



A Banner Year for the College of Medicine

The College of Medicine is making big moves and changes, while welcoming even more talented incoming students than ever before. The 2022–2023 academic year is shaping up to be an especially thrilling time for our college community.



Craig Schlenker

Building for the Future in University City

There's excitement in the air about the new Health Sciences Building. The state-of-the-art facility, whose construction began in the early months of the COVID-19 pandemic, is a physical representation of the "One University" manifesto, which aims to promote greater synergy among Drexel's colleges and schools. Located at 36th and Filbert Streets, the building will eventually house academic and administrative functions for the College of Medicine, the Graduate School of Biomedical Sciences and Professional Studies, and the College of Nursing and Health Professions.

Having students from a range of medical professions learning together in one space, and interacting in their downtime, will begin to foster the kinds of interprofessional relationships that help medical teams succeed in the real world. Building this spirit of understanding and cooperation early in our students' careers will benefit them and their future patients.

The College of Nursing and Health Professions moved into the new building in mid-September. Our College of Medicine

community has been preparing for our own move, with MD and graduate students beginning the 2023 academic year in the new space in August.

"It's a magnificent building," said Dean Charles B. Cairns, MD, during a recent State of the College Town Hall event. "It's right in the center of University City. It's right in the ecosystem around Schuylkill Yards. And most importantly it will bring the health sciences programs in direct connection with all of the other colleges and schools."

Improving Maternal and Infant Care

The Graduate School of Biomedical Sciences and Professional Studies recently introduced a new Human Lactation Consultant Certification IBCLC Pathway 2 program. The program prepares undergraduate and graduate students to be eligible to sit for the exam to become an Internationally Board-Certified Lactation Consultant, or IBCLC. It is a mix of didactic and experiential learning that equips students to succeed as lactation consultants, helping new parents overcome challenges and obstacles to successful, comfortable breastfeeding.

FALL 2022

Vol. 9, No. 3



White Coat welcomes class of 2026 with fanfare and tradition



Asif Ilyas, MD, MBA, to grow clinical research as associate dean



Neuroscience Camp: Fostering teens' curiosity for 10 years

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pulse

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drexel.edu/medicine



Advancing Into Autumn

We welcomed a record 304 MD students in August. This includes the second group of first-year MD students to study in West Reading. A remarkable group of 29 PhD students, 232 master's students and 22 certificate students also joined us. And 70 new faculty participated in our virtual New Faculty Orientation on September 28. Education is the driving force of our institution, and I am proud that our faculty is growing in numbers while broadening our clinical and research expertise.



Charles B. Cairns, MD

This time of year also brings an important annual event: the College of Medicine's Discovery Day. Held at the Pennsylvania Convention Center on October 27, the event featured over 300 posters and eight platform presentations, as well as a wonderful keynote address from Veronica A. Alvarez, PhD, acting chief of the National Institute of Alcohol Abuse and Alcoholism Section on

Neuronal Structure, and lab chief of NIAAA's Laboratory on Neurobiology of Compulsive Behaviors. With research as a core mission for our College, it is indeed exciting to see the investigative efforts of our community shared and celebrated.

September brought renewed excitement about the new Drexel Health Sciences Building, as the College of Nursing and Health Professions moved in at the start of their academic year. We are eager to begin our transition into the new space in the heart of University City, with MD program students beginning the 2023–2024 academic year. You will be hearing about naming opportunities for spaces in the building, which is a chance to leave a lasting legacy with the College of Medicine.

Drexel's ongoing commitment to inclusiveness and equity was highlighted by the University's renaming of its Office of Equality and Diversity, which is now the Office for Institutional Equity and Inclusive Culture, a name that better reflects the scope of that office's mission. Our College's equity and inclusion efforts have manifested in several key ways: The Institute for Women's Health and Leadership was renamed the Lynn Yeakel Institute for Women's Health and Leadership, honoring Lynn's tireless efforts in the realm of gender equity. Nancy Spector, MD, senior vice dean for faculty, executive director of the ELAM and ELH programs, and professor of pediatrics, was named the Betty A. Cohen Chair in Women's Health and executive director of the institute. Two well-received and well-attended symposiums focused on the care of LGBTQ+ patients were held over the summer.

Our clinical enterprise also continues to move forward. Work is underway on Drexel Medicine Diagnostics, our new, CAP/CLIA-certified complex laboratory. It will provide a range of in-demand testing services including microbiology, toxicology screens, viral and bacterial testing including tick-borne diseases, and COVID-19. Drexel Medicine Diagnostics will support the continuous development of cutting-edge diagnostics in genomics, toxicology, clinical chemistry and therapeutic drug monitoring. Also of note, Drexel Medicine recently launched the Epic Garden Plot electronic health record system. We are one of the first two institutions to implement Epic Garden Plot and have partnered with Epic to enhance the system to meet our education, training and research needs.

I thank you as always for your dedication to excellence across our missions. I look forward to great things from our students, faculty and professional staff in this academic year.

Charles B. Cairns, MD

Walter H. and Leonore Annenberg Dean
Senior Vice President of Medical Affairs

Health Care Workers and Anti-abortion Laws

Content notice: This article contains discussion of potential pregnancy complications and a brief mention of sexual assault.

When Texas Senate Bill 8 went into effect, it triggered confusion and uncertainty for many health care workers. Called the “Heartbeat Act,” the law created some of the nation’s heaviest restrictions on reproductive health care. In effect, it bans abortions beyond six weeks of pregnancy, a stage during which the majority of people, especially those with irregular menstrual cycles, don’t know they are pregnant. The law also allows ordinary people to report anyone who performs or “aids or abets” an abortion, promising a \$10,000 reward in civil court. That includes anyone who pays for an abortion, such as partners who don’t want their significant other to carry a pregnancy to term.

For those of us counseling pregnant patients, it also creates an unnerving gray area around what we could be prosecuted for. Is it safe to mention abortion as an option when it’s best for the patient’s health, or even to say the word “abortion” or “termination” during a consultation anymore? To recommend it from a physician’s perspective? To answer questions they have about the option? To give them resources for where else they can go?

The reality is that we found ourselves asking, “What could we be sued for, maybe even arrested for?” Medical workers are highly trained, but it is not as though we received a month off for retraining. The new law elbowed its way into the middle of a work week, as doctors and nurses juggling crises found themselves with a new, ill-defined dilemma.

While the risk of saying the wrong thing in a consultation was palpable, I also felt that my patients were in danger if they weren’t getting the appropriate counseling. As a medical professional, my job has always been to ensure the health of my patients. Thoroughness meant clearly presenting all options to a patient so that they can choose what is best for themselves, regardless of my own personal beliefs. Barred from counseling patients about termination, I felt like I was indirectly giving an opinion when I should have been giving options.

My colleagues and I became afraid even of situations in which termination of a pregnancy would previously have been considered a medically necessary choice for the patient, rather than an

“elective” procedure. Some of these include:

- Ectopic pregnancy, a life-threatening condition in which the embryo implants somewhere other than the uterus, usually in a Fallopian tube
- A patient’s water breaks before the fetus viability window, around 24 weeks
- A patient has a psychological medical condition (for instance, PTSD as a result of rape) that leaves them unable to care for themselves, much less a newborn baby, and carrying the child to term may worsen their condition
- A patient has a physical condition that would be worsened by carrying a fetus to term (for instance, severe heart conditions, chronic kidney diseases or severe diabetes)
- A patient’s treatment plan would cause harm to a developing fetus, and delaying treatment could be detrimental to the health of the patient (for example, cancer treatments such as chemotherapy, surgery or radiation therapy)

These are just a few examples of situations in which terminating a pregnancy can be a positive choice for a patient’s health. Because the law felt unclear, I found myself repeatedly going to my higher-ups to find out whether I was allowed to intervene or whether it would be considered

an abortion. Efficiency suffered. Still, it felt taboo even to discuss the subject amongst ourselves.

Medical training programs typically give medical professionals a chance to opt out of training for termination and to receive alternative training if they prefer. As an obstetrician/gynecologist, you can decide not to perform elective abortions, or to simply provide patient counseling. You can guide your practice any way you want, and you are never forced to do anything you don’t agree with or feel comfortable doing.

Laws like Texas SB8, on the other hand, restrict how we can practice medicine and counsel our patients. Instead of presenting all the options to them, our imposed silence leaves them to seek counsel elsewhere and find their own way to get past these laws. When you leave patients uninformed and responsible for finding their own way, you put them in danger.

Texas SB8 set the tone for other anti-abortion legislatures when it comes to restrictions, bans and “trigger laws” — abortion bans that would

• *continued on page 4*



Sharrón L. Manuel, MD, PhD '13

A Banner Year

• *continued from the cover*

There is ever-increasing evidence about the many benefits of breastfeeding, on both an individual and population level. In addition to health benefits to the infant, breastfeeding also benefits mothers, and it reduces the incidence of chronic illnesses, decreasing the societal cost of health care and increasing quality of life. Breastfeeding even has global environmental impacts, since other modes of feeding require more natural resources and create more greenhouse gases. All health care providers can benefit from a thorough understanding of breastfeeding. Drexel's is just one of ten programs worldwide offering this type of training.

The certificate program has existed since 2015 within the Nutrition Sciences Department in the College of Nursing and Health Professions as a standalone certificate and an elective. As Drexel University strives to optimize interdisciplinary health care programming throughout the university, the program was moved to the Graduate School of Biomedical Sciences and Professional Studies, starting in the 2022–2023 academic year.

The program has also undergone meaningful growth recently. Since hands-on training is a core component of the curriculum, practicum sites are of great importance. The program now has more than 25 sites, an eight-fold increase in the past five years. These partnerships are a testament to Drexel's reputation in the region, as well as to the program's leadership, which has fostered strong, long-lasting relationships.

"Our role as IBCLCs is to empower: empower our patients to reach their breastfeeding goals, empower health professionals to have the skills and information to support breastfeeding families, and empower our students to become the best IBCLCs they can. Our new home in the College of Medicine allows us to do this, and we are excited about the program's future," says Susan Fuchs, MS, IBCLC, the program's director, who is also a program graduate.

Fresh Faces, New Stories

A new crop of students is always a source of excitement and renewal for our community. This year's incoming classes

were no exception. We welcomed 304 MD students and 283 graduate students. Our admissions teams pride themselves on attracting well-rounded students who will excel in their chosen fields, while also serving their communities and fostering their own well-being.

This year, the MD program admitted a record number of alumni of Drexel pre-medical/pre-health programs, including 44 from the Drexel Pathway to Medical School program. In addition, the incoming first-year classes include an ordained Buddhist monk, a former NASA employee who supported the International Space Station, a former FedEx package handler, a registered nurse, a neuroscience/dance double major and a nationally ranked baton twirler. We have an incoming student from Alaska, and one who invented a fishhook and a hoodie with a built-in face mask.

Community service and engagement were central to many of our incoming students' experiences prior to enrolling at Drexel. Their volunteer work spanned a range of organizations, including a sexual assault crisis hotline, a middle-school youth camp, an animal rescue organization, a youth basketball program and the local Arthur Ashe tennis program in East Falls. They participated in medical mission trips and internships in Italy, Greece, Uganda and Guatemala.

It isn't all work for our first-year students, although many take their hobbies very seriously. They have traveled extensively for pleasure in addition to their medical trips; a master's student recalls a high school motorcycle trip along the entire West Coast as a formative experience. We have a student who grows fruit trees, and one who cares for a range of water-dwelling creatures that includes freshwater fish, aquatic frogs and crayfish. One of our new PhD students had a pet corn snake named Bowie in college.

In speaking about the incoming students during the Town Hall, Dean Cairns said, "They're a remarkable group, and they reflect the wide reach and impact of this historic college."

While it might be easy to look at nearly 600 new faces and see a forest instead of trees, every new student who joined us this summer has a story worthy of their own *Pulse* cover. To welcome them during a time when the College is experiencing so much growth and change of its own is especially gratifying.

Destination Excellence

• *continued from page 3*

immediately go into effect following the overturn of *Roe v. Wade*, which took place in June of 2022 when the Supreme Court released the majority opinion for *Dobbs v. Jackson*. It's an example of how legislation at the local level ultimately affects what happens on the national level.

For those who want to see change, that's good news, too. Local politics are the lever by which informed citizens can move mountains, regardless of how far we are from Capitol Hill. Whether it's forming a protest, writing to your elected officials, or learning

more about how these laws are written, argued and passed, what you do trickles up. The laws passed in Congress and at your state capitol, whether uplifting or oppressive, directly impact each of us. In this critical moment, we should each take every chance to have an impact on how those laws are made.

Sharrón L. Manuel, MD, PhD '13, is a reproductive endocrinology and infertility fellow at the University of Cincinnati. She previously practiced general obstetrics and gynecology in El Paso, Texas, where she also conducted research focused on women's health.

The views expressed in this post are the author's and do not reflect the views of Drexel University College of Medicine.

WHAT WE'RE DOING



Olubunmi Ajao, MS, a fourth-year MD student, was elected to the position of convention planning co-chair on the Student National Medical Association Board of Directors. Elections were held during the organization's Annual Medical Education Conference in April 2022.



Seena Ajit, PhD, gave an invited seminar as part of the MD Anderson Pain Research Consortium seminar series at the University of Texas on May 6, 2022. Her talk was "The Role of Mouse Serum-Derived Small Extracellular Vesicles in Pain."



Peter Baas, PhD, professor, Department of Neurobiology & Anatomy, delivered a talk, "Mechanistic Route to Therapy for SPG4 Hereditary Spastic Paraplegia" at the 19th annual conference of the Spastic Paraplegia Foundation in Nashville, Tennessee, on July 23, 2022.



Barson



Pirino

Jessica R. Barson, PhD, associate professor of neurobiology and anatomy, **Breanne Pirino, MS**, Neuroscience PhD student, and **Brody Carpenter**, Neuroscience master's



Carpenter

student, presented at the Research Society on Alcoholism conference in Orlando, Florida, on June 25–29, 2022. Barson gave a symposium talk titled "The Role of Pituitary Adenylate Cyclase-Activating Polypeptide (PACAP) in the Thalamic Paraventricular Nucleus in Ethanol Drinking and Affective Behavior"; Pirino presented a poster, "Sex-Related Differences in Pattern of Ethanol Drinking and Its Impact on Exploratory Behavior in Rats"; and Carpenter presented a poster, "Overexpression of PACAP in the Paraventricular Thalamus Reduces Ethanol Drinking With No Changes in Affective Behavior."

John Chojnowski, an MD/PhD student in the Molecular & Cell Biology & Genetics program, **Rongrong Li, MS molecular and cell biology and genetics '21**, **Fatimah Alfaran, MS cancer biology '20**, **Alexej Dick, PhD**, postdoctoral researcher in biochemistry and molecular biology, and colleagues at the Perelman School of Medicine at the University of Pennsylvania, published "Copper Modulates the Catalytic Activity of Protein Kinase CK2" in *Frontiers in Molecular Biosciences* on June 9, 2022.



Matt



Gaskill

Jennifer Connors, PhD '22, and **Bhavani Taramangalam, MS '21**, Microbiology & Immunology program alumni; **Gina Cusimano** and **Matt Bell**, Microbiology & Immunology



Kutzler

PhD students; **Stephanie Matt, PhD**, postdoctoral fellow, Department of Pharmacology & Physiology; **Kaitlyn Runner**, former Gaskill Lab manager; **Peter J. Gaskill, PhD**, associate professor of pharmacology and physiology; **Michele Kutzler, PhD**, associate dean for faculty and professor of medicine, and microbiology and immunology; **Elias K. El Haddad, PhD**, professor of medicine; and colleagues at Oregon Health and Science University and University of Arizona College of Medicine-Tucson published "Aging Alters Antiviral Signaling Pathways Resulting in Functional Impairment in Innate Immunity in Response to Pattern Recognition Receptor Agonists" in the July 18, 2022, issue of *Geroscience*.



Canada, in June 2022.

Kimberly Dougherty, PhD, associate professor of neurobiology and anatomy, presented "Developmental and Injury-Induced Changes in Cellular and Synaptic Properties of Spinal Premotor Interneurons Expressing Shox2" at the International Motoneuron Society Meeting in Banff,



PhD, professor and interim chair in the Department of Biochemistry & Molecular Biology.

Emily Esquea, a PhD student in the Molecular & Cell Biology & Genetics program, was awarded an NIH National Cancer Institute Diversity Supplement award for her thesis work investigating metabolic vulnerabilities in breast cancer in the lab of Mauricio Reginato,



a review paper on neural tracing in a special issue of *Experimental Neurology*.

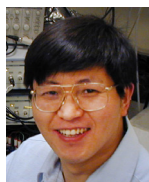
Tara Fortino, PhD student in the Molecular & Cell Biology & Genetics program, was awarded an F31 pre-doctoral fellowship from the National Institutes of Health for her project "Tailoring Neural Transplants for Cervical Spinal Cord Repair." She also published



the Bipartisan Safer Communities Act. The bill strengthens firearm laws and funds community-based mental health services and programs, achievements that align closely with the mission of Healing Hurt People.

Annette Gadegbeku, MD, associate professor of family, community and preventive medicine, assistant dean of community health, and faculty director of Healing Hurt People, was invited to attend a ceremony at the White House on July 11, 2022, in celebration of the passage of

Leonardo Garcia-Ramirez, PhD, a postdoctoral fellow in neurobiology and anatomy, presented a talk, "SCI-Induced Plasticity of Sensory Afferent Input Pathways and 5-HT Modulation of Shox2 Interneurons Following Epidural Stimulation in Mouse," at the International Motoneuron Society Meeting in Banff, Canada, in June 2022.



Wen-Jun Gao, MD, PhD, a professor in the Department of Neurobiology & Anatomy, has been awarded a five-year, \$1,882,040 R01 grant from the National Institute of Mental Health for the project "Corticothalamic Control of Social Motivation," with senior Neuroscience

PhD student **Nancy Mack** as key personnel.



Simran Gill, MS drug discovery and development '21, now a PhD student in the Pharmacology & Physiology program, received a Chapter Recognition Student Travel Award from the Philadelphia chapter of the Association for Women in Science, to attend the Society for

Neuroscience 2022 annual meeting in San Diego, California, in November 2022.



Hall



McGrath

Adam Hall and Jenna McGrath, Neuroscience PhD students in the labs of Michael Lane, PhD, and Kimberly Dougherty, PhD, in the Department of Neurobiology & Anatomy,

were awarded the T32 Fellowships from the NIH-funded Training Program on Spinal Cord Injury and Repair.

Excellence in Scholarship, Service and Advising Recognized

On May 23, 2022, the Drexel University Office of Research & Innovation and the Office of Faculty Advancement and Undergraduate Affairs announced the recipients of the 2021–2022 Research, Scholarship and Creativity Awards and the 2021–22 Provost Awards for Teaching, Scholarship and Professional Service.

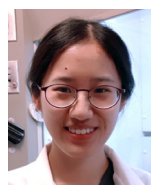
Jacqueline Barker, PhD, associate professor of pharmacology and physiology, earned a Provost Award for Outstanding Scholarly Productivity, Early Career.

Theresa Connors, MA, instructor of neurobiology and anatomy, received the Harold M. Myers Award for Distinguished Service.

Anna-kay Thomas, executive director of academic advising, received an Outstanding Professional Advisor Award.



Ashraful Islam, a Neuroscience PhD student in the laboratory of Veronica Tom, PhD, in the Department of Neurobiology & Anatomy, published "The Use of Viral Vectors to Promote Repair After Spinal Cord Injury" in the August 2022 issue of *Experimental Neurology*.



Xiaonan Liu, a Pharmacology & Physiology PhD student in the Toyooka Lab, earned a Dean's Fellowship for Excellence in Collaborative or Themed Research from the Graduate School of Biomedical Sciences and Professional Studies. The fellowship will support her project "Myo1c-Adnp Regulates the Transportation of Actin Bundling Protein Actn4 to the Cell Membrane During Neurite Initiation in Neurons."



Locke

Katy Locke, a fourth-year medical student, published a review article, "Respiratory Plasticity Following Spinal Cord Injury: Perspectives From Mouse to Man," in the October 2022 issue of *Neural Regeneration Research*.

The paper's coauthors were **Margo A. Randelman, PhD neuroscience '21**, **Lana Zholudeva, PhD neuroscience '18**, **Michael Lane, PhD**, associate professor of neurobiology and anatomy, and a colleague from the University of Florida.



Dillon Malloy, a Neuroscience PhD candidate in the Côté Lab in the Department of Neurobiology & Anatomy, presented a poster, "Repeated Transcutaneous Spinal Cord Stimulation at Alternating Compared to Supra and Subthreshold Intensities Preferentially Increases Transmission in Inhibitory Pathways in Spinal Cord Injured Rat" at the Central Nervous System Injury and Repair: Gordon Research Conference in Oxnard, California, on March 20, 2022. Malloy also presented a poster, "Repeated Transcutaneous Spinal Cord Stimulation at Alternating Intensities Increases Spinal Reflex Inhibition and Reorganizes Neural Circuitries in Spinal Cord Injured Rat," at the American Spinal Injury Association Meeting in New Orleans, Louisiana, on May 18, 2022.



Nathalie May, MD, associate professor of medicine, was awarded an Environmental Collaboratory Research Grant for her project "Impacts of Climate Change on Primary Care Utilization and Needs in Philadelphia," which aims to analyze the impact extreme heat, flooding and cold patterns will have on primary care utilization. May will partner with colleagues from the College of Medicine, Drexel's College of Engineering, the Dornsife School of Public Health, Esperanza and Eastwick United.



Olimpia Meucci, MD, PhD, professor and chair of pharmacology and physiology, received a new five-year grant as an extension of her current R37 MERIT (Method to Extend Research in Time) award from the National Institute on Drug Abuse. The extension will support the last phase (2023–2028) of her longtime project “Role of Chemokines in Neuronal Function and Survival,” which has been continuously funded by NIDA since 2001.



Vandana Miller, MD, associate professor, Department of Microbiology & Immunology, gave an invited tutorial, “Plasma Oncology, A Review,” at the Gaseous Electronics Conference’s International Online Plasma Seminar and Online Low Temperature Plasma Seminar

Miller

on March 7, 2022. She was also invited to present “Non-thermal Plasma — an Emerging Player in Cancer Immunotherapy” at the Pancreas Research Meeting at Thomas Jefferson University on April 28, 2022. Miller was one of the authors of “Low-Temperature Plasma for Biology, Hygiene, and Medicine: Perspective and Roadmap,” which was published in *IEEE Transactions on Radiation and Plasma Medical Sciences*, February 2022.

Miller was also one of the authors of “Perspectives and Advances of Non-thermal Plasma Technology in Cancers,” which appeared online June 29, 2022, in *IEEE Transactions on Plasma Science*. In the *Journal of Physics D: Applied Physics*, she was among the authors of “The 2022 Plasma Roadmap: Low Temperature Plasma Science and Technology,” which was published online July 5, 2022.



Wigdahl

Krebs

Miller; **Hager Mohamed, PhD microbiology and immunology '21**; **Brian Wigdahl, PhD**, professor and chair of microbiology and immunology; **Fred Krebs, PhD**, associate professor of microbiology

and immunology; and a colleague at North Carolina State University presented “Plasma Immunomodulation: Secondary and Tertiary Effects” at the 9th International Conference on Plasma Medicine, which was held in Utrecht, Netherlands, June 27 to July 1, 2022.



Alessia Niceforo, PhD, a postdoctoral fellow in the Lane Lab in the Department of Neurobiology & Anatomy, was awarded a Craig H. Neilsen Foundation Postdoctoral Fellowship for her project “Engineering Human Neural Progenitors for a Biphasic Approach to Spinal

Cord Repair.”



Micaela O'Reilly, a Neuroscience PhD candidate in the Tom Lab in the Department of Neurobiology & Anatomy, presented a poster, “Effect of Microglial NF- κ B Signaling in Spinal Microglial Polarization and Peripheral Immune Function After High-thoracic

Spinal Cord Injury” at the 4th Annual Americas School of Neuroimmunology conference in Columbus, Ohio, on July 13, 2022.

Calendar

November

- 24–25 **Thanksgiving Break**
- 30 **Advancing DEI Through Collaboration and Bravery**
Virtual event
Speaker: Alvaro Tori, MD, Indiana University School of Medicine
Contact: Bernadette Campoli, bc858@drexel.edu

December

- 1 **World AIDS Day**
- 26 **Christmas Day (Observed)**

January

- 2 **New Year’s Day (Observed)**
- 6 **DUCOM Classical Winter Recital**
Contact: ducomclassical@gmail.com
- 16 **Martin Luther King Jr. Day**
- 27–29 **50th Annual LMSA Northeast Regional Conference**
Johns Hopkins University School of Medicine
Baltimore, Maryland
Contact: conference.northeast@lmsa.net

February

- 10 **Leadership Summit: “The Great Negotiation”**
Virtual event
bit.ly/WIMSCsummit
Contact: Jacqueline Barker, PhD, jmb893@drexel.edu

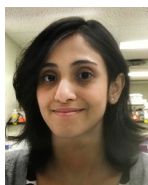
Ongoing

2022–2023 Population Health Spotlight Series

Nesbitt Hall, 3215 Market Street
Philadelphia, PA 19104
Monthly on Wednesdays
Contact: Rory Schonning, rs3628@drexel.edu

Full calendar: All College of Medicine events are available at drexel.edu/medicine/news-events/events.

Alumni: For information about alumni events, please call toll-free 888.DUGRADS (888.384.7237), email medical.alumni@drexel.edu or visit drexel.edu/medicine/alumni/events.



Manali Potnis, a PhD student in the Molecular & Cell Biology & Genetics program, was invited to speak at the annual meeting of the American Aging Association, which was held May 17–20, 2022, in San Antonio, Texas. Her presentation was “The Evolving Role and Regulation of H19 During Cellular Senescence.”



Qiang

Liang Qiang, MD, PhD, assistant professor, Department of Neurobiology & Anatomy, and members of his lab including **Simeon Kofman, MS biomedical engineering '20**, research assistant; **Neha Mohan**, Pharmacology and Physiology PhD candidate; **Xiaohuan**

Sun, Neuroscience PhD candidate; **Larisa Ibric**, research assistant; and **Emanuela Piermarini, PhD**, postdoctoral fellow, published “Human Mini Brains and Spinal Cords in a Dish: Modeling Strategies, Current Challenges, and Prospective Advances” in the *Journal of Tissue Engineering* in July 2022.



Mauricio Reginato, PhD, professor and interim chair in the Department of Biochemistry & Molecular Biology, was invited to speak at Nutrient Regulation of Cellular Physiology by O-GlcNAcylation, a meeting of the American Society for Biochemistry and Molecular Biology,

which was held in Athens, Georgia, July 7–10, 2022. His talk was “O-GlcNAcylation: Linking Signaling and Metabolism in Cancer and Beyond”

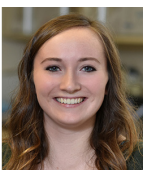


Jonathan Richards, a Neuroscience PhD candidate in the laboratory of Megan Detloff, PhD, Department of Neurobiology & Anatomy, presented a poster, “Role of Monocyte-Derived Macrophages in Spinal Cord Injury-Induced Nociceptive Pain and Depressive-like Symptoms” at

the 7th Annual Shriners/Temple Symposium on Neural Repair in Philadelphia, Pennsylvania, on June 10, 2022.



Rizzi-Wise



Opalka

Candace Rizzi-Wise and **Ashley Opalka**, Neuroscience PhD students in the lab of Dong Wang, PhD, in the Department of Neurobiology & Anatomy, received Excellence in

Citizenship Awards at the Gordon Research Conference for Optogenetic Approaches to Understanding Neural Circuits and Behavior (OptoGRC2022) in Newry, Maine, on July 20, 2022.



Gabriele Romano, PhD, assistant professor, Department of Pharmacology & Physiology, was one of the authors of “Multi-modal Molecular Programs Regulate Melanoma Cell State,” which was published in *Nature Communications* July 9, 2022.

Jennifer Ross, PhD, research assistant professor in the Department of Pharmacology & Physiology, received pilot funding from the Drexel University Medical Cannabis Research Center. The funds will support Ross’s project “Clinical Efficacy of Medicinal Marijuana for Stress-Related Disorders.”



Priscila Sato, PhD, assistant professor, Department of Pharmacology & Physiology, was elected as a fellow of the American Heart Association at the AHA-Basic Cardiovascular Sciences meeting in Chicago, Illinois, in July 2022.



Daniel V. Schidlow, MD, professor of pediatrics, pharmacology and physiology, and medicine, was recently appointed to the board of the Panamerican Association, whose mission is to promote cultural, educational and economic activities designed to increase understanding and cooperation among the peoples of the Americas. Schidlow is also a board member of the American Jewish Committee of Philadelphia and Southern New Jersey, where he co-chairs the Latino-Jewish Coalition and the Interfaith-Intergroup Committee.

Emerging Scholars Honored

Three students in the College of Medicine’s Graduate School of Biomedical Sciences and Professional Studies received awards at the Drexel Emerging Graduate Scholars Conference.

Provost’s Award for Best In-person Oral Research Presentation:

Benjamin Haslund-Gourley

MD/PhD student in Microbiology & Immunology
Presentation: “N-glycans on IgG Reflect Acute Lyme Disease and Treatment Response”

Provost’s Award for Best Virtual Oral Research Presentation

Marcelina Puc

Interdisciplinary Health Sciences master’s student
Presentation: “Gene Editing to Correct a Novel ABCA3 Mutation in Human Lung Fibroblasts”

Third Place In-person Research Poster Presentation

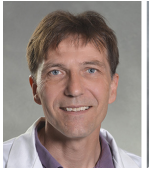
Rhea Temmermand, MSN, CRNA

PhD student in Pharmacology & Physiology
Presentation: “Development of Glutamate Transporter Modulators as a Novel, Non-opioid Treatment for Neuropathic Pain”



Barbara Schindler, MD, professor of pediatrics and psychiatry, and vice dean emerita of educational and academic affairs, was selected by the Mayor's Commission on Addiction & Recovery (MCAR) to receive a "Making a Difference" Award. Schindler and other

award recipients were honored at a virtual celebration September 28, 2022.



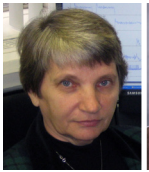
Sell



Noguchi

Christian Sell, PhD, associate professor, **Eishi Noguchi, PhD**, professor, and **Srinivas Somarowthu, PhD**, assistant professor, all in the Department of Biochemistry & Molecular Biology, and **Elias K. El Haddad, PhD**, professor of medicine, were recently awarded a new R01 grant from NIH for "Novel Longevity Enhancing Pathways Regulated

by mTOR." Sell was invited to speak at the Fifteenth International Symposium on Neurobiology and Neuroendocrinology of Aging in Bregenz, Austria, where he presented a talk of the same title. **Jasmine Peake, PhD molecular and cell biology and genetics '20**, and Noguchi published "Fanconi Anemia: Current Insights Regarding Epidemiology, Cancer and DNA Repair" in the journal *Human Genetics* on May 21, 2022.



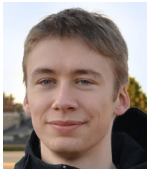
Shevtsova



Rybak

Natalia Shevtsova, PhD, research assistant professor of neurobiology and anatomy; **Erik Li**, Biomedical Engineering MD/PhD student; **Shayna Singh**, Neuroscience PhD

student; **Kimberly Dougherty, PhD**, associate professor of neurobiology and anatomy, and **Ilya Rybak, PhD**, professor of neurobiology and anatomy, published "Ipsilateral and Contralateral Interactions in Spinal Locomotor Circuits Mediated by V1 Neurons: Insights From Computational Modeling" in the May 16, 2022, issue of the *International Journal of Molecular Sciences*. Shevtsova, Dougherty, **Simon Danner, PhD**, assistant professor of neurobiology and anatomy, Rybak, and collaborators at Dalhousie University published "The Role of V3 Neurons in Speed-Dependent Interlimb Coordination During Locomotion in Mice" in the April 27, 2022, issue of *eLife*.



Danner



Nicholas Stachowski, a Neuroscience PhD student in the Dougherty Lab in the Department of Neurobiology & Anatomy, was awarded an F31 predoctoral fellowship from the National Institutes of Health for his project "Post-SCI Effects of BDNF and Epidural Stimulation on

Inhibitory RORb Interneurons."

Julia Sutter, a Microbiology & Immunology PhD student, received a Best Student Paper Award in recognition of the most outstanding oral presentation by a young researcher at the 9th International Conference on Plasma Medicine (ICPM9), which was held from June 27 through July 1 in Utrecht, Netherlands. The talk, "Non-thermal Plasma as an Antiviral and Immunomodulatory Agent Effective Against HSV-1 Infection," described Sutter's ongoing thesis research into a unique treatment for herpes labialis.



Rhea Temmermand, a Pharmacology & Physiology PhD student, was awarded a grant from the Art Zwerling Memorial Fund of the American Association of Nurse Anesthetists Foundation. The grant will support her project "Development of Glutamate Transporter Modulators as a Novel, Non-opioid Treatment for Chronic Pain."



Veronica Tom, PhD, professor in the Department of Neurobiology & Anatomy, and colleagues at Case Western Reserve University School of Medicine published "Maladaptation of Renal Hemodynamics Contributes to Kidney Dysfunction Resulting From Thoracic Spinal Cord Injury in Mice" in the August 2022 issue of the *American Journal of Physiology-Renal Physiology*. Tom was also awarded a five-year, \$2,155,580 R01 grant from NIH/NINDS for "Multipronged Approach to Diminish Sympathetic Hyperreflexia and Ensuing Cardiovascular and Immune Dysfunction After Spinal Cord Injury."



Nielufar Varjavand, MD, professor of medicine and director of the Physician Refresher/Re-entry Program, moderated a Coalition for Physician Enhancement webinar, "Assessment and Remediation in the Time of Covid-19: Fireside Chat Between Assessors and Regulators," on June 7, 2022.



John Walker, MS, a Neuroscience PhD candidate in the laboratory of Megan Detloff, PhD, Department of Neurobiology & Anatomy, presented a poster, "Nociception Impedes Grasping Recovery in the Spinal Cord Injured Rat" at the 7th Annual Shriners/Temple Symposium on Neural Repair in Philadelphia on June 10, 2022.

WHAT WE'RE DOING



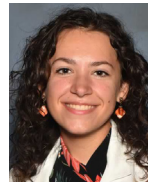
Jeremy Weinberger, MS, a Neuroscience PhD candidate in the laboratory of Marie-Pascale Côté, PhD, in the Department of Neurobiology & Anatomy, presented a poster, "Epidural Stimulation With Flexible Multisite Electrode Arrays to Treat Spasticity in Rodents Following Chronic Spinal Cord Injury" at the Central Nervous System Injury and Repair: Gordon Research Conference in Oxnard, California, on March 24, 2022. Weinberger also delivered a platform talk, "Multisite Electrode Array to Optimize Epidural Stimulation for Spasticity Following Spinal Cord Injury," at the International Motoneuron Society Meeting in Banff, Alberta, Canada, on June 16, 2022.



Michael Weingarten, MD, MBA, professor of surgery and assistant dean, Medical Scholars Track, received the Edward Weisband Award for public service from Binghamton University. The award "recognizes one alumnus or alumna each year whose life, work, career and contributions exemplify the highest standards of service and deepest dedication to the sustenance of the common good." Weingarten received the award in recognition of his volunteer work with the U.S. Army Combat Casualty Program caring for wounded soldiers in the Iraq and Afghanistan Wars, as well as his volunteer work in Haiti after the 2010 earthquake.



Jason Wickman, a Pharmacology & Physiology PhD student in the Ajit Lab, received a Dean's Fellowships for Excellence in Collaborative or Themed Research from the Graduate School of Biomedical Sciences and Professional Studies. The fellowship was awarded in support of his project "Immune Modulating Therapies to Target Resident Memory T-cells in Complex Regional Pain Syndrome."



Kira Zack, a second-year MD student, was chosen to receive a Grant for Emerging Researcher/Clinician Mentorship (GERM) award from the Infectious Disease Society of America Foundation. GERM awards support medical students in their research efforts, with the goal of fostering interest in infectious disease as a specialty. Zach will study carbapenem-resistant *Acinetobacter baumannii* under the mentorship of Suresh Joshi, MD, PhD, MSc, a faculty member in the College of Medicine and the School of Biomedical Engineering, Science and Health Systems.



Tell your colleagues what you're doing.
Email CoM_Pulse@drexel.edu.

In Memoriam

Gerald Escovitz, MD, died May 29 at age 85. He joined Medical College of Pennsylvania as a professor of medicine and associate dean in 1971, serving for 27 years and advancing to vice dean and senior vice president for medical affairs and graduate medical education. During his tenure, he developed an integrated neuropsychiatric institute, EPPI, which was nationally regarded. He was a leader and innovator in institutional development and medical education and consulted internationally with the American College of Physicians. He later applied his talents in support of the Freire Charter Schools, serving as a board member for over 20 years.

Norman Johanson, MD, who served as chair of Drexel's Department of Orthopedic Surgery from 2000 to 2019, died on July 3 at 72 years old. In addition to leading the department, he was an admired and sought-after mentor for residents and medical students. He also had a reputation as a technically gifted clinician. Johanson received his MD from Cornell University and completed surgical residency training at the New York Hospital, followed by orthopedic training and a research fellowship at the Hospital for Special Surgery. He is survived by his wife, Brenda, and four children: Erik, Kendra, Grace and Elise, as well as five grandchildren, his brother and his sister.

Muriel Kowlessar, MD, died on July 13. She received her MD from the College of Physicians and Surgeons, Columbia University and then completed pediatrics training at Strong Memorial Hospital. After some time practicing and teaching in New York City, she joined the pediatrics faculty at Medical College of Pennsylvania in 1970, serving as vice chairman and director of the Pediatric Outpatient Department until her retirement. She is survived by her daughter, Indrani Kowlessar, and her granddaughter, Katie Gallagher.

Henri Parens, MD, died on February 19 at the age of 93. Born in Poland, he immigrated to the U.S. during World War II alone at age 13, after escaping a detention camp in France. He served two years as an Army medic after college, and then attended Tulane University Medical School. He worked at MCP from 1969 to 1992, serving as a research professor of psychiatry and director of the infant psychiatry section. Parens was a celebrated educator, clinician and author on the topic of parenting. His text *Parenting for Emotional Growth* was published in 1995 and has been adopted by schools around the country and the world.

The Evolution of Professionalism in Healthcare Conference: Improving Interactions to Enhance Care

Professionalism is important in any industry. But those in the medical community know it's essential to providing quality health care. Professional interactions between medical colleagues, as well as between providers and patients, smooth the communication process, build trust and respect, and uphold confidentiality, all of which contribute to quality health care. In addition to its importance for patients, a person's level (or lack thereof) of professionalism could make or break their career, which is why the Academy for Professionalism in Health Care (APHC) held a conference at Drexel University from June 1 to 3, 2022. The goal of the conference was to inform attendees about how to optimize patient care through professionalism education, scholarship, policy and practice in all health-related fields to ensure excellence and patient well-being.

Dennis Novack, MD, a professor of medicine and associate dean of medical education, knew that Drexel University was the obvious choice to host the conference because of the school's commitment to professionalism throughout all four years of the MD curriculum. "The university is a national leader in medical, educational and interprofessional professionalism," notes Novack, who is also the incoming president of the APHC.

Novack and Barbara Lewis, MBA, project director of Professional Formation at the College of Medicine, helped organize the hybrid conference, "The Evolution of Professionalism in Healthcare: Moving Towards an Interprofessional Future | Celebrating 10 Years of APHC." It attracted 243 individuals from 16 countries, with approximately 80 people attending in person. Lori O'Connell, manager of education resources, and her team — Breanna Ruiz, Dave Ross and Steve Levandoski — provided virtual access for more than 160 online attendees.

The positive response to the conference is a testament to the 13 informative oral presentation sessions, eight workshops, three problem-solving sessions, two roundtables, two panels and a debate. Attendees participated in the conference from a variety of countries. "I think the success was partly due to the hybrid nature of the conference," says Novack. "Most people hadn't been to a conference where they sat in a room with people from all over the world, attending virtually in their home countries. I think that was tremendous fun for people. We also had great speakers."

Holly Humphrey, president of the Josiah Macy Foundation, was a keynote speaker. The foundation aims to prepare future health professionals to provide care in the 21st century to a population that is the most diverse in U.S. history and who may live longer than any previous generation, which is fitting since diversity is a central component of professionalism. Health care workers need to know how to work with and interact

with members of a variety of cultures and communities. Part of Drexel's curriculum focuses on teaching students how to handle ethical issues around diversity.

When speaking about the importance of professionalism, Novack references a 2004 paper written by Maxine Papadakis, MD, a professor of medicine, emeritus, at the University of California, San Francisco and a practicing internist at the San Francisco Veterans Administration Medical Center, and colleagues in her department at UCSF. It studied students who were disciplined for lapses in professionalism during medical school. The paper looked at those students 10 years later, comparing them to students who didn't have unprofessionalism citations. The students who were cited were three times more likely to be penalized by their state medical boards and to lose their licenses or have them suspended. In other words, if a student is unprofessional in medical school, there's a good chance they will be unprofessional in practice, and that's going to undermine patient care and potentially lead to the loss of their license. These findings underscore the value of teaching professionalism during medical school and how the concepts must continue into a health care professional's career to ensure optimal patient care.

"The emphasis on professionalism is also in some ways a reaction to the fact that medical education has become very knowledge-based and fact-based," says Novack. "There are so many facts and skills that students have gotten overwhelmed and burnt out. There are studies that show that empathy decreases over the course of medical education. This is the opposite of what we want to happen. To combat this, all students participate in small group discussions about their professional development throughout the year. We found that by the end of the third year, students' empathy was preserved, and their self-reflective abilities had improved."

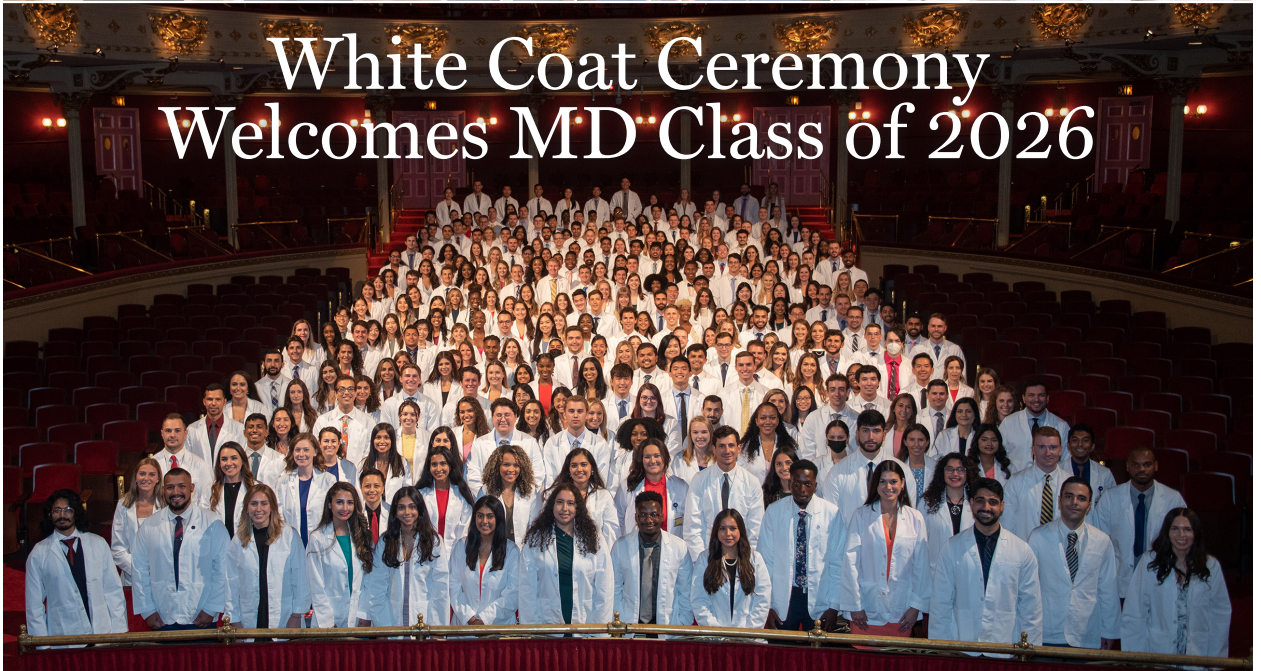
The Evolution of Professionalism in Healthcare is just one part of Drexel's commitment to teaching professionalism, not only as a core part of the MD curriculum, but also to health care providers around the world.

— Paulina Jayne Isaac





White Coat Ceremony Welcomes MD Class of 2026



The MD program class of 2026 gathered at the Academy of Music in Philadelphia on Friday, August 5, for the White Coat Ceremony, a tradition that marks students' entry into medical school and underscores their commitment to the duties and values of the profession. In the nationally recognized ceremony, incoming medical students don their white coats, a symbol of clinical care and compassionate service. They also recite the Physician's Pledge, the contemporary successor to the 2,500-year-old Hippocratic Oath, affirming their commitment to a physician's responsibilities even before their coursework has begun.

Students' families and friends joined College of Medicine faculty members in Philadelphia and online via livestream to celebrate this important step in the future

physicians' medical school journeys. The College's a cappella group, Doctor's Note, also welcomed their new classmates with a performance.

James B. Reilly, MD, associate dean of academic affairs for Allegheny Health Network, a regional medical campus, gave the ceremony's keynote address. Reilly encouraged students to strive for emotional connection rather than perfection. He also reminded students to hold onto a simple message in difficult times. "No matter how you might be made to feel some days, you belong. You belong," Reilly said. "I know you will have doubts. You will feel like you're not ready, like you're not enough. Acknowledge these feelings, then choose to dive in, recognizing that your learning, your growth, the difference you will make, cannot happen in your comfort zone."





Familiar Faces, New Roles

Three longtime members of the College of Medicine faculty and administration have assumed expanded leadership roles.

Annette Gadegbeku, MD, has been appointed associate dean, community health, within the newly formed Office of Community Health & Health Equity at the College of Medicine. In this role, Gadegbeku will lead strategic initiatives to connect community clinicians and organizations — both internal and external to Drexel — to advance community service, education, clinical care and research, while addressing the social determinants of health.

Gadegbeku will organize outreach programs to support the health of the community; facilitate opportunities for staff, students and faculty to extend their efforts outside the College; engage with the College of Medicine service-learning curriculum; and work closely with senior leaders to promote innovation, as well as integrated, collaborative relationships with affiliates and community stakeholders.

The Office of Community Health & Health Equity will support the Drexel Medicine clinics' community outreach, community clinical service and community-based participatory research, as well as the interprofessional schools, departments and training programs affiliated with Drexel University. Gadegbeku will be working across all schools, colleges and departments within the University to further the mission of equitable health care for all.

An associate professor and chief of the Division of Community Health in the Department of Family, Community & Preventive Medicine, Gadegbeku has also been named faculty director of Healing Hurt People, a hospital and community-linked violence intervention program at the Center for Nonviolence and Social Justice, Dornsife School of Public Health. In addition to her longstanding involvement in education and training as faculty advisor for the College's Health Outreach Project (HOP), she has overseen the Drexel mobile COVID-19 testing and vaccination services throughout the pandemic. In her new role as associate dean, she will continue to partner with the Office of Diversity, Equity and Inclusion — where she previously served as assistant dean of community health — to promote urban health equity and advance curricular support and training in diversity, inclusion and anti-racism.

Martin J. Herman, MD, professor of orthopedic surgery and pediatrics, has been appointed interim chair of the Department of Orthopedic Surgery.

Herman began his clinical career in 1996 at St. Christopher's Hospital for Children as an attending physician in the Orthopedic Center for Children, a position he still holds today. He is also the current surgeon-in-chief

and section chief of orthopedic surgery at St. Christopher's.

He is a longtime faculty member of Drexel University College of Medicine and its predecessor institutions, having started in 1997 as an assistant professor of orthopedic surgery and pediatrics. In 2015, he was appointed professor, and became director of the Orthopedic Surgery Residency program, a position he held until 2019.

Since 2006, Herman has been course director for the Orthopedic Surgery In-training Exam Review Course at St. Christopher's. He served for many years as a member of Drexel's Orthopedic Residency Selection Committee and is currently the Orthopedic Surgery Pathway director.

A member of numerous medical societies, Herman has served in many leadership roles; he is the current chair of the American Academy of Pediatrics Section on Orthopedics. He has been involved with the *Journal of Pediatric Orthopedic Surgery* as a manuscript reviewer for many years, and a member of the Editorial Board since 2018.

Herman has published nearly 70 peer-reviewed papers and has been co-editor of four textbooks. He has authored or co-authored 25 book chapters and has presented lectures and workshops at national and international meetings. He has been a visiting professor at prestigious institutions including Cincinnati Children's Hospital, Shriners Hospital-Los Angeles and Yale University.

Nancy Spector, MD, has been named the Betty A. Cohen Chair in Women's Health and appointed executive director of the College of Medicine's Lynn Yeakel Institute for Women's Health and Leadership (IWHL). The Institute was renamed in honor of Lynn Yeakel in spring 2022 at the annual Woman One Award Ceremony in memory of Yeakel as a fitting tribute to her service. Spector has served as interim director of the Lynn Yeakel Institute for Women's Health and Leadership since Yeakel's untimely passing in January.

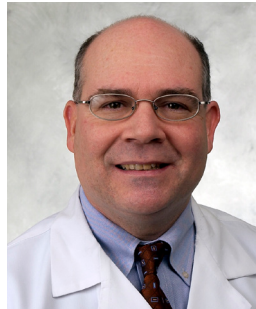
In addition to her new role, Spector will continue to serve as senior vice dean for faculty, professor of pediatrics, and executive director of the Hedwig van Ameringen Executive Leadership in Academic Medicine® (ELAM) program and the new Executive Leadership in Health Care (ELH) program at Drexel. ELAM is the only national longitudinal leadership program for women faculty in

schools of medicine, dentistry, public health and pharmacy. Its nearly 1,300 graduates hold positions at 300 institutions around the country, and 75% of women deans of medical schools are alumnae of ELAM.

Spector's role as executive director of the Lynn Yeakel Institute for Women's Health and Leadership aligns strongly with her national work in women's leadership through ELAM and ELH and with her institutional work within the Office of Faculty to emphasize excellence and equity. This synergistic connection between ELAM, ELH and the Office of Faculty will help to foster the growth and evolution of IWHL.



Gadegbeku



Herman



Spector

Recent Thesis Defenses

We congratulate the following master's and PhD students from the Graduate School of Biomedical Sciences and Professional Studies on the successful defense of their theses.



Phil Clark

Neuroscience PhD Program

Title: Targeting Hypocretin Receptor 1 to Normalize Nucleus Accumbens Dopamine Transmission and Block Incubation of Cocaine Seeking

Advisor: Rodrigo España, PhD



Lilly McQueen

**Microbiology & Immunology
Master's Program**

Title: Cobamide Distribution in Winogradsky Columns Supplemented With Halogenated Environmental Contaminants

Advisor: Joris Beld, PhD

Co-advisor: Amy T. Ma, PhD



Genevieve Curtis

Neuroscience PhD Program

Title: The Role of the Paraventricular Nucleus of the Thalamus and Pituitary Adenylate Cyclase Activating Polypeptide in Binge-type Eating

Advisor: Jessica R. Barson, PhD



Dominic Sales

**Microbiology & Immunology
Master's Program**

Title: Synergism Between Flavonoids and Antiretroviral Drugs Against HTLV-1 via AhR Signaling – Literature Review

Advisor: Pooja Jain, PhD



Silvia Fernandes

Neuroscience PhD Program

Title: Grafting Embryonic Neural Progenitor Cells to Improve Sympathetic Regulation of Cardiac Function After Spinal Cord Injury

Advisor: Shaoping Hou, PhD



Cassandra Spector

**Microbiology & Immunology
PhD Program**

Title: HIV-1 Quasispecies Heterogeneity Mediates Tat Function, Molecular Epistasis and Neuropathogenesis

Advisor: Michael Nonnemacher, PhD



Dillon C. Malloy

Neuroscience PhD Program

Title: Transcutaneous Spinal Cord Stimulation Augments Motor Excitability and Restores Spinal Inhibition and Chloride Homeostasis After Spinal Cord Injury

Advisor: Marie-Pascale Côté, PhD



Will Stump

**Microbiology & Immunology
Master's Program**

Title: Redesign and Evaluation of a *Plasmodium falciparum* Circumsporozoite Protein-based Malaria Vaccine

Advisor: James M. Burns Jr., PhD

Epic Improvements to Care Delivery at Drexel Medicine

In August, the Drexel Medicine clinical practices, including Drexel Internal Medicine, the Partnership Comprehensive Care Practice, the Caring Together Program for women and the Drexel Student Health Center, launched their own MyChart patient portal using Garden Plot, a new offering of Epic's electronic health record (EHR). Garden Plot is for independent medical groups unaffiliated with a larger medical system. Drexel Medicine was one of the first two practice groups to launch Garden Plot.

Early response to MyChart has been overwhelmingly positive. The website that instructs patients on how to enroll saw more than 2,500 visits in the first two months. Of the roughly 2,600 patients seen in Drexel Medicine offices in September, more than half enrolled in the portal. In particular, the Student Health Center is finding patients are enthusiastic about having the option to communicate with providers and view test results online.

A key benefit of MyChart is patients' ability to view their medical records, so it's noteworthy that in the first month,

providers released this information for patient access in the portal within five minutes 100% of the time. In addition to patients being able to see their own records, the information is shared via Care Everywhere, Epic's interoperability platform, so that the health information can be accessible to other participating systems if the patient permits. This facilitates continuity of care between Drexel providers and specialists at other sites.

The Drexel Medicine team's early results were outstanding, with more than 97% of messages sent via the portal within the first month of the system's launch having been answered within two days, and an average response time to patients' inquiries of just a few hours. Patients showed early interest in interacting with their records, with 20% looking at their physician's notes and 15% using the online appointment check-in feature, allowing them to save time at their appointments.

While the new offering is an asset to Drexel Medicine patients and providers, the benefit goes both ways. Epic also looks forward to gaining familiarity with the distinct patient populations served by the Drexel Medicine practices.

Clinical Research Associate Dean Named

Asif M. Ilyas, MD '01, MBA, FACS, has stepped into the newly created position of associate dean of clinical research at Drexel University College of Medicine.

Ilyas is charged with growing clinical research at the College, especially among our regional campuses and clinical affiliates. He will be focused on improving MD student access to research opportunities, increasing faculty engagement with clinical research, and supporting submissions and presentations at local, national and international scientific meetings. He will also encourage publication in peer-reviewed journals and applications for grant funding. The overall mission of this new role is to grow the reputation of the College's clinical research efforts on the regional and national stage.

After earning his medical degree from Drexel in 2001, Ilyas completed residency training in general and orthopedic surgery at Temple, followed by a fellowship in hand, upper extremity and microsurgery at Harvard. He is currently a professor of orthopaedic surgery at Thomas Jefferson University and a surgeon at the Rothman Institute. He also



serves as president of the Rothman Opioid Foundation and is a past president of the Pennsylvania Orthopaedic Society. Ilyas has a history of serving Drexel, as evidenced by his tenure on the College of Medicine's Alumni Association Board of Directors and his mentorship of Drexel medical students for years.

A prolific researcher, Ilyas has been funded by the PA Department of Health, the Appalachian Regional Commission, the Rothman Opioid Foundation and the American Foundation for Surgery of the Hand for projects pertaining to upper extremity surgery, surgical pain management and combatting the opioid crisis. He has co-authored over 200 publications in academic journals and authored or co-authored over 20 book chapters. He is a sought-after speaker on orthopedic injuries, pain management, medical cannabis and wide-awake hand surgery, among many others.

Ilyas holds numerous editorial positions, including as consultant reviewer for *Bone & Joint Surgery* and the *Journal of the American Academy of Orthopaedic Surgeons*. He serves as section editor for the *Journal of Medical Insight*, and most recently has launched the journal *SurgiColl*. Beyond his clinical and teaching roles, Ilyas also serves as the consulting hand surgeon for the Philadelphia Eagles and the Philadelphia 76ers.

LGBTQ+ Health Symposiums Tackle Health Disparities, Culturally Competent Care

This summer, two events offered opportunities for current and future providers to learn best practices for delivering informed, respectful health care to LGBTQ+ patients.

The second annual LGBTQ+ Health Symposium on June 15, organized by the College of Medicine and Tower Health, was virtual and open to the public. The all-day event covered a variety of topics from the basics of sexuality, gender identity and expression to providing culturally sensitive health care to LGBTQ+ patients.

"Society at large has failed the LGBTQ+ population, and it is important that we are deliberate in the correcting of inequalities in our system," said Zachary Winchell, a psychiatry resident at Tower Health – Phoenixville and a symposium organizer. "It was wonderful to be able to approach this important topic through an educational and interesting event."

Tower Health residents worked alongside College of Medicine MD program students and staff members from the Office of Diversity, Equity & Inclusion on the symposium. The event began with a presentation that introduced attendees to the concepts of gender and sexuality, and defined common language and vocabulary.

Building off the morning's first presentation, speakers throughout the day addressed LGBTQ-affirming practices as they applied to such topics as talking with patients of various ages and life experiences about pre-exposure prophylaxis (PrEP), providing culturally sensitive care to LGBTQ+ patients who are refugees, the joys and recovery challenges of gender-affirming surgery, and ways to reduce gynecological health disparities between cisgender

and transgender, nonbinary and gender diverse patients.

Closing out the event, symposium organizer Maryssa Lyons, MD, a psychiatry resident at Tower Health – Brandywine Hospital, noted, "I hope this symposium has given you the resources to be the person some of the most vulnerable people need, from the waiting room to the provider's office."

The MD program class of 2023 gained resources toward the same goal in a student-driven version of the symposium, which helped prepare the medical students to have more respectful patient interactions during clinical rotations. The day-long event on May 15 also began with an introduction to concepts and terminology related to the LGBTQ+ community and health care, before delving into more specific subjects.

"Medical students have wildly different levels of exposure to the LGBTQ+ population," Winchell said. "It is important that everyone gets to a minimum level of competency so that they can give the proper care to any person, regardless of their gender identity or sexuality."

Alexa Profozich, MD program class of 2023, helped organize both symposiums and said the format was the main difference, rather than content. Students took part in case study discussions and could choose between two small-group lessons: a presentation on transgender primary care or one on the demographics of HIV-positive adolescents and PrEP initiation for young people. The event also featured a patient panel of queer individuals sharing their health care experiences.

Profozich expected that this format would benefit students. "It permits more participation and discussion, compared to only didactic lectures. I think it's very beneficial for students to hear clinical experiences that may vary from their own," they said, adding that there are

Innovation Shines at Tower Health Research Day

On October 12, Tower Health hosted its second annual Research Day. The event showcased the recent scholarly activity of fellows, residents and medical students across the health system through poster and podium presentations.

A total of 97 abstracts were submitted for consideration in the categories of basic science research, clinical research, case reports and quality improvement. All submissions were peer reviewed and scored by a committee of teaching and research faculty from Reading Hospital, Drexel University College of Medicine, St. Christopher's Hospital for Children and Caron Treatment Center.

Two College of Medicine students were among the five highest scoring abstracts, which were shared during the podium presentations:

Ben Haslund-Gourley, MD/PhD student in the Microbiology & Immunology program: *Immunoglobulin N-glycosylation Discriminates Acute Lyme Disease From Endemic Healthy Controls and Mimic Diseases – A Novel Diagnostic*

Anna Roble, MD program class of 2023: *Cervical OS Marsupialization in the Initial Management of a Rare Case of Obstructive Uterine Didelphys with Ipsilateral Renal Agenesis*

The other high-scoring abstracts included: Aparna Baranwal, DO, OB/GYN resident, Reading Hospital: *Robot-Assisted vs. Traditional*

Laparoscopic Hysterectomy in Noncancerous Patients: A 5-Year Retrospective Analysis to Compare Intra-Operative, Postoperative Efficacy and Complications

Caroline Browning, DO, chief pediatric emergency medicine fellow, St. Christopher's Hospital for Children: *Use of a QR Code Survey to Improve Fellow Satisfaction With Faculty Member Feedback*

Zohaib Yousaf, MD, MSc, internal medicine resident, Reading Hospital: *Cerebral Phaeohyphomycosis in Liver Transplant Recipient: A Case Report*

The poster presentations highlighted the research of two fellows, 20 residents, and 14 students from Drexel University College of Medicine.

Wei Du, MD, professor and chair of psychiatry, senior vice president of academic affairs, and chief academic officer at Tower Health, said, "At Tower Health we are fortunate to have brilliant fellows, residents and medical students as part of our team. In addition to honing their skills as physicians they conduct research projects, and our annual Research Day allows them to showcase their work to their health system colleagues."

The event also featured a keynote address from Adrian Dobs, MD, MHS, director, Johns Hopkins Clinical Research Network. Dobs discussed current trends in clinical research and the importance of organizing a research network. Charles B. Cairns, MD, Walter H. and Leonore Annenberg Dean, delivered the closing remarks.



Haslund-Gourley



Roble

Partnership Practice Provides Much More Than Medical Care

The Partnership Comprehensive Care Practice offers comprehensive patient services for HIV-positive patients, but their reach extends beyond medical care. Case managers can also assist patients with scheduling specialist appointments as well as connecting them with rental and utility assistance. Now, thanks to a grant funded by Philly AIDS Thrift, the Partnership has been able to assist patients in purchasing much-needed household items like beds, refrigerators or air conditioners.

Samantha Leader, LCSW, notes, "Especially during the pandemic, our staff have seen the need for basic household supplies go up significantly, while the supply for these items has gone down, resulting in greatly inflated pricing. And while prices for many things have increased, most of our patients who live on a limited, fixed income have not seen a comparable increase in their monthly take-home, leaving people to choose only the most important expenses to take care of." Leader goes on to point out that many social service agencies do not offer money for these types of household items.

The Partnership serves a vulnerable population with a wide range of medical issues necessitating household basics like air purifiers to combat severe allergies or refrigerators to store medications that must be kept cold. Since the grant's funding in early March, case managers have assisted 18 patients with obtaining these items.

simple things physicians can do to make LGBTQ+ patients feel welcome in health care settings.

"First and foremost, I think it is important to never assume someone's pronouns regardless of their appearance, especially if a patient has previously identified their pronouns in the electronic medical records," they said. "Additionally, it seems unnecessary to draw attention to a person's queer identity if it is not influencing health care management at the present time."

Zac Nan, MD program class of 2025, expressed hope that current and future physicians left the symposiums with a better understanding of the health disparities LGBTQ+ patients face, as well as greater ability to communicate with those patients respectfully. "All of us will eventually encounter an LGBTQ+ patient," he said. "Through symposiums like this, we can help to reduce health disparities facing the LGBTQ+ community and build trust between providers and our queer patients."

A Warm Woman One Welcome

The College of Medicine welcomed two new Woman One Scholars to the MD class of 2026 this August. These scholarship recipients are talented underrepresented students who are committed to practicing medicine in underserved areas. Learn more about Woman One at drexel.edu/medicine/womanone.

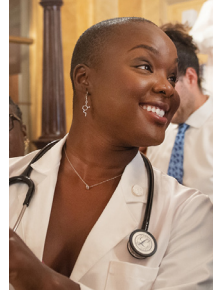


Lauryn Bender

Lauryn Bender was born in Chicago, Illinois, and moved to Chester County, Pennsylvania, when she was 4 years old. She attended the University of Pittsburgh, where she graduated *summa cum laude* with a BS in neuroscience and a minor in chemistry. Bender worked throughout college and volunteered

with several organizations including Girls on the Run,

which provided an opportunity for her to mentor girls ages 8 to 12. Along with work and volunteer experiences, Bender engaged in research with University of Pittsburgh faculty. She has great interest in promoting health equity, and she plans to pursue a path in medicine to bring quality health care to underserved communities.



Bernice Kear

Bernice Kear was born in Monrovia, Liberia, moved to the U.S. as a child and was raised in northern Virginia. She graduated with a BS in biochemistry from the University of Mary Washington, followed by a research fellowship at the National Institutes of Health. She later earned a master's degree in physiology from Georgetown

University and continued in research at the University of Maryland, Baltimore. During her college years, Kear served as a medic in the United States Army Reserve.

Neuroscience Camp 10 Years Later: A Mind Is (Still) a Wonderful Thing to Embrace

The College of Medicine welcomed its 10th cohort of high school sophomores and juniors to its annual Neuroscience Camp in July. Each year, students are selected to learn the fundamental concepts of neuroscience and basic lab techniques during the two-week program. In addition to lectures, the students experience live brain activity recordings and engage in group research projects led by senior neuroscience graduate students.

The camp is led by Jed Shumsky, PhD, professor, and Michael Lane, PhD, associate professor, both in the Department of Neurobiology & Anatomy. This year, 13 high school students from Philadelphia and beyond attended the camp. They enjoyed a field trip to see the brain exhibit at the Franklin Institute and a behind-the-scenes tour of the Academy of Natural Sciences of Drexel University.

"The Neuroscience Camp is designed to expose students to what they might encounter in graduate and medical training. This community outreach aims to spark a love for and interest in neuroscience amongst the students, and that in itself is a worthy cause," says Shumsky.

The camp attendees' research projects allow them to broaden their exposure to neuroscience methodology.

Recent experiences have included culturing neurons that were grown from stem cells, performing physiological studies to record how neural pathways function under normal or pathological conditions, and surgical procedures to study and repair neural tissues. Students use these experiences to build a research project that they can report on at the end of the program. Lane notes, "Being a part of this ongoing neuroscience research provides the participants with an enriched training experience, shedding light on what it's like to be a neuroscientist."

While the camp is clearly an enriching experience for the students, it also benefits the graduate students in the department, who gain additional teaching experience while working with the students. They get the opportunity to demonstrate lab techniques and guide the students through their research projects. Whether they go on to pursue careers in academia or industry, the ability to teach concepts and demonstrate skills will serve them in the future.

Lyandysha Zholudeva, PhD neuroscience '18, who participated in the program for four summers, says, "I think the most rewarding part about the program is seeing the students' excitement about being in the lab and being able to participate in research. Personally, [the camp] has helped me to step

back and put our research into a greater perspective." Students who are interested in attending camp in 2023 can contact Tsz Kwok, EdD, associate director, Graduate College, at tkk22@drexel.edu or 215.571.4526.



A recent group of campers during their annual field trip to the Franklin Institute.

Get to Know...

What is your official title at Drexel?

I just became associate director of the Division of Behavioral Healthcare Education [BHE]. Previously I was manager of technology and online education in the division.

Have you ever wished you could make up a more accurate title for yourself? If so, what would it be?

A good alternate title would be "Whatever Is Needed." I'm a licensed counselor and I was brought on board to teach continuing education, but in our group, whatever need is out there, someone has to do it. That's how I got into the technology and online education piece. Everyone in BHE could honestly have "Whatever Is Needed" as an alternate title.

Explain what you do in under 50 words.

BHE provides continuing education to mental health professionals across the commonwealth. I teach all sorts of mental health topics to folks who need CE credit to maintain licensure. I try to make it fun, rather than just reading them PowerPoint slides. I want to creatively engage people in continuing education.

Who do you interact with most on a daily basis?

Primarily I interact with the BHE team. When I'm teaching, obviously I have lots of contact with health care providers. I also work with people across the university, in particular the IT folks who support our technology needs. They have been just amazing.

What is your typical day like?

There isn't really a typical day for me or anyone in BHE. I often describe my job as: I read, I write and I talk. Sometimes I do those things as part of creating, improving or delivering a course. Sometimes I'm responding to emails or attending Zoom meetings. Sometimes I'm setting up some sort of technology to aid in the delivery of educational materials or to support our team. Every day's a little bit different.

How do you see your work fitting into the big picture of the missions of the College?

What we do at BHE is different from anything else that goes on in the College. But we do a lot of outreach in Pennsylvania to communicate messages of growth and recovery, and overcoming challenges and obstacles. We try to do that in a positive, fun and creative way.

What are your favorite and least favorite tasks?

My favorite moments involve standing in front of a room full of people and talking to them. When I teach, I get to take complex clinical concepts and translate them into digestible information, bringing them to life through storytelling and humor. It is hard to think of a least favorite task — I have a wonderful job. But traveling can be hard. Being away from home, sometimes for as long as a week, is a downside, even when I am attending conferences where I am eager to reconnect with colleagues who I only see once a year.



Chris Owens, MA, LPC, CCTP, C-DBT, Member of MINT
Associate Director, Division of Behavioral Healthcare Education

What is your educational and previous work background? How did those prepare you for what you do now?

I have a master's in community counseling from Ball State University. I am also a licensed professional counselor with certifications as a clinical trauma professional and in dialectical behavior therapy. Before coming to Drexel, I did clinical work with families, children and adolescents, and I did a lot of work on drug and alcohol treatment.

I always knew I wanted to teach, but I needed to have the clinical background to provide meaningful trainings to other providers. I also had a background in improv, standup comedy and talk radio, and teaching is a type of performance, so that has served me well.

When you were working on site, did you bring your own lunch or eat out?

More often than not, I would bring my own lunch. I lost a lot of weight a few years ago, and prior to that I was eating out a lot. The cafeteria food at Friends Hospital, where our office is housed, is unusually excellent for hospital food!

What's one unusual or unexpected item in your home work space or your office?

I have a large framed Dr. Who poster that is painted in an impressionistic style and shows the Tardis exploding, surrounded by swirls of light. I also have a poster that shows the characters from Pixar's "Inside Out" — the emotions are represented inside a silhouette of the main character's head. The text says "Every Day Is Full of Emotions."





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