VOL. 5, NO. 2 SPRING/SUMMER 2019

DREXEL UNIVERSITY

College of Medicine

ALUMNI MAGAZINE

HIV: WHAT'S NEXT

Adopt-a-Doc: Funding the Future

Madeleine L. Long, MD, MCP ’80, keeps one foot in the present and one in the future. An internist retired from practice, Dr. Long actively pursues her interests in holistic health, nutrition and alternative medicine. She also takes a keen interest in current students at the College of Medicine.

That’s why she likes the Adopt-a-Doc concept. It’s a unique opportunity to give support to one student through all four years of medical school.

Dr. Long and her student, Elizabeth Walton, Class of 2022, met in person at the White Coat Ceremony. Elizabeth thinks the Adopt-a-Doc program is wonderful. “And I am very lucky to have been paired with Dr. Long.”

The idea is simple:

- Commit $5,000 x 4 years = $20,000
- One medical student receives a $5,000 scholarship each year

The impact:

- An immediate benefit to the medical student
- A chance to know your student and see firsthand the difference your gift will make

Madeleine L. Long, MD, MCP ’80, gave her “adoptee,” Elizabeth Walton, a treasured chair bearing the seal of the Woman’s Medical College of Pennsylvania.

To **Adopt-a-Doc** or inquire about another **type of gift**, contact
Andrea Pesce, Assistant Vice President, Development 215.762.2206 or adp77@drexel.edu

drexel.edu/medicine/alumni/giving

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ON THE COVER
A human white blood cell (blue) under attack by HIV (yellow)

Photo: NIH/NIAID

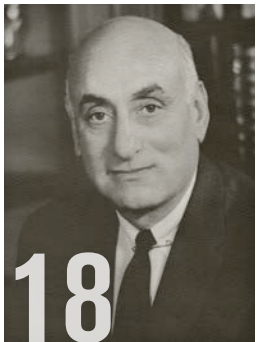
FEATURED

ALUMNI PROFILE

Clifford C. Hudis, MD, MCP '83, followed a fairly conventional path in academic medicine until he took an unusual turn. He never loses sight of his primary calling, but fresh challenges make it fun.

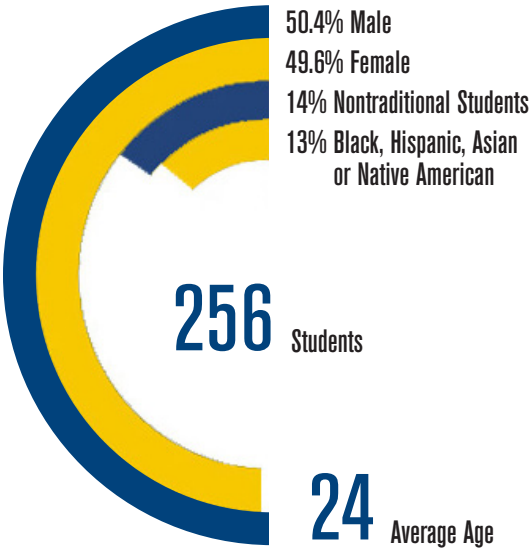
ARTICLES

DEPARTMENTS



Philanthropist and Hahnemann trustee Myer Feinstein gave generously to fund a physician practice building. After his death, the clinic was dedicated to him.

MD Class of 2022 Demographics



1 in 4 U.S. students applying to medical school applied to Drexel's College of Medicine

The College of Medicine is currently educating **1 in 83** medical students in the U.S.

Research Awards

$47.5 million in research awards to the College of Medicine in FY 2018

↑ **22%** increase over FY 2017

→ **32%** of total research awards to Drexel of $148.9 million

Wonderful U

Classified in **R1: Doctoral Universities: Very High Research Activity**
— Carnegie Classification of Institutions of Higher Education

Top 25 STEM Colleges 2018 — Forbes

Top U.S. Colleges & Universities — The Wall Street Journal/Times Higher Education Rankings
74 out of **968** four-year schools, **36** among private universities

QUESTIONS? | What would you like to know about the College of Medicine or Drexel in 2019? Email: medical.alumni@drexel.edu.

Dear Alumni and Colleagues,

We are in our 20th year since Drexel assumed management of the College of Medicine and subsequently incorporated it into the University. The medical school is doing wonderfully well. We graduate remarkable human beings with a myriad of skills and personal characteristics that will make them extremely successful and well regarded in their future careers.

We established the Graduate School of Biomedical Sciences and Professional Studies some six years ago, and it has been a source of great satisfaction to see its growth and to know that our outstanding master's and PhD graduates are making their mark in research laboratories, industry, and other health- and science-related activities.

I have interacted with many alumni, of our predecessor schools and Drexel College of Medicine, and I am constantly impressed by their accomplishments and by their continued commitment to serving the public, patients and families. They are the true heirs to the principles that started our heritage medical schools over 170 years ago.

One of the highlights of my tenure as dean is our new relationship with Tower Health, as we collaborate to establish the first four-year regional medical campus in the history of our school. This will extend our reach into Berks County and the surrounding area, helping to create opportunities for education and research, and in due time serving the public through graduates who settle there. We are elated by the reception from the community and by our cultural congruence with the health system's leaders.

I am grateful for the time that I have worked with my staff and the faculty. The students have been a source of inspiration all day long. And the support of alumni has been crucial — I am thankful for their input and encouragement; for how they help to relieve the burden of student debt by providing wonderful scholarship opportunities; for their mentoring of students; and for their sponsorship of many other activities within the school.

I've also been gratified by the tremendous support that the leadership of the University, embodied in President Fry and his team, has given and continues to give to the medical school, which bodes tremendously well for the future.

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

HERE WE GROW:

A NEW REGIONAL CAMPUS

A view of West Reading showing the bell tower at Reading Hospital

At the signing: Drexel President John Fry, Tower Health President & CEO Clint Matthews, Dean Daniel V. Schidlow, MD

The College of Medicine will gain a four-year regional medical campus in West Reading near Reading Hospital thanks to a 20-year academic affiliation agreement signed by Drexel University and Tower Health. The collaboration between the two institutions was celebrated in a signing ceremony at the end of February, after it received the approval of the Liaison Committee on Medical Education.

The affiliation with Tower Health is unique because students will be able to fulfill all four years of their medical education at the campus, including the basic science curriculum. (Generally, the term "regional medical campus" refers to a center providing all clinical rotations.) This structure will allow the College of Medicine to increase its overall enrollment, at a time when the Association of American Medical Colleges, among other sources, continues to predict a shortage of up to 100,000 physicians by 2030. There is also a push to increase medical coverage in rural and underserved areas.

Not only will the College of Medicine expand its reach, but the school and its students will also benefit from the relationship with Tower Health, a strong regional health system comprising six hospitals and dozens of other clinical facilities. Reading Hospital, the largest hospital between Philadelphia and Pittsburgh, is the system's flagship.

The hospital already has a presence in medical education, offering medical student rotations and sponsoring several accredited residency programs, and this initiative will further its standing as an academic medical center. "This is an exciting step in the evolution of our academic mission," says Tower Health's president and CEO Clint Matthews. "Our affiliation with Drexel will help us address projected physician shortages in our region, bring improved access and services to our patients and provide significant economic benefit to the entire Reading area."

The new regional campus is expected to create jobs for physicians, educators and other health professionals in a part of the state that has an increased demand for highly trained physicians.

DESIGN FOR MEDICAL EDUCATION

Construction plans are underway. Tower Health signed a memorandum of understanding with Equus Capital Partners, Ltd., last October for the campus to be part of The Knitting Mills redevelopment site, formerly home to the VF Outlet Center retail complex. A state-of-the-art building is slated for the property, which is about half a mile from Reading Hospital. Tower Health has selected a top-ranked architectural firm, The S/L/A/M Collaborative, which specializes in higher education projects, to design the facility.

When it opens, the new campus will welcome a class of approximately 40 first-year medical students. Students will have clinical rotations at Reading Hospital and its award-winning Reading HealthPlex for Advanced Surgical & Patient Care, opened in 2016, one of the most technologically advanced health care centers in the region.

Reading Hospital is a Magnet Recognized acute-care facility and has been named one of the top 100 hospitals in the country, in addition to being admired as one of the most wired and greenest. The emergency department is the busiest in Pennsylvania, with 133,000 visits a year. In 2017, Reading Hospital delivered 3,500 babies, provided more than 750,000 outpatient services and oversaw 33,000 inpatient admissions. As a hub for technologically advanced medical care, the hospital is also a state leader in surgical volume, with more than 19,000 annual procedures.

THE LARGER CONTEXT

For medical students — and faculty — the new regional campus presents the chance to study and work in a thriving, well-located area. The borough of West Reading (population approximately 4,200) has a walkable downtown with shops, restaurants and cultural venues. Nearby Reading hosts the Berks Jazz Festival every year and welcomes visitors to the Santander Performing Arts Center. Reading is also a minor-league sports mecca with its own hockey, baseball and arena football teams. The surrounding area offers much for outdoor enthusiasts, including French Creek State Park, Hawk Mountain Sanctuary and Crystal Cave Park.

In the bigger picture, this addition brings together two historic organizations that have successfully evolved into the present moment with technological advances in education, research and clinical care. Like the College of Medicine, Tower Health has built a state-of-the-art institution on the foundations of a historic legacy. Reading Hospital was born in 1867 as the Reading Dispensary, while the College of Medicine's earlier incarnations, Hahnemann Medical College and Woman's Medical College of Pennsylvania, were founded in 1848 and 1850, respectively.

"We are very excited about this new collaboration, which offers our students a great opportunity to train with excellent physicians at a top-quality facility," says Drexel College of Medicine Dean Daniel V. Schidlow, MD. "The College of Medicine has a heritage of innovation and inclusiveness. This unique collaboration with Tower Health, a strong regional health system, is a wonderful addition to our legacy."

Reading Hospital's 150th anniversary gala: President Fry; Reading Hospital President & CEO William Jennings; Tower Health's President & CEO Clint Matthews; Dean Schidlow; Associate Dean Linda Berardi-Demo, EdD; Senior Vice Dean Valerie Weber, MD; Tower Health EVP Dan Ahern; Drexel Interim Co-CFO Tony Esposito; Tower Health EVP & CFO Gary Conner

Clifford A. Hudis, MD: The Bigger Vision

Though Clifford A. Hudis knew from a young age that he would practice medicine, he could not have predicted that he would one day oversee the leading medical society for oncology professionals. As the chief executive officer of the American Society of Clinical Oncology (ASCO), he now focuses on improving professional education, cancer policy, and quality for the organization's 45,000 members — essentially shaping the future of his field.

Dr. Hudis grew up in Northeast Philadelphia in what he describes as a middle-class environment. His parents supported his early interest in math and science, and by eighth grade, he was participating in a summer science program at Hahnemann University, working on earthworm muscle biology.

A few years later, he applied to Lehigh University's six-year BA/MD program with the Medical College of Pennsylvania and was admitted. After two years at Lehigh, when he should have been a junior in college, Hudis left Bethlehem for East Falls and commenced medical school at the age of 20.

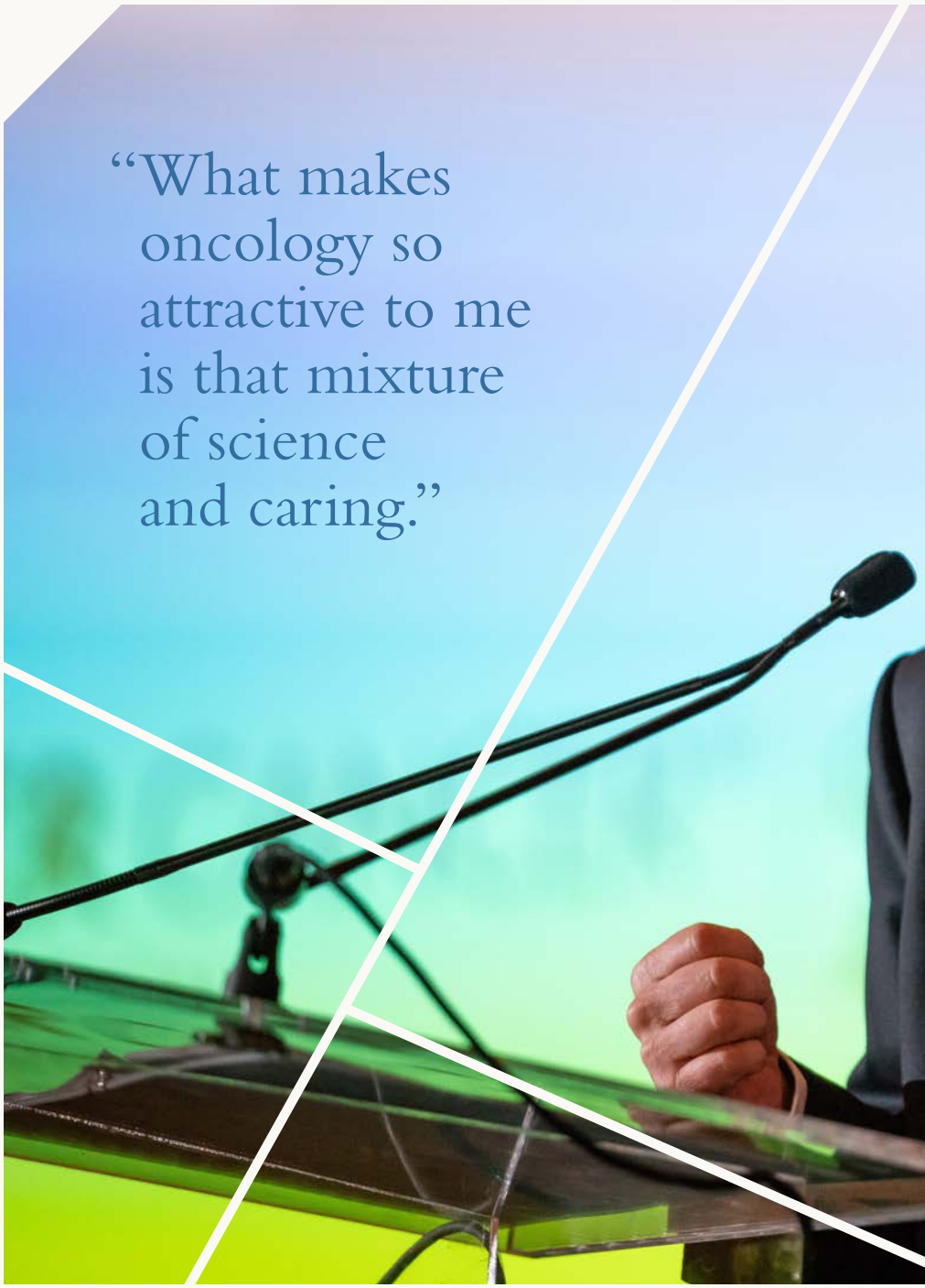
When he graduated, he stayed at MCP and completed the Internal Medicine Residency program, ultimately becoming the chief medical resident. That meant that he worked not only at MCP Hospital on Henry Avenue but also at the Philadelphia VA and several community hospitals. He had become interested in oncology, and during this time, he was lucky to encounter important mentors who gave his career focus.

Making His Way

"I ended up in oncology because of Drs. Roz Joseph and Manny Besa, who were two of the staff oncologists at MCP when I was a medical resident," he says.

Hudis applied for a fellowship at Memorial Sloan Kettering Cancer Center, which he viewed as the best place for him to train, and soon found his calling in the breast cancer clinic.

"What makes oncology so attractive to me is that mixture of science and caring. I don't want to suggest that's not true in other fields, but at least in my experience, there can be poignant, rewarding and life-changing interactions in cancer. It satisfied my desire to work in an area of care that was evolving based on evidence and improving based on technology, while helping people confronting what were always perceived as serious problems."



Eventually, Hudis became chief of the breast medicine service at Memorial Sloan Kettering, a title he held for 18 years. While there, he was also a professor of medicine at the Weill Medical College of Cornell University. In this role he helped develop more effective treatments for all stages of breast cancer while also exploring novel prevention opportunities. He and his team incorporated targeted biologics and small-molecule inhibitors that established several widely used standard adjuvant regimens for high-risk and HER2-positive breast cancer. Later, with multi-institutional collaborators, he focused on the connections between inflammation, obesity and cancer.

To Lead and Serve

During his years in practice and research, Hudis became very involved in ASCO, first as a member, serving on several committees, and then as an elected director and treasurer. After his term as treasurer ended, he was elected president.

In 2016, Hudis was offered the opportunity to take a very unconventional step — moving from peer-elected leadership to hired staff. Yet in many ways this step was a logical extension of the work he'd been doing on the board and, indeed, all along.

"What I've come to love about my role is developing vision and clarity around issues in oncology. At a mature organization like ASCO, the real strategy is set by the board. Our board's job is to know the field, to stay at the highest level, to continually evaluate and map the strategy that the organization must pursue to achieve its mission, and then to charge me with executing that. Of course, it goes two ways. I share my vision and opinions as to how the organization should proceed."

Hudis has particularly enjoyed the fresh challenges of the role. Learning new aspects of leadership and management at this stage of his career has been fun, he says.

"I'm going to be 60 in a couple of months, and the opportunity to contribute to our profession through this role is unique," he says. "Few settings provide these levels of responsibility and authority, autonomy and accountability."

Over the course of his career, Hudis has stayed in close contact with his alma mater, coming back to visit East Falls and to give grand rounds about his breast cancer research. In 2018, he received the Alumni Association's Lifetime Achievement Award in recognition of his professional accomplishments and stature, and his lasting contributions to his field.

"I have a great affection for MCP, dating to when I was a medical student there. Its rich history as, essentially, the place where American women in medicine got their start is something that should be cherished," he says. "I've sent students to apply as medical school candidates over the years and that's been fun to watch. I've tracked the various interesting developments, the mergers, and the transition to Drexel. And I've been profoundly honored to come back."

At heart he is a clinician, and Hudis continues to practice, albeit in a very limited way. Because of the time constraints of his job with ASCO, he explains, he is not in a position to take care of people with acute illness, so he sees a small number of very stable low-risk patients with breast cancer, who are receiving no more than endocrine (hormone) therapies. "Generally, my patients come to talk about side effects of oral therapies and the long-term consequences of treatment; we're not usually dealing with emergencies or progression of their disease."

Remember the Privilege

Hudis points out that there are not many jobs like his, and in fact a good number of medical societies are run by management professionals, not physicians. Yet his career trajectory has been uniquely well matched to his passions, interests and discoveries. That's why he encourages young people interested in medicine to look beyond the seemingly mundane day-to-day tasks of the work and see the bigger vision of their calling.

"It's a privilege to be able to spend a life in medicine, but it requires perseverance. Yes, the electronic systems are very difficult to use, and yes, we spend a lot of time on things that we shouldn't have to, but in the end, it's a sacred responsibility to be allowed into the lives of patients and families who are anxious, if not scared. We guide them through these rocky times and, in many cases, help them come out the other side healthier and happy. And when it doesn't go well, we ease their suffering. This should be inspiring for every generation of physicians, and to support them, my never-ending quest at ASCO is to empower professionally fulfilled doctors to deliver the highest quality care to their patients."

Photo: Dr. Hudis at the 2018 ASCO annual meeting

Biomedical Engineers in the Clinic

Ellen Garven spent a lot of time looking over shoulders at Hahnemann University Hospital last year.

That's because the PhD student in Drexel's School of Biomedical Engineering, Science and Health Systems chose to take BMES-596 — a clinical practicum in which biomedical engineering students can observe basic operative procedures and see the role biomedical engineers can play in improving surgical practice.

"Walking into the OR for the first time was nerve-wracking," she says. "Was I going to get grossed out and leave the room?" But that didn't happen. Instead, Garven says, she learned that "observing and working with surgeons to develop better tools is something I would enjoy doing."

Garven also saw a lot of gruesome pictures at 8 a.m. That's because the lecture portion of the class, taught by David Stein, MD, chair of surgery in the College of Medicine, introduces the biomedical students to the variety of surgical procedures and best practices they will come across in their observations.

"It's very nice to study something theoretically, but without practical experience, it's harder to learn," Stein says of the class. "This is a way, in a structured environment, where they can learn some of the basics about surgical care and the surgical specialties, but also get their hands wet on what it's like to be in an operating room."

The culmination of the class is a project in which each student presents an idea for a new biomedical device that solves a problem they witnessed during their observations. A panel of College of Medicine faculty, including the Department of Surgery's two biomedical engineers, provides feedback.

Garven says she found it funny when she saw an article promoting "hands-on learning" in another biomedical engineering program, but it was just something simulated in a classroom. "It was very not real-world," she says. "It's nothing compared to actually going and seeing it being done."

The Tincture: Tending Heart and Soul

Ria Mulherkar, editor-in-chief of *The Tincture,* a student-run art and literary journal, writes, "The daily business of medicine often leaves us encumbered with facts, thoughts, details. It keeps us ever occupied … In this fury of knowledge and reason, something vital often slips away — something that keeps us human.

"*The Tincture* was created so that we as medical students could stay in touch with that something human. It is a way of tending to the heart and soul while our learned minds continue to grow."

The 2018 issue, the third in this annual series, is filled with art in many forms, all generated by the very talented student body. Read in magazine format at issuu.com/thetincture/docs/tincture2018contentdraft4 or visit tincturemagazine.com.

Meet Our Chairs

New on the web: Meet the chairs of the College of Medicine's four basic science and 17 clinical departments. Scroll through brief bios of this distinguished group, or link to their full profiles to see other accomplishments. Six department chairs are alumni: Drs. Richard Hamilton (Emergency Medicine) and Owen Montgomery (Ob/Gyn) earned their medical degrees from Hahnemann; Lydia Komarnicky, MD (Radiation Oncology), from MCP; and Drs. Peter Gliebus (Neurology), Michael Green (Anesthesiology) and Wei Du (Psychiatry) completed Drexel/Hahnemann residencies. Visit bit.ly/ducomchairs/.

Take That Back!

More than 18,000 scientific papers and conference presentations have been retracted since the 1970s, according to an industry blog called Retraction Watch. Now, with the recent debut of a searchable online database compiled by RW, information on those retractions is available with the click of a mouse.

Each title is listed with author, publisher, subject, dates of publication and retraction, and country of origin. Perhaps most important, each listing also includes the impetus for the retraction — more than half are the result of fabrication, falsification or plagiarism. Another 10 percent result from other unethical behaviors. Nearly 40 percent arise from honest errors, problems with reproducibility or other unintentional issues.

In an analysis of the data, *Science* magazine noted that the number of retractions has risen substantially in recent years, from fewer than 100 per year before 2000 to nearly 1,000 in 2014. Still, the rate of retraction is relatively low, about four in 10,000 papers. And much of the increase in numbers appears to reflect improved oversight at a growing number of journals.

Interestingly, individual bad actors account for a disproportionate number of retractions. Just 500 of more than 30,000 authors and co-authors named in the database — less than 1.7 percent — account for about one-quarter of the 10,500 retractions that *Science* analyzed. And 100 of those authors were responsible for 13 or more retractions each. *Science* notes: "Those withdrawals are mostly due to deliberate misconduct, not errors."

Retraction Watch was founded by the journalists Ivan Oransky and Adam Marcus. They have received funding from multiple sources, most notably the MacArthur Foundation and the Arnold Foundation.

Smart Devices Telling Tales?

Most of us have learned to accept that we are targeted by advertisers based on our online and other behaviors. Now, thanks to smart thermometers, your ZIP code can be targeted based on your health.

A company called Kinsa, founded by serial philanthropist Inder Singh, has developed internet-connected thermometers that sync to a phone app, allowing users to track their fevers and symptoms. The company aggregates deidentified data from the apps — geocoded by GPS or IP address — and uses it to track the spread of, say, influenza. The data can be valuable for marketing and could prove valuable for public health.

For example, Clorox has licensed Kinsa data to identify ZIP codes around the country where fevers are spiking. The company then directs more digital ads for its disinfectant wipes to those areas. Other companies have used the data to keep retailers' shelves stocked with flu-related products in high-fever communities.

Meanwhile, according to a study published in *Clinical Infectious Diseases* that combined Kinsa data with data from the CDC, smart thermometers have the potential to offer public health benefits. The study found that "thermometer readings were highly correlated with national influenza-like illness (ILI) activity ($r > 0.95$) and activity patterns across regions and age groups. Thermometer readings also significantly improved forecasts of ILI activity in real time and up to 3 weeks in advance."

As the so-called "internet of things" expands into more and more corners of people's lives, some have voiced privacy concerns — perhaps with good reason. Amazon was granted a patent last fall for technology that will enable its Echo device to detect coughing or sniffling from voice input and respond by recommending cough drops or chicken soup. Other patents submitted by Amazon would result in Alexa making product suggestions based on keywords in people's conversations. Based on recurring anecdotes, some people believe their devices are already eavesdropping on them.

A Woman's Place

Tweet from the Laboratory of Jessica Barson, PhD: I'm pretty sure this has been said before, but can we all just agree, when writing letters of recommendation for women candidates, not to use words like "pleasant" and "agreeable"? It really just sounds like the writer is trying to say "they know their place."

Back Story: Barson, an assistant professor of neurobiology and anatomy, was reading through materials for graduate school applications in advance of meeting the candidates. More than one recommendation letter described a female applicant in those terms. "I never saw those words used in letters for male applicants," Barson says. "Of course, I would prefer not to work with someone who is unpleasant or disagreeable, but this should not affect my view of them as a scientist."

TIME'S UP HEALTHCARE

The College of Medicine has joined a network of leaders organizing across the health care industry to create safe, fair and dignified workplaces for women. Time's Up Healthcare aims to drive new policies that result in more balanced, diverse and accountable leadership; address workplace discrimination, harassment and abuse; and create equitable work cultures within all facets of the health care industry.

Inspired by Time's Up, the organization launched last year by women in the entertainment industry, and galvanized by data on gender inequities in health care careers and the entrenched culture of harassment, an energized group of women came together to form Time's Up Healthcare. By the time the initiative was announced on February 28, there were 50 founding members.

One of them is Nancy Spector, MD, associate dean for faculty development and executive director of the College's acclaimed Executive Leadership in Academic Medicine program for women. "The tenets of Time's Up Healthcare align perfectly with the mission of ELAM," she points out, "and also with the history of the College of Medicine, which has a strong heritage of supporting the advancement of women in medicine."

In fact, the College was among the first signatories of Time's Up Healthcare, pledging its commitment to prevent sexual harassment and gender inequity; to protect and aid those who are targets of harassment and discrimination; and to measure and track sexual harassment and gender-based inequities within the institution. Time's Up Healthcare is also supported by a range of partners including the American Medical Women's Association, American College of Physicians, Service Employees International Union, American Nurses Association and Council of Medical Subspecialties.

A founding member of Time's Up Healthcare, Nancy Spector, MD, shows off a poster, created for the launch event, that talks about the College being a proud founding signatory.

Time's Up Healthcare is made up of women from diverse backgrounds and a wide spectrum of health care professions. They are doctors, nurses, physician assistants, clinical pharmacists and more, steadfast in the shared goal of improving gender equity and decreasing the burden of sexual harassment in health care. They seek to engage and support health care workers at every level of health care delivery; to raise awareness; to advocate for meaningful standards; and to strengthen the ability of low-income workers to obtain legal aid.

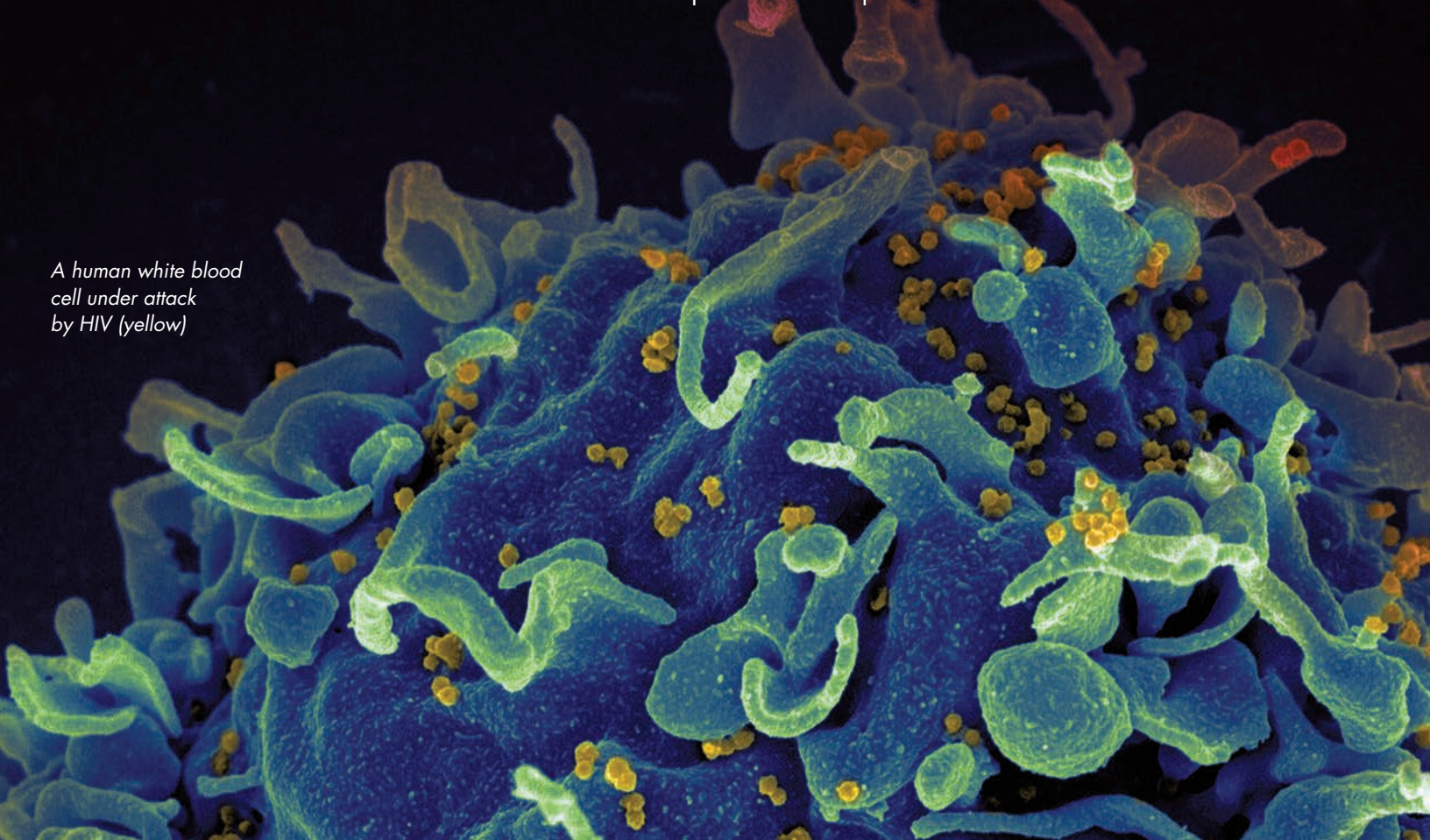
Time's Up Healthcare reminds us of the bigger picture: "In health care, we know that lives are saved by working together and improving collective intelligence through teams that are not only diverse, but are respectful, inclusive, and equitable." Visit timesuphealthcare.org/.

HIV: WHAT'S NEXT

SIX SCIENTISTS SHARE THEIR WORK

By Elisa Ludwig

Where antiretroviral drugs are taken as prescribed, HIV/AIDS has passed from a crisis to a manageable chronic disease. Researchers are deeply engaged with the next set of questions: How can HIV patients have a better quality of life? What aging conditions or diseases might they be more susceptible to as a result of living with the virus? Are there better treatments that might involve fewer side effects, or that can be used if the existing ones are no longer effective? Can a vaccine be developed that will conquer this health threat once and for all?



A human white blood cell under attack by HIV (yellow)

THE DRIVE TO KNOW

For Peter Gaskill, PhD, HIV research will always be in some way personal. The assistant professor in the Department of Pharmacology & Physiology funneled his passion for science into this particular subject matter in large part because his own mother was diagnosed with HIV in the heart of the AIDS panic of the early 1990s.

"My parents found out because of a blood test anomaly, which was reported to them through a letter from their insurance company," he says. "I was a teenager at the time. There was no internet and I didn't know anything about HIV or AIDS."

His mother's illness had a profound impact on Gaskill's life in many ways, and her death, just before he graduated from college, drove home the realization that far too little was understood about HIV.

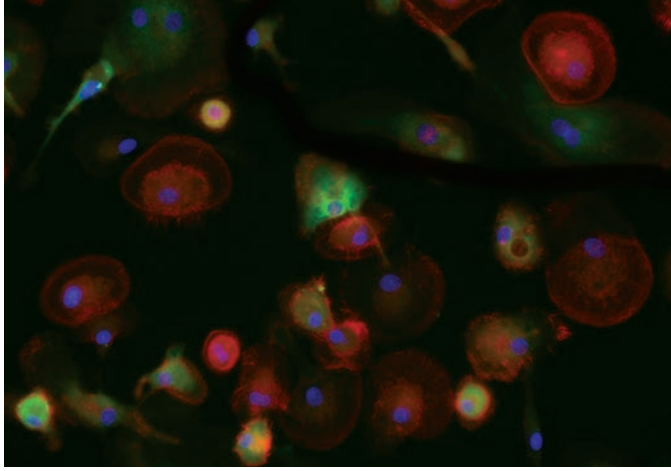
"She was taking about 40 different medications, including the earliest antiretrovirals, and the medications were making her quality of life worse," Gaskill says. "When she went into septic shock, the doctors were telling us in so many words that there was nothing anyone could do. I remember thinking I will never *not know* again."

As a researcher, Gaskill homed in on the neuroHIV field, which is trying to understand the pathology underlying the cognitive and behavioral impact of HIV infection in the brain. The range of conditions caused by HIV damage to the central and peripheral nervous systems can include vacuolar myelopathy, sensory neuropathy, anxiety and depression, and dementia.

"I was interested in the physical changes that cause neurocognitive issues. In today's epidemic, where many people are on antiretroviral therapy, we've found that a lot of the physical changes we've seen don't always correlate with the cognitive or behavioral categories we've created. It makes it challenging to design targeted therapies, because it is hard to solve a problem if you don't know the underlying cause."

The Gaskill Lab is currently investigating the impact of drug abuse on HIV-associated neurocognitive disorders, particularly as it relates to dopamine-mediated changes in macrophages — cells that play a central role in HIV neuropathogenesis. A large number of people with HIV suffer from substance use disorders, which have been linked to acquiring the virus, but which may also change the course of the infection itself. Gaskill and his collaborators are looking at the mechanisms inside the human cell after dopamine or HIV binds to its surface. This research also applies to legal therapeutics such as antidepressants and their relationship with neuroimmune function.

"People are living longer with HIV, but that longevity creates a series of new problems," Gaskill says. "People are depressed. They have diabetes, gastrointestinal issues, cardiovascular problems and neurocognitive effects as well. The treatments themselves can cause these issues, and then there are comorbid factors like drug abuse, which also contribute to problems. If we want to treat people who use drugs of abuse, or people who have Alzheimer's or Parkinson's disease, we have to come up with better therapeutics to do so. There's a lot more we still need to know."



Macrophages being infected with HIV in the presence of dopamine, five days after start of infection. Actin, a cytoskeletal protein, is labeled in red; cell nuclei, in blue; and HIV (the p24 protein), in green.

CLOSING THE DOOR ON HIV

Professor of biochemistry and molecular biology Irwin Chaiken, PhD, wants to stop HIV before it can take hold in the body. As a protein scientist, he focuses on the entry mechanism of the virus into cells.

"I realized that if we could reveal the fundamental properties of the virus protein machine, we might figure out a way to stop the entry itself," he says.

That has meant defining the HIV envelope surface protein, known as Env. When it interacts with cells, the Env changes shape so that it anchors on both the virus and the cell. Chaiken and a multi-institutional cohort of collaborators, funded by the National Institutes of Health, have been seeking ways to hijack entry interactions, including compounds that change the Env's shape and its mechanisms. As the findings have evolved, Chaiken says, so too have the objectives.

"The research field has certainly changed over time. Initially, we were more focused on blockers to stop the infection," he says. "But now there is a very strong push to find a cure and eradicate both the virus and infected cells altogether. Compounds we have found have the potential to be developed for eradication, but we still have a long way to go."

Ultimately Chaiken would like to see translation of mechanistic findings into commercialization projects. To that end, he has formed a team with seed funding from the Coulter-Drexel Translational Research Partnership program, though he doesn't anticipate having a working compound for at least five to 10 years.

"People want a functional or real cure, and there is currently no frontline therapy for HIV that uses the same target we're going after," he says. "If we developed such a compound, it could potentially be used in combination with existing therapies. I don't think we should shy away from finding additional therapeutics, because people can still become resistant to the ones that are out there."

The developments have been exciting and profound. At 76, Chaiken wants to keep on exploring the fundamental questions he's been posing throughout his career.

"The work we've already done could ultimately tell us how to defeat HIV, and that is a very rewarding prospect."

A BIGGER PICTURE

One reason Simon Cocklin, PhD, enjoys studying HIV is because he sees the virus as a threshold into a world of possibilities.

"Every time we learn something, it not only redefines HIV biology, but usually it also has broad implications for biochemistry and biology as a whole," he says.

Today he is an associate professor in the Department of Biochemistry & Molecular Biology, but Cocklin started his career as a postdoctoral student working for Irwin Chaiken. Fascinated by the virus and its ways of evading the immune system, Cocklin was hooked and ended up making HIV a focus of his own research career. The Cocklin Lab is working on a small-molecule inhibitor discovery program with the aim of developing a new class of antiretroviral agents.

"We don't just focus on one target. We have three targets. We have inhibitors that stop the entry of HIV in susceptible cells and target the HIV Env, as well as compounds that target the capsid protein."

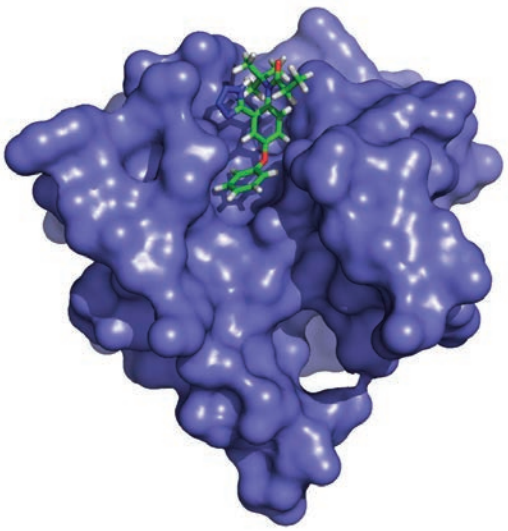
Additionally, for the first time in a decade, Cocklin has received significant funding to pursue his passion project. He's targeting the HIV-1 matrix protein, which is fundamental to the life cycle of the virus, and key to the virus's replication.

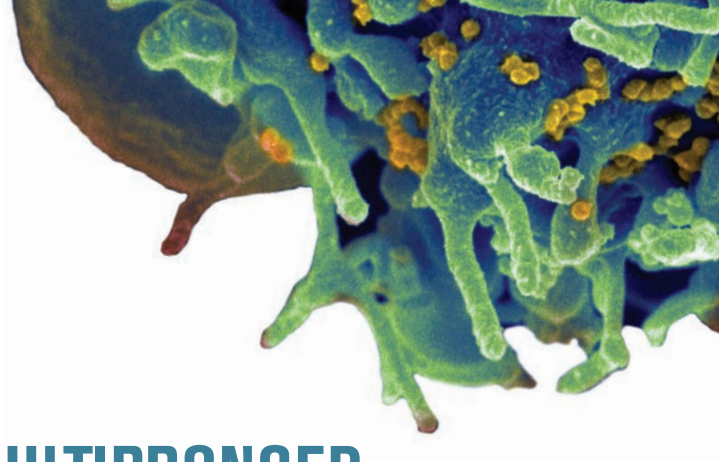
"We are the first people to have inhibitors of the matrix protein, whose function is to guide all the components of the virus to the plasma membrane. These are first-in-class compounds, so it's early yet, but we've seen promising results."

The field has changed significantly in the last several years, Cocklin says. Whereas in the past, research may have focused on the virus's enzymes, interest has shifted toward the idea of targeting and inhibiting the structural proteins.

"We now have a battery of 25 inhibitors in the clinic, but the virus adapts and resists them over time. In the absence of a viable vaccine, we have to continually produce new therapeutic targets and make new drugs to continue to provide a good quality of life for patients."

A first-in-class small-molecule inhibitor with a unique mechanism of action has been shown to target the HIV-1 matrix protein in vitro.





MULTIPRONGED ATTACK

Elias El Haddad, PhD, a professor of medicine in the Division of Infectious Diseases & HIV Medicine, first witnessed people infected with HIV when he was a graduate student conducting research in Lebanon in the 1980s. Before the advent of AZT, the outlook was grim.

"People knew they were dying — a big community had come to Lebanon from sub-Saharan Africa, where there was no treatment for them," El Haddad says. "It was worse than cancer in how fast it progressed. Today, the picture is so different, but we still need the ultimate cure, which would be a vaccine."

As a researcher, El Haddad takes a cross-disciplinary approach, and his HIV work centers on three distinct projects: vaccine development, cure discovery and basic research about the virus's mechanisms.

"We need to better understand infection, how HIV acts in the body and how the host responds to it," he says. "I have been working in HIV since 2000, and my research has changed in that time, from looking at the pathogenesis of the infection to trying to understand the mechanisms of immune response."

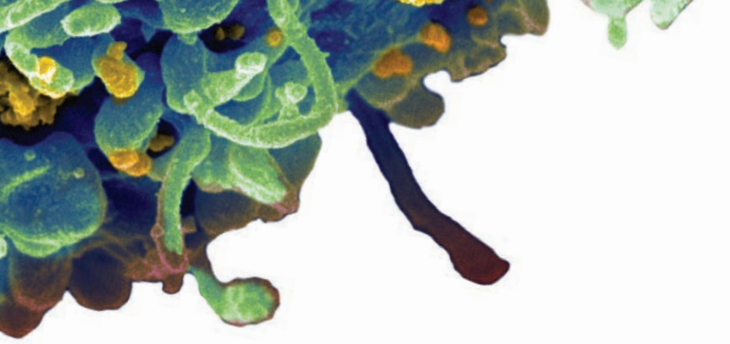
With the help of HIV-infected individuals, specifically the so-called "elite controllers," who have the ability to control virus replication without the need for antiretroviral therapy, El Haddad and his collaborators have been able to study the mechanisms of the host immune response to the virus as it progresses in the body. In identifying a biomarker for central memory T cells and memory B cells, he has uncovered how these patients might naturally keep the virus at bay, with potential implications for immunotherapy treatment targets.

El Haddad's vaccine work has advanced significantly in recent years with a finding published in *Nature Medicine,* where he and his colleagues described a new subset of T cells, called follicular helper T cells, that is important for humoral immunity and is defective in HIV-infected individuals. More recently, in a study published in *Nature Communications*, he demonstrated a new molecule called ADA that could be harnessed to target follicular helper T cells and might be used as a target for a novel vaccine.

"There are still many people who are at risk for getting the virus, and a vaccine could prevent this. At the same time, a virus and immunotherapy are not necessarily mutually exclusive. We might be able to use both together."

El Haddad's lab is currently working to develop and test an adjuvant to see whether it can induce or alter the immunoresponse to HIV infection. His latest results will be published in upcoming papers. For now, he finds that emerging discoveries and the commitment of patients keep him optimistic about the future of the field.

"The people who volunteer for research have made our work possible. That motivates me to continue and stay hopeful that this work will eventually have a significant impact."



THE CUTTING EDGE OF TREATMENT

Michael Nonnemacher, PhD, can remember when, as a teenage science geek, he would tell his friends that someday he'd find a cure for AIDS.

"Back in the 1980s and 1990s, we knew so little about the disease, and I was naïve about what it really meant to be able to accomplish such a thing," says the associate professor in Microbiology & Immunology.

As a graduate student at Penn State University, Nonnemacher started working with Brian Wigdahl, PhD, examining how genetic variations of HIV might impact proteins important for the virus's replication in immune cells. When Wigdahl was recruited to Drexel, Nonnemacher went with him.

"My current grant research focuses on seeking diagnostics for neurocognitive impairment, which occurs in about 50 percent of HIV patients," Nonnemacher says. "We think the protein called Tat plays a large role in driving the replication of the virus, and causing neurotoxicity and the pathogenesis seen in the central nervous system."

Through gene sequencing and biostatistics, Nonnemacher and his colleagues Sandhya Kortagere, PhD, and Will Dampier, PhD, can study associated amino acid changes in patients, which they hope will lead to a genetic diagnostic test for neurocognitive impairment.

On another project, with Wigdahl and teams of researchers at Temple University and Case Western Reserve, Nonnemacher is looking at a potential therapeutic solution for HIV that uses leading-edge CRISPR gene-editing technology, developed initially for cancer treatment.

"We are developing guide RNAs with the potential to be broad spectrum, to account for viral quasispecies within and between patients infected with subtype B virus, the most commonly found in the Americas and Europe. If we can edit the HIV genome, cutting it out completely, making the promoter defective, and/or eliminating the proteins necessary for replication, we think this approach can be used as a therapeutic."

While human trials are still a long way away, the application of this technology for HIV could be very promising. Nonnemacher tells his students that they should look outside their own narrow window of research to the larger scientific community, as sometimes the answers might lie beyond their immediate scope. After all, he says, before 2013, gene editing wasn't something he'd ever imagine using. Once he did, however, a new direction for his research, along with new possibilities for actually finding a treatment, suddenly emerged.

"To be where I am now, to be looking at therapeutics and diagnostics, is very exciting and it shows the evolution, what we've learned and just how far we've all come," he says. "Now I'm hopeful that we just might see the light at the end of the tunnel."

IMPROVING LIFE WITH HIV

Vanessa Pirrone, PhD '09, was a high school science teacher when she first studied HIV with her students — a formative moment in her decision to go back to school and pursue a research career.

"We read a book about the discovery of the HIV virus in the 1980s, and I found it fascinating — namely, the idea of identifying an infectious disease that is afflicting so many people," says the assistant professor in the Department of Microbiology & Immunology. "I wanted to know how you identify a disease like that, and how you delve deeper to understand the mechanisms at work."

In her collaborative research — funded by NIH, Temple University's Comprehensive HIV Program and the Sidney Kimmel Cancer Center — Pirrone works across a number of different areas, largely focusing on what it means to live with HIV as the first generation grows older with it. With Brian Wigdahl, she studies a local cohort of patients every six months to see how the virus has progressed. The patient cohort includes not just individuals who are aging with HIV, but some older patients who have been newly infected.

"We collect patient blood samples and ask them questions to delve into their clinical and demographic history. This information helps us springboard other research questions," she says. "The studies I'm most interested in have to do with HIV and aging. We're finding out that the aging process for HIV patients is not the same, and we want to understand why."

Some of the conditions HIV patients are developing include osteoporosis and mild, progressive dementia 10 years earlier than the population at large. Forty percent of HIV patients develop cancer, not just AIDS-defining cancers like Kaposi sarcoma, but liver, oral and colon cancer. Pirrone is studying the connections between the diseases, working with both colon and anal cancer patients.

The question Pirrone is raising is whether HIV synergistically accelerates immune system response and thereby accelerates the aging process. Pirrone is now in the process of taking her research from the bedside to the molecular and cellular biology bench, studying the mechanisms that emerge. The goal is to develop therapeutics, screening paradigms and regimens for existing treatments for aging patients.

Working at Drexel, where the HIV research community is richly diverse, has been inspiring. "We have so many research projects and experts across disciplines," she says.

Pirrone still has the same fascination with HIV research that was sparked in her classroom, and she's grateful to be working in a time when she can build on the advances that came before her.

"Our patients know that we might not be able to change anything in their lifetime, but we have the potential to help future generations," she says. "Even if we can't cure patients, we can help them understand their risks and the biomarkers to watch for these diseases. Ten years later — to say I've been able to contribute to the body of research about HIV is an amazing thing."

Health Outreach Project

Student-Run Clinics Care for Vulnerable

By Nancy West

A homeless man came into one of the Health Outreach Project clinics run by Drexel medical students. His fist was swollen because he had gotten into a fight. One of the first-year volunteers, Julianna Cervino, asked the man if he had put ice on his wrist to reduce the swelling. "Of course I haven't put ice on it," the man abruptly answered. "I don't have a freezer. I don't even have a bed."

"That was a learning experience," says Cervino, now a second-year student and a project co-chair. "I should have known that a man without a home wouldn't have access to ice."

Now going on 25 years, the Health Outreach Project offers free health services to people in poor and socially vulnerable communities through five weekly clinics and a dozen other programs, while training a corps of future physicians committed to patient-centered, culturally sensitive practice. In 2018, more than 430 students provided health services to nearly 1,200 patients.

Students Steer

Supervised by faculty physicians volunteering on their own time, the clinics are located at special-needs adult day centers, transitional housing for people experiencing homelessness, a needle exchange site, and a residential rehabilitation program. Each clinic has a leadership team of medical student coordinators in charge of student and physician recruitment, pharmacy and supplies, and general steering.

The majority of the volunteers are first-year students who commit to serving at a clinic one day a week. Second- and third-year students also volunteer, serving as coordinators and as mentors for the first-years, who learn how to take a proper patient history, conduct a physical exam and present a patient to an attending physician, among other skills.

Hands-On Learning

"Interacting with patients is so valuable for students," says Cervino. "You learn bedside manner, and it's a lot easier to remember what a patient presentation looks like when you see a real one instead of just reading about it.

"First-year students especially love coming to the clinics and speaking with patients, since most of the first year is spent in the classroom," Cervino continues. "Once when I went to our acute care clinic at the Salvation Army Residence in Roxborough, I listened to a patient's heart murmur. I had never before listened to a real heart murmur with a real stethoscope in a real chest — I had only done it in simulations. It was a great learning experience."

Students who volunteer at the Salvation Army clinic are working with adults in a substance use disorder rehabilitation center. They learn how to treat acute care issues as well as chronic conditions such as pain and hypertension. They can also train to be smoking cessation counselors for a program held at the center.

"The students really get to know the patients who live

Kristina Orbe

Naloxone team members in Kensington

Communities

there," Cervino says. "They see many of the same patients every week and can follow their progress."

At the Eliza Shirley Shelter for mothers and their children, students help to provide acute care services and run programs they have developed themselves, like Jump Into Reading for the children and a workout class called Move It With Mommy and Me. The volunteers are also involved in smoking cessation and special seminars on women's reproductive health and sexually transmitted infections.

The Arc of Philadelphia, a day center for adults with intellectual disabilities, gives students valuable experience with a patient population that they don't often see, according to Cervino. In weekly wellness clinics, some time is spent just teaching patients how to communicate about their health.

In talking to one man, student volunteers realized that he had never been to a dentist, Cervino recalls. "We talked to him about why he was afraid to go, encouraged him to make an appointment and wrote a letter about it to his mother, who was his caregiver. A few weeks later, his mom called and she was so grateful — her son had gone to the dentist for the first time in 30 years. She said that he probably never would have gone if we hadn't taken the time to talk to him and address his fears. That was very rewarding."

Bringing a Sense of Stability

Student volunteers bring added support to the residents of St. Raymond's House in Philadelphia, which provides permanent supportive housing for adults with chronic health conditions. "Our residents haven't had stability for years, and because of that, they haven't been taking care of their health," says Brandon Doll, St. Raymond's senior program counselor.

Every Thursday night, students run a wellness clinic at St. Raymond's, where they help residents monitor blood pressures and blood sugars, set health goals, make medical appointments and better manage their health problems.

"One of the struggles in my job is getting people to keep their medical appointments," explains Doll. "The students help them set up appointments and help to make sure that they follow through and go to the appointments. I'm so thankful for their help with this. The residents can tell that the students really care about them.

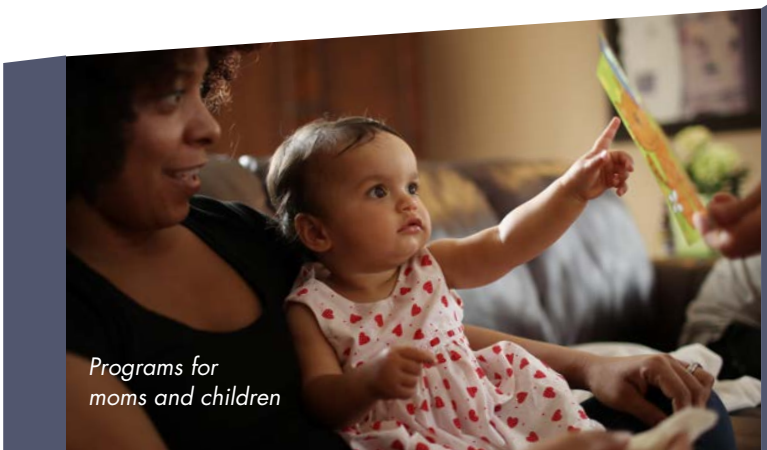
"One resident in particular was neglecting his health because he loves to work and was focusing only on his job," notes Doll. "He doesn't understand that if he doesn't take care of his physical and mental health, he's not going to be able to keep his job. The students are really helping him to see this connection."

During visits with the residents, the students cover things that might be pretty basic to most people, such as the importance of taking their medication every day, according to Doll. "I once had a resident with diabetes ask, 'Do I need to check my blood sugar after I drink a glass of water?' That's where the Drexel medical students are really helpful. They are very patient in explaining why and how residents need to manage their health."

Preventing Overdoses

Students see a very different patient population at the Streetside Clinic in Kensington, which is run out of Prevention Point, a nonprofit organization that provides harm reduction services, including HIV/HCV testing and a needle exchange program. Streetside provides acute care services to those experiencing homelessness, sex workers and people with substance use disorders. "We see a lot of abscesses and infections at this clinic," notes Cervino.

Stemming from their work at Streetside, the separate Naloxone Outreach Project is the students' pivotal opioid overdose reversal and education initiative. Drexel medical students go out into the Kensington community to gas stations, corner stores and churches, asking business owners or church staff whether they've ever had someone overdose in their restrooms and if they would be interested in learning how to administer naloxone. If so, the students teach them how to use it and give them a supply. So far, students have distributed more than 160 doses of naloxone and are credited with saving 29 lives. (For a deeper dive into this program in action, see "Of Hippocratic Oaths and



Programs for moms and children

Antidotes" at drexelmagazine.org/2018/of-hippocratic-oaths-and-antidotes/.)

As word has spread, the Drexel students have given overdose reversal training to students at Penn, PCOM, Temple, Jefferson and Cooper Medical School in Camden. These trainings emphasize harm reduction (teaching people who are using opioids to avoid overdose) and destigmatizing addiction. Now, thanks to an endowed fund honoring the late Carl Norden, MD (see sidebar), the students can also carry the message to conferences such as the Society for Student-Run Clinics, where they are presenting a workshop, "Harm Reduction & the Opioid Epidemic: Impacts & Lessons Learned From a Student-Led Initiative."

Taking vitals

Wellness and Prevention

In addition to the clinics, the Health Outreach Project has numerous other programs that run on a regular basis. Among them are DrexelCARES, a new street medicine team of students who are trained to engage people experiencing homelessness with respect and dignity while distributing care packages of toiletries, socks and other personal necessities along with educational pamphlets.

In ongoing activities, the medical students produce a quarterly health fair for Philadelphia's refugee population, provide screening for hepatitis C through "C a Difference," and give stress reduction classes that include mindfulness, meditation and yoga.

All of the medical student volunteers receive extensive training, which includes sensitivity and health advocacy training for the populations they serve. Students better understand the profound impact of social conditions such as poverty, discrimination and poor access to health care on the lives of patients. "They are taught the proper language to use and questions to ask patients," says Cervino. "We always want our patients to feel comfortable coming to us, so we need to be sensitive to their situations in life."

Steven Rosenzweig, MD, director of the Office of Community Experience, concurs: "It's hard to overstate the value for students of participating in the Health Outreach Project. They learn so much about members of our community who are socially vulnerable yet incredibly resilient. They get to cultivate empathy, compassion, and connection with people who have such different life stories. They get to show up for patients, not as authorities or experts, but as health advocates, meeting folks where they're at. All this while engaging with peers and faculty to integrate learning about medicine with the realities of social conditions that impact health."

Norden Fund Supports Professional Development Opportunities for Students

The late Carl W. Norden, MD, was a compassionate physician, a superb clinician and an internationally recognized authority in infectious diseases, deeply committed to mentoring future physicians. His wife, Joyce Norden, made a gift to the College of Medicine to establish the Carl Norden MD Mentorship Endowed Fund in memory of her late husband, who was an adjunct clinical professor of medicine at Drexel.

The purpose of the fund is to promote the professional development of students enrolled at the College of Medicine, with preference given to students engaged in community-based health advocacy or social justice activities, such as the Health Outreach Project. Spending from the fund may be used, for example, for faculty mentoring of students and for costs associated with students' participating in professional conferences, presenting scholarly work at professional venues or gaining additional professional skills.

Thanks to the Norden fund, more students are able to attend professional development events like the annual meeting of the Society of Student-Run Clinics. This year, six students involved in the Health Outreach Project can go to the meeting. In the past, the College could only send two. Last October, the money allowed the co-presidents of the Naloxone Outreach Project, Shraddha Damaraju and Ann Carnevale, to go to New Orleans to present at the Harm Reduction Coalition Conference.

Conference participation increases the students' knowledge base and stimulates new ideas.

"We benefit by learning how other groups are handling the barriers and injustices experienced by people who use drugs and do sex work," Carnevale says. "We know that it's important to reduce the stigma around substance use so that more people will seek and be able to receive adequate treatment and dignified, nonjudgmental care. In New Orleans, we had the opportunity to learn how even current thoughts and approaches toward patients with substance use disorders aren't always rooted in evidence-based medicine, but rather born out of stigma."

Conferences are a rich opportunity to network with medical students from across the country engaged in providing free health care services. Carnevale notes that it is very beneficial for students to network with community groups as well, because they provide a different perspective on public health services, community education and population empowerment. "We're learning that future health care providers need to have a compassionate understanding of what substance use disorder is and how to address the medical, psychological and social factors involved," she says. "The information students gain at these conferences will help to make them better physicians, who can serve this patient population more effectively, and it will also help them to enhance the Naloxone Outreach Project."

When attendees bring new information back to their peers, it enriches the whole student body.

By Maxine Susman

Pneumonia

Just weeks into the fall.
He has a bad cold,
no need to come home.

Come home.

He's coughing but smiling,
kibbitzing he already paid
her school bill, even in hard times
people need plumbers
just like they do doctors,

she agrees to what he wants,
returns to school.
In a week he's dead.

Forty-seven years old.
A few years before penicillin.

She rushes back from Philly,
in her new coat sobbing on the train

to sit shiva with the family,
Mama, Minnie, Herb, and Jack,
the house overflowing
with condolences and food,

then strangely emptied.
She wants to stay home.
They need her at home,

don't they need her?
No, Mama says, holding her close,
go back to school.

After / Before

What her first month at med school
taught of life and death:

Love and prayer are not a cure.
A plot in Mt. Lebanon Cemetery
cost more than a year's tuition.

She changed that fall from Papa's Flossie,
Flossie the whiz kid the dark girl from Brooklyn

to Florence who'll graduate F. Carol Levin,
the name on her diploma, name on her shingle.
Carol, my father called her. Carol to friends.

Specialist in Diseases of the Lungs.

"Pneumonia" and "After / Before" reflect the experiences of Maxine Susman's mother, Florence Carol Levin, MD, Class of 1937, during her first year as a student at the Woman's Medical College of Pennsylvania. Susman is an educator and widely published poet, whose new collection, My Mother's Medicine, *is due out this summer from Grayson Books.*

CALLING DR. NEW: A QUICK

Purchased by Hahnemann Medical College in 1972, the Schaff (now Bellet) Building lost its easternmost portion to eminent domain in 1974 to accommodate the widening of 15th Street.

DR. BELLET BEFORE HE WAS A BUILDING

Samuel Bellet, MD (1902-1971), was a prominent Philadelphia cardiologist, considered a pioneer in the study of arrythmias. He authored more than 275 papers and four books, including *Clinical Disorders of the Heart Beat*, which was translated into three languages.

Born in Kiev, Russia, Bellet immigrated to the United States with his family in 1906, at the tender age of 4. (His father's first name was "Alias," which must have raised some eyebrows among the immigration officers.) Bellet grew up in Philadelphia, and earned his bachelor's degree from the University of Pennsylvania and his MD from Jefferson Medical College.

Over the years, sometimes simultaneously, Bellet served as a cardiologist at Einstein Medical Center, chief of cardiology at Philadelphia General Hospital, director of cardiovascular diseases at Graduate Hospital, professor of clinical cardiology at the University of Pennsylvania, and clinical professor of medicine at Woman's Medical College of Pennsylvania. His research contributed significantly to knowledge of the ill effects of tobacco, diet and inactivity on the heart. Bellet was so well respected that he was tapped by the Johnson Administration to serve on the President's Commission on Heart Disease, Cancer and Stroke.

In 1976, five years after Bellet's death, the former Schaff Building at 1505 Race Street was renamed in his memory. (The building had been constructed in 1923 as an addition to the Reformed Church Building, which sat right at the corner, but the addition outlived the original.) At the dedication, the salute to Bellet was delivered by William Likoff, MD, Hahnemann Class of 1938, director of the cardiovascular institute at Hahnemann, and namesake of the William Likoff Clinical Excellence Award, still given annually to a College of Medicine faculty member.

FONDLY KNOWN AS FEINSTEIN

Garages have served as the birthplace for everything from rock bands to high-tech startups — and even pristine modern medical buildings, like the one opened in the 1960s at 216 North Broad Street.

But let's back up.

There was a time when North Broad Street was Philadelphia's Automobile Row. From Cherry Street north to Girard, there were showrooms, parts shops, even manufacturers. Today, the 200 block is dominated by health care, and all the cars are being driven, or parked. Change came in stages. First, the garage at 216 N. Broad Street, owned by Keystone Motor Car Company, was remodeled into a public-facing business: a Chrysler showroom. Then, in the 1960s, Hahnemann Medical College acquired the building with plans to remodel it for ambulatory patients.

The renovation would create a complete radiology therapy center on the first floor and include facilities for diagnostic radiology, private physician's offices and procedure rooms for various medical specialties. The cost at the time was estimated at $1.9 million. More than half was accounted for, but the rest would have to come from public subscription.

Fortunately an angel stepped up. According to the late Joseph DiPalma, MD, former Hahnemann dean, the general fundraising was "greatly helped by a generous grant from Myer Feinstein, then a member of the board" (DiPalma, *Decanus Maximus*, Xlibris, 2004). In fact, Feinstein had been a Hahnemann trustee since 1954 and chaired the finance committee.

Myer Feinstein (1896-1965) was a notable Philadelphia banker and philanthropist. President of the *Jewish Exponent* weekly and a member of the national campaign cabinet of the United Jewish Appeal, he was active in more than 20 other organizations. In an editorial mourning his death, the *Philadelphia Evening Bulletin* credited Feinstein with bringing about a renaissance in Hahnemann Hospital. "He took the Depression as a challenge, and made a fortune, but he took that as a new challenge: to repay his debt to his country and his city."

TOUR OF CAMPUS NAMESAKES

The Myer Feinstein Polyclinic was dedicated in 1967. Charles S. Cameron, MD, president of Hahnemann Medical College and Hospital, gave the welcome. A "dedicatory dinner" and reception were held that evening at the Bellevue-Stratford Hotel.

THE LATEST STILES

Named for a Hahnemann graduate, Stiles Alumni Hall was the first student residence at Hahnemann Medical College, and it remains Drexel University's only Center City dormitory. The 16-story building at 325 N. 15th Street offers one-, two- and three-bedroom apartments for upper-class and graduate students in the health sciences. Two floors are leased to the Pennsylvania Academy of the Fine Arts for their student housing.

Wendell Arthur Stiles, MD, received his bachelor's degree from Texas A&M University before making his way across the country to Hahnemann, where he graduated in 1927. True to his Texas roots, Stiles practiced internal medicine and cardiology in Dallas for nearly 50 years (with five years spent in the Army Medical Corps during WW II). In 1951, he was named to the Texas State Board of Medical Examiners.

Stiles was also true to his Hahnemann roots, for when he died in 1976, he left $1.2 million to Hahnemann Medical College, which was the largest single bequest received by the school up to that time. That led the school to christen the new student tower in his name. Joseph T. Marconis, HU '42, was the master of ceremonies at the dedication held on June 1, 1977.

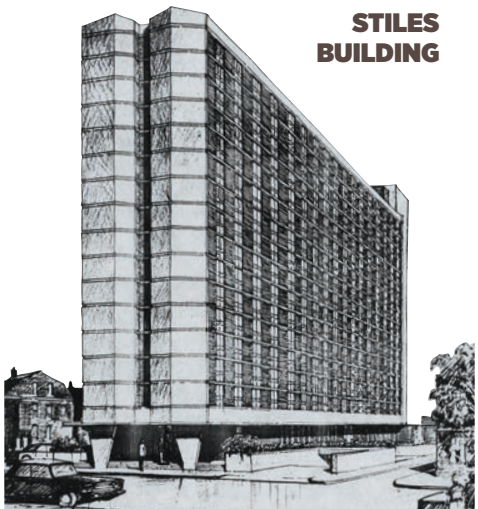
CALLING DR. NEW

No, don't even bother. The New College Building wasn't named for an alum, a faculty member or a philanthropist. It wasn't named after anyone, actually. It does have a connection to a famous architect. But that's only a small part of the history of 245 N. 15th Street.

It's necessary to begin in 1886. That year, Hahnemann Medical College completed construction of an education building on North Broad Street, on what is now the site of the hospital's South Tower. Four years later, in 1890, Hahnemann completed and dedicated a 150-bed hospital at the 15th Street location.

Then, in 1928, the hospital and the college traded places.

It was part of a grand plan: Renowned architect and Philadelphia native Horace Trumbauer was engaged to design a large hospital-and-teaching complex. (Among other work, Trumbauer is known for designing mansions in Philadelphia and Newport, the Free Library of Philadelphia at Logan Circle and much of the campus of Duke University.) Hahnemann Hospital moved to its new 600-bed building at 230 N. Broad Street,



A Redevelopment Authority image shows the old college building on the left, Klahr on the right.

site of the former college building, and the medical school moved into the 1890 hospital building on 15th Street.

Still on track? Good, because further expansion followed. In 1938, one wing of a new "Trumbauer college building" was completed — the seven-story Klahr Building, believed to be named for Pittsburgh philanthropist Emilie Klahr. The Klahr Building replaced part of the existing building facing 15th Street.

Finally, in 1966, construction began on a new college building adjacent to the Klahr Building. Built to the tune of $34 million, the new college building was partially occupied in 1972, completed in 1973, and dedicated (to no one) in 1974. Inflated by capital letters, the project title became a name — and it stuck.

Q&A

As director of the Women's Care Center, an arm of Drexel Obstetrics & Gynecology, Sandra Wolf, MD, oversees a practice with 18,000 patient visits annually. For the past three years, the center has been a member of the Philadelphia International Women's Project, a coalition to better serve the needs of immigrant and refugee women. Large numbers of these women, particularly from sub-Saharan Africa, have experienced what the World Health Organization calls "female genital mutilation." WHO defines female genital mutilation as any procedure involving partial or total removal of the female genital organs for nonmedical reasons. It's a deeply entrenched cultural norm as well as a serious human rights issue. Q&A uses the term genital cutting as an accepted neutral term.

Sandra Wolf, MD

Director of the Women's Care Center
Associate Professor of Obstetrics & Gynecology

WHAT IS THE MISSION of the Women's Care Center?

The Women's Care Center provides comprehensive reproductive health care services, family planning, obstetrics and gynecology to underserved women in Philadelphia, particularly immigrants and refugees. Patients are increasingly diverse, as is Philadelphia. The center accepts all insurances and has robust safety-net programs for women who have no insurance or cannot afford their co-pays. Residency education is a key component, so trainees learn under the attending physicians. Peer outreach workers — women from the community who bring other women into the center — are an invaluable resource as well.

WHAT IS 'cultural humility'?

A more apt term than cultural sensitivity, cultural humility means maintaining curiosity and humility when working with patients from other cultures. For instance, if a patient comes from a culture where preventive medicine is not the norm — where one sees a doctor only when very sick — she might think a mammogram is not worthwhile. If we're not aware of that, we may think she's noncompliant, when she just has a different system of beliefs we need to work within.

It's a whole host of sensitivities that really stem from the provider being cognizant of the patient's background. We also practice trauma-informed care, since newly arrived refugees often come from distressed parts of the world.

HOW DO YOU MEET THE NEEDS of immigrant women and refugees?

The Philadelphia International Women's Project is a collaboration between the College of Medicine; the African Family Health Organization, a community-based organization; and Nationalities Service Center, a refugee resettlement organization in Philadelphia. It offers a pathway to improve sexual and reproductive health outcomes in refugee and immigrant women. It is particularly focused on those who've undergone genital cutting, as well as sexual and gender-based violence that may be linked to it. Dr. Jasjit Beausang and I provide the medical expertise. The program is currently funded by a grant from the Office on Women's Health (womenshealth.gov).

We are one of very few sites in the United States providing this kind of community-based, comprehensive care. It's estimated that around 16,500 women in our region are affected by cutting. There's a lot of stigma and secrecy associated with it. Many women don't understand what was cut and what happened to them. So we answer a lot of questions.

For other women, cutting is not a seminal event in their lives. In that case, we don't treat it as a problem but will follow up with education. If the patient has female children, we will explore that a bit further — ask how she feels about cutting and really counsel her. If she thinks her child is at risk and she has no control, which many women don't, then we'll let her know she has resources. It's delicate. We don't want to stigmatize somebody further. Also, since many of these women had terrible experiences with health care providers, we offer training to clinicians and other providers in giving culturally competent care. We've reached nearly a thousand providers in three years. Our research has shown that because of the huge African immigration into Philadelphia since the 1990s, clinicians were already seeing these women; they just had no training or background to provide adequate care.

WHAT DO YOU ENJOY MOST about your work?

The work is meaningful and rewarding. You learn about cultures' beliefs. You learn resilience. You make connections to community members who come in with their friends. You get a community-based view of health and a global-based view of health, mixed together. You meet unique people. So it's gratifying. I have good department and University support. Both are needed to keep grant-making going, to ensure safety nets are in place so we can reach vulnerable populations and take care of them.

Interview by Catherine McCorkle

Drexel ALUMNI

ALUMNI WEEKEND 2019

MAY 16-18

We welcome alumni from the College of Medicine, Hahnemann University, Medical College of Pennsylvania, MCP Hahnemann University and Woman's Medical College to Alumni Weekend 2019. Join us as we reminisce about the old times and raise a glass to the good times!

- Take in great city views from Hotel Palomar and enjoy live music as you catch up with classmates at the **College of Medicine All Alumni Celebration**
- Recognize the outstanding work fellow alumni are doing at the **College of Medicine Awards Lunch** with Daniel V. Schidlow, MD, Annenberg Dean and Senior Vice President, Medical Affairs
- Attend your **milestone reunion celebration** with an exclusive cocktail reception if you graduated from the classes of 1984, 1989 or 1994
- Golden Dragons from the Classes of 1969 are invited to a **Welcome Reception at the Pyramid Club, College of Medicine Commencement** and a **50-Year Tour of the Archives**
- The **College of Medicine Golden Dragon Society and Grand Classes Presentation** is for all Golden Dragons from the Classes of 1969 and prior to meet, mingle and have some fun
- After a discussion with Laura Gitlin, PhD, dean of the College of Nursing and Health Professions, about the aging population and higher education's role in preparing a healthcare workforce, explore one of the country's best museums of medical history at **Saturday Morning at the Mütter**
- We're taking over the Philadelphia Museum of Art for **Drexel After Dark.** Party the night away with live music by Strangers, access to exhibits, dancing and more

For more information and to register, visit drexel.edu/alumni/weekend

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