DREXEL UNIVERSITY
DORNSIFE SPH
SCHOOL OF PUBLIC HEALTH MAGAZINE

252 Nesbitt Hall
3215 Market Street
Philadelphia, PA 19104

Non-Profit Org.
U.S. Postage
PAID
Permit #144
Philadelphia, PA

The Picture of Public Health: *Parks enhance economic vitality - as well as health*

An assessment prepared for the Philadelphia Parks Alliance in 2008 measured the value of city parks. The findings: Using local parks instead of paying for recreation elsewhere saves citizens $1.1 billion annually. The benefit to health was nearly $70 million per year and enhancement to property values was worth almost $730 million.

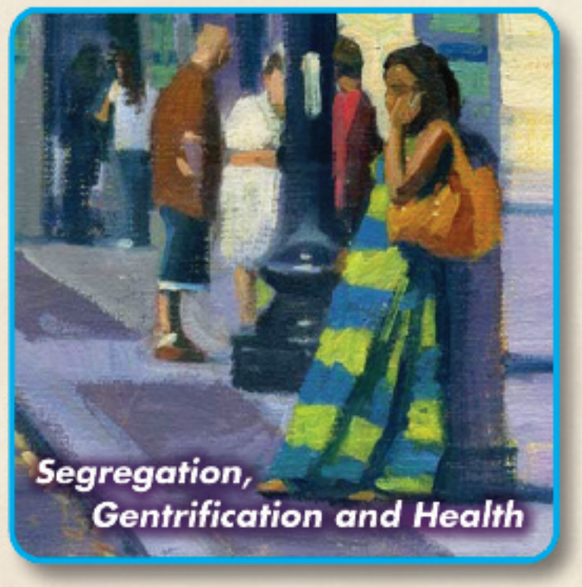
DREXEL UNIVERSITY
WINTER 2017-2018
DORNSIFE SPH
SCHOOL OF PUBLIC HEALTH MAGAZINE

Promoting a Culture of Health in American Cities

Community Partnerships for Urban Health Action

REIMAGINING HEALTH IN CITIES

Health Issues Facing Cities Today



Segregation, Gentrification and Health

INSIDE: Building Circles of Respect and Support

Ana V. Diez Roux, MD, PhD, MPH

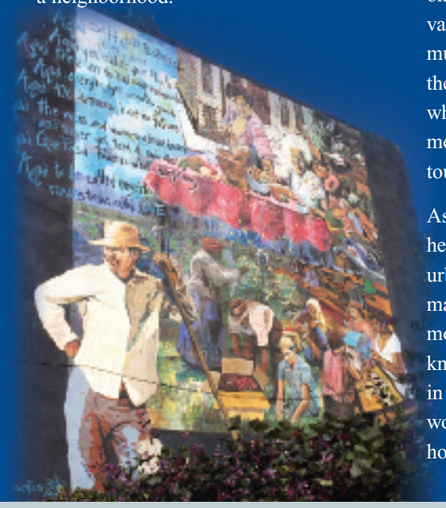
"There is so much untapped potential in our cities not only for health but also for life in all its variety and joyfulness."

In late October Philadelphia held its second ever "Philly Free Streets" event, closing major streets to traffic for a few hours and offering music and fitness classes. Sections of Third, Fourth and Fifth Streets starting in Old City were closed, extending north through Kensington to Fairhill, ending in a neighborhood called Centro de Oro. After much cajoling, I convinced my husband and Italian niece (just turned 17, visiting from Naples) to join me in walking the length of the route.

The mood was festive. Walking down the middle of the street we experienced the neighborhood in a new way. The houses on both sides were suddenly more visible. We saw blocks of new, spare looking modern construction, traditional tiny two story row houses, and tall Philadelphia townhouses with moldings on the top, all intermingled.

Parks and green spaces (not many but some!) seemed more welcoming. And of course there were the murals: A spectacular jungle-themed mural with colorful birds that my niece posed in front of for a photo to send home. Murals commemorating Puerto Rican culture: migrant workers and factory workers, singers and dancers. And Pablo Neruda, the famous Chilean poet, in a wall full of Latin American writers.

The neighborhood changed as we walked up from Market Street. The first blocks of Old City were packed with boutique stores and galleries. Fancy new modern homes lined the gentrifying blocks just above Spring Garden. As we walked further, there were fewer trees, more potholes, and abandoned lots began to appear. The homes were more modest, but neighbors stood or sat on their tiny stoops and said hello. Our walk vividly illustrated what a simple thing like closing the streets to traffic can do to the feel, the look and even the social life of a neighborhood.

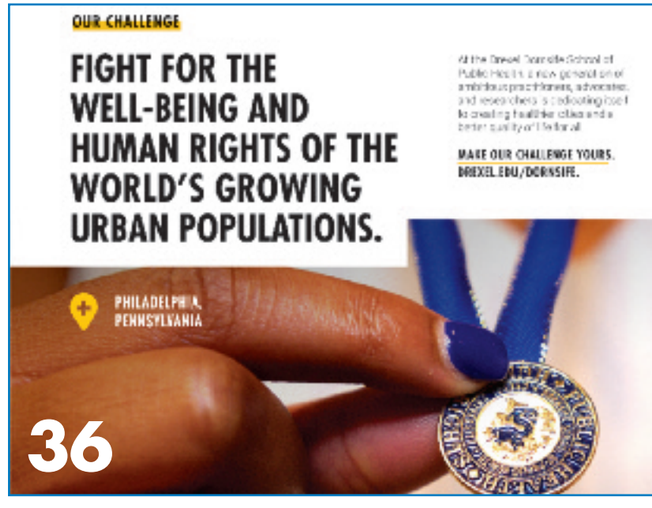


But it was not all festive and beautiful. Towards the end of our walk, and as the streets emptied of walkers, we saw what many neighbors struggle with every day: an urban landscape that can be ugly, unwelcoming, and hopeless. As we walked past the small stage that marked the end of the Philly Free Streets, we were suddenly in another world: a world that was dreary and gray, abandoned lots, dilapidated housing, broken sidewalks, garbage, cars, trucks and dangerous cross-walks, small children walking by a sick man lying in the street....

I couldn't help but reflect on what changing our neighborhoods, changing our city could do to health. And I couldn't help but think about how unfair it was that the neighborhoods we walked through were so different in the experiences and opportunities they create for their residents. There is so much untapped potential in our cities not only for health but also for life in all its variety and joyfulness: we saw it in the murals, in the people in the street, and in the neighbors sitting on their tiny stoops who welcomed my husband, my niece and me so generously as we walked by, strange tourists on a sunny Saturday.

As a school committed to fighting for the health and well-being of the world's growing urban populations, we ask you to join us in making cities healthier, more inclusive, more just, and more fulfilling for all. We know that a different future is possible here in Philadelphia and in cities all over the world. May reading these pages give you hope and spur you to action.

In This Issue



Subscribe to the magazine at drexel.edu/dornsife/magazine.

IT'S ALL CONNECTED

In September, the Dornsife School of Public Health proudly convened its second Urban Health Symposium. Some 300 researchers, practitioners, policymakers and students gathered at Nesbitt Hall on the Drexel University campus to share insights and perspectives on the health challenges facing cities, at a time of rapid urbanization locally and around the globe. They came away with a recognition that across vast differences, there is much to learn from each other, and - that when it comes to health - everything is connected: behavior, environment, equity and policy, in varied arenas such as housing, transportation, education and beyond.

By Sherry L. Howard

For his age, the three-year-old boy was far from bashful. Dr. Abdul El-Sayed encountered the child about three weeks after being named director of the Detroit Health Department. El-Sayed had walked into a department with a staff so small that he could count them all on one hand. He said he found himself "drowning" in a mission so large that he could hardly wrap his own young mind around it. But the little boy helped him see the challenge clearly.

"He did something really peculiar for a three-year-old. This boy looked me right in the eye, walked right up to me, gave me a big hug and walked back to his mother," El-Sayed said. "I thought about the confidence and the courage that it takes a three-year-old to go hug some random dude they'd never met before.

"And I thought about that in contrast to the set of challenges that boy is going to face because of the life in which he was situated, which has nothing to do with decisions he's ever made. ... This boy taught me a lot about how ... we should be thinking about public health in the first place."

Engaging individuals where and how they live - and taking into account their social environments and the elements that affect them - is the new focus of the public-health field. That was the overriding theme of presentations on "Health Issues Facing Cities Today" offered by four big-city health department officials at the biennial Urban Health Symposium sponsored by the Dornsife School of Public Health at Drexel University.

Public health professionals today are emphasizing the social, behavioral and environmental determinants of health, and how all have contributed to the inequities

suffered by the people they serve. Their aim is to keep people healthy through prevention and access to quality care and to tackle the behaviors as well as external and systemic factors that lead to unhealthy lives, said **Dr. Thomas Farley**, commissioner of the Philadelphia Department of Public Health.

He cited smoking, unhealthy diet, physical inactivity, air pollution, alcohol and drug use as behavioral/environmental factors for disease. "We can now count how many people die from those risk factors," he said, noting that smoking alone kills roughly 400,000 to 500,000 per year.

Among the social determinants of poor health, he cited racial and economic segregation, and inadequate education.

"If you go back say 40 years ago, public health was really about infectious diseases," said Farley. "We were immunizing children. We were responding to disease outbreaks. We still do that and that's important, but those are now very low as relative causes of death. It's caused something of an identity crisis in public health - who are we really and to what extent are we responsible for these social issues which have a big impact on health."

This redefinition is nothing new. In the two centuries since public health emerged as a field in this country, its focus has changed depending on the nature of the health menace at the time. Early on, the federal government provided hospitals for sick sailors through the Marine Hospital Service, the forerunner of the Public Health Service.

When many people were dying of small pox, yellow fever and cholera a century later, public health officials reacted by quarantining and isolating the sick. When they realized that unsanitary living conditions led to disease outbreaks, they worked to clean up those communities.

"A lot of the early public health work was looking at the environment where people lived, which has a social justice context to it," said **Aletha Maybank, MD, MPH**, one of the presenters on the panel, said in a later interview. She is deputy commissioner and director of the Center for Health Equity in New York City's Department of Health and Mental Hygiene.

"We know this from reading some of the documents from over a hundred years ago about public health in New York City," she said. "You read about the neighborhood associations that were responsible for disseminating information and helping to support infant-mortality campaigns."

During the 20th century, public health professionals began to take an even bigger role in people's health through educational campaigns and by stepping in to help stem major disease outbreaks. They responded to tuberculosis and polio epidemics, measles immunizations and the like.

Now, the field is evolving again. Panelist **Julie Morita**, commissioner of the Chicago Department of Public Health, attributed some of the shift to the Affordable Care Act (ACA), or Obamacare.

The act "freed public health up to think beyond what we traditionally focused on," she said. "There was so much emphasis in the ACA related to prevention and public health and support for that within the health care delivery system that it freed us up to think more broadly. It was very liberating to now be able to think about determinants of health and root causes of health in general."

Here's what four large U.S. cities are doing to try to build and promote healthier communities:

DETROIT: Focusing on the smallest among us

Dr. Abdul El-Sayed's encounter with the three-year-old boy showed him the path that his public health department should take.

"I realized that the work we had to do in rebuilding a health department in Detroit had everything to do with justifying the confidence that any three-year-old boy should have in the life that he is going to lead," El-Sayed said. "So, we built our department with one key goal in mind: We wanted to leverage health to disrupt intergenerational poverty.

"We wanted to break down the barriers that children like him had to navigate, to be able to learn and earn like any child should anywhere, whether that is an African American little boy growing up in Detroit in a single-parent household or that is my child growing up potentially in the burbs with two parents who are highly educated."

The boy was the fourth child of a 21-year-old mother growing up in a city that El-Sayed described as "incredibly poor," whose population's life expectancy was 16 years shorter than people living in the suburbs, whose local government went bankrupt (but emerged from it), whose schools housed dead rodents and black mold, and whose air was being tainted by too much pollution.

The department started with some "quick, very easy, very simple solutions that hopefully had broader contextual consequences," he said.

The health department delivered free eyeglasses to children at their schools, he said. When a petroleum refinery in southwest Detroit wanted to raise its emissions of sulfur dioxide, the department joined with the community and others to oppose it. The company instead decided to reduce its emissions and spend $10 million to do it. The water in schools and Head Start programs was tested for lead.

He said public health professionals must stand up for those people who have not traditionally been the priority of those who govern. With that in mind, he decided to quit his job as health director and run for governor of Michigan.

"I realized that if and when people from my perspective don't stand up and run, we have the circumstances that we've had in Michigan for a very long time," he said in a later interview. "So I decided to leave explicit public health service for public service with the recognition that I do hope my experiences as a public health physician will help me to set an agenda for our state that precludes anything like Flint or anything like Detroit from happening again."

Elizabeth Rappaport, a retired physician on the dean's advisory panel for the school of public health who attended the conference, agreed on the importance of having a political voice.

"I just thought that (El-Sayed's) talk raised many important points, not the least of them that all the interventions that we're studying and all the relationships between social determinants and health are not actionable unless we have the right people in government," she said.

IT'S ALL CONNECTED

Health Challenges Facing Cities Encompass Behavior, Environment, Equity and Politics

CHICAGO: 4-year plan for improving the city's health

In Chicago, the public health department has found that incorporating health initiatives systemically in every aspect of local government and partnering with city departments are key to implementing the Healthy Chicago 2.0 plan, according to Morita.

Having support from Mayor Rahm Emanuel didn't hurt, either. When the plan premiered in May 2016, he backed a resolution requiring that city departments collaborate to promote health through policy. The plan was developed over 18 months and is scheduled to run over four years.

The department is "expanding (its) focus and actually needing to partner more with others," said Morita. "We are not urban planners. We are not economists. We are not folks who've delved into these areas in the past and really need to partner with others to be successful."

In the process of building the plan, the Healthy Chicago 2.0 team found that the city over the past few years had become healthier, but in some of its 77 communities, residents had not fared as well.

"There are significant health disparities that have not improved over time and so that became the area of focus for us," she said. "In order for us to do our work, given the resources that we have, we need to focus on those communities that have the greatest need."

A "health-in-all-policies" task force was formed to make recommendations for implementing the plan. So far, streets have been restructured to accommodate bicyclists, walkers and drivers, and bike-sharing has been introduced in low- and high-income neighborhoods, Morita said.

Train stations, tracks and trains have been improved to encourage more riders than drivers, and funding through the Vision Zero program has been secured to help reduce traffic fatalities and serious injuries.

Morita said the department has also partnered with non-governmental community-development agencies with ties to communities and expertise in working with them. Grants of up to $40,000 are available to community groups for projects.

NEW YORK: Major overhaul in the thinking of health department

The New York City Department of Health and Mental Hygiene is reimagining itself. Over the past 2 ½ years, its public health professionals have looked inward at their own attitudes toward race. The aim is to create equity internally so the professionals can advocate for the same in the black and Latino communities they serve, according to Maybank.

The source of the change was Health Commissioner Mary T. Bassett, who cited racism as the root cause of inequities and went about overhauling the department to root it out, Maybank said.

"She has called out the need for us as public health professionals to be advocates, and to name racism as an explicit and fundamental cause of inequities," she said, "and we also have to do critical research and thinking around all of this."

Maybank laid the blame for some of the inequities on public-health professionals who, she said, have developed policies and hold biases that have perpetuated the inequities.

After coming on board in 2014, Bassett found that her executive staff had few blacks and Latinos - in direct contrast to the population of the city. She made "many intentional efforts to change that look and feel," Maybank added.

The department offers brown bag lunches with expert speakers, a two-day workshop on Undoing Racism, health-equity sessions on gender, and LGBTQ (Lesbian, Gay, Bisexual, Transgender and Queer) issues, leadership training and more. It also created a Center for Health Equity, which Maybank leads and whose function is to root out health inequities fueled by injustices and discrimination, she said.

"We really believe in the value of inclusivity, and if we're going to talk about it and the need for it to happen within neighborhoods, then we need to practice the same within our health department and within our center," she said.

The department has also engaged more with the community, she said. The neighborhood health action centers are being changed to encourage collaboration with other city agencies located within those centers to do away with silos. As a result, department staff tapped teens as advocates when its teen-pregnancy program was threatened with cutbacks.

Their work caught the eye of City Council, which passed a bill - signed by the mayor in September - supporting racial and gender equity across city departments, along with training and annual reports.

PHILADELPHIA: Tackling all the factors that lead to unhealthy living

Farley urged the participants to take an active role in figuring out how to prevent unnecessary deaths caused by social determinants of health, as well as behavioral and environmental factors.

The public health field, he said, must recognize that finding solutions to both social and behavioral/environmental health challenges is necessary - and requires stepping out of the traditional realm of health to grabble with issues such as poverty and income inequality.

"The social determinants of health and the behavioral determinants are ... in different dimensions but we probably ought to be working on both," Farley said. "We're not going to end poverty and income inequality with things like reducing air pollution, increasing access to healthy food, or parks and pedestrian infrastructure, or raising cigarette taxes. All those are wonderful and are going to save lots of lives, but they're not going to do anything to poverty and income equality."

He offered several policy recommendations that the public health field should push for to alleviate the impact of social determinants:

- increasing the minimum wage or work toward more union-negotiated wages
- creating a less regressive tax structure and providing an earned income tax credit
- providing "more opportunity to racial groups that are discriminated against right now" through affirmative action
- implementing affordable housing policies already on the books, along with zoning and planning regulations that promote integration
- increasing funding for public schools.

A call-out to public-health professionals

With the little boy in mind, El Sayed urged the symposium participants to become more attuned to the communities they help. "Pay attention to the individual," he said. "Have empathy for the people we are actually serving as we think about trying to wrap our heads around some of these abstract concepts that sometimes feel so much bigger than anything we can do.

"I think it is a moment right now where we have to be thinking about public health in the grandest ways but then focus it on sometimes the smallest people."

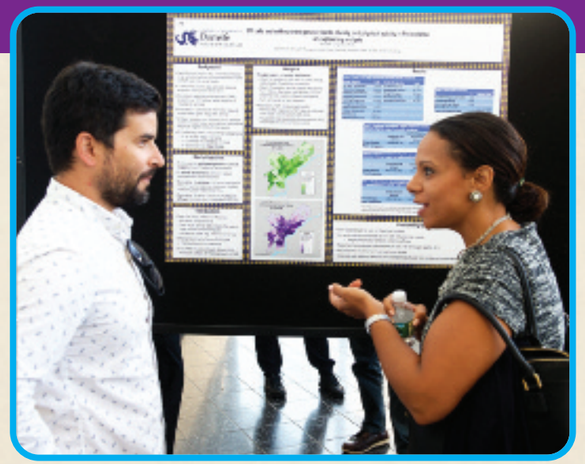
DATA, DATA, EVERYWHERE

By Courtenay Harris Bond

Researchers now have access to huge amounts of data - so much data that using it well can be a challenge

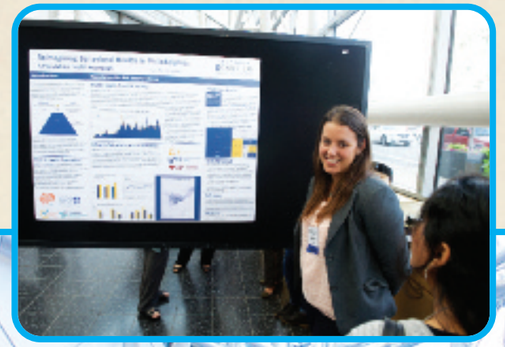
Novel Uses of Data in Urban Health Research and Action

In a session about the novel uses of data in urban health research and action, the speakers discussed ways to make collecting data easier, faster, cheaper - and ideally more accurate - through the use of wearable devices, such as Fitbits and accelerometers, as well as with cameras that are constantly recording and capturing information and images in cities around the world.



Michael Bader, assistant professor of sociology at American University, talked about the promise and perils of harnessing geographic big data for neighborhood research to examine issues such as how our physical environments affect the way we act and interact in the world and what the walkability of a space can do for one's health.

"Google has done much of this work for us," Bader said. "They have cameras down many of the streets that we are interested in."



But the problem then becomes one of how to weed through all that data to find the information one needs for a particular study.

"We now have almost too much data," Bader said. "We need to figure out a way to get the data from Google ... into a form that's useful for academic research and hopefully policy translation in the future."

So his team has developed a computer-assisted neighborhood visual assessment system, a software platform designed to reduce measurement error. The platform also requires little technical expertise for the deployment and oversight of data collection.

"With some of these cameras, we can look at some of these retrospective questions... to see if interventions or policy changes worked," said **Aaron Hipp**, associate professor of community health and stability and a fellow at the Center for Geospatial Analytics at North Carolina State University, in a separate but related talk about trans-disciplinary evaluation of place and physical activity.

For instance, his team analyzed a year's worth of photos taken by an intersection camera at Pennsylvania Avenue and Ninth Street in Washington, DC. Hipp used Amazon's Mechanical Turk – a crowdsourcing Internet marketplace that helps businesses and researchers find individuals to perform tasks that computers can't - to get people to draw circles around pedestrians and cyclists in each image. The research showed a three-and-a-half-fold increase of cyclists in the area after the addition of a cycling track, a designated bike lane, separated from traffic and the sidewalk.

"If you build it will they come," Hipp said. "It seems the cyclists came here. We really want to be able to communicate this to urban planners."

Genevieve Dunton is an associate professor of preventive medicine and psychology and director of the USC REACH Lab at the University of Southern California, where she has been employing real-time approaches to capturing information about people's physical activity and diets. She discussed her methods and their implications for urban research.

"How can we begin to harness the power of mobile technology and wearable devices and use them to help explain health behaviors?" Dunton offered as one of her guiding questions.

"We used to rely on surveys that describe one's usual behavior," Dunton said. "So we don't get a sense of how one's behavior can fluctuate within a day or from day to day."

Instead, Dunton has been researching how to use wearable technologies to allow for real-time self-reporting recorded in these devices, which reduces the need to depend on a person's often flawed recall of their own behaviors.

Using wearable devices to gather data "might be more ecologically valid because you are capturing the information in the environment" and can even look at nuances such as how mood affects behavior from moment to moment, Dunton said.

In looking at how real-time data capture methods can advance understanding of physical activity and eating behaviors, for instance, Dunton found that "weekend intentions" didn't predict behaviors at all – that the data collected by wearable devices showed that people did not do what they predicted they would do. "It doesn't matter what you say you're going to do, the behaviors are not going to follow at all," she said.

Heidi Grunwald, director of the Institute of Survey Research and deputy director for the Center for Public Health Law Research at Temple University, talked about shortening the data collection to action pipeline.

In Philadelphia, this is happening through her project BeHeardPhilly, a civic engagement tool through which city residents have voluntarily agreed to have their voices heard by researchers interested in the thoughts, opinions, and behaviors of people here.

"It's really expensive to reach people on the phone these days, so we were trying to figure out how to do that better, faster, cheaper," Grunwald said.

BeHeardPhilly is the only regional panel of its kind and maintains a basic set of demographics about its participants, and asks them how they want to take surveys and how often.

One of its findings so far: "Overwhelmingly, people want to take a lot of surveys," Grunwald said. "Surprising!"

GLOBAL PERSPECTIVE

By Courtenay Harris Bond

We're healthier than ever, but improved human well-being and rapid urbanization have taken a toll on the planet

The human species is a force in nature that is permanently changing the fossil record - and not in positive ways.

That is what Anthony Capon, a professor of planetary health at the University of Sydney in Australia explained in a session entitled "Urban Health in Global Perspective: The Challenges and Opportunities of Global Urban Growth." He was one of four panelists from throughout the world to talk about the subject of global health.

"Our geoscience colleagues are now arguing that we're leaving the Holocene for a new epoch, an epoch of humanity in which we are now changing planetary systems to such an extent that we'll see this in the fossil record," Capon said.

"Future generations will look back, and they will wonder why we didn't act."

The new epoch, the Anthropocene, is a concept inspired by an international commission that published a report in 2015 outlining how we have made a lot of progress from a biomedical perspective but have done so at great cost to the environment.

"By almost any measure the human population is now healthier than ever before," Capon said. "But to achieve this we've exploited the planet at an unprecedented rate" through increased carbon dioxide emissions, deforestation, and many other factors.

"Future generations will look back, and they will wonder why we didn't act," Capon said in a follow-up interview. "Because we know enough to act, we're just not making the changes that we need to make."

He said the Anthropocene is a potentially dangerous period of disruption. "And we need to understand what's ahead, whether it's climate change, loss of biodiversity, toxic pollution of ecosystems, or, importantly, urbanization ... which has potentially great positives for health but also great risks for health."

To slow our devolution, he said, the world needs to move from a highly consumptive economy to one that emphasizes reducing, reusing and recycling. For instance, nearly 30 percent of the world's total agricultural land is used to produce food that is never eaten, Capon said.

Forest conservation reduces disease risks. Air pollution - in part caused by lighting fires to clear forests in order to raise cattle - causes approximately seven million deaths a year. And more and more people are dying during extreme weather events caused by climate change.

"Cities are a key part of the challenge but also the opportunity," Capon said.

For instance, urban planners and politicians can help reduce air pollution, provide green spaces, improve watershed conservation, increase access to healthy food, and build resilience to floods, storms, and drought.

"At an individual level, we can all play a part in reducing greenhouse gas emissions: A vegetable rich diet is better for our health and planetary health," he said.

Here's what the other presenters had to say:

Dr. Tolullah Oni, an associate professor at the University of Cape Town in South Africa, said non-communicable diseases, such as hypertension, were rising in her country - just as they are in cities in the developed world. "We're really seeing a transition to the kind of risk factors that are more prevalent in the urban context," Oni said, citing high blood pressure, diabetes, and mood disorders as health conditions that are becoming more prevalent.

(l-r) Shannon Márquez, PhD, MEng; Anthony Capon, BMedSci, MBBS, PhD, FAFPHM; Tolullah "Tolu" Oni, MBBS, MRCP, MPH, DFPH, MD; Waleska Teixeira Caiaffa, MD, MPH, PhD; Siddharth Agarwal, MBBS; and Ana V. Diez Roux, MD, PhD, MPH

Siddharth Agarwal, executive director of the Urban Health Resource Center in New Delhi, India, spoke about the importance of empowering communities to affect change.

Teaching women how to form health groups and negotiate with government entities through petitions has helped improve the well-being of impoverished populations in India. Even simple measures, such as community members building an earthen bridge over a drain they once had to wade through daily, can impact community health, Agarwal said.

Dr. Waleska Teixeira Caiaffa, a professor of epidemiology and public health at Federal University of Minas Gerais and director of the Observatory for Urban Health in Belo Horizonte, Brazil, highlighted how very simple structures for physical activity in deprived neighborhoods throughout Belo Horizonte have greatly increased local health and become a national initiative.

LEARNING WHAT WORKS

Capitalizing on Urban Policies and Natural Experiments

By Courtenay Harris Bond & Amrita Balachandran

What if community parks offered free dance classes: Would people living nearby participate, and become healthier?

For Olga Lucia Sarmiento, an associate professor of public health at the Universidad de los Andes in Bogota, Columbia, the answer is yes.

Sarmiento was one of four presenters at the Urban Health Symposium session on research into urban policies and natural experiments, defined as "empirical studies in which individuals exposed to the experimental and control conditions are determined by nature or by other factors outside the control of the investigators." When Bogota officials identified six new parks in which to install a physical activity program that had been in other parks throughout the city for more than 20 years, Sarmiento saw a chance to conduct a natural experiment about the impact of the policy on the health of individuals and their communities.

Her team took height and weight measurements of study participants, used accelerometers to gather data, conducted semi-structured interviews with staff running the classes and reviewed literature about the program. They learned that the dance classes increased levels of moderate to vigorous physical activity and helped create community cohesion.

As a sociologist, Diana Hernandez didn't know much about boilers - until she started studying the impact of New York City's clean heat policies.

"I'm successful today if I make you or help you appreciate that sludge in boilers is problematic for the environment," said Hernandez, an associate professor at Columbia University. "It's also problematic for health and also has implications for disparities."

The lived experience of dirty fuels is a "very real hardship," Hernandez said.

The lived experience of dirty fuels is a "very real hardship," Hernandez said. To illustrate this point, she quoted a subject from one of her studies: "It was like a volcano of black smoke that came directly into my kitchen window ... I realized immediately when it smelled like a city bus, like I was standing behind a city bus, that we needed to get the heck out of the apartment. I shut the window but it was too late ... I developed asthma in the same year, 2006. And I was 43 years old. I'd never had asthma in my life."

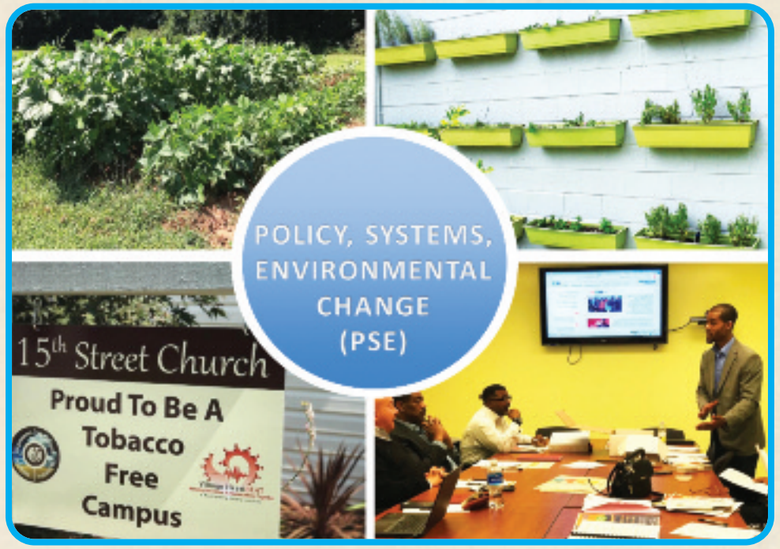
Hernandez's studies show how New York's clean heat policies have impacted both the city's environment and the health of its residents.

From 2012 to 2015, her team evaluated New York City's efforts to get buildings to shift to cleaner fuels. What they found was that the implementation of the new policies was highly successful, with nearly 100 percent compliance over the course of three years. Air quality and community health improved, but researchers also found that compliance alone wasn't enough. The laws needed strengthening to encourage more of the buildings to shift completely to natural gas.

Hannah Lawman, director of research and evaluation in the Philadelphia Department of Public Health's Division of Chronic Disease Prevention, discussed her research into the efficacy of two public health policy "wins" for Philadelphia: last year's passage of a beverage tax of 1.5 cents per ounce on all sweetened drinks and new tobacco retailer permit regulations that took effect this year.

The goal with the soda tax evaluation was to see what happens to consumption and price. To assess these factors, Lawman's group examined millions of scanner records, conducted intercepts in stores, asking to inspect people's bags, and made site visits to smaller shops in the city. They also conducted qualitative interviews. Lawman was set to present findings at the Obesity Society in November.

To evaluate the impact of new tobacco regulations designed to help control the density of tobacco retailers in Philadelphia and to create tobacco-free school zones, Lawman's team analyzed a retailer database and used online panel surveys to ask people about their smoking habits and perception of retail environments.



"In Philadelphia, we see that people are just bombarded with tobacco," Lawman said. Philadelphia has more sellers and advertising than many other cities and the highest youth tobacco sales violations in the state, she said.

Before she moved to the suburbs of Detroit in 2015, Roshanak Mehdipanah, an assistant professor of health behavior and health education at the University of Michigan, spent four years working with the public health department in Barcelona to evaluate the impact of the Neighborhoods Law. Passed in 2004, the law created a massive urban renewal program aimed at improving the physical infrastructure, social integration and economic condition of residents of 143 neighborhoods in the region of Catalonia, Spain. At the time, it was the largest urban renewal project in Europe.

Using a mix of qualitative and quantitative methods, Mehdipanah's team evaluated the perceptions of the program among residents in targeted neighborhoods, as well as assessing their health status before and after the intervention. The findings indicated that Neighborhoods Law intervention had improved self-rated health of residents and that urban renewal policies brought about the most significant improvements in health among the most deprived populations.

When a change in the regional government in Catalonia halted the implementation of urban policy improvements under the Neighborhoods Law, Mehdipanah's evaluation of the program prompted vociferous community and media support. Two months later, the government resumed the program and later, expanded it.

To learn more about the Urban Health Collaborative, visit drexel.edu/uhc.

GENTRIFICATION AND DISPLACEMENT:

REIMAGINING HEALTH IN CITIES

By Karyn L. Feiden

In the Mission District of San Francisco, it is not uncommon on holidays to see a white person walking down the street topped with a traditional Mexican sombrero. That can be a jarring image, and to some an offensive one, not least because it is happening in a neighborhood undergoing a dramatic population shift. In 2000, Hispanics and Latinos accounted for 60 percent of the Mission District's residents, according to the U.S. Census. Now, they represent less than half of the community, and the trajectory is downward - only 31 percent of residents will be Hispanic/Latino by 2025, city analysts say.

That kind of demographic upheaval, whether or not it is accompanied by cultural appropriation, is taking place across the country. The Federal Reserve Bank of Cleveland looked at the 118 U.S. cities with populations of 250,000 or more, and found a sharp and consistent trend - the people living near downtowns have become richer, better educated and whiter, especially since 2000. From the Shaw Avenue neighborhood of Washington, DC, to Chicago's River North, from East Austin, Texas, to Bedford-Stuyvesant in Brooklyn, lattes, dog-walkers and yoga mats suddenly seem to be everywhere while local barber shops and bodegas are closing their doors.

Gentrification - defined as the process by which more affluent populations move into less-affluent areas, pushing up the price of housing, goods and services - is transforming cities with health, economic and cultural impacts that go well beyond symbols. Do the changes simply reflect the ever-evolving nature of great population centers, or do they result from deliberate social policy? What are the causes and consequences? Who gains and who loses?

Those were among the questions explored at the "Segregation, Gentrification and Health" session of Drexel University's Urban Health Symposium in September. History, the global economy, the labor market, government decisions, racism and generational trends all contribute to the complex answers.

The Fuel of Gentrification

It is impossible to understand today's revitalized cities without a brief look back in time. In her symposium keynote address, Mindy Fullilove, MD, professor of urban policy and health at the New School in New York, highlighted the many forces that undermined once-stable communities throughout the 20th century.

Beginning in the mid-1930s, the Federal Housing Administration's racist practice of redlining - refusing loans in black communities - segregated urban neighborhoods and starved them of new investment. By the late 1950s, highway construction was tearing apart many of those same neighborhoods. A broad-based, government-sponsored "slum clearance" effort in the same era destroyed large swaths of housing, undermining social cohesion, and white flight to the suburbs took hold. In the decades that followed, deindustrialization, mass incarceration and the inequitable allocation of public resources for education, transportation and public safety continued to weaken the fabric of the central city. "Marginalized people are in the path of all of these forces," says Fullilove. The population of many urban areas dropped precipitously for some 35 years.

That trend began to be reversed in the early 21st century as some cities finally outpaced the growth of the suburban ring that surrounded them, and that shift picked up speed after the Great Recession. Census data show that the white population increased in 24 of the nation's 50 largest cities between 2010 and 2014 (of the remaining 26 five lost white residents, while the remainder saw little change).

At the same time, those cities grew richer. A data analysis by Governing looked at neighborhoods in the lowest two-fifths of each city's census tracts (as measured by median household incomes and median home values) and found that 20 percent of them had gentrified since 2000 (based on increased housing prices and higher levels of education). In some cases, the extent of the gentrification was even more pronounced - in Portland, OR, Washington, DC, Minneapolis, and Seattle, 50 percent or more census tracts had gentrified. In Philadelphia, the figure was 29 percent.

A host of factors explain the appeal to more affluent populations. "There has been a shift in the nature of the central city, and what goes on there," says Richard Walker, PhD, professor of geography (emeritus) at the University of California, Berkeley, pointing out the extent to which finance, technology, health care and other clean industries have supplanted ports and manufacturing. "This is about the transformation of American cities in our time."

Young professionals and retiring Baby Boomers represent two of the largest demographic groups attracted to cities by some combination of good jobs, cultural amenities, safe streets and the density that allows for mass transit. Especially along the coasts, large cities have become a magnet for highly educated workers from many corners of the world. "You have a flow of labor that moves around," says Malo André Hutson, PhD, associate professor of urban planning at Columbia University, who spoke at the Urban Health Symposium. "New York, Washington and Boston, they are connected to Paris, London and Santiago. Strong market cities with strong, diverse economies put a tremendous amount of pressure on housing markets."

With that comes a strong incentive to rebuild deteriorating urban neighborhoods – but rarely for the benefit of current residents, who are mostly people of color. Developers, flush with capital from around the world, are more interested in their buildable land, solid housing stock ripe for rehabilitation, and locations proximate to jobs, transportation and wealthier neighborhoods. The promise of a high return on investment, and sometimes the availability of public subsidies to get the work done, are also potent draws.

The result is what Fullilove calls "a housing famine" for Americans at the low end of the economic scale, and increasingly in the middle class, too. "We have destroyed such a great proportion of our housing infrastructure and are now building only luxury housing," she says. "What happens? Where do people go?"

On the Move

As communities gentrify, some long-term residents can no longer afford rising rents or taxes; others choose to cash out of homes

bought cheaply years ago. Landlords may use either carrots or sticks to empty their units before renovating them to appeal to higher-paying renters. Residents who stay on may eventually come to feel like strangers in their own communities because friends and family have left, and retail options cease to meet their needs.

Although there is no uniform methodology to track displacement, anecdote and data suggest it is widespread. Striking analyses have emerged from the San Francisco Bay Area, where housing pressures are among the most acute in the nation. More than half the region's neighborhoods have experienced some degree of displacement, according to the Urban Displacement Project at the University of California, Berkeley.

The pressure in Philadelphia is less intense, but a study by the Federal Reserve Bank of Philadelphia uncovered a trend of concern there, too - "distinct and unequal mobility patterns" where vulnerable residents who move from gentrifying neighborhoods are likely to wind up in more economically disadvantaged locations.

With some cities becoming enclaves of affluence, their surrounding suburbs increasingly sport pockets of poverty. The Brookings Institute confirms that the poor population living in the nation's suburbs is growing significantly faster than in its cities. With longer workplace commutes, limited transportation options and fewer social services, these populations may be losing their shot at upward mobility.

"Economists and urban planners will sometimes say 'cities have always gone through transformations. People move in and out,'" observes Hutson. But in his view, the recent shift is unprecedented. "This is different than the past in scale and magnitude. It is much more intense. The change is much more rapid, and much more stark."

Costs and Consequences

Gentrification and displacement can have profound health consequences, warns Fullilove, who is a social psychiatrist by training. "Health is fundamentally created from the ability to participate in society and access its resources," she says. By dispersing people from their homes and undermining social cohesion, "displacement feeds disparities and leads to permanent scars that are both physical and mental."

Those disparities can come into sharp focus even without displacement. As one resident told Hutson, "When we said the street lights need to be fixed, no one came. When we said someone is peddling drugs, no one came. Suddenly we have dog parks and bike lanes, and all these wonderful things. And then you have cops showing up and saying 'Why are you in this neighborhood?' And the answer is, 'I grew up in this neighborhood.'"

The uneven health effects of neighborhood change are documented in a study published in the Journal of Urban Health (December 2016). Drawing on a regional survey from southeast Pennsylvania, researchers examined health outcomes of black and white residents in Philadelphia neighborhoods undergoing gentrification, compared with those that were not. Overall, gentrification resulted in marginal improvements to self-rated health, but "it leads to worse health outcomes for blacks," they found. "The endurance of these bad health outcomes suggests the subtle effect of gentrification's cultural displacement."

As a city grows more homogenous - not only by race and ethnicity, but by income, education and skill set - the impact goes beyond the individuals and families most directly affected. When teachers and police officers can't afford to live in the communities they serve, when low-wage workers confront horrendous commutes and artists depart, taking a layer of creative ferment with them, those who remain lose some of the richness and diversity that drew them to the city in the first place.

Public discourse and the capacity for problem-solving can be damaged, as well. "A truly healthy city encourages people to get out on the street and engage and support democracy and have conversations around race and gender," Hutson says. "All of that is important when we talk about political and social diversity."

Fullilove agrees. "Cities have become places where we invent solutions. If you have different people cross paths, then the possibility of invention goes up. Every group in the society has small pieces of knowledge about the world. If they can't interact with one another, they will remain unable to exchange their knowledge."

Revitalizing Communities for the People Who Live There

How, then, do we revitalize communities in ways that benefit long-term residents, as well as newcomers? There is no single strategy to ease the complex pressures that drive gentrification and displacement, but a mix of approaches can influence housing prices and stabilize communities. A good starting place is to

REVITALIZING WITHOUT GENTRIFYING: PROMISE ZONES AND PROMISE NEIGHBORHOODS

By Karyn L. Feiden

Bike lanes, riverfront walkways, expanded parkland and housing close to mass transit are popular amenities in forward looking cities these days, offering both environmental and health benefits. Why, then, are they as likely to be met by suspicion as by enthusiasm in some quarters?

Urban Health Symposium speaker Helen Cole, DrPH, MPH, a postdoctoral researcher at the Barcelona Laboratory for Urban Environmental Justice and Sustainability, suggested one explanation: "green gentrification." Planners are increasingly cognizant that public investments can make a neighborhood so appealing that they drive up real estate values and force established residents out. From the High Line in New York City to the parks created for the Olympics in Barcelona, Spain, the benefits of community investment are all too often being shared unequally, if at all.

A federal initiative known as Promise Zones may offer a different strategy for building on local assets in ways that can advantage poor communities, rather than drive people out of them. The initiative helps existing organizations collaborate on revitalization projects and increase opportunities available to local residents. Drexel University is a key partner in the West Philadelphia Promise Zone, a designation awarded in 2014 that also engages the Mayor's Office of Community Empowerment and Opportunity and other public and nonprofit entities.

West Philadelphia has a strong tradition of local activism and social cohesion that has remained intact for generations. But it also has the kind of vacant lots and location that appeal to developers. "The things that make these communities resilient are exactly the things people fear losing – the beautiful old homes, walkability, the history of the people who have lived there for so long," says Amy Carroll-Scott, PhD, MPH, co-director of the policy and community engagement core at the Urban Health Collaborative at the Dornsife School of Public Health.

Numerous community-strengthening activities fit under the umbrella of the West Philadelphia Promise Zone. Among them is the Home Preservation Initiative, which provides affordable home repairs in targeted neighborhoods, as well as pro bono legal work, support for civic engagement, and a focus on education, housing and public safety. "We are trying to eliminate certain legal, financial and structural reasons that people abandon their homes," Carroll-Scott says.

Carroll-Scott and Félice Lê-Scherban lead the Data & Research Core for Promise Neighborhood. Funded with $30 million over five years from the U.S. Department of Education, Promise Neighborhood is a place-based initiative supporting children who live or attend school in the footprint of the Promise Zone, and their families. The Promise Neighborhood initiative will also benefit from $76 million in matching funds, secured by the City of Philadelphia and area nonprofit organizations.

The data-collection efforts are designed, in part, to detect the risk that revitalization is morphing into uncontrolled gentrification and displacement pressures. "We need to monitor any indicators of dramatic change, and put that information in the hands of local advocates who can stop that," Carroll-Scott says. "We want to make sure the data and research informs the program, and keeps it accountable."

recognize adequate housing as a human right, as 75 percent of Americans say they do, according to the National Low-Income Housing Coalition.

Acknowledging the value of equitable community investment as a force for good is another foundational principle. Long-term residents who have struggled for decades to revitalize their neighborhoods don't welcome investors who have only a profit motive for fostering change, but they don't favor stagnation either. "I have yet to go to a community that says, 'We don't want investment, we don't want jobs,'" observes Hutson. "They do say, 'We'd like to be at the table as partners in this process.' What people want is more transparency, more accountability."

Putting anti-displacement measures, such as limits on eviction, in place before the forces of development grow too powerful to resist is also key to getting ahead of the gentrification curve. An Urban Institute report suggests that gentrification proceeds through early, middle and late stages, with progressively fewer options to preserve affordable housing and protect residents over time. "In places like San Francisco and Manhattan, the battle is far advanced and we have lost," says Fullilove, with some despair. "But some places aren't getting investment yet, or are getting only modest investment. What is the strategy in places that are not yet built out?"

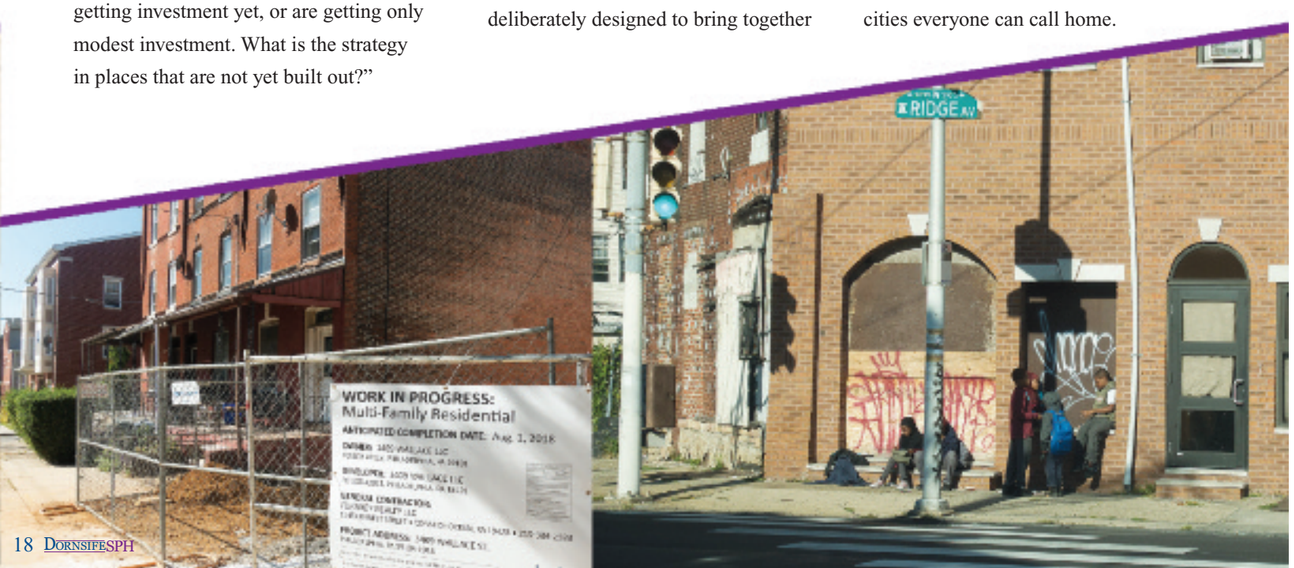
One concrete package of policy recommendations has been put forward in Rise of the Renter Nation, a report by the Right to the City Alliance and the Homes for All Campaign. At the national level, these include commitments to expand and preserve existing affordable housing and stronger regulation to prevent the kind of speculation that led to the last housing bubble. Locally, the report advocates for a "renter's bill of rights" with provisions to keep housing affordable and in livable condition; strategies to increase the available supply; protections from eviction, displacement and discrimination, and more community control.

Cities that provide subsidies or tax abatements to developers in any form "should be thinking about what they can get in return in terms of jobs, health investment and infrastructure investment," says Hutson. "It is important to be thinking about economic growth, but not by sacrificing a bunch of people along the way."

Other approaches:

- Inclusionary zoning, which requires that market-rate construction set aside a portion of its units for renters or buyers with limited incomes.
- Mixed-income developments, which are economically integrated housing deliberately designed to bring together residents from different backgrounds and deconcentrate poverty.
- Density bonuses, which allow developers to build more units on a smaller footprint in exchange for providing more affordable housing.
- Housing trusts, generally funded through some kind of real estate transaction fee so that a nonprofit or public agency can acquire land, build or rehabilitate housing units, or provide rental subsidies in some form.
- Land trusts, a mechanism for acquiring and protecting property before its market value soars.

Although these and other public policies can mitigate the crisis of housing affordability, gentrification and displacement also need to be considered through the lens of larger societal trends that tarnish the landscape. The Urban Health Symposium speakers (story page 4-13) were clear about the influence of racism, economic inequality, environmental degradation and health disparities in this context. "I think these are battles that have to be fought in every city and neighborhood, with people waking up and grappling with the fact that we are destroying our lifeboat," says Fullilove. A broader commitment to equity and better health for all is the launch point for building cities everyone can call home.



CIRCLE OF RESPECT | Community Health Worker Peers

Teaching young men to heal themselves and their community

By Sherry L. Howard

Stefanie Wakeman and Tony Thompson

When he walked into the program that first day, Waltkeem Jenkins was very anxious. He didn't know anyone, and he realized he was the youngest man in the room. The others were older and looked more mature, and he wasn't sure how well he'd fit in.

"I'm only like 20," Jenkins said, recalling how uncomfortable he felt, wondering how the older guys would react to him. He decided to just "present myself the best way I can."

It was the first day of the Community Health Worker Peer (CHWP) Training Academy at the Center for Nonviolence and Social Justice at the Dornsife School of Public Health. Jenkins was among a group of young men of color touched or impacted by violence who had been accepted to the program for guidance and training.

He didn't need to be apprehensive, said Andre Thomas, 25, of Olney, another participant. "I understand why he thought that coming in, but we learned from each other," he said. "Waltkeem taught me a lot about different things. Age really wasn't too much of a difference."

…they created a brotherhood around their similarities and gave themselves the name "Founders" as the pilot members of the training academy.

Over the next seven weeks, the men opened up to each other, trained in community health practices, learned how to be healers, and networked with public and medical practitioners whom – without the program – they would likely not have ever met. Just as important, they created a brotherhood around their similarities and gave themselves the name "Founders" as the pilot members of the training academy.

The program was part of a project funded by the federal Office for Victims of Crime, secured by center co-directors John Rich, MD, MPH, professor of health management and policy, and Ted Corbin, MD MPP, associate professor in Drexel's College of Medicine and the Dornsife School of Public Health. The $1.6 million grant runs for five years, until 2020.

The grant also paid for two training academy graduates to be hired as community health worker peers for Healing Hurt People, a hospital-based violence prevention program. It is also being used for another project on community-based conversations about trauma. The next training academy is scheduled for spring 2018.

TAPPING INNER POTENTIAL TO EMPOWER MARGINALIZED YOUNG MEN

"One of the things I have always felt strongly about is that the young people who have been victims of violence or who have experienced violence in their lives are actually the experts in what their lives are like, and their world and the kinds of challenges they face," said Rich. "And yet we've often forgotten that their voices really can matter and make a program different."

The word went out through email blasts and flyers, visits to health and community centers, even Head Start locations to reach young fathers with children in those programs. The center was looking for men between the ages of 18 and 30 who had experienced violence or had had someone close to them who had experienced it.

Forty-one men applied for a program that could accept no more than 10. Nine men were selected but one dropped out after finding a job, leaving eight graduates in June. The program operated like a job, with the men training from 9 a.m. to 3 p.m. three days a week starting in May and receiving a salary of $8.50 an hour as temporary employees of Drexel.

"Most of these young men (are) people you probably would have walked by and wouldn't have given them a second glance or opportunity or chance to do anything," said Tony Thompson, field and training coordinator at the center who directs the program with Stefanie Wakeman, a project manager. "If you have a community board, you'll never see any young men between 18 and 30 unless he's working in the building that they're meeting in."

The men were taught career readiness skills, mental health first aid training, stress management and conflict resolution, how to navigate the health care and criminal justice systems, how to engage people dealing with trauma, how to network, and more.

They received mental health and other certifications for the training, and are employable in community health centers, doctors' offices, hospitals and other health service-related fields.

"THE FOUNDERS": BUILDING NEW CONNECTIONS AND NETWORKS

"I don't want to look at community health workers as individuals who do something for people," said Thompson. "Community peers are young people who are supporting community members to figure out ways of addressing an issue or problem in (their) life. The way our training was created was to help them to build bridges and connections so we could figure out where the barriers for healthier living are."

Just as important, the peer program gave them a comfortable place to be honest with each other about themselves and any trauma they may have faced, according to Jenkins and Thomas, who has a bachelor's degree in interdisciplinary studies from East Stroudsburg University.

Two of Thomas' family members were killed by senseless violence: a pregnant aunt shot by her boyfriend and a 23-year-old cousin seemingly in the wrong place at the wrong time.

"I didn't know how to really express what it was I wanted to say," he said. "I knew I wanted to say something but I just couldn't get things together in my mind to help it make sense. … This program has made me more comfortable speaking about what I'm thinking about and having more people on the same wave length to understand that conversation."

Sometimes the experience of violence becomes so commonplace that it seems like a natural part of living for some men, and the wounds may lie deeper inside. The violence becomes so pervasive, Corbin said, that people don't necessarily see themselves as victims of it.

"Sadly, it's so normalized for them," he said. "Part of the training was identifying that, and also hoping that the training would help them understand it better and help them themselves heal, if there are any lingering wounds from whatever they've experienced."

Rituals were built into the sessions to offer affirmation to a group of men who are not always told of their worth. They started each day by identifying themselves, saying what they expected to learn and mentioning whom they'd turn to for help.

At the end of the day, they participated in a Circle of Respect, in which each one individually stood in the center of a circle surrounded by the others with their arms locked like a chain. Each would say why they respected the person in the center. It was a practice that Wakeman and Thompson borrowed from another program.

"It reminded you of who you were and what you bring to the table," said Thomas. "These people may not know everything about you, but they know the action you display in the classroom. It helps you stay grounded and it also helps you keep motivated, fighting the good fight."

The idea of a brotherhood was something the men created on their own. Wakeman says the directors were calling them the team, but they preferred the brotherhood.

"We all just clicked," said Jenkins, of South Philadelphia, who volunteered at a church before he came into the program. "That's one of the things I was worried about. Once I got to know them and they got to know me, it was like 'Hey man, we cool.' It's how the community's supposed to be, the resources you can learn from being around people like this. It broadens your horizons."

During the training, the men's weekly lunches blossomed into networking experiences with staff from other departments that were partnering with the program. Those sit-downs gave them an opportunity to meet professionals with whom they could build relationships. The guests were impressed, and thought this was a unique group of men.

"They're exceptional young men," Wakeman points out. "They're not unusual young men …

"They're exceptional young men," Wakeman points out. "They're not unusual young men. There's any number of young men in Philadelphia who are already acting as healers and helpers. What we can do as a system is be more intentional about creating space for them to join efforts around healing and helping."

Said Thomas, "We met some amazing people. Lots of people in different occupations. We took that time to just pick their brains on certain things. Some of those people I have formed relationships with after the program. I try my best to keep in contact with those people."

Just as the program helped them, the men gave back to the community in their own way. The week of their graduation, they toured parts of North Philadelphia with a group of first-year emergency-medicine residents at Drexel who would be working at Hahnemann University Hospital, said Corbin. The aim was to try to make the physicians "culturally sensitive" to the patients they would be treating, he added, while humanizing the young men they'd encounter.

The Founders are keeping in touch through a group chat and monthly alumni meeting. They're still trying to figure out how to best use the skills they have obtained and how to stay connected. The center is searching for job opportunities for them, which is hard, Wakeman acknowledged.

Thomas has been hired by the program as a community peer worker at St. Christopher's Hospital for Children. Jenkins will be an intern in the fall working with Thompson on the conversations on trauma project.

Looking back on the program, both say they were pleased with the training and experiences. Thomas says he learned to speak up from the way Jenkins speaks up for himself. "He says what he believes in despite what anybody thinks," Thomas said. "I think that's admirable."

But, Jenkins said, that might not be the right approach in all cases – something he figured out while in the program. "I've learned that I have no filters, so now I've turned it down some," he said. "It's OK to (say) how you feel. It depends on how you say it."

Meanwhile, Thomas is trying to figure out how the brotherhood should celebrate Jenkins' birthday. He'll turn 21 in March.

Standing from left: Waltkeem Jenkins, DeJuan Ford, Andre Thomas, Holden Jones, Donte Gist, Jermaine McCorey; Kneeling: Brandon Young and Cauzell Harris

Mindy Fullilove, MD

Making connections, seeking common ground and creating an environment of invention.

As a child, Mindy Fullilove aspired to be a pediatrician. Instead, she became a community psychiatrist, an expert on AIDs, and a trailblazer in advancing the concept of "psychology of place" and the idea that where you are is closely linked to your health and well-being. She co-founded NYC RECOVERS, an alliance of organizations focused on the social and emotional recovery of New York City in the aftermath of 9/11. Her books include *The Story of AIDS in Black America*, *Root Shock: How Tearing Up City Neighborhoods Hurts America and What We Can Do About It*, and *Urban Alchemy: Restoring Joy in America's Sorted-Out Cities*. After giving the keynote address at the Drexel Urban Health Symposium, Fullilove sat down to talk about the challenges facing cities.

Q. What message needs to be conveyed to policymakers and all the players who have an impact on the quality of life in cities, about the need to look at the dynamics of urban life in a collaborative and comprehensive way?

MF: My research suggests that American cities have been affected by three policies all of which have been very painful in undermining health.

One of them is deindustrialization, which knocked the economic foundation out from under the American city. The second is a process we call serial forced displacement – which is the sorting by race and class of the American city which has gone on for decades. And the third is environmental degradation – just abandoning the environment.

So, if you think of that as a three-legged stool – then we've been sawing away at all three legs of the foundation of the city. People need to know that cities require a great deal of support, they require good science, and they require civil rights for people – they require a perspective on inclusion …

Q. Where did you begin? How does an MD/psychiatrist become an advocate for urban policy and for saving cities?

MF: I grew up in a household that was deeply engaged with the city – the city of Orange, NJ. We like to say that anything you want to know about the American city you can learn in Orange, NJ, because it's just a little model of all the urban problems. It's a remarkable little place …

As a physician I encountered the AIDs epidemic and was asked to study the excess risk for AIDs among blacks and Hispanics … At that time in 1986 we didn't understand why that was. The popular theories were that all blacks and Hispanics were drug addicts and hypersexual, which was widely endorsed as a theory even though the data offered no support. So I was looking around for what else could explain this.

Then a colleague sent me a paper by Rodrick Wallace called "A Synergism of Plagues" … and that paper talked about the urban policy of planned shrinkage, which was implemented in New York City in 1988. Basically, planned shrinkage closed fire stations in the black and Hispanic neighborhoods – like the South Bronx, and Harlem and East New York and Brownsville – and let the neighborhoods burn down. As people were displaced, they carried the AIDS virus with them and broke up social networks and drug sharing networks – so it created new patterns of interaction and it accelerated the spread of the virus among all these groups which had basically been thrown up in the air – basically refugees of a fire epidemic the city had created.

Q. The city of New York decided to close fire stations, because they just wanted to let everything burn up?

MF: Planned shrinkage is policy which says we're losing population so let's decide which neighborhoods we're going to keep and which ones we're going to abandon and let's abandon the neighborhoods by closing infrastructure like fire stations, and then people will be moved – we'll have internal resettlement to the neighborhoods we want to keep. They implemented the policy by closing fire stations …

Following in Dr. Wallace's footsteps, I realized that as a psychiatrist I didn't know anything about cities … I'd never been taught anything about how we relate to the place where we live … So I took that on: what I called the 'psychology of place'. And so that's basically where I've been working – trying to understand how individuals experience these horrific processes like deindustrialization – that are implemented at such a high level of scale but affect the person's every possibility for a decent life.

Q. When you started out did you anticipate you would evolve into an expert on health in the context of urban policy?

MF: I thought I would be a clinical pediatrician. Then I went to medical school and pediatrics was kind of boring and psychiatry was just riveting. So I became a psychiatrist. Learning psychiatry is the most fascinating thing in the world – but doing psychiatry is pretty boring, I thought. I decided to do research in AIDS and AIDS was fascinating, but I had to understand the stuff about cities … So, I went to a conference on AIDS in Paris …

The first person to speak was an urbanist who studied cities, Michel Cantal-Dupart. He said if you want to solve problems of neighborhoods you have to treat the city. And he said, 'Physicians know if you have a boil on your body - you have to treat the whole body.' And I said, 'I do know that! I've got to meet this guy.' I went to study with him, because it became apparent from his talk that I had to understand cities, because if I had to treat the city to save the neighborhood I ought to understand the city.

Q. What are the long-term benefits that you envision if the worlds of public health, urban planning, housing, transportation, city policymakers – if there were synergy across differences – what will that yield?

MF: The theory is that cities are complex organizations, so they have all these different systems: They have transportation systems, they have food systems, water systems, school systems, police systems and if you can get them all thinking together and working you will create synergies that will lead to better health.

The idea is that you would create very dynamic engagement of the population – and that's the great thing that cities have to offer: is that people go to cities and they just come alive. And it makes you have new ideas. And that's what we need – because we have desperate levels of problems. And we need new ideas so that we can find our way out.

"People need to know that cities require a great deal of support, they require good science, and they require civil rights for people …"

The goal is to get to an environment of invention, which is how we will invent our way out of the disasters we have created for ourselves. That is the real goal.

Q. We're in a political moment where people are talking past each other, in different directions from each other. What can we do to address the divisiveness we're facing now?

MF: Writ large, the divisiveness is an invention. People have used the invention of inequality to keep working people apart. Howard Zinn in his book *A People's History of the United States*, spends a lot of time explaining … that in the 1600s when they were inventing slavery what the elites feared most was that Native Americans, white poor working people and black people would get together and overthrow them. They invented racism – against both African Americans and against Native Americans – to prevent that from happening. They wanted the three groups to despise and distrust each other. They did all kinds of things to make that happen. It was literally an invention for social control. ... They made it law and custom and then they put it into the Constitution. We've been living in that construction and it's an easy way to seize power to tell people you should be afraid of that person.

Under most rules of civility in recent decades, people haven't said that out loud. But of course, lately people have said that out loud: 'You should be afraid, you should hate them because they're coming to take what you have.' But that's a lie. And the truth is that we're all struggling, we're all oppressed … to some degree or another. Somebody might have $200,000 a year in income, and someone might have $20,000 a year income, but we're all imperiled by global warming.

Q. How do we come to see that the only way forward is to understand our common interests?

MF: That's the struggle that we're in. We have to go beneath the divisiveness, and say, 'Yeah we're different, but we're not that different. I need good weather, you need good weather. I need schools for my kids, you need schools for your kids. I need a house I can afford, you need a house. When I'm in old age, I need to feel secure – when you're in old age, you're going to need to feel secure.'

We have all this in common and we're not getting any closer to those goals. One of the people who is leading in that direction, Rev. William Barber, who in his book, *The Third Reconstruction,* lays out his thinking about how we put together campaigns to develop common cause … and most importantly develop a political platform that explicitly lifts what people – whatever race creed or color – what people need and want, so we can push the political system to solve our problems.

IN SEARCH OF RECOVERY FROM OPIOID ADDICTION:

WHERE DO WE GO FROM HERE?

By Courtenay Harris Bond

El Campamento, the hellish Philadelphia gathering place for drug addicts, is now a barren field. The scourge of opioid addiction, now scattered, continues. But for some determined souls, varied treatment approaches are creating new paths to recovery.

Photo top: Philadelphia's drug encampment before the clean up.
MICHAEL BRYANT / Philadelphia Inquirer Staff Photographer

Photo bottom: A Conrail police vehicle patrols the area around 2nd and Indiana after the clean up.
DAVID MAIALETTI / Philadelphia Inquirer Staff Photographer

Jose Rodriguez was homeless in Kensington just days before the city and Conrail bulldozed Philadelphia's notorious drug encampment, where many users lived, and where countless people circulated in and out day and night to inject their drugs. A minority of those individuals went into treatment, and found housing with the help of the city and outreach organizations. Many other addicts have just shifted to nearby streets, abandoned buildings and other dark corners of the city.

Where Rodriguez ended up is an open question. He had no address, no phone, no email. But after 15 years of heroin use, he said last summer that he was desperate for treatment.

"I need detox because I can't do it myself," Rodriguez said then. "I get too much pain in my body. I start throwing up. I can't sleep. I get a headache real bad and my eyes hurt. It's too hard, too strong for me to be doing by myself. I need help."

Rodriguez is hardly an exception. About 70,000 Philadelphians are heroin-dependent, and about 120,000 to 150,000 people in the city with substance-use disorders need treatment, according to Roland Lamb, deputy commissioner of the city's Department of Behavioral Health and Intellectual disAbility Services (DBHIDS).

Overdose deaths continue to spike, with Pennsylvania coroners and medical examiners reporting 4,642 drug-related overdose deaths in 2016 – 85 percent of which involved opioids – a 37 percent increase over 2015. Fulton and several other rural counties are now beating out Philadelphia in overdose deaths, revealing how the crisis is worsening in rural parts of the state. At the same time, more than 56,000 people identify themselves as being in recovery in Southeastern Pennsylvania and more than 23 million nationwide.

"Those are numbers that should also be on the table – the idea that people can recover and do recover," Lamb said. "There's got to be some hope – that they can improve their lives, that they can do better, that it's not hopeless for them."

The paths to recovery are as unique as the individuals who tread them, meaning that treatment needs to be flexible to be successful.

"The ideal treatment is not one size fits all," said Adam Brooks, research director at the Treatment Research Institute in Philadelphia "The ideal treatment is a person shows up at a facility that has multiple levels of care that can meet the patient where they are."

"The ideal treatment is not one size fits all," said Adam Brooks.

For more and more people these days, this means employing medication-assisted treatment (MAT) – the use of medicines such as methadone, buprenorphine, and naltrexone to combat opioid cravings. Former Surgeon General Vivek Murthy declared in his 2016 report "Facing Addiction in America" that MAT, combined with counseling, is the new gold standard for the treatment of opioid use disorders.

People are extremely vulnerable after detoxing without the assistance of some kind of medication maintenance, said Jason McLaughlin, CEO of the Wedge Recovery Centers in Philadelphia, which started a Suboxone program in 2016.

"You detox someone and throw them out into the world – it doesn't bode well," McLaughlin said. "But the anecdotal evidence is that people are being engaged longer in treatment, and we've seen less deaths in the medication-assisted program versus the drug-free, because frankly, there are a lot of deaths going on."

Chiougt Johnson says he is thankful that he wound up at the Wedge more than a year ago after being arrested for two bags of heroin. He was shot at 14 and given morphine four times a day at the hospital. After being released, Johnson found the painkillers he was prescribed weren't combatting the pain well enough. So, he began using street drugs.

"I was addicted to drugs on and off for about 40 years," said Johnson, 61, who lives in Philadelphia.

For the first time Johnson has been in long-term recovery with the help of the Wedge's Suboxone program and counseling.

"They really made me feel like they were there to help and not just to collect a paycheck," Johnson said about his doctor, nurse and therapist. "Progress is slow, but I'm coming along."

Johnson said he has a lot more fun now with his more than 20 grandchildren. He hopes to get his associate's degree and a part-time job.

"It's a strange feeling," Johnson said about his recovery. "I feel motivated and purposeful. You want to do better. It feels fulfilling like you have a purpose instead of just getting up every day and doing nothing."

FINDING HELP

Philadelphia Crisis Response Centers
Medicaid patients
Community Behavioral Health
1-888-545-2600

Uninsured or under-insured
Behavioral Health Special Initiative
215-546-1200

Pennsylvania Addiction Treatment Hotline
1-800-662-HELP

McLaughlin thinks it's "essential" that the use of MAT be combined with psycho-social interventions.

"There's a certain biochemical component for substance abuse, but there's almost always a strong psychological issue," McLaughlin said. "With someone with opiate addiction you often see someone unable to tolerate strong feelings and you have to teach someone to manage their feelings or else they're just going to go out and use again. …I think a minimum of a year in some sort of outpatient treatment is necessary and sometimes necessary throughout the rest of their life."

A prominent criticism of MAT is that it substitutes one drug for another. But doctors who "know the evidence think it's a good thing, and people who are concerned with treating people as successfully as possible think it's a good thing," said Dr. Joshua Lee, associate professor in the Department of Population Health at New York University's School of Medicine.

TOOLS FOR RECOVERY

Medication-assisted treatment, or MAT, uses medications and behavioral therapy to treat substance use disorders. The most common form of MAT that has been used for decades is **methadone**, which is an opioid agonist, a substance which replaces heroin or other opioids and blocks withdrawal symptoms and euphoric effects. Available as a pill and in liquid form, methadone is dosed once a day, nearly always at a clinic.

Buprenorphine, a partial agonist, comes in many different products, the most common being Suboxone, which combines buprenorphine and naloxone and comes in a dissolvable film. When taken as prescribed, it can be safe and effective, and works much like methadone. In addition, certified doctors can prescribe it, so it doesn't require daily clinical visits.

Naltrexone is an antagonist that blocks opioid receptors. The most common version is the brand name, Vivitrol, an extended-release form of naltrexone, usually given as a monthly injection. People with opioids still in their bodies will go into immediate withdrawal if given naltrexone. Patients are recommended to stay off opioids for seven to 10 days before starting the medication.

How strong is the evidence behind MAT?

"In terms of preventing heroin use and keeping people alive, it's up there with the laws of physics," Lee said. "That doesn't mean that 100 percent of people are going to be alive at the end of the year and get better at the end of the year. … But the medication group is always going to look better at the end of whatever point in time: less HIV and Hepatitis C and less dead bodies."

Jennifer Smith

Abstinence-only, 12-step models have dominated treatment in this country for decades. "There are still folks who believe that the only successful treatment outcome is a drug-free outcome, and what we're trying to impress upon people is that's not always the case and that treatment has to vary by individual," said Jennifer Smith, acting secretary of Pennsylvania's Department of Drug and Alcohol Programs.

She explained that with diabetes, some people can treat it by altering their diet, while others need medication every day. "Addiction is a disease just like that in that there is sort of a spectrum of what constitutes successful treatment," Smith said.

Brooks went even further: "More and more, we're understanding that for the majority of opioid use patients, medication-assisted treatment factors in either temporarily or indefinitely. It [MAT] really reduces their opioid use, and helps them build a new life and protects them from overdose."

At the same time, Brooks said, treatment ideally should be "patient-driven." And for many people this still means turning to abstinence-only, 12-step programs, which works well for some people.

"Twelve-step has a rich history of playing a prominent role in many people's recovery, but it doesn't work in everybody's recovery," Brooks said. "I often think of 12-step as being a wonderful, free, strong, ubiquitous support for a self-selecting group of patients. People sample it, and they either have positive experiences that keep them coming back, or they know it's not for them."

This is the road that Chris Captain, of Mascoutah, Ill., found himself on when he went to Hazelden Betty Ford Foundation addiction treatment center more than four years ago to address decades of heroin and other drug use.

After suffering severe burns in a childhood accident at age 9 and being put on painkillers in the hospital during his recovery, Captain began sampling marijuana, LSD and cocaine – and eventually his father's Vicodin pills from the medicine cabinet.

One time he was vomiting into his hard hat on the way to his job as a union laborer pouring concrete and doing asphalt work. He had just a few pills to take. But they weren't enough.

"I started to vomit again, and I tried to hold it back, and I puked all over the ground," Captain recalled. "I just picked up some of those pills again. That's all I knew to get away from that feeling [of being dope sick]."

Then someone introduced him to heroin.

"I just skipped over all the snorting and smoking and went straight to I.V. use," Captain said. … I started to go downhill real quick then. My world revolved around how, when and where I was going to get high."

Luckily, with the help of a family intervention, a month-long stay in inpatient rehab and assiduous compliance with a 12-step program, Captain has rebuilt his relationships and life, and is thriving in recovery. He said he would die pretty quickly were he to relapse into his old habits.

Captain stays sober by, as he said, "giving it" – giving to others constantly, acting as a sponsor and helping other people enter treatment. He firmly believes in the 12-step path to recovery and wants people to know help is available.

However, significant hurdles remain in providing treatment for those who want and need it.

A recent needs-assessment completed by the state Department of Drug and Alcohol Programs (DDAP) found that while Pennsylvania has nearly 800 treatment providers, there are still not enough to meet demand, especially for the treatment of opioid use disorders.

"As far as treatment is concerned, Philadelphia is one of the most treatment-rich places in the country, but in many cases you have specific kinds of treatment that get inundated," Lamb said. For instance, the city has access to between 1,300 and 1,500 inpatient detox or rehab beds, but at any given time those beds can be full.

Last year, DBHIDS served about 27,000 individuals, or about 18 percent of those who needed it, which is higher than the national average of 10 percent, Lamb said.

"The biggest problem is being able to process someone fast enough and give them immediate access into care," Lamb said.

Philadelphia has been working to increase "warm-handoffs" in which people move from emergency rooms directly into treatment programs. The city has expanded the number of places where people with opioid use disorders can receive MAT. All opioid treatment programs in the city are mandated to provide MAT by the end of 2017.

- **There are five crisis response centers in Philadelphia where people can go for assessment.** Those with Medicaid can call Community Behavioral Health (1-888-545-2600) to be linked to care; the uninsured or under-insured can contact the Behavioral Health Special Initiative (215-546-1200) to get treatment.
- **The state has a hotline (1-800-662-HELP) for assistance in finding a treatment provider.** Someone will stay on the line until you are connected with services, making a "warm-line connection." There were more than 14,500 calls into the hotline as of this fall, about 50 percent of which were directly connected to treatment, according to DDAP.
- **The state is working to strengthen its prescription drug monitoring program, enhance prescriber education, and improve a media campaign that aims to reduce stigma surrounding substance use disorders and educate people about accessing treatment.** Although DDAP has collected about 300,000 pounds of unused medications through its prescription take-back boxes since 2014, many communities still do not have easy access to them – another issue the state is working to improve.

With funding that Pennsylvania hopes to get as part of the federal 21st Century Cures Act, DDAP will implement a program to expand medication-assisted treatment throughout Pennsylvania based on a hub-and-spoke model. At the hub would be an addiction medicine specialist who would communicate with the spokes of primary care doctors and other specialists.

Ultimately, Lamb said, the goal is to engage people "as quickly as possible," and to keep them engaged as they seek treatment. Programs need to be able to address much more diverse populations over the long term. More job preparation, training, and educational opportunities are needed within communities, he said.

The treatment system needs to shift away from an acute care model, Brooks added, "the idea that you're going to go into a 28-day rehab, and you're going to come out ready to face the world. Where in reality we really need to think about addiction as a chronic condition like diabetes or asthma."

This means there is need for more intensive outpatient treatment programs in communities, Brooks said. And patients with opioid use disorders need ongoing follow-up, just as they would get with any other disease.

"If everyone was walking around with pneumonia they would get the right antibiotics," Lee said. "It's not that simple with opiate use disorder. But the medications work and they work reliably… so it's just a matter of kind of organizing politically and in terms of the health care system."

Smith added that it is important to maintain optimism. "Every person who overdoses – even if it's been seven or eight times – there's still hope for them to beat that addiction."

Jane Clougherty, MSc, ScD

Associate Professor
Environmental and Occupational Health
DORNSIFE SCHOOL OF PUBLIC HEALTH

▶ CHILDHOOD AMBITION

My first ambition was to become an Olympic gymnast, but I grew a little too tall and didn't have the talent for that. However, I was way too short for basketball so that one ended, too. My next ambition – about ages 12 to 14 – I dreamed of becoming a Blue Angel; I wanted to be a pilot and fly and do flips in the sky (instead of flips in the gym). Then I learned you had to have 20-20 vision which I didn't have. In high school, I got interested in environmental work ... and started thinking about air quality as a really strong example of a shared resource; we all have to, quite literally, share the air that's around us ... so what is put into that air impacts everybody.

▶ FIRST JOB

In high school, I worked in a coffee shop, and in a clothing store in this huge mall ... During college, I worked as a gymnastic coach and as a lifeguard. In college and after, I worked on a volunteer basis as a crisis counselor for sexual assault survivors, and writing domestic violence policy and sexual violence intervention policy for the university ... That really influenced me in terms of violence exposures in urban communities, which relates to my work now.

▶ INSPIRATION

I grew up in a huge family of Irish Catholic firefighters in South Boston ... It was a family and culture where it was very normal for everybody to have the police and fire radios on 24/7 in their homes – and at 3 a.m. the phone would ring and everyone goes out ... That is an experience and a childhood that instills a strong sense of social service that is very selfless – because these are people who put their own lives at risk to help others. That's very inspiring and has probably shaped a lot of who I am.

▶ WHY PUBLIC HEALTH?

As my career began ... I was working as a rape counselor and that was really my true passion – women's health and violence intervention – but I had an academic interest in environmental science and economics. So, I really struggled with how do I put these things together ... I slowly started to think about how the social environment and people's psychosocial experience affected their health and well-being as much as their physical environment did. I can quite literally remember the evening I was sitting back in my little apartment in Chicago and the light bulb kind of went off over a couple of beers – that, oh my God – the social environment and the physical environment are the same thing – and maybe these do interact, and maybe this isn't a crazy idea to combine these. So, I wrote in my application to Harvard School of Public Health this is my hypothesis, this is what I want to study, these are the methods I want to put together – will you support me in that? And that was it ...

▶ PROUDEST MOMENT

Getting my PhD was a proud moment for my family and me. My doctoral defense was delivered in an overcrowded room – with all these people sitting across the back who had never been in such a setting before, but there was no keeping them away!

"My mission in life is to understand the combined effects of psychosocial stressors – things like exposure to violence – with physical environmental exposures, such as air pollution, on people's health. So, does stress make you more susceptible to everything else that you contact in the environment? This question is huge: There's a logic to it, but getting the details right is really, really complicated ..."

▶ PROFESSIONAL FOCUS

My mission in life is to understand the combined effects of psychosocial stressors – things like exposure to violence – with physical environmental exposures, such as air pollution, on people's health. So, how does stress make you more susceptible to everything else that you contact in the environment? This question is huge: There's a logic to it, but getting the details right is really, really complicated ...

My doctoral thesis looked at asthma development among children living in East Boston. I worked on a cohort of children who'd been followed for many years, and they and their parents had completed questionnaires on the child's previous exposure to violence over their life course. We asked: Have you or your child ever witnessed a stabbing, shooting, kicking, punching, heard gunshots, and we asked about violence in the home. We found that we can generally identify those children who've had some degree of substantial exposure to violence in their life, versus those who have not. And what we found was that, in comparing those two groups of children, it was only among the children who had substantial prior exposure to violence where we could see an association between air pollution from traffic and their likelihood of developing asthma. Among the children with no prior exposure to violence, there was no association at all between air pollution and asthma. It suggested that when we're looking at associations between environmental exposures and health, one very susceptible subgroup might be children, or others who've been exposed to very severe stressors.

▶ LATEST RESEARCH

The most recent funding I've received is to look at patterns of community stressors across all of New York City – things like exposure to violence – and how that may make people more susceptible to the cardiovascular effects of air pollution, changing day-to-day, location-by-location, across the city, over an 11-year period ... So we're shifting our focus from thinking about children having asthma to thinking about adults having heart attacks ... for example, do adults who live in communities with higher rates of violence have a stronger response to air pollution on, say, bad ozone days in the summertime? Are they the ones more likely to wind up in the emergency room with a heart attack?

▶ ANYTHING SURPRISING?

A shocking amount of stress effect is mediated by your interpretation of it. Perception makes stress. If you are a person without very much money and you don't quite have enough for your rent or mortgage ... you could worry about that tremendously. Or, you could be a person who says, 'I trust that I'll have the resources that I'll need. And even if I lose my apartment, I have plenty of family and friends nearby that I can stay with.' Those [attitudes] are going to have two different effects on your body. A lot of resilience to stress is in how you perceive the stressors, and being able to perceive something as less threatening is helped by having a strong network of family and friends, having a few dollars in the bank, by knowing that you are able to take care of yourself and your family in challenging circumstances, and having more resources available to you, including health insurance.

▶ WHAT'S AHEAD FOR PUBLIC HEALTH?

These are days when it will be vitally important for those of us in public health to look out for each other. These are going to be challenging grant funding years, in terms of the legitimacy with which public health science is received ... We're going to have to be creative about funding sources and we are going to have to look out for the junior people in our field who are not yet as established in terms of funding or their positions ... We need to be sure we don't lose this generation. We're all in this together. If nothing else – we're having a big wake-up call ...

▶ MY PASSION (AWAY FROM WORK):

My passion *is* my work – the things I think about intellectually, the conversations I engage in. For fun – I like biking, hiking, skiing and outdoor stuff and traveling ... and being with my family.

Improving Oral Health for Pennsylvania Children

Among its youngest citizens, Pennsylvania does a poor job of ensuring good dental health.

That's what dentist and epidemiologist Riddhi Shah learned from practicum experience, working on a Pennsylvania Coalition for Oral Health (PCOH) project to evaluate sealant programs for children in three school districts in the state.

Pennsylvania is not alone: A 2016 Pew Charitable Trusts report showed that dental care among U.S. children was an "unmet health need," and that children from low-income homes were at the greatest risk.

"While states such as Ohio, Michigan, Colorado, and Kansas have strong school sealant programs, Pennsylvania gets a D in oral health," Shah said. "We wanted to investigate possible measures that could improve oral health in our state."

Shah graduated from Karnavati School of Dentistry in Ahmedabad, India and practiced dentistry there before moving to the United States in 2015. Since her arrival, she's volunteered as a dental assistant in Langhorne, PA, and as a research assistant at the University of Pennsylvania School of Dental Medicine.

Now a second-year MPH student at Dornsife, Shah was intrigued with the broad use of technology in oral health here in the U.S. For her practicum at Drexel, she sought out PCOH to find something that aligned with her interest. She was tapped for a project funded by the Pennsylvania Department of Health to evaluate three school sealant programs administered by health departments in Chester County, Allegheny County and the City of York. The sealant program involves coating the permanent molars of children ages three to six to help prevent tooth decay.

Shah helped generate a questionnaire to assess the challenges and successes of each of the programs, and then supported the collection and analysis of the data. She also administered a questionnaire to oral health commissions in several states to learn about how they had implemented their programs.

As a co-author of the coalition's report to the Pennsylvania Department of Health (DoH) over the summer, Shah was instrumental in offering feedback, suggestions and recommendations on measures to rectify the problem. These recommendations included advising the DoH to provide funding for updating equipment used for sealant delivery, to use a uniform system for program data collection, and to conduct annual retention checks on students targeted by the sealant programs. "I was always interested in working in the oral health arena and – especially as an epidemiologist – to identify communities that need care," said Shah. "The project with PCOH revealed the real need for better oral health awareness in schools across Pennsylvania."

The Pegasus Therapeutic Riding Academy

Helping the Disabled Gain Strength and Confidence

Alexandra "Alex" Vene considers herself an animal person. Besides caring for her own pet bunnies, she fosters rabbits as a volunteer for Animal Coalition of Delaware County (**http://www.acdc.ws/**).

When she learned about an internship at the Pegasus Therapeutic Riding Academy, a school for children and adults with disabilities, she instinctively knew that she wanted to work there as her first-year practicum project.

"I have never worked with horses or taken horseback riding lessons, so I wanted to gain that experience," said Vene, now a second-year MPH student at Dornsife.

Vene has been working with the academy since May, assisting with data collection and analysis, categorizing student goals and progress, and restructuring and updating surveys. "Alex was the first Dornsife MPH student to intern with us, and she has been a delight to work with," said the program's executive director, Barbara Wertheimer. "We hope to have more students like her join us in the future." The nonprofit academy was established in 1982 by Carol and Rich Tatum to help 15 children with minor disabilities. It now offers weekly lessons to more than 100 students ranging from age two to senior citizens. Located in Northeast Philadelphia, the school helps students with physical, intellectual and behavioral disabilities to improve their quality of life.

As part of her internship, Vene designed an independent research project of her own. "Alex spent Saturdays observing more than 20 students during several of their lessons. For each lesson, she tracked each student and recorded their progress. She also observed parental influence as part of her project. I am looking forward to her data, which will be very useful for our program," Wertheimer explains.

Vene found that the students advanced faster than she had expected. "They started out having no skills, and a few months later, they were quite advanced," she said. "There was a rider who was riding bareback at the beginning, and three weeks ago, she was riding in a saddle, which is quite hard to do."

She observed that the riders gained a sense of confidence as they progressed through the lessons. "For children with disabilities, the horse-riding lessons at Pegasus make them feel independent. Many students have siblings who play sports, and this is their sport. It makes them feel included, like they are a part of something," she said.

Vene also saw an increase in the students' physical capabilities. "For people with physical disabilities, riding is really good exercise. It is not easy to ride a horse - it takes a lot of strength."

Though she was raised in Harrisburg, PA, after graduation Vene says she plans to stay in the Philadelphia area, which is where she was born.

"I see this work as making a career of being a volunteer, and I like that," she said. "I've loved my time in Philadelphia, and it would be nice to give back to the community here."

Rx: Go Outside and Play!

Park Audits Encourages Children to Re-Balance Their Indoor/Outdoor Time

For Allison Gibson, it was discovering parts of her hometown that she had never seen before.

For Lauren White, it was spending time outdoors, with her dog Mikadi tagging along.

Gibson and White spent their spring and summer this year visiting and auditing Philadelphia's diverse park system for NaturePHL, to determine the best outdoor spaces where families can take their children to play - and help improve their health.

"The Philadelphia park system is the largest urban green space in the nation," said Gibson, now a second-year MPH student at Dornsife. Working with NaturePHL gave her the opportunity to explore parts of the city's vast park system that she had not visited before, said Gibson, a native of suburban Philadelphia. "Spending time in the parks reminds me of living in Bozeman, Montana, as a student, where I loved being outdoors," said White, a Tennessee native who went to college in Bozeman, and is also currently a second-year MPH student.

NaturePHL is a pediatric intervention program developed by the Children's Hospital of Philadelphia (CHOP), the Schuylkill Center for Environmental Education, the Philadelphia Parks and Recreation Department and the U.S. Forest Service. Pediatricians at CHOP's primary-care centers in Roxborough and Cobbs Creek are piloting the program.

During routine pediatric wellness visits, they are prescribing outdoor time when they observe a lack of physical activity and time spent outdoors, or an "activity deficit" in a child. The program screens patients between the ages of 5 and 12 for health deficits and conditions that may be alleviated by spending time outdoors.

NaturePHL research shows that the average American child spends a fraction of his or her daily free time - less than one percent - outdoors. While a child may spend more than seven hours a day in front of screens, he or she may only spend 30 minutes a week playing outside.

White has seen this phenomenon in her own life. "Growing up, my screen time was limited to 'one hour per day,' but that never really mattered because I was always outside," she says, recalling her childhood. "Now, as a graduate student in public health, I have to actively set aside time to get away from the screen that holds my job and coursework, communications and finances."

By the time the program launched, White and Gibson had visited more than 80 of the 400 spaces designated for recreation by the city. NaturePHL's designated spaces include urban parks, trails, public pools, green spaces and even empty city lots that can double as play spaces.

The students evaluated each space for a variety of features and amenities, such as size; accessibility for wheelchairs for caregivers, or strollers for young children; availability of bathrooms, trash cans, benches; accessibility to parking and public transportation, and even the presence of a body of water.

The evaluations are documented on NaturePHL's website (**https://naturephl.org/**) to help parents, caregivers and others to plan park visits. The students also offered recommendations to the program, including categorizing a green space or park, or additional informational filters for the website. They have also added photos of the park spaces. White's dog, Mikadi, accompanied her on each of her park visits, allowing her to gauge the dog-friendliness of various areas in the parks.

White, whose concentration is environmental and occupational health, hopes her experience will help her develop as a health advisor. "I would love to work as a liaison between the members of a community and their health resources," she said. "I want to help people navigate the health care system in the context of their environment and culture."

For Gibson, who is focusing on community health and prevention, the experience has fed her passion for serving and empowering communities. "The park system in Philadelphia is a wonderful resource to help kids - and communities - get healthy," she said. "Public spaces are also a great equalizer, whether it be a sidewalk café, a city square or a park."

Dornsife ALUMNI NOTES
School of Public Health

1999

Dariusz Wolman, MPH '99 presented on pediatric abusive head trauma at the International Trauma Foundation conference in Quebec Canada November 3-5. He also presented on EMS provider suicides at the same conference.

2009

Amber Tirmal (Sterling), MPH '09 manages the immunization program at the City of Philadelphia Public where she's worked for 8 years. She supervises a staff of about 30 people who serve children and adults with limited access to health services.

2011

Kuan-Lung Daniel Chen, MPH '11 is a Senior Research Associate at George Washington University's Milken Institute School of Public Health. He is a staff member of Building Community Resilience (go.gwu.edu/bcr) focusing on primary data analysis, and using data to tell stories about five program sites across the country.

Adrianne Jiles (Bailey), MPH '11 is a Clinical Data Analyst at Holyoke Health Center, a federally qualified health center in Holyoke, MA. The center offers an array of services including primary care, dental, behavioral health and substance use treatment. Adrianne analyzes clinical data and assists with their quality management activities.

2014

Brittany Barnes, MPH '14 has worked at the Center to Advance Palliative Care for the past two and a half years. She was married in August, in Montego Bay Jamaica.

Brandon Brooks, MPH '14 is a Research Coordinator at New York University School of Medicine working at the Spatial Epidemiology Lab on HIV/Health Disparities which incorporate GPS technology to learn more about the connection between neighborhoods and health.

Gregory Caplan, MPH '14 is working at Boston Children's Hospital in the Program for Patient Safety and Quality (PPSQ). Working directly for the Chief Quality Officer, he contributes to annual quality and safety reports. Gregory celebrated his first wedding anniversary in August.

Debra Harris, MPH '14 is a Health Policy Analyst at Commonwealth of Massachusetts. She works on policy development, payment and eligibility for Health Safety Net, a state reimbursement program for low-income patients.

Michelle Klawans, MPH '14 is currently an epidemiology doctoral student at the University of Texas School of Public Health in Houston, TX focusing on maternal and child health.

NaDea S. Mak, MPH '14 is an IRB Project Coordinator in the Human Research Protection Program, at Drexel University. She provides guidance to Principal Investigators on the assembly and submission of research protocols working to ensure that human subjects research protects the safety, rights, and welfare of those subjects. NaDea says she learns something new daily and no two days are the same!

Joëlla Adams, MPH 2014

Joëlla Adams: Leveraging Computer Modeling to Reduce HIV Among Women

While still at Drexel, **Joëlla Adams, MPH '14**, collaborated with the Philadelphia Department of Public Health on researching ways to improve the health of women living with HIV. Now she is extending this research by examining how the mass incarceration of men in the United States impacts HIV rates among heterosexual, African American women as a doctoral student in epidemiology at Brown University's School of Public Health.

"We know that mass incarceration disrupts relationships," Adams said. "But what we don't understand is how the mass incarceration of men impacts the women left behind and increases the risk of HIV acquisition within the wider community."

Adams is using agent-based modeling – an advanced form of computer modeling employed in public health and other fields – to try to answer some of these complex questions. With historical surveillance information from the Department of Public Health, Adams created a virtual world modeled on Philadelphia to reflect what has actually happened in the city regarding mass incarceration and HIV rates among women and to look at ways of reducing acquisition rates. Adams hopes her work will ultimately be applicable to other cities.

"Drexel was an excellent place for me to realize how to bring academic research into practice and to make sure that the work that I did could translate into the real world," Adams said.

While on sabbatical, Jennifer Taylor, PhD MPH, associate professor of environmental and occupational health and director of the Center for Firefighter Injury Research and Safety Trends (FIRST) at Dornsife, submitted a proposal, "Stress and Violence in fire-based EMS Responders (SAVER)." The new project won a $1.5 million grant from the Assistance to Firefighters Grant Program (AGF), run by the Federal Emergency Management Agency (FEMA) and the Department of Homeland Security (DHS). "The success of the FIRST Center comes from hiring Drexel's excellent school of public health alumni," says Taylor. Her project team includes **Lauren Shepler, MPH '15** (seated) outreach and communication manager for the FIRST Center; **Regan Murray, MPH '17, EMT** (left) who will oversee the SAVER study as Project Manager and **Andrea Davis, MPH '12** (right) Senior Project Manager.

Alumni Trio to Oversee Study of How Stress and Violence Impact Emergency Medical Responders

Kate Ogden, MPH '14 is a Policy and Regulatory Analyst for Quality and Physician Payment at the Association of American Medical Colleges.

2015

Danielle Fernandez MPH '15 is working as an infectious disease epidemiologist in the Applied Epidemiology and Research unit at the Florida Department of Health in Miami-Dade County (DOH-Miami-Dade). Her team conducts syndromic surveillance, responds to outbreaks, and conducts research on topics including Zika virus (ZIKV), Carbapenem-resistant Enterobacteriaceae (CRE), and Middle Eastern Respiratory Syndrome (MERS). In 2016, she presented her Drexel master's project research on the role of measurement error and reporting bias on the widely-accepted 2 to 21-day incubation period of Ebola virus at the annual Council for State and Territorial Epidemiologists' meeting in Anchorage, Alaska.

During the 2016 Zika virus outbreak, she served as the lead for all epidemiologic field investigations and community surveys to identify local ZIKV transmission events during the first identified local autochthonous transmission of ZIKV in the continental

Dornsife ALUMNI NOTES
School of Public Health

United States. In November 2017, Fernandez and her colleagues published a report on the epidemiology of pediatric ZIKV infections in Miami-Dade County in the journal Pediatrics. Fernandez was honored with the 2017 "Individual Award for Excellence in Epidemiology" for Zika virus efforts at the Florida Department of Health Statewide Epidemiology seminar. "Moving forward in my career, I am confident that my training at Drexel University has left me well-prepared to continue to do the "boots-on-the-ground" work to improve the health of populations," Fernandez says.

Chari Cohen, MPH, DrPH 2015

Chari Cohen: Leading the Good Fight Against Hepatitis B

When **Chari Cohen, MPH, DrPH '15,** started working in the field of hepatitis B 18 years ago, she recalls people telling her that viral hepatitis was not going to be a problem in a decade because there was a vaccine.

"Unfortunately, we're seeing new infections, and we're seeing people who have hepatitis B who are not able to access care," said Cohen, vice president of public health and programs for the Hepatitis B Foundation (HBF), in Doylestown, Penn. "There is still a lot of work to be done."

So Cohen has dedicated herself to the planning, implementation and evaluation of community programs and research projects focusing on hepatitis B and liver cancer. She has striven to reduce hepatitis B-related health disparities and to develop culturally competent models for improving health care access.

Cohen also helped start Hep B United, a coalition of coalitions, now with 35 national partners in 27 cities and 17 states, that offers education, free testing and linkage to care. Hep B United Philadelphia tries to reach the 20,000 people locally who have hepatitis B – many of whom don't know it and are in danger of developing liver cancer. "It has become such a stigmatized disease," Cohen said. "Nobody wants to talk about it, and people don't want to get tested for it."

HBF has started a campaign called Just B, in which people who are affected tell their stories. "The goal is that someone will look at these stories and say, this is me," Cohen said. "And hopefully over time it will help people to talk more about hepatitis B and to get tested."

Hanyang Shen, MPH '15 is a research data analyst in the department of Psych/Interdisciplinary Brain Sciences at Stanford University.

2016

Ruth K. Boansi, MPH '16 is working for a mid-sized healthcare non-profit with the mission to improve the quality of health care. She will be celebrating one year with NCQA at the end of September. She was also recently promoted from Healthcare Analyst to Senior Healthcare Analyst and had the honor of presenting her team's health equity research to the Director of CMS Office of Minority Health and additional CMS staff.

Kathryn McNamara, MPC '16 is writing occupational health and safety regulations as a health scientist for the Occupational Safety and Health Administration (OSHA) in Washington, DC.

Ricardo A. Mora, MPH '16 works at the health department in Houston, TX. He conducts research to identify individuals who have fallen out of HIV medical care so they can be linked back to medical and other services they may need.

Hammad S. N'cho, '16 PhD, MS, has completed the epidemiology and biostatistics graduate certificate in 2016 at Dornsife and is currently serving as an Epidemic Intelligence Service Officer (Waterborne Disease Prevention Branch) at the Centers for Disease Control and Prevention in Atlanta.

Kofoworola Williams, MPH '16 is a second year Social and Behavioral Sciences doctoral student at Virginia Commonwealth University, whose work addresses interpersonal/dating violence, health communication in the media and health disparities. In 2016, she received an institutional award that will provide financial support for up to three years as well as professional development mentorship and networking opportunities.

2017

Kaitlynn Jones, MPH '17 is the Diabetes Prevention Program Coordinator for the Center for African American Health in Denver, CO. She develops, implements, and evaluates all diabetes/ health programming for the Center.

Rennie Joshi, MPH '17 is a doctoral student at Dornsife School of Public Health and is an Urban Health Collaborative Doctoral Fellow.

Dave Kern, PhD '17 is working at Janssen Research and Development sector of Johnson & Johnson. His focus is evaluation of the extended-release and long acting (ER/LA) opioid analgesics Risk Evaluation and Mitigation Strategy (REMS) in partnership with the FDA. The goal is to examine how continuing medical education has influenced prescribing behaviors of providers, and impacted rates of abuse and misuse by patients.

Emily Anderson, Global Health Fellow: Building Data Analysis and Evaluation Skills in Tanzania

As a PHI/CDC Global Health Fellow within the Strategic Information Branch in the Centers for Disease Control (CDC) Office in Dar es Salaam, Tanzania, **Emily Anderson, MPH '15** supports the HIV surveillance portfolio and monitoring and evaluation (M&E) activities under the President's Emergency Plan for AIDS Relief (PEPFAR) program.

Over the past year, she's been engaged with the implementation of a Key Populations Formative Assessment in Zanzibar, and has learned how to conduct analysis of PEPFAR program data to gain an understanding of the epidemic in high burden areas. Her work informs Tanzania's HIV control program, turning M&E data into information for action. "Living and working abroad has been a learning experience on its own," Anderson says. "I hope to continue in global health, possibly in HIV, and would really like to find an opportunity where I can pair public health with my clinical laboratory skills to develop and support laboratory infrastructure in other countries."

Anderson says she's also had some opportunities for professional development, including leadership and management, GIS, qualitative methods, and "so much Excel!"

Emily Anderson, MPH 2015

Cydney McGuire, MPH '17 is a doctoral student studying Health Services Research Policy and Administration at the University of Minnesota School of Public Health in the Division of Health Policy and Management. She is also a Minnesota Obesity Prevention Training (MnOPT) Program fellow in the Division of Epidemiology and Community Health.

Sarah Robitaille, MPH '17 is an assistant research scientist/data analyst in the New York State Department of Health in Albany, NY.

Anita Wade, MPH '17 is a Council of State and Territorial Epidemiologists (CSTE) Applied Epidemiology Fellow at the Vermont Department of Health and Mental Health.

Portia Womer, MPH '17 is a Public Health Planner in New Jersey at the Warren County Health Department creating the emergency and disaster preparedness plans for the county and leading a community health initiative focusing on mental health.

Got News?

Please send your latest updates to Phi Nyugen at phi@drexel.edu. Be sure to include your graduation year and a phone number where you can be reached.

BEGINNING WITH PINS AND A PRINCIPLE

DORNSIFE WELCOMES NEW STUDENTS AND FACULTY

The incoming class at the Dornsife School of Public Health arrived on September 20, eager and excited to get started on the road to becoming public health professionals - and in the process, to discover for themselves exactly what public health is - and their place in it.

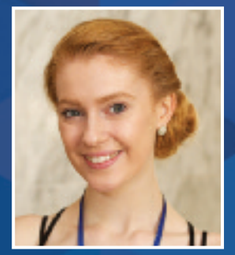
Guest speaker Giridhar Mallya, MD, MSHP, offered a working definition of public health, coined by his mother: "It's a way to care for communities, not only individuals,'" he quoted her as saying, then added: "It's a way to bring together biology and sociology, economics and public policy, theory and practice, health and human rights. It's a way to make a difference.

"And that's what you are all poised to do."

One by one, their names were called and each student walked on stage, to lean in and receive a ribbon necklace, held together with a pin proclaiming the idea - the ideal - of health as a human right, advanced by the school's late founder Jonathan Mann.

"Social problems are yours to solve, whether you like it or not," Mallya concluded, urging the students to dive right into the problems and possibilities of a public health career. "Embrace the challenge ... your voice, your participation matters."

After the ceremony, the students talked about their plans and aspirations.



Rebecca West, Undergrad
Denver, CO

"I've been interested in science and medicine. My mom is a nurse - we talk, which got me interested in public policy. I was also involved with the Model United Nations program - which got me interested in local and national and international policy. Public health covers most of those things ..." When she's done: "My goal is to write policy."

Breana LaFortune, MPH
Philadelphia, PA

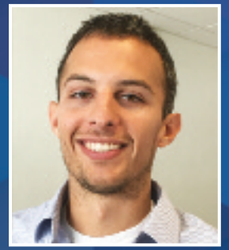
"I worked in HIV/AIDs for three years before coming to Drexel. I hope being here will guide my path in community health. I'd like to minor in global health ... I'd like to travel and to make a difference in communities other than mine."

Stephanie Shosanya, Undergrad
Potomac, MD

"I'm not sure what I'll do in the end … I've always been interested in science, but my strong suit is history, government and public policy. So, I want to mix science and social stuff."

Asuseyi Daniyan, MPH
Baltimore, MD

"I hope I can narrow down what I want to do. I just have a passion to help people. My general idea is to help inner city youth. How I want to help - I'm looking to figure out in my first year."

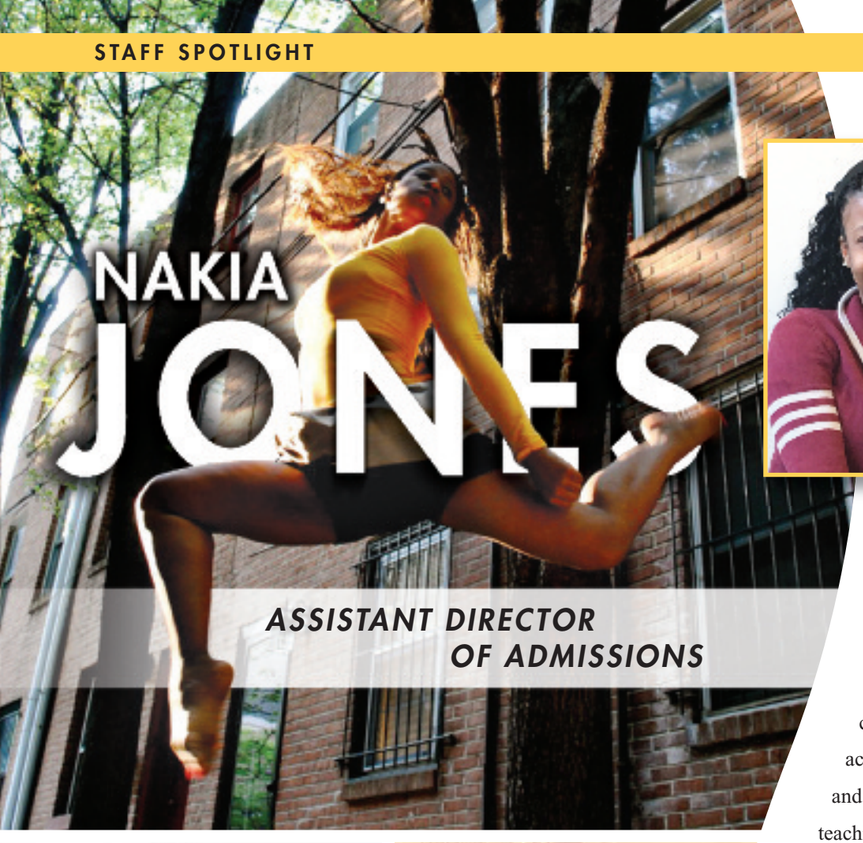


John Marshall, MPH
Bryn Mawr, PA

"I don't have a super strong focus, but what was appealing about Drexel's program is that it's well-rounded. So what I'm looking for is an overall better preparedness for my found interest - which is to come!"

Najira Ahmed, MPH
New York, NY

"I'm hoping that in two years I'll be much better equipped to go to a community, assess risks and help create a program with the community to move it forward. One of the things about Drexel is its community orientation - working with community members on things that can benefit them."



NAKIA JONES

ASSISTANT DIRECTOR OF ADMISSIONS

Nakia Jones was just two years old when she first put on her ballet slippers. "The arts are alive in our family," she explains. "My dad is a musician and actor, and my mom always took care of the dance ministry at church. Both my parents pushed me to keep going with something I loved – which was dancing."

And so she did: At age 4, she started classes at Philadanco, Philadelphia's acclaimed African-American dance company, and continued through high school, eventually teaching classes herself. At DeSales University she majored in dance and minored in business. "I knew I wanted to own my own dance school, and since I had the business background, I pushed forward," says Jones. Total Prayze, the church-based dance program she started with her mother, achieved nonprofit status last year.

Along with working at Dornsife and at Total Prayze, Jones finds time to perform herself, at Total Prayze and with other dance companies. But as a single mom with two young daughters, Jones recognized that dance can't always pay the bills. She's now pursuing a master's degree in education and working in admissions at Dornsife. "I fell in love with talking to students and helping to guide them through the choices," she said.

"I only met Nakia three years ago but it feels like we have been lifelong friends," says Leslie Reynolds, MPH '15, who is a project and evaluation coordinator in the Department of Community Health & Prevention. "She always has a positive attitude, a nugget of advice, and a laugh to share, and she's a great listener and a great friend."

"As a colleague, she's willing to bend over backwards to help someone out, and in a timely fashion," Reynolds adds. "Her positive spirit brings the overall spirit of the department and the school all the way up. Anyone who knows her is very lucky."

Ultimately, Jones sees her career and her passion for dance as connected. "With public health, you're trying to bring together different ideas to prevent disease and trauma, and with dance we provide different outlets to deal with trauma – so the two are intertwined," she says. Jones' oldest daughter, Nayelle, has inherited her mom's love of dance – and at six already takes classes at the well-regarded Rock School in Philadelphia.

Five years from now, Jones is dreaming big. "I would love to be working full time with our nonprofit Total Prayze – offering dance throughout the week and counseling for teens," she says, noting that she's seen teens in the program deal with depression, suicide, bullying and more. A secret wish is to add a degree in dance therapy to her resume. "They watch each other go through cycles and journeys, and truly give each other support. The dance ministry is an outlet for those girls who may not have someone to talk to: It gives them a safe haven."

GRANTS

FIRST Center Awarded $1.5M to Study Impact of Stress and Violence on Fire-based EMS Responders

The Center for Firefighter Injury Research and Safety Trends (FIRST) in the Dornsife School of Public Health at Drexel University has received $1.5 million from the Assistance to Firefighters Grant Program (AFG) run by the Federal Emergency Management Agency (FEMA) and the Department of Homeland Security (DHS), to support a new project, Stress and Violence in fire-based EMS Responders" (SAVER), which aligns with FEMA national prevention priorities on firefighter safety and aims to "measurably change firefighter behavior and decision-making." **Jennifer Taylor, PhD, MPH, CPPS**, director of the FIRST Center, will be assisting a team of three Dornsife alumni (see Alumni Notes, page 33) and GIS Lead Analyst **Steve Melly, MA, MS** of the Dornsife School who will provide mapping support.

Through this study, a systems-level checklist for violence against fire-based Emergency Medical Services (EMS) responders will be developed, then evaluated with fire departments in San Diego, Miami-Dade, Chicago, and Philadelphia. "FEMA Research and Development funding hasn't previously addressed the EMS aspect of fire, even though EMS accounts for as much as 70 to 90 percent of the work," says Taylor. "The SAVER study seeks to address the lack of research in this area and determine the predictors of fire-based EMS responder injury and stress."

Drexel's Center for Non-Violence and Social Justice Awarded RWJF Forward Promise Grant

The Robert Wood Johnson Foundation (RWJF) has announced grant awards totaling $3.15 million to nine organizations across the United States that are helping boys and young men of color heal, grow, and thrive. This first round of grants includes a $450,000 award to the Center for Nonviolence and Social Justice (CNSJ) at the Drexel University School of Public Health, which works to promote health, nonviolence and social justice through trauma informed practice, research, professional development, and advocacy for policy change. Founded in 2008, it is co-directed by **John Rich, MD, MPH** professor of health management and policy and **Ted Corbin, MD, MPP**, associate professor in Drexel's College of Medicine and the Dornsife School of Public health.

The RWJF grant will support Center projects including Healing Hurt People and the Community Health Worker Peer Training Academy (story page 19).

Packaging Pre-Exposure Prophylaxis (PrEP) to Prevent HIV among Women Who Inject Drugs

Women who inject drugs are at disproportionate risk for HIV and sexually transmitted infections. PrEP is a once daily pill taken to prevent HIV acquisition. This mixed methods research study seeks to understand how the context of women's lives shapes their understanding of and ability to initiate pre-exposure prophylaxis to prevent HIV. Funded by the National Institute on Drug Abuse the study will be led by **Alexis Roth, PhD, MPH**, assistant professor of community health and prevention, with support from Prevention Point Philadelphia and Project SAFE.

Piloting a Naloxone Intervention in an Emergency Response Community to Reduce Opioid Overdoses in Philadelphia

This three-year, $655,000 NIH-funded intervention study will design, build, and pilot test a mobile phone application to signal opioid overdose emergencies in real time to community members who will then respond to the scene and administer naloxone to overdose victims in advance of Emergency Medical Services. Principal investigator is **Steve Lankenau, PhD**, professor of community health and prevention. (See opioid story page 24.)

Cultivating Ethical Autism Research Cultures via Community Engagement

This three-year, $400,000 study will analyze whether practices of community engagement in autism research affect how researchers design their studies and present their research. The study will accomplish this by showing whether and how involving members of affected communities in research development and design matters both practically and ethically. Findings from this project could potentially lead to increased inclusion and participation of people with disabilities in scientific research. The project also will establish best practice guidelines for generating an ethical culture of autism research and help improve public understanding and reception of that research. Principle investigator is **Michael Yudell, PhD, MPH**, associate professor and chair, Department of Community Health and Prevention and **Chloe Silverman, PhD**, associate professor in the Department of Politics.

Health and Well-being of U.S. Children of Deported Migrants

From 2008-2015, 2.9 million immigrants have been deported from the U.S. Over half of them are parents of U.S. citizen children. Parental deportation can have profound and long-lasting consequences for the children left behind. To our knowledge, no large-scale, longitudinal, and population-based study has examined the short- and long-term effects of parental deportation on the health and well-being of U.S. citizen children of deported immigrants. The aim of this $420,000, two-year, mixed-methods pilot study is to develop and test a novel methodology to inform the methods of a future large cohort study to determine the impact of deportation policies on the health and well-being of U.S. citizen children of deported Mexican immigrants. Principal investigator is **Ana Martinez-Donate, PhD**, associate professor of community health and prevention.

NEW ARRIVALS: FACULTY GROWING AT DORNSIFE SPH

Sharelle Barber, ScD, MPH is an assistant research professor in the Department of Epidemiology and Biostatistics. Dr. Barber received a Doctor of Science (ScD) degree in Social Epidemiology from the Harvard School of Public Health and a Master of Public Health (MPH) in Health Behavior and Health Education from the University of North Carolina, Chapel Hill. Her research focuses on the intersection of "place, race, and health" and examines the role of structural racism (i.e. concentrated economic disadvantage and residential segregation) in shaping health and racial/ethnic health inequalities among blacks with a focus on the Southern United States and Brazil.

Sherry Brandt-Rauf, MPhil, JD joins the Department of Environmental and Occupational Health as an associate teaching professor. In her classes, students learn about the legal, political, and scientific underpinnings of policy in a current area of concern while working on a policy document that can be used to drive public discourse and policymaking in that area. Recent areas of focus have included temporary workers, climate change and occupational health, state and local initiatives in fracking, environmental policy at the local level, food insecurity among students, and reporting of pesticide exposure-related illness and injury.

Jana Hirsch, MES, PhD joins the Department of Epidemiology and Biostatistics as an assistant research professor. She earned her doctorate in epidemiology from the University of Michigan and a master's in environmental studies from the University of Pennsylvania. An interdisciplinary researcher, she has primarily worked at the intersections of urban planning, geography, and epidemiology with a focus on built environments and physical activity among adults and older adults. Her current work includes longitudinal examinations of the way neighborhoods change and the subsequent impact that this change has on health. Personally, she is an eager, active walker and a people-focused "urbanophile."

Jessie Kemmick Pintor, PhD, MPH joins Dornsife as an assistant professor in Health Management and Policy. She holds a PhD in Health Services Research, Policy & Administration and an MPH in Maternal & Child Health from the University of Minnesota. Dr. Kemmick Pintor previously completed an AHRQ-funded postdoctoral fellowship in Quality, Safety, & Comparative Effectiveness at the UC Davis Center for Healthcare Policy & Research. Prior to entering graduate school, she spent six years working with Latino immigrant families in Minneapolis, Minnesota.

Janell L. Mensinger, PhD, comes to Dornsife as an associate research professor in the Department of Epidemiology and Biostatistics after spending seven years as a faculty member in the College of Nursing and Health Professions at Drexel. Mensinger brings her consulting and management experiences from academic medicine and her expertise in quantitative research methods and data analysis to direct and grow the Drexel University Biostatistics Service Center.

PUBLICATIONS

Brian Lee, PhD, associate professor in the Department of Epidemiology and Biostatistics has three recent publications on autism. Working with Craig Newschaffer, PhD, associate dean for research, professor and director of the A.J. Drexel Autism Institute and other researchers, he co-authored "Antenatal nutritional supplementation and autism spectrum disorders in the Stockholm youth cohort: population based cohort study" in BMJ in October. Lee was senior co-author on "Gestational age at birth and autism spectrum disorders with and without intellectual disability" published in September in Paediatric and Perinatal Epidemiology. In July, Lee was co-author on an article "Antidepressants during pregnancy and offspring autism, population-based cohort study" also published in BMJ.

PUBLICATIONS

Affordable Care Act Boosts Latino Health, But Repeal Could Reverse Progress

A study of data from the California Health Interview survey found that the implementation of the ACA helped to reduce disparities in health care access, utilization and medication use between Mexican heritage Latinos and non-Latino whites with hypertension. The research was conducted by **Ryan McKenna, PhD**, assistant professor of health management and policy, **Félice Lê-Scherban, PhD, MPH**, assistant professor of epidemiology and biostatistics and **Alex Ortega, PhD**, professor and chair of the Department of Health Management and Policy, along with other co-authors. The progress found in the study is threatened by looming repeals of ACA provisions. The findings were published in Medical Care, 55(7Z) 654-660.

Ryan McKenna

Félice Lê-Scherban

Another study by Ortega, McKenna and **Brent Langellier, PhD, MA** assistant professor of health management and policy and other co-authors reviewed data from the National Health Interview Survey, to determine the impact of the Affordable Care Act. They found that after the ACA went into effect, insurance coverage and well-child visits significantly improved for non-Latino white, black and Latino youth compared to the period before the legislation was enacted. However, despite improvements, Latino youth continue to have the worst patterns of access and utilization. The research was published in *Academic Pediatrics*.

Alex Ortega

Brent Langellier

AWARDS & HONORS: FACULTY

Dornsife Dean in the Spotlight

Ana Diez Roux, MD, PhD, MPH, Dean and Distinguished Professor of Epidemiology at the Dornsife School of Public Health, has been chosen to lead the Interdisciplinary Association for Population Health Science (IAPHS) as president-elect in 2018 and president in 2019. The Dean was also honored this fall by the American College of Epidemiology, when she received the 2017 Award for Outstanding Contributions to Epidemiology. Diez Roux is internationally known for her research on the social determinants of health and the study of how neighborhoods affect health.

James Buehler Named 2017 Health Information Exchange Champion at HealthShare Exchange (HSX)

James Buehler, MD, clinical professor of health management and policy was honored for his work this year as co-chair of the Population Heath Use Case work group for the HealthShare Exchange of Southeastern Pennsylvania. The work group developed a framework for population health uses of health information exchange (HIE) data.

Dissertation Award: Addressing overdose risk among recently incarcerated people living with HIV/AIDS

Megan Reed, a DrPH candidate in the Department of Community Health and Prevention, has received a two-year, $99,000 grant from NIH to support her research, which will evaluate changes in opioid overdose knowledge and attitudes among people recently released from jail who are living with HIV/AIDS.

Amy Carroll-Scott Wins 2017 Vision Award

Amy Carroll-Scott, PhD, MPH, assistant professor of community health and prevention was honored with the APHA Community Health Planning and Policy Development Section's Vision Award for Excellence in Health Policy. In her nomination, Carroll-Scott was described as a "true believer that solutions can be found at the intersections … and a consummate and eloquent collaborator, who knows how to build a sense of community and professional camaraderie from the 'community up.'"

Amy Carroll-Scott (center) received the Vision Award for Excellence in Health Policy at APHA meeting in Atlanta in November.

Sharelle Barber: American Heart Association Scientist Development Grant

In mid-October, **Sharelle Barber, ScD, MPH** assistant research professor of epidemiology and biostatistics, received a three-year, $233,000 Scientist Development Award from the American Heart Association (AHA). Barber will use the grant to examine Multilevel Social Predictors of Hypertension and Diabetes Control in the United States and Brazil using data from the Multi-Ethnic Study of Atherosclerosis (MESA) and the Brazilian Longitudinal Study of Adult Health (ELSA-Brasil).

Sharelle Barber (center) receives AHA Award, surrounded by colleagues and students from Dornsife School of Public Health.

AWARDS & HONORS: STUDENTS

Dornsife Students Selected as National Fellows in Maternal Child Health at APHA

Tamika Roe, a second year MPH student in the Department of Health Management and Policy, has been selected as both an APHA MCH Student Fellow and as the student representative for the Association of Teachers of Maternal and Child Health (ATMCH). Roe's background in direct patient care in a hospital post-partum unit sparked an interest in Maternal and Child Health, and improving the quality of health care mothers and babies receive. Through the fellowship program, Roe aims to learn more about important Maternal and Child Health issues and gain "hands on" experience and knowledge from established professionals in the field. As the ATMCH student representative, she will represent student perspectives on MCH training nationally.

Udara Perera, a third year DrPH student in the Department of Community Health and Prevention who is minoring in maternal and child health also has been selected as an APHA MCH Student Fellow. Perera's research interests include perinatal and maternal health, international maternal and child health, infectious diseases, and health disparities. Through the APHA MCH Section Fellows Program Perera hopes to gain experience in working with MCH leaders to develop policy statements at the national level, and to enhance her leadership skills by working on Section committees.

EVENTS/UPDATES

2nd International SALURBAL Meeting in Peru

Researchers share lessons on making cities healthy, equitable and environmentally stable worldwide

The Dornsife School of Public Health and partners throughout the U.S. and Latin America, including research institutions and international organizations, are working to study how urban environments and urban policies impact health in Latin American cities. The project, SALURBAL or "Salud Urbana en America Latina" (Urban Health in Latin America) is funded by the Wellcome Trust as part of its Our Planet, Our Health Initiative. Over 50 researchers from across Latin America traveled to Lima, Peru for the biannual SALURBAL meeting, November 13-15. The gathering started with a novel participatory workshop engaging policy makers and other stakeholders in thinking about how urban food and transport policies affect health. Participants used the tools of systems dynamics modeling to identify promising points for intervention. The full SALURBAL team worked over three days on approaches to advance research and policy translation goals and heard from local Lima policymakers and advocates. DSPH faculty involved in SALURBAL include Amy Auchincloss, PhD, MPH; Brent Langellier, PhD, MA; Gina Lovasi, PhD, MPH; Harrison Quick, PhD; Leslie McClure, PhD, MS; Yvonne Michael, SCD, SM; Alex Quistberg, PhD, MPH and Dean Ana Diez Roux, MD, PhD, MPH.

For updates on SALURBAL visit:
https://www.facebook.com/LACUrbanHealth/

RESEARCH BRIEFS

Emergency Preparedness for Vulnerable Populations: Meeting the Needs of Those Most at Risk

Esther Chernak, MD, MPH, FACP, Director of the Center for Public Health Readiness and Communication and an associate research professor in the Department of Environmental and Occupational Health, will begin data collection on a 3-year, million-dollar grant to explore the disaster communications needs of families with special health care needs, including autism spectrum disorders. "We are particularly interested in the key roles that 'trusted' providers – health care professionals and others – can play before, during, and after disasters, to assist families with preparedness and with recovering from disasters," Chernak says. The research protocol will include interviews with families and sources they trust for information, such as health and social service providers. "We want to understand providers' perceptions of their patients' communication needs during emergencies and disasters, and their capacity to address them," Chernak explains. Based on the research findings, Drexel and CDC will create communication tools, messages, and guidance documents to support public health emergency planning for these groups.

UP NEXT AT DREXEL UNIVERSITY Dornsife School of Public Health

Population Health Spotlight 2017-18

JAN 17

Lance Waller, PhD
2:00 PM – 3:15 PM
Rollins Professor and Chair
Department of Biostatistics and Bioinformatics
Rollins School of Public Health
Emory University

OCT 18

Ricky Blumenthal, PhD
Professor of Preventive Medicine
Keck School of Medicine
University of Southern California
The Impact of the Opioid Epidemic on Drug Injection: Evidence and public health implications

FEB 7

Thomas Burke, PhD
2:00 PM – 3:15 PM
Jacob I. and Irene B. Fabrikant Professor and Chair
Department of Biostatistics and Bioinformatics
Bloomberg School of Public Health
Johns Hopkins University

NOV 15

Lisa Cooper, MD
Bloomberg Distinguished Professor
Bloomberg School of Public Health
Johns Hopkins University
Promoting Health Equity in Urban Policies: Opportunities for health impact assessment and related approaches

MAR 14

Tene Lewis, PhD
2:00 PM – 3:15 PM
Associate Professor
Department of Epidemiology
Rollins School of Public Health
Emory University

Urban Health Collaborative | INVITED SPEAKER SERIES

DREXEL UNIVERSITY Urban Health Collaborative
Dornsife School of Public Health

The Urban Health Collaborative's distinguished invited speaker series "New Directions in Urban Health Research and Action" focuses on innovative approaches to improving urban health both in the United States and abroad.

NOV 3

Steve Mooney, PhD, MS
Senior Fellow and Epidemiology Lecturer
School of Public Health
University of Washington
(co-sponsored with Department of Epidemiology and Biostatistics)
Do 'Complete Streets' Policies Decrease Cyclist Fatality Risk? G-computation for policy evaluation

MAR 2

Lorna Thorpe, PhD, MPH
12:00 PM – 1:00 PM
Professor and Director
Division of Epidemiology
School of Medicine
New York University

JAN 12

Keshia Pollack, PhD
12:00 PM – 1:00 PM
Associate Professor
Bloomberg School of Public Health
Johns Hopkins University

APR 20

Ramah McKay, PhD
12:00 PM – 1:00 PM
Assistant Professor
Department of Anthropology
University of Pennsylvania

For details and updates, visit www.drexel.edu/dornsife/events

Mary Duden

Alumna, Professor, Donor

"I think there is a real obligation to give back."

Mary Duden earned her Drexel MBA at a difficult time in her life: when she had four children, and found herself their sole support almost overnight.

"The first reason I give is because I'm grateful for the education I received, which has enabled me to support my family and to be a helpful presence in the community," Duden explains. "Secondly, I think that education is one of the 'must haves' and Drexel is a school that provides access, embraces diversity and makes a commitment to community which I fully support and endorse. The third reason for giving is I'm confident that whatever I donate will be used to further the mission of Drexel, and particularly the school of public health."

Duden built a 17-year career with Mercy Health Systems, where she retired as chief financial officer of Mercy Health Foundation and executive director of a Mercy program for the uninsured in Delaware County. She's now an assistant teaching professor in health management and policy at the Dornsife School of Public Health, and serves on the Dean's Advisory Council, which she chaired from 2002-2009.

She's credited with nearly $50,000 in personal and matching gifts to the school. She also was instrumental in securing a $350,000 grant from the Connelly Foundation to support renovations to Nesbitt Hall that allowed the DSPH to relocate and consolidate all faculty and staff under one roof.

"At a certain point in life when you are out in the world, you've got to be a giver and not a taker anymore," says Duden. "And getting in the habit of giving back - even if it is a small gift - matters. There were times when I could only afford to give $25, but I did it every year."

Announcing...

Dornsife Alumni & Friends SCHOLARSHIP FUND

Our mission to improve population health and eliminate health disparities all over the world begins with the ability to attract and support exceptional students who might not otherwise attend Drexel University – or even have access to higher education at all.

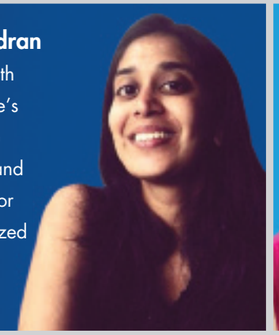
Gifts from our alumni and friends to the new Dornsife Alumni & Friends Scholarship Fund will enable us to educate generations of the best and brightest public health specialists, who will in turn advance our common research, education and service missions.

Please consider making a gift today.

Visit: **http://drexel.edu/dornsife/about/make-a-gift/**

Contact: Kevin J. McNamara
Dornsife School of Public Health, Nesbitt Hall
3215 Market Street, Room 253, Philadelphia, PA 19104
Phone: 267.359.6093 • Email: kjm32@drexel.edu

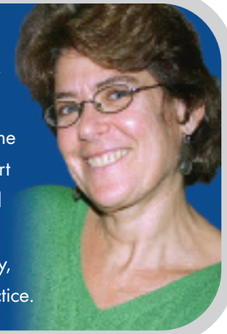
Amrita Balachandran is a science writer with a PhD in biology. She's been a contributor to The HistoryMakers, and currently freelances for the Journal of Visualized Experiments.



Courtenay Harris Bond is a freelance reporter and a Rosalynn Carter Fellow for Mental Health Journalism. Her work appears in the Philadelphia Inquirer, Philadelphia Weekly, TIME.com and other outlets.

Melvin Epps is a professional photographer and videographer, who started Thirdeye Productions, Inc. over 30 years ago. A Philadelphia native, Epps has worked with many Fortune 500 companies locally and nationally.

Karyn L. Feiden is a New York City-based writer and editor who covers public health, health care, and medicine for the Aspen Institute, the Robert Wood Johnson Foundation, and many other public and private organizations engaged in policy, philanthropy, research, and practice.



Sherry L. Howard is a former newspaper reporter and editor. She now writes a blog called "Auction Finds," about the interesting things she finds at auctions and the stories behind them.

Linda Wright Moore is the editor of DornsifeSPH Magazine. Her career spans four decades in television news, print journalism, public radio and documentary production. She's also been a mayoral press secretary, tenured journalism professor and communications professional in philanthropy and nonprofit organizations.

Digital Communications Specialist
Paul Johnson

Design & Printing
Macalino Marketing

Acknowledgements
Special thanks to
Phi Nguyen and Caroline Voyles
for assistance with Alumni Notes.

PLEASE TALK BACK!

Send your comments on the magazine to DornsifeSPHMagazine@drexel.edu

SUBSCRIBE

to the magazine at Drexel.edu/Dornsife/magazine