



## ELAM Prepares Graduates to Lead in Medical Education

For more than 25 years, the Executive Leadership in Academic Medicine® (ELAM) program has been helping women develop the professional and personal skills to lead in academic medicine and health care. ELAM graduates, known as ELUMs, now number more than 1,200. In 2021, 11 of the program's alumnae were appointed deans or interim deans of medical schools. Another was named interim dean in January 2022.

"2021 was a remarkable year for many of our ELAM graduates," noted Nancy Spector, MD, executive director of ELAM and vice dean for faculty at the College of Medicine. With these appointments, "75% of women deans of medical schools are graduates of ELAM," she said.

Three of the newly promoted ELUMs shared their experience with the program and its importance in academic medicine.



Nancy Spector, MD,  
executive director,  
ELAM

Julie Story Byerley, MD, MPH, ELAM '16, was appointed president and dean of Geisinger Commonwealth School of Medicine, and executive vice president and chief academic officer for Geisinger Health, effective January 1, 2022. She came to Geisinger from UNC School of Medicine, where she was vice dean for academic affairs; she had also served as interim dean of the UNC Adams School of Dentistry since January 2021.

Carolyn C. Meltzer, MD, ELAM '03, was the William P. Timmie Professor and Chair of Radiology & Imaging Sciences; executive associate dean, Faculty Academic Advancement, Leadership & Inclusion; and chief diversity officer for Emory University School of Medicine. Starting March 1, 2022, she became dean of the Keck School of Medicine, the May S. and John H. Hooval, MD Chair of Medicine; and professor of radiology at the University of Southern California.

Julie G. Pilitsis, MD, PhD, MBA, ELAM '21, was professor and chair of the Department of Neuroscience and Experimental Therapeutics, and professor and division chief of neurosurgery

in the Department of Neurosurgery at Albany Medical College in New York. She became dean and vice president of medical affairs for the Charles E. Schmidt College of Medicine of Florida Atlantic University on February 14, 2022.

### A Much-Needed Curriculum

When asked what drew her to ELAM's curriculum, Meltzer said, "I was greatly interested in strengthening my leader toolkit." She went on to add that ELAM "opened my eyes to leadership as an area of scholarly work and continuous learning." Byerley was similarly interested in ELAM's "outstanding reputation of preparing women to lead in academic medicine," noting that her leadership skills in the area of finance were particularly strengthened through ELAM. The finance component of the curriculum also made the program especially valuable to Pilitsis, who completed her fellowship during the pandemic. Each class of fellows completes an exercise that involves overhauling the budget for a struggling fictional medical school. She found participating in this project, especially at a time when many schools continue to struggle, both timely and poignant.

• continued on page 4

SPRING 2022

Vol. 9, No. 1



Delaney grant  
furtheres efforts  
toward HIV cure



Pediatric AIDS  
benefit supports  
kids and families



Remembering Lynn  
Yeakel, pioneer in  
gender equity



# Contents

ELAM Prepares Women Leaders ..... 1  
Destination Excellence. .... 3  
Recent Thesis Defenses. .... 5  
CRISPR for CURE ..... 10  
Remembering Lynn Yeakel.....13

## WHAT WE'RE DOING

Activities and accomplishments. .... 6-9

## NEWS & EVENTS

Pediatrics AIDS Benefit Concert,  
Gender Equity Summits ..... 12-14

**Calendar** ..... 7

**In Memoriam** ..... 9

**Get to Know** ..... 15

# pulse

*Pulse*, a publication for students, faculty, staff and alumni of Drexel University College of Medicine, is published four times a year by the Marketing & Communications Department  
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Philadelphia, PA 19102

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# Endings and Beginnings

As we enter spring and the third year of the COVID-19 pandemic, I want to sincerely thank all of you for your flexibility and dedication during the omicron surge. We continue to thrive as a community despite challenges and uncertainty. I am very proud of our College of Medicine.

Spring is a time for milestones. On March 18, our fourth-year medical students celebrated Match Day and learned where they will spend the next phase of their training. Our graduating pre-medical and pre-health program students also shared their energy and



Charles B. Cairns, MD

inspiration at the annual Explore & Serve Day, where they present their research or community service projects that highlight their commitment to serving their community and advancing their fields as they enter the next stage of their careers. This year, on April 25, the Transition to Clinician Ceremony will welcome the MD class of 2024 to the clinical stage of their training, since they missed out on an in-person White Coat Ceremony at the start of their medical school careers due to the pandemic.

Our students continue to do remarkable things, both academically and in their extracurricular endeavors. The student-run Pediatric AIDS Benefit Concert, held on February 12, raised more than \$16,000 for the Dorothy Mann Center for Pediatric and Adolescent HIV at St. Christopher's Hospital for Children. Members of the College of Medicine's Latino Medical Student Association were instrumental in planning the 2022 LMSA National & Regional Conference; the College was also a hosting institution for the event. DUCOM Classical will share their musical talents at their Spring Recital on April 23.

Our community experienced a poignant loss in January with the passing of Lynn Yeakel, the visionary director of the Institute for Women's Health and Leadership and founder of the Woman One and the Walter H. Cohen Shared Leadership Scholarships, as well as the VisionForward initiative. Lynn was a force for change for many decades, the last two of which she spent at Drexel working toward the goal of gender equity and shared leadership between women and men.

The College of Medicine and its predecessor institutions have a long history of embracing diversity and paving the way for change in medicine and biomedical science. We were lucky to have Lynn's determination and dedication as we continued those traditions. Lynn had already been unanimously chosen to receive the 2022 Woman One Award in April, and now the award ceremony will be a celebration of her life and legacy. I encourage you to learn more about Woman One at [drexel.edu/medicine/womanone](http://drexel.edu/medicine/womanone).

This will be a year of exciting progress for our students, faculty and professional staff. The Drexel Health Sciences Building is on target to be ready to house College of Medicine academic and administrative functions in the 2023 academic year. As we plan to come together on the University City Campus, I am also grateful that our sense of community spans a wide geography – to those working remotely outside of Philadelphia, to our four-year regional medical campus in West Reading, and to regional campuses and affiliate sites across Pennsylvania and as far away as California. Our connections remain strong because we share the common goal of excellence in education, innovation and community service.

### Charles B. Cairns, MD

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



## Taking Care of Our Nation's Heroes

As a military physician in the U.S. Navy, Eric Farabaugh, MD '03, is proud of the role he plays in "taking care of our nation's heroes." His wife, Dana Farabaugh, MD '03, wholeheartedly supports his efforts while serving as associate dean of clinical education and professor, obstetrics and gynecology, at the College of Medicine. Recently, we asked them to share their thoughts about serving and supporting a career in military medicine.

**Eric:** I've always felt fascinated and connected with the military. My dad enlisted in the U.S. Navy right after graduating from high school and my aunt was a U.S. Air Force Reserves nurse. They both talked fondly about their military service. I found their stories fascinating and really liked the fact that the military gives you a chance to serve others.

By the time I was in high school, my goal was to become a Navy doctor. A Navy recruiter told me about the Navy Health Professionals Scholarship Program. He explained that, in exchange for four years of military service, the program would pay for my medical school education. So I applied and was accepted. The summer before starting my medical education at Drexel, I completed my six weeks of Naval officer training in Newport, Rhode Island.

After getting married and graduating from Drexel in 2003, Dana and I moved to Virginia, where I began my military service in Portsmouth and she started her residency in obstetrics and gynecology at Eastern Virginia Medical School in nearby Norfolk.

For the first two years, I served as the ship's doctor on an amphibious assault ship carrying U.S. Marines. After that, I served for two years at a Navy clinic in Virginia. Then I left active duty and we moved back to Philadelphia, where I did my emergency medicine residency at Drexel.

I remained in the Navy Reserves and, after completing my residency, I was called back to active duty and mobilized to Kandahar, Afghanistan, for seven months. Having the opportunity to represent our country and take care of our country's heroes on the front lines was a great honor and one of the most rewarding experiences of my career. Caring for people at the neediest times in their lives keeps you humble and helps you understand what's really important in life. In addition, I gained valuable clinical experience treating crush injuries and injuries from explosions. Although we don't encounter that kind of trauma as often here at home, it does happen, and I feel better prepared to deal with it.

I've also been fortunate to have service opportunities at locations all over the world, including the Philippines, Jordan and Australia, which have really broadened my career.

Currently, my Reserves assignment is with the Marine Forces Reserve in New Orleans, where I'm one of the medical directors. My full-time work is in the Emergency Department at the Veterans Affairs Medical Center in Philadelphia. I really like caring for that patient population. They appreciate my military experience, and we often trade stories.

**Dana:** Eric's career in military medicine has made me more aware of the struggles that many people have, especially veterans. This has enabled me to connect with a broader range of patients in a more personal way. Also, as an ob/gyn specialist, it has helped me to relate better to single moms who are juggling a lot of responsibilities in life, just as I often do when Eric is on reserve or active duty.

We have four children — ages 16, 14, 10 and 6 — and life can be pretty chaotic at times. Our kids are involved in a lot of sports and other activities. When Eric is away, it's up to me to make sure they get where they need to go. I manage it with great support from family and friends.

One of our greatest challenges was Eric's deployment to Afghanistan. At that time, we had three very young kids. The youngest had just turned 1 so he was

• continued on page 5



Eric Farabaugh, MD '03, and Dana Farabaugh, MD '03

In the last issue of Pulse, Folasade Kehinde, MD, MPH, was mistakenly identified as an assistant professor of pediatrics. Dr. Kehinde is an associate professor of pediatrics. We apologize for the error.

# ELAM Program

• continued from the cover

## Making Connections

Each ELUM noted that the opportunity for networking, both during and after the fellowship, was a key benefit of ELAM. When asked what was valuable about the program, Meltzer cited “a lifelong network of colleagues and friends from whom I continuously draw wisdom and strength” as an important benefit. Byerley concurred, stating, “The program allowed me the opportunity to share ideas with similarly talented people, and benefit from their feedback and friendship.” Pilitsis added that one of the most important outcomes of her time at ELAM was the opportunity for fellows to make connections to “a rich repository of ELUMs, not just from your class, but with other classes.”

The importance of the program’s Learning Communities (LCs) — the smaller groups of six fellows who are assigned to work through aspects of the program together — was also a common theme for these ELUMs. Meltzer had fond memories of drinking wine and sharing stories with her LC on the rooftop of the learning center during her fellowship year. Byerley recalled commiserating with her LC about often being the youngest person in a room, in addition to being in the minority as a woman. Together the group developed the mantra “You’re not as young as you think you are,” and Byerley still reminds herself of that at times. Pilitsis, having gone through the program entirely online, cited her LC’s choice to meet in person in the Poconos for the final session as one of her favorite memories of her time with ELAM. “We rented an Airbnb and it was super fun to be together after getting to know each other and developing these close bonds, never having met live,” she recounted.

## Making the Professional Personal

According to the ELUMs, the program offered benefits to other areas of their lives. Pilitsis shared that the program provided her with new, lifelong friendships, noting that this was particularly valuable as many relationships outside of her family have been harder to maintain due to the pandemic. She also found the program’s focus on “making sure you’re prioritizing what you want to prioritize, to the degree you want to prioritize it” particularly helpful during the pandemic, when work-life distinctions fell away for many busy professionals. “It helped me set some boundaries,” she said. Byerley agreed that the program helped clarify her own priorities, while illuminating her strengths and weaknesses, adding, “Gaining better insight into who I am has made me a more content person in all facets of my life.”

## The Importance of ELAM

The ELAM program aims to increase the number of women in leadership in academic medicine, and these three former fellows stressed why that matters. Byerley sees her role as a female leader as impactful to both her organization and the communities it serves. She said, “The more diverse our leaders are, the better we will engage with our communities, which are more and more diverse. What I hope to accomplish as a dean is caring for the patients that we serve, but also caring for the faculty, staff and learners.”

Pilitsis noted that in her specialty of neurosurgery, she has always been in the minority, since only about 10% of neurosurgeons in academic medicine are women. She added, however, that “no matter what the specialty, when you get up to professor or chair level, you’re also looking at numbers like that. Realizing all the barriers that exist and learning ways people have gotten around those barriers are really important discussion points.”

Meltzer summed up the importance of the program, stating, “Without critical and equitable representation of women in the highest levels of our field, systemic and deeply embedded institutional bias will continue to suppress progress and innovation across our missions.”



Julie Story Byerley,  
MD, MPH, ELAM '16



Carolyn C. Meltzer,  
MD, ELAM '03



Julie Pilitsis, MD, PhD,  
MBA, ELAM '21

## Looking Back While Moving Ahead

The ELUMs also shared advice that they would have given to their younger selves at the start of their careers. “I would advise my younger self to have greater confidence in my abilities, but I don’t think it would have worked. It takes a community such as ELAM,” said Meltzer.

Pilitsis said that skills that have served her well as a neurosurgeon haven’t always translated as well to leadership: “No one has ever accused me of being patient. The surgeon in me wants to power through and make a decision. That may work in the OR, but it doesn’t necessarily work elsewhere. I have learned that it’s better to consider lots of ideas, find consensus and achieve buy-in to obtain a better product at the end.”

Looking back, Byerley wished she could tell her younger self to broaden the possibilities she considered for her career. “My vision of the future for me early in my career was much narrower. I am thrilled with how my career has developed, but I feel that if I had to do it over, I would encourage my young self to consider a broader range. I might have done things differently to make me better prepared for the possibilities that exist.”

Spector summed up the pride she and the program feel about all of these recent ELUM achievements. “This a wonderful accomplishment for these women and for our program. Institutions around the country have recognized that ELAM graduates have the high-level skills that are necessary to lead through crisis and change. We’re incredibly proud of these women and of all of our graduates and fellows.”



# 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.



## **Erik Carter**

Microbiology & Immunology  
PhD Program

**Title:** Peptide Triazole Inhibitors of HIV-1: Hijackers of Env Metastability – Literature Review

**Advisor:** Irwin Chaiken, PhD



## **Danielle Renée Piazza**

Molecular & Cell Biology  
& Genetics PhD Program

**Title:** Testing the Limits of Natural Transformation: Effects of Donor DNA Size and Genomic Structural Variation on *Haemophilus influenzae* Recombination

**Advisors:** Joshua Chang Mell, PhD, and Ming Xiao, PhD

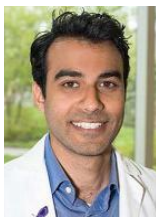


## **Diehl Remedio De Souza**

Molecular & Cell Biology & Genetics MS Program

**Title:** Assessment of Genes in Defective Integrated HIV-1 Provirus Within the PBMC Compartment of Individuals With NeuroHIV

**Advisor:** Michael Nonnemacher, PhD



## **Kristopher S. Raghavan**

Molecular & Cell Biology  
& Genetics PhD Program

**Title:** The Role of NetrinG1 in Stroma-Derived Extracellular Vesicle-Mediated Survival of Pancreatic Ductal Adenocarcinoma Under Nutrient-Deprivation

**Advisor:** Edna Cukierman, PhD



## **Emily Nickoloff-Bybel**

Pharmacology & Physiology  
PhD Program

**Title:** The Impact of Dopamine Receptor Signaling on Myeloid Cell Function: Implications for the Pathogenesis of NeuroHIV

**Advisor:** Peter Gaskill, PhD



## **Neeta Vijay Shadija**

Microbiology & Immunology  
MS Program

**Title:** Characterisation of Vacuolar Type ATPase in the Malaria Parasite *Plasmodium falciparum*

**Advisor:** Hangjun Ke, PhD

## Destination Excellence

• *continued from page 3*

too young to know, but the older two missed him a lot. Skype had just become available, which was great because we were able to see and talk to him every once in a while. I engaged everyone in our kids' lives for support. Even our son's football coach and the kids' teachers knew what was going on, and they all helped us through it.

**Eric:** Being away when I'm on duty is still a challenge. Kids grow up very fast, so you don't want to miss much but, of course, even when I'm just away for the weekend, I miss some of their activities.

### Career Advice

**Eric:** If you're considering a career in military medicine, be flexible. Your career may not follow the path that you expected, but other opportunities may be right around the corner. Make the most of them. Military service will teach you to adapt in rapidly changing environments. For example, two years ago as the COVID pandemic was surging, Dana and I

woke up early one morning to go for a hike. Then the phone rang and it was the Navy calling me back to active duty to help care for COVID patients. I had to be in New York the next day, which also happened to be our 17th wedding anniversary. Needless to say, our plans had to change. I ended up serving in New York for over two months. You need the flexibility to handle those situations.

It's also important to have family buy-in. When service opportunities arise that require travel, I try to tack on a family trip at the end or do something special whenever possible so Dana and the kids don't feel left behind.

**Dana:** As a military spouse, you need to be supportive to your partner in whatever they enjoy. You also need to recognize the importance of your partner's service and be flexible. I encourage people to understand what it means to be associated with the military, because things can change very quickly ... your spouse could be going somewhere tomorrow that you didn't expect. Being able to manage that and surrounding yourself with support will make it easier for you.

–Interview by Nancy West

## WHAT WE'RE DOING



**Barker**

**Jacqueline Barker, PhD**, associate professor, and coinvestigator **Laura Giacometti, PhD**, postdoctoral fellow, both in the Department of Pharmacology & Physiology, received a grant from the W.W. Smith Charitable Trust in support of their project "Ovarian Hormone

Regulation of Drug Seeking and Astrocyte Function in Progressive HIV."



**Karen Berkowitz, MD**, associate professor, Departments of Biochemistry & Molecular Biology and Obstetrics & Gynecology, gave a professional development talk, "Research Mentoring of Medical Students: A Win-Win" at the College of Medicine's Community of

Scholars meeting on October 28, 2021.



**Quinoñes Cardona**



**Cooperberg**

**Vilmaris Quinoñes Cardona, MD**, assistant professor, **David Cooperberg, MD**, associate professor, **Endla Anday, MD**, professor, and **Alison J. Carey, MD**, associate professor, all in the

Department of Pediatrics, published "Eliminating Contamination in Umbilical Cord Blood Culture Sampling for Early-Onset Neonatal Sepsis" in *Frontiers in Pediatrics* on December 20, 2021.



**Anday**



**Carey**

in *Pediatrics* on December 20, 2021.



**Case**

**Kendra Case**, a Neuroscience PhD student, **Denise Garcia, PhD**, associate professor of biology, College of Arts and Sciences, and a colleague at Stanford University published "A Subpopulation of Astrocyte Progenitors Defined by Sonic Hedgehog Signaling" in *Neural Development* in January 2022.



**Ciraku**



**Esquea**

**Lorela Ciraku**, PhD student, and **Emily Esquea**, master's student, both in the Molecular & Cell Biology & Genetics program, and **Mauricio Reginato, PhD**, professor and interim chair,

Department of Biochemistry & Molecular Biology, authored "O-GlcNAcylation Regulation of Cellular Signaling in Cancer," which appeared in the February 2022 issue of *Cellular Signaling*.

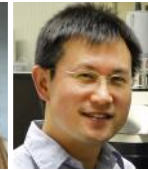


**Reginato**

**Elijah Davis**, a PhD student in the Microbiology & Immunology program, was awarded second place in the Senior Graduate Student category for his poster "Toll Like Receptors Dictate Microglia Responses to Beta-Coronavirus infection" at the 30th annual Philadelphia Infection & Immunity Forum.



**DeFinis**



**Hou**

**Jaclyn DeFinis**, Neuroscience PhD student, and **Shaoping Hou, PhD**, assistant professor of neurobiology and anatomy, authored "Dual-Pseudorabies Viral Tracing for Spinal Tyrosine

Hydroxylase Interneurons Involved in Segmental Micturition Reflex Circuitry in Spinal Cord Injured Rats," which was published in *Neurotrauma Reports* on December 22, 2021.



**Meucci**



**Fatatis**

**Anthony DiNatale**, an MD/PhD candidate in the Pharmacology & Physiology program; **Ramanpreet Kaur, PhD pharmacology and physiology '20**; **Chen Qian, PhD pharmacology**

**and physiology '19**; **Jieyi Zhang**, Pharmacology & Physiology PhD student; **Michael Marchioli**, a BS student in the Biology program in the College of Arts and Sciences; **Maria Castelli, MS drug discovery and development '20**; and **Darin Ipe**, manager of research operations, **Olimpia Meucci, MD, PhD**, professor and chair, and **Alessandro Fatatis, MD, PhD**, all in the Department of Pharmacology & Physiology, published "Subsets of Cancer Cells Expressing CX3CR1 Are Endowed With Metastasis-Initiating Properties and Resistance to Chemotherapy" with colleagues at the Sidney Kimmel Cancer Center of Thomas Jefferson University. The paper appeared in the February 2022 issue of *Oncogene*.



**Gaskill**

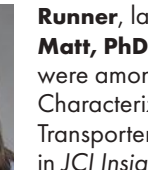


**Nolan**

**Peter Gaskill, PhD**, associate professor of pharmacology and physiology, and members of his laboratory including **Rachel Nolan**, Neuroscience MD/PhD student, **Kaitlyn**



**Runner**



**Runner**, lab manager, and **Stephanie Matt, PhD**, postdoctoral researcher, were among the authors of "Functional Characterization of the Biogenic Amine Transporters on Human Macrophages" in *JCI Insight* on February 22, 2022.



**Giszter**



**Kim**

**Simon Giszter, PhD**, professor, **Taegyo Kim, PhD**, postdoctoral fellow, both in the Department of Neurobiology & Anatomy; **Benjamin Binder Markey, PT, DPT, PhD**, assistant

professor, and **Glenn Williams, PhD**, associate professor, both of the Department of Physical Therapy at the

College of Nursing and Health Professions; and **Arun Ramakrishnan**, director of research labs, College of Nursing and Health Professions, received an \$82,250 Pennsylvania Department of Health CURE grant for their project "Prototype Electrode for Intramuscular Single Unit Myography and Electrodiagnostics."

**Adam Glass**, a student in the Microbiology & Immunology PhD program, was awarded first place in the Junior Graduate Student category for his poster "Investigating Innate Immune Receptors in Macrophage Response to Betacoronavirus Infection" at the 30th annual Philadelphia Infection & Immunity Forum, organized by the Eastern Pennsylvania Chapter of the American Society for Microbiology.



**Meera Nair Harhay, MD, MSCE**, associate professor of medicine, and colleagues at Johns Hopkins and the University of Michigan authored "Pre-kidney Transplant Unintentional Weight Loss Leads to Worse Post-kidney Transplant Outcomes" in *Nephrology Dialysis Transplantation* on September 27, 2021.

**Rebecca Holton**, a Molecularly & Cell Biology & Genetics PhD candidate, presented research from the Berkowitz Lab as a poster and flash talk, "CHTF18 Mediates Meiotic Cohesion in Females," at the 51st annual meeting of the Society for the Study of Reproduction in St. Louis, Missouri, which was held December 13–18, 2021. Holton also received a trainee travel award to attend the meeting.



Mell



Kutzler

**Abdullah Muhammed Izmirly, MS immunology '15, Jennifer Connors, Microbiology & Immunology PhD student, Bhavani Taramangalam, MS microbiology and immunology '21, Sawsan Alturki, MS infectious disease '18, Emma Gordon, MD/PhD student, Joshua Chang Mell, PhD, assistant professor of microbiology and immunology, Gokul Swaminathan, PhD microbiology and immunology '14, Vivin Karthik, MS immunology '18,**



El Haddad

**Michele Kutzler, PhD**, associate dean for faculty and professor of medicine, and microbiology and immunology, **Elias El Haddad, PhD**, professor of medicine, and colleagues at RPM Bioinfo Solutions, University of São Paulo and Emory University School of Medicine authored "Pre-vaccination Frequency of Circulatory Tfh Is Associated With Robust Immune Response to TV003 Dengue Vaccine," which was published in *PLOS Pathogens* January 18, 2022.

# Calendar

## May

- 4 **The Future of mRNA Therapeutics**  
Lecture by Franklin Institute Award Laureates Katalin Karikó, PhD, and Drew Weissman, MD, PhD  
In person: New College Building, Geary Auditorium A  
245 N. 15th Street, Philadelphia  
Virtual: Contact host for Zoom link  
Contact: Noreen Roberston, nmr26@drexel.edu
- 11 **Dr. James A. Batts Jr. Diversity Dinner**  
Germantown Cricket Club  
411 Manheim Street, Philadelphia  
Contact: Bernadette Campoli, bc858@drexel.edu
- 13 **College of Medicine Commencement**  
Kimmel Cultural Campus  
300 North Broad Street, Philadelphia  
Contact: Caroline Bush, cb3576@drexel.edu
- 19–22 **Alumni Weekend**  
Contact: Nikki Bromberg, nlb67@drexel.edu
- 30 **Memorial Day**

## June

- 3 **Faculty Professional Development Day**  
Contact: Caitlin Curcio, cak332@drexel.edu
- 20 **Juneteenth (Observed)**

## July

- 4 **Independence Day**

**Full calendar:** All College of Medicine events are available at [drexel.edu/medicine/news-events/events](https://drexel.edu/medicine/news-events/events).



Tell your colleagues what you're doing.  
Email [CoM\\_Pulse@drexel.edu](mailto:CoM_Pulse@drexel.edu).

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



## WHAT WE'RE DOING



**Khan**



**Jain**

**Julie Joseph**, Microbiology & Immunology PhD student; MD students **Benjamin Rahmani**, **Yonesha Cole**, **Neha Puttagunta** and **Edward Lin**; and **Zafar Khan, PhD**, and

**Pooja Jain, PhD**, both professors in the Department of Microbiology & Immunology, published "Can Soluble Immune Checkpoint Molecules on Exosomes Mediate Inflammation?" in the *Journal of Neuroimmune Pharmacology* on October 25, 2021.

**Douglas Krauth**, a PhD student in the Microbiology & Immunology program, earned an honorable mention in the Senior Graduate Student category for his poster "Characterizing the SARS-CoV-2 Novel Accessory Protein ORF8" at the 30th annual Philadelphia Infection & Immunity Forum.



**Jared Luchetta**, a Pharmacology & Physiology PhD student, was invited to present his research as a part of the 2021-2022 Joint National Institute of Mental Health Center seminar series. His talk was "Examining How CXCL12 Affects Structural Plasticity and Cortical Network Function."

**Teresa LuPone, MS**, a PhD student in the Microbiology & Immunology program, received first place in the Senior Graduate Student category for her poster "Zika Virus Infection Activates Toll Like Receptor 3 in Primary Human Fetal Astrocytes" at the 30th annual Philadelphia Infection & Immunity Forum.



**Stephanie Matt, PhD**, a postdoctoral fellow in the Department of Pharmacology & Physiology, received a Cotswold Foundation postdoctoral fellowship in support of her project "Epigenetic Regulation of Dopamine Induced by Substance Abuse and HIV-Associated Neuroinflammation."



& Behavior.

**Paul McGonigle, PhD**, professor of pharmacology and physiology, was one of the authors of "Peripherally Administered Amylin Inhibits Stress-like Behaviors and Enhances Cognitive Performance," which appeared in the February 1, 2022, issue of *Physiology*



**Nonnemacher**



**Wigdahl**

**Hager Mohamed, PhD microbiology and immunology '21**, postdoctoral fellow; Molecular & Cell Biology & Genetics PhD students **Ted Gurrola** and **Rachel Berman**;

**Mackenzie Collins**, Microbiology & Immunology PhD

student; **Michael Nonnemacher, PhD**, professor of microbiology and immunology; **Brian Wigdahl, PhD**, professor and chair of microbiology and immunology; and a colleague at Temple University published "Targeting CCR5 as a Component of an HIV-1 Therapeutic Strategy" in *Frontiers in Immunology* on January 20, 2022.



**Andréia C.K. Mortensen, PhD**, assistant professor of pharmacology and physiology, was one of the authors of "Role of Glutamate Excitotoxicity and Glutamate Transporter EAAT2 in Epilepsy: Opportunities for Novel Therapeutics Development." The paper was published in the November 2021 issue of *Biochemical Pharmacology*.



**Ole Mortensen, PhD**, associate professor in the Department of Pharmacology & Physiology and director of the Pharmacology & Physiology graduate program, and **Shaili Aggarawal, PhD**, a postdoctoral fellow in Mortensen's laboratory, were two of the authors of "Allosteric Modulator KM822 Attenuates Behavioral Actions of Amphetamine in *Caenorhabditis elegans* Through Interactions With the Dopamine Transporter DAT-1" in the March 2022 issue of *Molecular Pharmacology*.



**Guha**



**Patil**

**Hemalatha Muralidharan, PhD neuroscience '20**, **Shrobona Guha, MS**, Neuroscience PhD student, **Kiran Madugula, PhD microbiology and immunology '21**, **Ankita Patil, PhD neuroscience '21**, postdoctoral researcher, **Sadie Bennison**, Neuroscience PhD student, **Kazuhito Toyooka, PhD**, assistant professor of neurobiology and anatomy, and **Peter W.**



**Bennison**



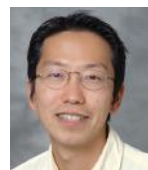
**Toyooka**



**Baas**

"Role of KIFC1 in Neuronal Migration."

**Baas, PhD**, professor of neurobiology and anatomy, published "KIFC1 Regulates the Trajectory of Neuronal Migration" in the *Journal of Neuroscience* on January 18, 2022. Baas also received an \$82,250 Pennsylvania Department of Health CURE grant for his project



**E. Noguchi**

**Eishi Noguchi, PhD**, professor, Department of Biochemistry & Molecular Biology, received a W. W. Smith Charitable Trust grant for his project "Roles of Timeless in Cellular Senescence and Esophageal Carcinogenesis."

Noguchi, **Chiaki Noguchi**, lab manager, **Jasmine Peake, PhD molecular and cell biology and genetics '20**, **Baicheng Lin, PhD molecular and cell biology and genetics '18**, **Amber Theriault, MS cancer biology '17**, **Margaret O'Connor**, an MD/PhD student in the Molecular & Cell Biology & Genetics program,



**Shivani Sheth, MS cancer biology '20**, and colleagues at the University of Pennsylvania and Columbia University published "FANCD2 Limits Acetaldehyde-Induced Genomic Instability During DNA Replication in Esophageal Keratinocytes" in *Molecular Oncology* on November 15, 2021.



**Richa Pande**, a Microbiology & Immunology PhD student, received a Spring 2022 Dean's Fellowship for Excellence in Collaborative or Themed Research. The fellowship includes financial support for six months in the form of a scholarship or stipend, and \$1,500 for supplies and/or attendance at virtual conferences.

**Emanuela Piermarini, PhD**, a research associate II in the Department of Neurobiology & Anatomy, has been awarded a Cotswold Foundation postdoctoral fellowship for her application, "Gene Therapy Approach for SPG4-Based Hereditary Spastic Paraplegia." The fellowship provides \$50,000 for Piermarini's ongoing work in the laboratory of Peter Baas, PhD, professor of neurobiology and anatomy.



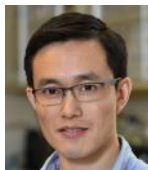
**Priscila Sato, PhD**, assistant professor, Department of Pharmacology & Physiology, received a grant from the W.W. Smith Charitable Trust to support her project "Metabolic Modulation by GLP1 Activation in Human Adult Cardiomyocytes."



**Nancy Spector, MD**, vice dean for faculty, professor of pediatrics and executive director of the Executive Leadership in Academic Medicine program, was interviewed on the podcast "Raise the Line." Her episode was "Bringing Gender Diversity to Medical Education Leadership." She also gave the keynote talk at the 2022 annual meeting of the Council on Resident Education in Obstetrics and Gynecology/Association of Professors of Gynecology and Obstetrics. The meeting was held in Orlando, Florida, March 9-12. Spector's talk was "Building a New Framework for Equity in Ob-Gyn Leadership: Addressing Structural Issues and Changing Culture."



**Nicholas Stachowski**, a fourth-year Neuroscience PhD candidate, was recently awarded the Drexel Dean's Fellowship for Excellence in Collaborative or Themed Research for his project "A Novel Combinatorial Model to Restore Locomotor Function and Explore Underpinning Mechanisms After Spinal Cord Injury."



**Dong Wang, PhD**, assistant professor in the Department of Neurobiology & Anatomy, delivered a talk, "How Are Memories Acquired and Consolidated?" at the neuroscience public lecture series "The Hippocampus: A Brain Region Worth Remembering," which was hosted by the University of Pennsylvania on January 25, 2022. **Candace Rizzi-Wise**, Neuroscience PhD student, and Wang authored "Putting Together Pieces of the Lateral Septum: Multifaceted Functions and Its Neural Pathways," which was published in the November/December 2021 issue of *eNeuro*. **Wenqiang Huang**, research technician, Wang and a colleague at the National Institute on Drug Abuse published "Median Raphe Nonserotonergic Neurons Modulate Hippocampal Theta Oscillations" in the *Journal of Neuroscience* January, 21, 2022.

## In Memoriam

**Mary B. Dratman, MD, WMC '45**, died on January 13, 2022, at the age of 101. She was the founding director of the Division of Endocrinology at Woman's Medical College and became a professor of medicine at Medical College of Pennsylvania in 1978, where she also served as chief of endocrinology. She was a sought-after lecturer and prolific author. Her research mainly focused on the relationship between thyroid hormones and the brain. Many of her papers are housed at Drexel's Legacy Center. She is survived by her son, Ralph, a grandson and great-grandson, and was predeceased by her husband, Mitchell, and daughter, Victoria.

**George "Bud" Gardiner Sr., MD**, died on August 20, 2021. He was 86. Gardiner completed a residency in adult psychiatry at Hahnemann University Hospital and subsequently joined the faculty. He had a passion for recruiting, retaining and mentoring trainees from minority groups that are underrepresented in medicine. He is survived by his wife, Margarita Hauser Gardiner, MD, MCP '85; three children, George Clarke Gardiner Jr., Leah Gardiner Gilliam and Jason Calhoun, and their spouses; and five grandchildren, Christopher and Saoirse Gardiner, Jonah Gilliam, and Jonathan and Jesse Calhoun.

**Louise Greenberg, PhD**, a former faculty member in the Department of Pharmacology of Medical College of Pennsylvania, died on January 12, 2022. She earned a master's and PhD in neuropsychopharmacology from Bryn Mawr College, going on to conduct research that made major contributions to understanding how aging regulates adrenergic receptor responsiveness in the brain, and how these molecular changes can reduce adaptation to stress in aged individuals. She is survived by seven nieces and nephews, and six grand-nieces and grand-nephews. She was predeceased by her husband, Cyrus.



Giszter



Kortagere

**Simon Giszter, PhD**, professor of neurobiology and anatomy, and **Sandhya Kortagere, PhD**, professor of microbiology and

immunology, were selected as Provost Solutions Fellows by the Provost's Office and the Drexel Solutions Institute. Fellows comprise faculty experts from across the University who partner with external organizations to address organizational challenges, build research and scholarship, and create experiential learning opportunities for Drexel students.

# Drexel Team, CRISPR for Cure, Wins Prestigious NIH Grant Working to Cure HIV

A team of scientists in Drexel University College of Medicine's Department of Microbiology & Immunology are one step closer to curing HIV and prolonging the lives of those with the disease.

Brian Wigdahl, PhD, professor and chair, Will Dampier, PhD, assistant professor, and Michael Nonnemacher, PhD, professor, belong to a collaborative led by Kamel Khalili, PhD, and Tricia Burdo, PhD, at Temple University. This "supergroup" consists of investigators from several universities across the country, a research institute and a biotech company all united in their goal of curing HIV. Their project, "CRISPR for Cure," was awarded a National Institutes of Health (NIH) grant as part of the Martin Delaney Collaboratories for HIV Cure Research program.

Ten academic institutions across the country were chosen to receive a portion of the \$53 million in annual funding the NIH provides on behalf of the Delaney program. CRISPR for Cure will receive \$4.8 million each year for five years to further its critical work. Co-funding is also provided by six different NIH institutes.

Thirty-eight million people live with HIV worldwide. It is a unique disease in that, when an individual is infected, they're actually infected with a swarm of genetically related viruses, called quasi-species. These viruses integrate into the host's DNA. The immune system and other pressures eventually eliminate most of the infected cells. But some can evade the immune system indefinitely.

This sets up cellular reservoirs of HIV, some of which

are beyond the reach of any antiviral treatments. These reservoirs are a potential source of infection for the rest of the individual's lifetime.

Current HIV therapies, taken daily, suppress the expansion of these viruses. "These therapies have been highly effective," explains Wigdahl. "More than 30 drugs are available to treat HIV infection." Their development has been "a huge breakthrough" in prolonging the lives of those living with this disease. In less than 40 years, HIV has gone from being a death sentence to one where people age with it.

The caveat, though, as noted by Dampier, is that "people who have HIV have to be on their medication forever." Latent provirus remains in the cells. "As long as you take something to suppress [HIV], you're fine," he says. "But if you stop suppressing it, it comes back. To date, no treatment has been able to eliminate the virus from infected cells."

In light of antiviral therapy's long-term toxicity, cost and stigma, and combined with aging immune systems that function less efficiently, a cure for HIV is necessary. It's the mission of the Delaney grant to support groundbreaking research in this field, such as the work being conducted at Drexel, Temple and other partnering institutions.

The gene-editing technology CRISPR (which stands for clustered regularly interspaced short palindromic repeats) uses a protein called Cas9 and a guide RNA (gRNA) to target the HIV "hiding" in host DNA. The technology locates HIV-infected cells and "snips out" the virus. Other members of the collaborative are working on ways to enhance the immune response. "It's a combination of immunology and excision to achieve a cure," explains Wigdahl. "As long as [CRISPR] can find those cells — this technology can eliminate the viral genome from the infected cells."

"CRISPR fits into a cure strategy niche that no other treatment can fulfill," explains Dampier, because it removes the virus from the host cell.

Recall that HIV consists of thousands of quasi-species and infects 38 million people globally. The Drexel team's critical contribution to the Delaney-funded research is technology that targets all those quasi-species across the greatest number of people — a scope both deep and wide. Dampier and Nonnemacher spearheaded the group who developed the algorithm to identify gRNAs with the greatest potential to target the most quasi-species across the broadest spectrum of individuals.

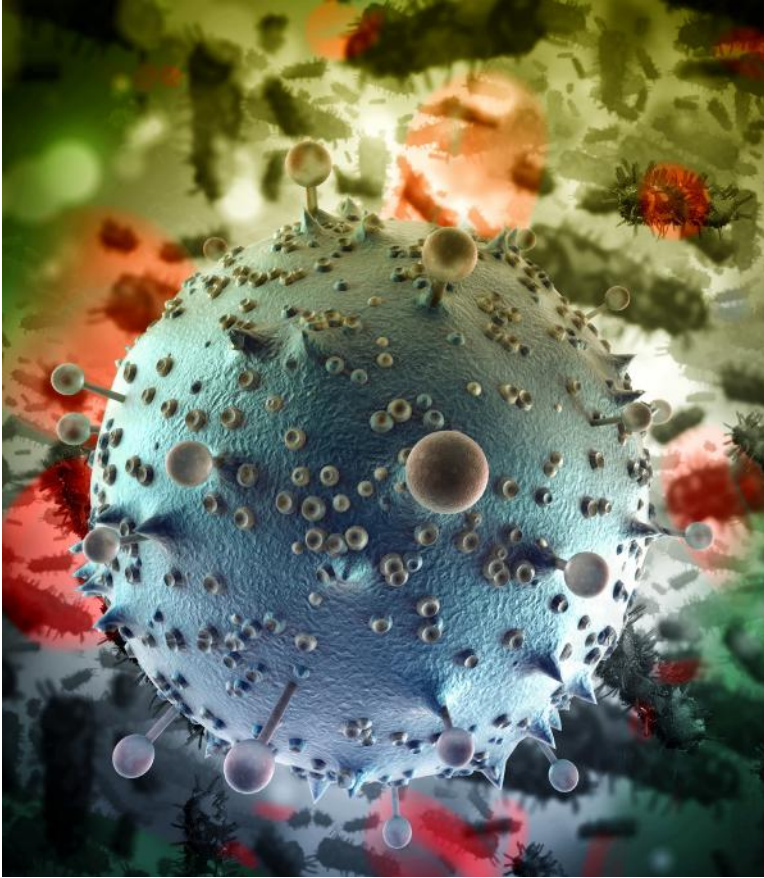
"We make sure CRISPR is effective for everyone and not just a lab strain," Dampier elaborates. Although studying laboratory strains is important, the scientist only sees and works with a small number of variants used to investigate different aspects of the disease. However, because HIV involves a plethora of viruses, it's important to develop CRISPR strategies that will recognize and target the viral swarm. Wigdahl explains that this is why the Drexel researchers focused on this aspect of an HIV cure. "We're trying to make sure the way we target

## What Is CRISPR?

CRISPR is a gene-editing technique whose aim is to cure diseases by repairing genetic defects or altering the genome of disease-causing viruses like HIV. The technique is based on DNA first seen in the immune system of bacteria, which use CRISPR to memorize the DNA of an invading virus and create DNA segments called CRISPR arrays. If the virus returns, the bacteria recognize it and use the CRISPR arrays to produce segments of RNA that target the virus's DNA, using an enzyme to cut it, rendering the virus harmless.

In gene editing, CRISPR-Cas9 (Cas9 is the DNA-cutting enzyme commonly used in the lab) works in a similar way. Researchers manufacture a piece of RNA, called a guide RNA, that is created to target and bind to a specific area of DNA that needs to be edited. The RNA guides Cas9 to the correct place to edit the area of interest. Then the cell's own repair system can take over, or researchers can replace the old segment with DNA customized to fix the area that was causing the problem.





CRISPR is effective for the most people," he says. Dampier emphasizes, "We want to design the therapy so that it's effective for everybody — or nearly everybody — with maximal safety. Then it can be validated on a large scale."

The importance of this contribution is tremendous. Because of the algorithm developed by the Drexel team, scientists can use the same set of gRNAs — the ones with the broadest spectrum of capability to target HIV — on thousands of patients. Wigdahl notes that the College of Medicine's support played an important role in the research he's guided for nearly 20 years.

Drexel University College of Medicine has a long history of treating HIV patients at its Partnership Comprehensive Care Practice, which opened its doors in 1993. When Hahnemann University Hospital closed in 2019, Wigdahl notes that the College of Medicine's senior leadership, especially Dean Charles Cairns, was "instrumental" in keeping the Partnership open under the Drexel umbrella.

This allowed Wigdahl, Nonnemacher and their team to maintain the access to a population of people with HIV they'd relied on for nearly two decades, during which time they sequenced many thousands of quasi-species. This translational research was key to developing the algorithm used in their CRISPR technology.

Other Drexel faculty who made important contributions to this program include Drs. Vanessa Pirrone, Garth

Ehrlich, Joshua Mell, Szofia Zsep (now at the University of Pennsylvania), and more recently, Amy Althoff and Elias El Haddad. Wigdahl emphasizes that the patients enrolled in the large studies at the Partnership played an absolutely critical role as well.

Curing HIV through CRISPR can occur two ways: physically or functionally. With a physical cure, the virus is eliminated and the host is uninfected. A functional cure keeps the virus silent by inactivating components of the provirus genome. With funding provided by the Delaney Grant, both these approaches are being used to achieve a cure.

Gene-editing CRISPR can be introduced into the host cell several ways, including viral vectors, nanoparticles and exosomes. "Many strategies are being developed at the moment," Dampier states. "The CRISPR for Cure collaborative is currently using an adeno-associated viral vector." The gRNA and Cas9 go into this virus, an approach commonly used to treat other diseases, including cancer. It then reaches the cells along the same pathway the virus would travel. The neutered, non-replicating adenovirus does not harm the host. "It delivers the

CRISPR treatment, then degrades and is eliminated from the body," Dampier says.

Wigdahl explains the gRNAs and excision molecules are designed to target viral DNA, not host DNA. This detail creates two levels of selectivity: first, seeking out only cells infected with HIV, and second, targeting only the virus within that cell and not the host cell chromosome. In this manner, healthy cells are protected.

The CRISPR for Cure collaborative began its first human clinical trials in January 2022. Excision BioTherapeutics Inc. has licensed most of the technology from the Temple group and will be licensing with Drexel to use the algorithm as well.

All this research moves scientists and doctors one step closer to curing HIV and prolonging the lives of those with the disease. "CRISPR by itself will not likely get us to a cure, but you combine it with other therapeutic strategies and it may be the magic bullet we are all looking for," Wigdahl says. "We hope it will be another tool in the clinician's hand someday."

The contributions Wigdahl, Dampier and Nonnemacher are making are critical to this groundbreaking HIV research. "I don't think I've ever been this close to doing something that will help a patient in my entire 40-year career," Wigdahl says. "I feel like we're at the cutting edge of impacting patient health. All of us feel that."

— Kate McCorkle

## Pediatric AIDS Benefit Concert

On February 12, 2022, the 29th Annual Drexel University College of Medicine Pediatric AIDS Benefit Concert raised more than \$16,000 for children living with HIV and AIDS. Since its inception, the event has raised more than \$600,000 for the patients of the Dorothy Mann Center for Pediatric and Adolescent HIV at St. Christopher's Hospital for Children.

The concert featured students, faculty and guests providing entertainment with a variety of performances across art forms and musical styles. Live performances were streamed to event attendees at home.

The Dorothy Mann Center for Pediatric and Adolescent HIV at St. Christopher's Hospital for Children is the largest of its kind in the tri-state area. It provides comprehensive care, including social services, to children who are HIV positive and their families.



## Reducing Stigma Around Opioid Use Disorder

Medical students from Drexel University College of Medicine and Cooper Medical School of Rowan University recently published research suggesting that overdose reversal training sessions had a positive impact on participants' view of people with opioid use disorder, in addition to raising their understanding of how to use naloxone.

"In almost every instance, participants increased their desire to empathize and help people after the training," said Ben Haslund-Gourley, MD/PhD candidate, class of 2026.

Haslund-Gourley was one of several College of Medicine students who coauthored the paper. Others included Kyle Samson, MD/PhD class of 2025, and Nathaniel Goss, Dakota Meredith, Andrew Friedman,

and Vishnu K. Kumar, all from the MD program class of 2023. The students' faculty advisor, Annette Gadegbeku, MD, is an associate professor of family, community and preventive medicine and assistant dean of community health within the Office of Diversity, Equity & Inclusion at Drexel.

Student researchers surveyed participants before and after a three-hour naloxone training. The surveys assessed individuals' attitudes toward naloxone use and overdose reversal, their confidence in their ability to use naloxone or safely help someone experiencing an overdose, and their attitudes toward people with opioid use disorder.

As in previous studies, participants' knowledge of facts around naloxone and overdose reversal increased, as did their confidence that they could safely help someone experiencing an overdose. The new research expanded on earlier studies by analyzing participants' attitudes toward



## The Legacy of Lynn Yeakel

Lynn Yeakel, who was director of the Institute for Women's Health and Leadership and held the Betty A. Cohen Chair in Women's Health since 2002, died on January 13, 2022.

For 20 years, Lynn pushed forward the work of the Institute to achieve shared leadership among women and men in all aspects of life, including business, government, voting representation and public service. She founded VisionForward, a national initiative of the Institute to achieve gender equity through women's leadership, with its focus on the year 2020, the 100th anniversary of the 19th Amendment, which granted women the right to vote.

Lynn was integral to the development of the Woman One Award and Scholarship Fund and the D. Walter Cohen Shared Leadership Scholarship for medical students from underrepresented communities. To date, the Institute has raised almost \$3 million in tuition support for 36 medical students.

In addition to scholarship funds, Woman One annually honors a person of exceptional leadership. Last fall, Lynn was unanimously chosen by the selection committee, composed of former honorees, to receive the 2022 Woman One Award, in recognition of her longtime leadership and contributions to the Philadelphia region and for her role in founding the award and scholarship fund program almost two decades ago.

Prior to her work at Drexel, Lynn was a founder of Women's Way, the first and largest women's fundraising coalition in the nation. In 1992, she ran



for the U.S. Senate. She drew national attention in what was called the "Year of the Woman," winning the primary and nearly unseating the longtime incumbent. In 1994, she was appointed by President Clinton to be mid-Atlantic regional director for the U.S. Department of Health and Human Services.

Lynn was a Phi Beta Kappa graduate and former trustee of Randolph-Macon Woman's College and received a Master of Science in Management degree from the American College. She was active for many years in leadership positions for local and national nonprofit organizations, and she received numerous honors and awards for leadership and humanitarian contributions, including the Pennsylvania Citizen Action Award, the Lucretia Mott Award, the Distinguished Daughters of Pennsylvania Award, the John Gardner Lifetime Achievement Award from Common Cause, and the Integrity Award from the Philadelphia chapter of the Public Relations Society of America.

Lynn was the author of two books: *A Will and A Way* (2010) presents insights into the key issues of women's independence based on her own experience and lessons from history, and *Majority Rules: Completing the Journey to Women's Equality* (2020) looks to the past, present and future in making the case that women should have a 50/50 share of leadership positions.

Lynn's legacy as an unrelenting advocate for women's equality will undoubtedly continue at Drexel and beyond. If you would like to make a gift to the Institute for Women's Health and Leadership in honor of Lynn, visit [giving.drexel.edu/yeakel](https://giving.drexel.edu/yeakel).

those with opioid use disorder before and after training. After the training, participants self-reported having a better understanding of opioid use disorder, and seeing beyond stereotypes and preconceived notions.

Study participants included health care providers and trainees of all levels, recovery program providers and members of law enforcement. Because of this, the authors believe the training can be widely applied to help increase overdose reversal success and reduce opioid use disorder stigma. The content of the training sessions was what helped change participants' attitudes about opioid



use disorder. In addition to education about opioids, overdose and reversal with naloxone, the training covered the societal factors that contribute to the opioid epidemic and included testimonials from guest speakers who have lived with opioid use disorder.

The paper was published in the *Harm Reduction Journal* in January 2022. It is accessible to readers for free, thanks to funding support from Charles B. Cairns, MD, the Walter H. and Leonore Annenberg Dean, and senior vice president of

medical affairs, and Drexel University's Office of Research and Innovation.

## Two Summits Highlight Need for Support, Allyship for Women

Two recent events hosted by Drexel and the College of Medicine addressed the need for, and possible paths toward, gender equity, both in academic medicine and in the broader culture.

In December, the Women in Medicine & Science Committee hosted the second annual Women's Leadership Summit in collaboration with the Offices of Faculty, and Diversity, Equity & Inclusion, as well as the Executive Leadership in Academic Medicine (ELAM) program. The event discussed gender equity in medicine and science with an intersectional focus.

The event's three panels coalesced around the theme of allyship. One panel covered strategies women in leadership could use to better support the career advancement and growth of people from communities that have been historically underrepresented in STEM. A second panel showed how men in leadership positions can model allyship to colleagues and mentees, and the third addressed strategies to help scientists from underrepresented groups identify and connect with allies at work.

More than 300 people attended the virtual event, coming from the College of Medicine, its affiliates, and outside institutions like Johns Hopkins, the Mayo Clinic and the National Institutes of Health. The audience included medical students, graduate students and faculty representing all career levels.

In addition to the panels, the summit included the presentation of the WMC/MCP Phyllis Marciano, MD, WMC '60, Woman in Medicine Award, which is given annually to a female physician, scientist or staff member to recognize her leadership, teaching of students, care of patients and status as a role model for women in medicine. The 2021 winner was Barbara Atkinson, MD, founding dean emeritus, UNLV School of Medicine. Atkinson became the Walter H. and Leonore Annenberg Dean at Medical College of Pennsylvania in 1996, having previously served as chair of the Department of Pathology.

When she accepted the award, Atkinson noted, "Allies are really important, probably the most important thing —

and I was so happy to hear that word being used instead of 'mentor,' because it's not just mentors who help. There are so many people who helped me when I was at MCP. It's wonderful to think of all the friends I've had — all the people who've helped me, and all the allies."

VisionForward, a program of the College of Medicine's Institute for Women's Health and Leadership, hosted the first virtual National Caregiving Summit this March. The Institute works to advance gender equity through women's leadership, and VisionForward developed this summit to highlight how caregiving responsibilities have fallen almost entirely upon women throughout U.S. history. This often forces women to sacrifice their own goals and financial security.

The summit began with a panel hosted by Roberta Liebenberg, a senior partner at Fine, Kaplan and Black. Panelists included Fatima Goss Graves, president and CEO of the National Women's Law Center, Jessica Lee, senior staff attorney and Pregnant Scholar Initiative director, Center for WorkLife Law, and Josephine Kalipeni, executive director, Family Values @ Work. The panelists spoke about the challenges women face in balancing work and caregiving, the implicit bias faced by mothers in workplaces, and the ways in which this caregiving burden intersects with other marginalized identities, including race, ethnicity and immigration status. They also highlighted the many ways that COVID-19 amplified the uneven burden of caregiving on women.

The keynote address was given by U.S. Senator Kirsten Gillibrand, who has long been a fierce advocate for paid family leave, affordable child care and fair pay for home care workers. She cited the importance of paid leave in addressing the strain of caregiving. "We know that nearly every single worker will need paid leave at some point in time. But even before COVID, 8 in 10 workers in America didn't have

access to paid leave." She went on to say, "We have to recognize that workers are people first: people who get sick, people who have babies, who adopt children, who need care for their children when they are sick, who have parents who age and die."

The address was followed by a lively Q&A session with Alix Lowe-Server, a senior advisor to Senator Gillibrand on a number of topics including paid family leave and childcare. The event concluded with participants joining virtual discussion rooms to share their thoughts about the content of the summit.



**Barbara Atkinson, MD**



**Senator  
Kirsten Gillibrand**

## Financial Planning Resource

Will you qualify for loan forgiveness? Who will be servicing your loans? How will the pandemic affect your student loans and finances as you enter the next stage of your career or training?

The landscape of student loans has changed a great deal in recent months. The Office of Financial Planning has

created a website to share updates about student loans, including the provisions of the CARES Act, loan servicer changes and the Public Service Loan Forgiveness Program. Visit [bit.ly/ducomfinance](https://bit.ly/ducomfinance) to view the page.

All students and alumni can contact Michael Clancy, MBA, CFP, director of financial planning, for one-on-one counseling and financial planning assistance. He can be reached at 215.991.8595 or [mrc324@drexel.edu](mailto:mrc324@drexel.edu).



# Get to Know...

## Who are you, and what is your official title at Drexel?

My name is Carolynn Rainey, and I am the director of clinic operations and quality at Drexel Medicine's Partnership Comprehensive Care Practice.

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

I have questioned my job title in previous roles, as the title did not always align with the tasks I performed. However, in this role, I find the title to be appropriate.

## Explain what you do in under 50 words.

I am responsible for the day-to-day operations of the Partnership's services and work very closely with our medical director and clinic manager to identify opportunities to improve quality, safety and efficiency in a way that ensures an enhanced experience for our patients, providers and staff.

## Who do you interact with most on a daily basis?

I primarily interact with the Partnership's providers and staff. However, I also interact with the leadership of the other three Drexel Medicine clinical practices and the Drexel Medicine leadership team.

## What is your typical day like?

No day is the same at the Partnership! Some days are slow and allow me the luxury of interacting with our staff and our patients, which I enjoy, while other days are so action-packed that I have little time to gather my thoughts between meetings. I enjoy the fact that no two days are the same; I am not a fan of the mundane and I enjoy being busy.

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

As a clinic leader, the work I do ensures the delivery of quality, patient-centered health care, which directly aligns with the missions of both Drexel University College of Medicine and Drexel Medicine.

## What are your favorite and least favorite tasks?

My favorite tasks involve partnering with staff to improve or enhance the clinic's services and workflows, which oftentimes includes mentoring and/or coaching staff to be their best selves. I only have one least favorite task, and that involves having difficult conversations. I don't shy away from them, but I would much rather not have to have them.

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

I earned a BS in communications and applied technology and an MS in adult education and organizational development — both at Drexel University, and both while working full time. I began my career in the private sector, where I worked for IBM for several years, tackling roles from customer support to operations management. Later, I transitioned into the health care arena, where I served in roles from administrative to clinical management, and where I learned that my passion lies in performance improvement! Both my educational and work experiences have been colorful and have provided me with a wealth of knowledge that helped prepare me for the role in which I now serve.

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

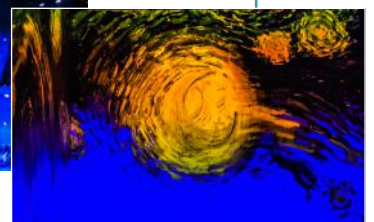
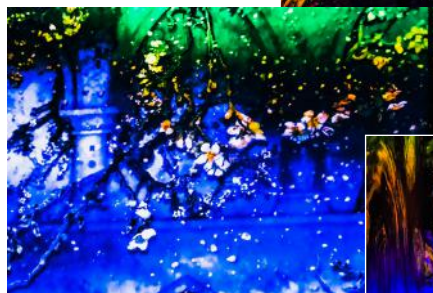
When you are in health care, you are considered "essential," and don't always have the luxury of working remotely. Most days I bring lunch, but there are days when I venture out to grab a bite.

## What's one unusual or unexpected item in your office?

Photography is a pastime of mine, and while attending the Van Gogh immersive experience when it was in Philadelphia, I had the opportunity to take pictures during the light show. The photographs are of images as they were transforming from one thing to another, and the colors are amazing! I just had the photographs developed and am planning to hang them on the wall in my office. I expect that they will be a conversation starter for sure!



**Carolynn Rainey, MS**  
Director of Clinic  
Operations and Quality





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# Conversations That Matter



The Office of Diversity, Equity & Inclusion has launched a podcast, "Conversations That Matter," hosted by Senior Associate Dean Leon McCrea II, MD, MPH. In each episode, he interviews members of the College of Medicine community about their lives, their professional journeys, and their thoughts on diversity in the workplace and education.

Learn more at <https://bit.ly/3AxL4QJ>.