Meeting, held April 8–9 in Harrisburg, Pa.

Kazuo Hayakawa, MD, PhD, a postdoctoral fellow in the laboratory of Itzhak Fischer, PhD, in the Department of Neurobiology & Anatomy, published a paper in Brain Research, "Glial Restricted Precursors Maintain Their Permissive Properties After Long-term Expansion but Not Following Exposure to Pro-inflammatory Factors." Co-authors included Fischer, Christopher Haas, Ying Jin, PhD, and Julien Bouyer, research assistant.



Dr. Hona

Eugene Hong, MD, associate dean for primary care and community health, and Hamot and Sturgis Endowed Chair and Professor, Department of Family, Community & Preventive Medicine, has been elected to fellowship in the College of Physicians of Philadelphia. The formal induction

ceremony took place on May 13.



Dr. Huneke

Richard B. Huneke, DVM, MPH, professor, Department of Microbiology & Immunology, and executive director, ULAR, presented "Guideline Evolution: Trends and Boundaries in Europe and the U.S.A." at the Symposium on Vivarium Innovations, held March 17–18 at the New York

Academy of Medicine, New York City.





**Dr. Shumsky** 

Ying Jin, PhD, research assistant professor working in the laboratory of Itzhak Fischer, PhD, published a paper in the journal Neuroscience entitled "Transplantation of Neural

Progenitor Cells in Chronic Spinal Cord Injury." In addition to Fischer, co-authors included Julien Bouyer, Jed

Shumsky, PhD, associate professor, and Christopher Haas. All are in the Department of Neurobiology & Anatomy.



Dr. Joshi

Suresh G. Joshi, MD, MS, PhD, director of the Center for Surgical Infections and Biofilms; assistant professor, Department of Microbiology & Immunology; and adjunct professor in the School of Biomedical Engineering, Science & Health Systems, and former graduate students Utku Ercan,

PhD, biomedical engineering (lead author), and Joshua Smith, PhD, chemistry; Frank Ji, PhD, professor of chemistry; and Ari Brooks, MD, former professor of surgery, published "Chemical Changes in Nonthermal Plasma-Treated N-Acetylcysteine (NAC) Solution and Their Contribution to Bacterial Inactivation" in Scientific Reports (an online, open-access journal from the publishers of Nature), February 2, 2016.



**Drs. Li Li**, pathology resident, and Manzoor Rather, clinical assistant professor of medicine, and colleagues presented a poster, "Unusual Skin Lesions Leading to Septicemia: A Rare Sequence of Events," at the Society of Critical Care Medicine's 45th Critical Care Congress,

held February 20–24 in Orlando, Fla. The other authors are medical residents at Mercy Catholic Medical Center.



Dr. Garcia



In addition, Drs. Li, Mark Zarella, research assistant professor, and Fernando Garcia, professor, all in the Department of Pathology & Laboratory Medicine, presented a poster, "Contri-

bution of Bcl-2 to the Subclassification of Luminal B Type Breast Cancer," at the Pennsylvania Association of Pathologists Annual Scientific Meeting, held April 8–9 in Harrisburg, Pa. David Breen, PhD, associate professor of computing in Drexel's College of Computing & Informatics, was also an author.



Dr. Mackovick



Dr. Mapow

Drs. Lynn Mackovick, pathology resident, Elizabeth Gleeson, research resident, Department of Surgery; Beth Mapow, associate professor and program director, Department

of Pathology & Laboratory Medicine; and Wilbur B. Bowne, associate professor, Department of Surgery, and colleagues from Caris Life Sciences presented a poster, "Molecular Profiling of Appendix-Derived Pseudomyxoma Peritonei," at the Pennsylvania Association of Pathologists Annual Scientific Meeting, held April 8-9 in Harrisburg, Pa. The poster was selected for oral presentation by Mackovick.



Joshua Chang Mell, PhD, assistant professor in the Department of Microbiology & Immunology, and colleagues published "Transformed Recombinant Enrichment Profiling Rapidly Identifies HMW1 as an Intracellular Invasion Locus in Haemophilus influenzae" in PLOS Pathogens 12(4):

e1005576 (April 28, 2016).



Rachel L. Navarra, PhD '16, Pharmacology & Physiology, gave an invited talk, "Methylphenidate Enhances Early Sensory Signal Processing in the Rat Visual Thalamus Through Noradrenergic Signaling," and presented a poster abstract at the 49th annual Winter

Conference on Brain Research, January 23-28 in Breckenridge, Colo. The talk was part of a panel, "Coerulean Fire: Norepinephrine, the Brain's Intrinsic Performance Enhancing Drug." Navarra's poster presentation was selected for a Special Poster Award Session. Navarra did her thesis research in the laboratory of Barry Waterhouse, PhD, professor in the Department of Neurobiology & Anatomy.



Dr. Núñez

Ana E. Núñez, MD, professor of medicine; associate dean for diversity, equity and inclusion; and director of the Women's Health Education Program, was elected to the board of Women Against Abuse Inc., a Philadelphia-based nonprofit that advocates and provides services for

victims of domestic violence.



Dr. Raghupathi

Ramesh Raghupathi, PhD, professor, Department of Neurobiology & Anatomy; Eugene Hong, MD, chair, Department of Family, Community & Preventive Medicine, and associate chief, Division of Sports Medicine; and Thomas Trojian, MD, professor, Family, Community & Preventive

Medicine and chief of Sports Medicine, published a commentary in the Philadelphia Inquirer (January 7, 2016): "On Concussions, Separate Hype From Science."

Laura Roper, a third-year medical student, presented "First Responder Training in Kiburara, Uganda" as part of the Global Health panel at the 9th Annual Student Conference on Global Challenges: Sustainability, held at Drexel on February 25. The conference was attended by more than 400 students, faculty and community members.



Roper visited Kiburara in 2010 for the first-responder pilot project. Uganda had no organized system for providing pre-hospital care to its citizens. The goal was to empower the community

Laura Roper sports the temporary splint she taught her Ugandan trainee to create from gauze and cardboard.

to take charge in emergency situations by training a local Ugandan citizen who could then pass on skills and knowledge. One individual received the equivalent of U.S. first-responder training tailored to the needs of Kiburara. Upon completion of the training, that person was given two emergency duffel bags with materials needed for pre-hospital care, as well as instructor manuals. By that time, the trainee already had two more individuals signed up for first-responder training.

Bhaswati Sen, PhD, postdoctoral research assistant, Department of Microbiology & Immunology, and Suresh G. Joshi, MD, MS, PhD, director of the Center for Surgical Infections and Biofilms; assistant professor, Department of Microbiology & Immunology; and adjunct professor in the School of Biomedical Engineering, Science & Health Systems, published an original research article, "Studies on Acinetobacter baumannii Involving Multiple Mechanisms of Carbapenem Resistance," in Journal of Applied Microbiology, 2016, 120(3): 619-629.



Dr. Waterhouse

Barry D. Waterhouse, PhD, professor, Neurobiology & Anatomy, chaired a panel, "Coerulean Fire: Norepinephrine, the Brain's Intrinsic Performance Enhancing Drug," and delivered an invited talk "Anatomical, Physiological, and Molecular Attributes of Locus Coeruleus-Prefrontal

Cortical Projections" at the 49th annual Winter Conference on Brain Research, January 23–28 in Breckenridge, Colo.



Soundararajan

Guanjun (GJ) Xia, MD, a first-year resident in the Drexel/Hahnemann Pathology Residency program, won the 2016 USCAP-SUP\* J. Allan Tucker Award for his poster "Drug Induced Phospholipidosis in Kidney: Ultrastructural Features," which he presented at the annual meeting of USCAP, held March 12-18 in Seattle.

The other authors were Sirma Koutzaki, electron microscope technician; Drs. Shahad Abdulameer and Shraddha Patel, pathology residents; and Suganthi Soundararajan, MBBS, clinical associate professor in the Department of Pathology & Laboratory Medicine.

\*United States and Canadian Academy of Pathology-Society for Ultrastructural Pathology

#### SPREAD THE WORD

Let people know what you're doing: Send news of grants, honors, presentations and publications to pulse@drexelmed.edu. Please include full names and departments of any Drexel collaborators.

Angelo M. DiBello, MD, HU '54, a family physician, was honored for 60 years on the job by the administration and medical staff of Nazareth Hospital in Philadelphia.

Stanley Mayrowetz, MD, HU '65, joined the Mountainside Medical Group in Caldwell, N.J., as an internist and primary care doctor.

Robert Broselow, MD, HU '66, who works at Amarillo Urgent Care, Amarillo, Texas, has been certified in advanced trauma life support, enabling him to practice in ERs.

Edward Zissman, MD, HU '69, retired from his private practice in Altamonte Springs, Fla., after 41 years as a pediatrician.

Theodore Uroskie, MD, HU '70, a retired obstetrician/ gynecologist from Clarks Green, Pa., was recently named chairman for the Northeast Regional Cancer Institute's 13th annual C.A.S.U.A.L. (Colon Cancer Awareness Saves Unlimited Adult Lives) Day.

Bruce Levy, MD, HU '71; JD, CEO of Austin Gastroenterology in Austin, Texas, was honored as the 2015 Physician of the Year at the Travis County Medical Society's Annual Dinner.

Norma Lee Wenger, MD, HU '73, nephrologist at the South Shore Dialysis Center in Bellmore, N.Y., was named a 2015 Top Doctor in Rockville Centre, N.Y.

Mariell Jessup, MD, HU '76, a cardiologist and professor at the University of Pennsylvania and past president of the American Heart Association, was honored at the 2016 American Heart Association Heart Ball in Philadelphia on February 6, 2016.

Susan N. Greenberg, MD, HU '78, of Adult Medical Oncology/Hematology Group in Little Silver, N.J., was named to New Jersey Monthly's 2015 Top Doctors.

Anthony Maniglia, MD, HU '78, board certified physician at Altoona Blair Medical Associates in Altoona, Pa., received the clinical practice award for the western Pennsylvania American College of Physicians (ACP).

Arthur Sagoskin, MD, HU '78, a reproductive endocrinologist at Shady Grove Fertility, was named a 2016 Top Doctor in Rockville, Md.

Donald Nash, MD, MCP '79, a sports medicine physician and program director of the UHS Wilson Medical Center Sports Medicine Fellowship, was inducted into the New York State Public High School Athletic Association Section IV Hall of Fame, headquartered in Sydney, N.Y. Nash has been associated with Section IV athletics as a doctor and team physician since 1982.

Dorothy M. Moore, MD, MCP '80, a pediatric and general ophthalmologist in private practice in Wilmington, Del., was elected the 172nd president of the Medical Society of Delaware.

Steven J. Weiss, MD, MCP '80, was hired at Chester County Hospital in West Chester, Pa., as the chief of cardiac surgery.

Joan Von Feldt, MD, MCP '81, a professor of medicine at the Perelman School of Medicine at the University of Pennsylvania, was appointed president of the American College of Rheumatology.

Michael Arvanitis, MD, HU '82, chief of colorectal surgery at Monmouth Medical Center in Long Branch, N.J., was elected president of the New Jersey chapter of the American College of Surgeons.



Alumnae and former residents of the Medical College of Pennsylvania gathered for a picture on March 10 at the annual Battistini Lecture of the Obstetrical Society of Philadelphia (I-r): Fay Wright, MD, MCP '87; Ann Honebrink, MD, MCP '81; the speaker, Theresa Woodruff, PhD, of the Feinberg School of Medicine at Northwestern; Jane Porcelan, MD, MCP '83; Helen Widzer, MD, MCP '78; and Drs. Marjorie Angert, Sherry Blumenthal and Lisa Rosen, who completed their residencies in Obstetrics & Gynecology at MCP (as did Porcelan, Widzer and Wright). The lecture is named in memory of Michelle Battistini, MD, MCP '83, who died in a car accident in 2001. Widzer is president of the Obstetrical Society of Philadelphia, and Wright is editor of the society's newsletter.

Andrew G. Kundrat, MD, HU '82, was promoted to medical director of the Riderwood retirement community in Silver Spring, Md.

Steven Krawtz, MD, HU '83, a board-certified physician in internal medicine, pulmonary disease, critical care medicine and sleep medicine who practices at Pocatello Lung & Sleep Disorders Clinic in Pocatello, Idaho, held a seminar and wrote an article titled "Seminar of End of Life Medical Care" that appeared in the Idaho State Journal.

Mark R. Schwartz, MD, HU '83, of Atlantic Surgical Group in Oakhurst, N.J., was featured in New Jersey Monthly on the magazine's list of "2015 Top Doctors."

David T. Bizousky, MD, HU '84, an orthopedic surgeon with an interest in sports medicine, was honored for 20 years of service at Indiana Regional Medical Center in Indiana, Pa.

George Rafferty, AS, Mental Health Technology, HU '84, was hired as the school superintendent of the Mount Laurel School District in Mount Laurel, N.J.

Louis Coda, MD, HU '85, of Shadow Grove, Pa., and his wife, Martha Coda, were presented with the Msgr. Brouwers Award for Faith and Service at the Annual Heart for the World, Mission Doctors Auxiliary Gala at the Loews Hotel in Hollywood, Calif., on February 13. (See the College of Medicine Alumni Magazine, Spring/Summer 2016.)

Marianne Mann, MD, MCP '86, an independent pharmaceutical development and regulatory consultant based in Highland, Md., was elected to the Scientific Advisory Board of Juniper Pharmaceuticals, Inc.

Andrew Marlowe, MD, HU '87, of Marlowe & Marrs Ear, Nose and Throat in Sarasota, Fla., wrote an article titled "A Guide to Hearing Loss and Hearing Aids" for SCENE magazine.

Jonathan "Todd" Barlow, MS, Group Process & Group Psychology, HU '89, has been named director of addiction services at both New Vitae The Mitchell Clinic in Emmaus, Pa., and its parent organization, New Vitae Wellness and Recovery in Quakertown, Pa.



#### Julianne O'Boyle, MD, HU '89, a

neurologist, returned to private practice on a part-time basis at Honesdale Neurology in Honesdale, Pa. O'Boyle also practices at the Wayne Memorial Community Health Centers in Honesdale.

Karen L. Smith, MD, HU '89; MPT, Physical Therapy, CNHP '91, a family physician at a private practice in Raeford, N.C., was named North Carolina's 2015 Family Physician of the Year by the North Carolina Academy of Family Physicians (NCAFP), the most prestigious award from the state's largest specialty medical association.

Charles Daknis, MD, HU '90, co-founder of the company Spine & Pain Centers of New Jersey and New York, which is headquartered in Shrewsbury, N.J., was featured in New Jersey Monthly's 2015 Top Doctors.

Kenneth Krumins, MD, MCP '90, knee specialist at Jewett Orthopaedic Clinic in Winter Park, Fla., was featured in "Top Doctors 2015" in Orlando Magazine.

Samuel Valenti, MD, MCP '90, joined Northeastern Rehabilitation Associates, PC at Rapid Care, an occupational medicine clinic in Scranton, Pa.

Scott Buckner, MD, HU '91, a vascular and interventional radiologist at Vein Clinics of America, was named a 2016 Top Doctor in Columbia, Md.

Patrice Weiss, MD, HU '92, chief medical officer for the Carilion Clinic system, has been named one of "100 Hospital and Health System CMOs to Know," by Becker's Hospital Review. She is a professor of obstetrics and gynecology at Virginia Tech Carilion School of Medicine, where she served as chair of OB/GYN before being appointed CMO.



Robert Brautigam, MD, HU '93, a general surgeon in Hartford, Conn., was recognized in the Hartford Courant as one of the area's 2015 "Hometown Heroes." Brautigam earned his master's degree in biological sciences from Drexel's College of Arts & Sciences in 1987.

Laura J. Borgos, MD '94, joined the Mohawk Valley Health System in Utica, N.Y., as a breast surgeon.

Amy Crawford-Faucher, MD, MCP '94, was appointed program director of the Forbes Family Medicine Residency program, part of the Allegheny Health Network in Pittsburgh, Pa. She serves on the board of directors of the Family Medicine Education Consortium.

Maureen McMahon, MD, MCP '95, a pediatrician affiliated with multiple hospitals, including Lankenau Medical Center in Wynnewood, Pa., and Nemours duPont Pediatrics in Villanova, Pa., has joined The Expert Network as a distinguished doctor, an invitation-only service of distinguished professionals.

S. Joshua Szabo, MD, HU '98; Orthopaedic Surgery Resident, MCPHU '03, of Tri Rivers Surgical Associates in Butler, Pa., is the doctor for the U.S. Ski Team and traveled with them for the World Cup skiing competition in February.

Ian B.K. Martin, MD, MCPHU '00, MBA, has been named professor and chair of the Department of Emergency Medicine at the West Virginia University School of Medicine effective June 30. He will also hold an appointment as a professor in the Department of Medicine. He joins WVU from the University of North Carolina School of Medicine,



where he was associate professor of emergency medicine, internal medicine and social medicine, and also served as chief of the Division of Global Health and Emergency Care; director of the Emergency Medicine, Global Health, and Leadership program; associate director of the Office of International Activities; associate director of the Simmons Scholars Career Development program; and associate director for the Emergency Medicine Residency program.

David Kashmer, MD '01, published a book, The Hidden Curriculum: What They Don't Teach You at Medical School (Lioncrest Publishing, February), which was listed as a best seller by Amazon and as a "hot new release" in the surgery category in the Amazon Kindle store. Kashmer is a trauma and acute care surgeon at Guthrie General Surgery in Sayre, Pa.

Aditya Mehra, MD '03, of Cardiology Associates of Ocean County in Brick, N.J., was featured in New Jersey Monthly on the magazine's list of "2015 Top Doctors."

David Sachs, MD '03, a board-certified ophthalmologist practicing in East Meadow and Massapequa, N.Y., was named partner at Ophthalmic Consultants of Long Island (OCLI).

Robert Hyun Cho, MD '04; Drexel/Hahnemann Orthopaedic Surgery Residency '09, a pediatric orthopedic surgeon and clinical assistant professor of orthopedic surgery at UCLA, has been appointed chief of staff at Shriners Hospitals for Children in Los Angeles, Calif. He specializes in treatment of complex spinal deformity in children.



Linda Kornfeld, MD '04, an internist in Allentown, Pa., wrote an article, "Why We Should Reimburse End-of-Life Discussions," in Medical Economics magazine about more effective ways physicians can discuss often sensitive end-of-life issues with their patients.

Vijay Sekhon, MD '04, joined Reno Diagnostic Centers in Reno, Nev., as a radiologist.

Octavia Devon, MD '05, joined Lahey Urology at Emerson Hospital in Concord, Mass. She performs surgery for urologic cancer, stone disease and voiding disorders.

John O'Shura, MD '06, joined the active medical staff at the Pottstown Memorial Medical Center Emergency Department in Pottstown, Pa.

Neelum Mittal, MD '07, board-certified radiologist, joined the staff at Mercy Medical Center in Baltimore, Md.

Marcelo R. Malakooti, MD '08, a critical care physician at Lurie Children's Hospital of Chicago, has been named one of the "40 Under 40" by Crain's Chicago Business in the area of health care and innovation.

Brandi Musselman, MD '09; **Drexel/Hahnemann Obstetrics &** Gynecology Residency '13; Minimally Invasive Gynecologic Surgery Fellowship '15, has joined Atlantic General Women's Health in Selbyville, Del. Musselman earned her master's degree in biological sciences from Drexel's College of Arts & Sciences in 2003.



Jacquelyn Palmer, MD '09, a breast cancer surgeon, joined Mercy Health Physicians in Fairfield, Ohio.

Clarence Marcus Lee Jr., MD '10, MBA, joined U.S. HealthWorks Medical Group in November 2015 as medical director at the U.S. HealthWorks North Sacramento [Calif.] facility. A former flight surgeon in the U.S. Air Force, Lee is the founder and CEO of CMLEEJR Co. He earned his MBA from Drexel's LeBow College of Business in 2014.



Neha Vora, MD '10, was hired by the women's health department of Saint Francis Healthcare in Wilmington, Del.

Osa Egharevba, MD '11, a board-certified internist, joined Bronson Internal Medicine Hospital Specialists and will be working as a hospitalist at Bronson Methodist Hospital in Kalamazoo, Mich., and Bronson Battle Creek Hospital in Battle Creek, Mich. He completed his residency at Loyola University Medical Center.

Andrew Gambone, MD '11, will enter the Orthopedic Surgery Clinical Fellowship program at The Children's Hospital of Philadelphia after completing his residency in orthopedic surgery at Wayne State University this year.

# Former Residents and Fellows

(alphabetical)

Archana Chaudhari, MD, MPH; Drexel/Hahnemann Internal Medicine Residency '07, joined Geisinger Mount Pleasant in Scranton, Pa., as an internal medicine physician.

Jamil A. Hossain, DPM, Drexel/Hahnemann Podiatric Medicine Residency '15, joined the medical staff at Maury Regional Medical Center in Columbia, Tenn. He is associated with Advanced Foot & Ankle Centers in Columbia and Nashville.

**Richard Lockwood, MD; Internal Medicine Residency, MCP '82**, joined Excellus BlueCross BlueShield in Rochester, N.Y. as vice president and chief medical officer.

**Steven Maser, MD, Orthopaedic Surgery Residency, HU '92**, a hand and upper extremity surgeon in Morristown, N.J., was featured in *New Jersey Monthly's* 2015 Top Doctors.

**Gilbert Mbeo, MD, Drexel/Hahnemann Neurology Residency '13**, assistant professor of neurology at the
University of Mississippi Medical Center, was awarded
neuroscientific intensive care subspecialty board certification by the United Council for Neurological Specialties.

**Todd McGrath, MD, Drexel/Hahnemann Emergency Medicine Residency '04**, a sports medicine specialist at Aria 3B Orthopaedic Institute in Philadelphia, was listed in *Becker's Orthopedic Review* "12 Orthopedic Surgeons to Know."

David J. Portonova, MD; Drexel/Hahnemann
Podiatric Medicine and Surgery Residency '15, opened a podiatry practice, Portonova Foot and Ankle Specialists, in Bloomsburg, Pa.

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Share your professional accomplishments in Alumni Notes — just email **pulse@drexelmed.edu**.

If you have **new contact information**, please let us know by calling 215.762.2371 or emailing medical.alumni@drexel.edu. This will ensure that you receive alumni publications, invitations and other important news.

## In Memoriam

Sheila M. Beirne, MD, WMC '62, March 8, 2016 William F. Boyle, MD, HU '54, April 10, 2016 Barbara Jean Branson, MD, HU '64, February 23, 2016

Earl K. Connors Jr., MD, HU '60, March 10, 2016 George A. Diamond, MD, HU '67, December 12, 2015

Lillian R. Ford, MD, WMC '55, October 14, 2015

A. Meryl Grasse, MD, HU '47, January 29, 2016

John C. Hoak, MD, HU '55, April 28, 2016

Mary Lois Jung, MD, WMC '58, September 25, 2015

David C. Mock, MD, HU '48, April 8, 2016

Harry L. Pappas, MD, HU '54, March 29, 2016

Vitaly Sawyna, MD, MCP '81, March 30, 2016

Donald Richard Walk, MD, HU '59, May 3, 2016

Ira Wasserberg, MD, HU '51, December 7, 2015

Norman M. Werther, MD, HU '66, October 14, 2015

A. Kent Williams, MD, HU '62, February 25, 2016

James P. Yeager Jr., MD, HU '57, March 26, 2016

**Robert S. Gold, MD, HU '66**, died at age 74 on May 11, one week before the 50 Year Reunion, which he had planned to attend. He trained in general surgery in the U.S. Navy, where he spent his professional career as



a practicing surgeon. After leaving the service, he worked as a consultant in the fields of managed care, home health, hospital accreditation and licensure and, most notably, in audit and education regarding documentation, coding and billing accuracy (DCBA) for health care services. He

co-founded DCBA, Inc., in 2002. He was a frequent speaker at industry conferences and widely published.

Pamela E. Prete, MD, HU '73, Colonel USAF Retired, died February 18 at the age of 68. She was the section chief of rheumatology at Long Beach Veterans Administration Hospital in Long Beach, Calif., and professor of medicine in residence, emeritus, as well as program director, at the University of California, Irvine, Division of Rheumatology. She was recognized in 2015 as a Master of the American College of Rheumatology. Prete had maintained her own funded research laboratory at the VA for over 20 years in basic science research but more recently was concentrating her efforts in clinical research in rheumatology.



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Tuesday, July 12 Manuel Stamatakis Golf Classic Philadelphia Cricket Club Flourtown, Pennsylvania

Join Manny Stamatakis and the College of Medicine to golf for a great cause. The day includes lunch, a round of golf, cocktail reception, dinner and awards banquet. All proceeds go to support scholarships for medical students with proven academic talent and financial need.

To book your foursome or to learn more, call Alyssa Abrohms at 215.255.7327 or email golf@drexelmed.edu.

