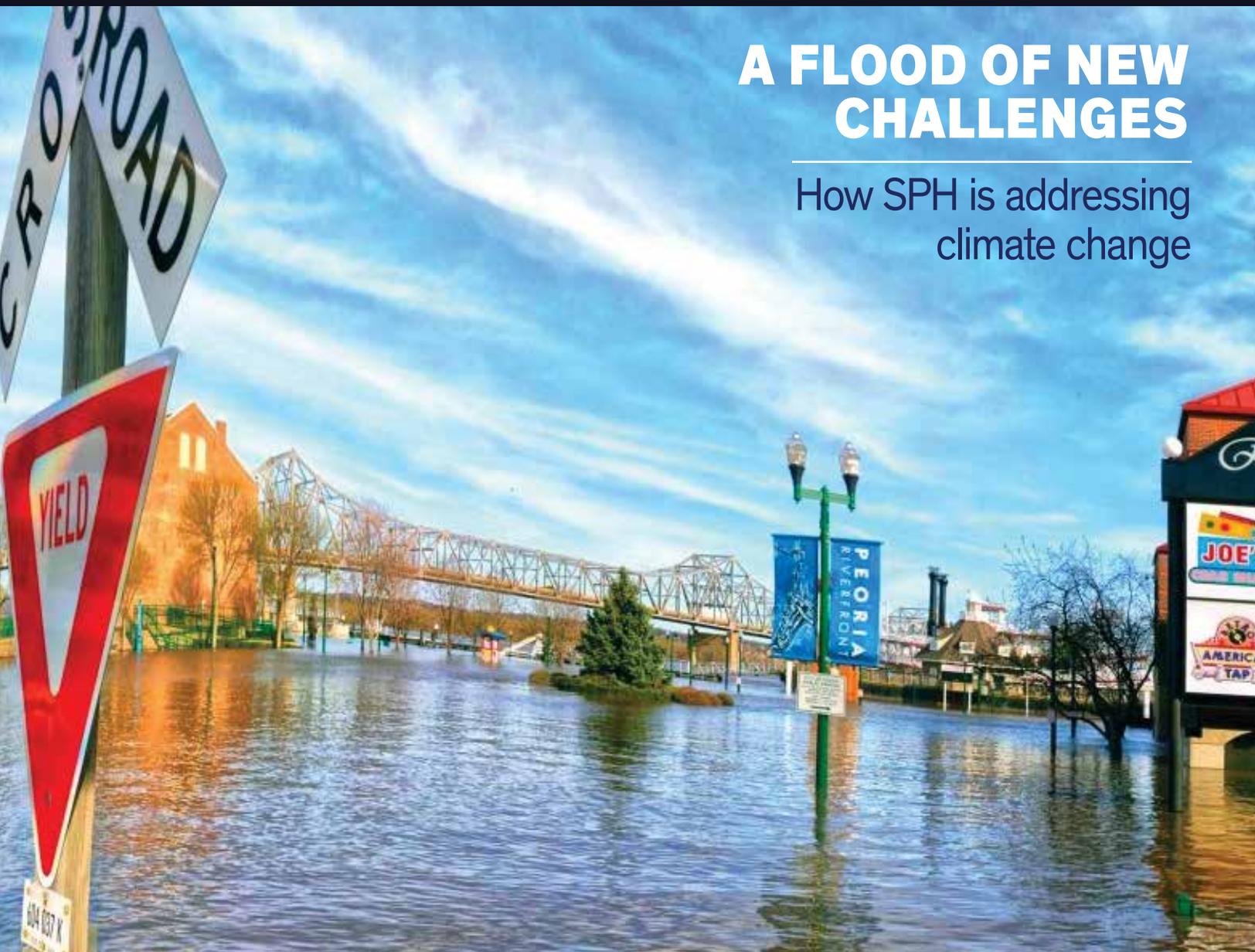


HEALTHVIEWS

FALL 2022 VOLUME 20

A FLOOD OF NEW CHALLENGES

How SPH is addressing climate change



INSIDE THIS ISSUE

Cultivating community-based citizen scientists

Center works to evaluate environmental justice

Bridging biological and social sciences to address health disparities



UNIVERSITY OF
ILLINOIS CHICAGO

School of Public Health



In August, UIC students began moving into on-campus housing as in-person learning resumed to its fullest extent since the onset of the COVID-19 pandemic. UIC's COVID-19 Contact Tracing and Epidemiology Program, housed at SPH, is ensuring the nearly 45,000 members of the campus community experience a safe and healthy fall semester.

HEALTHVIEWS

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Healthviews magazine is published by the Office of Advancement in the UIC School of Public Health. The school is dedicated to protecting and improving the health of people in Chicago, across the nation and around the world. To this end, UIC SPH faculty, staff, students and alumni are reaching out to local communities, city and state officials, and international partners with cutting-edge research, community-based health services and groundbreaking public health policy.

Please send questions or comments to SPHAdvancement@uic.edu.

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Over the past few years, a spotlight has been shown on the field of public health. Possibly for the first time ever, most people now have an understanding of the crucial role that public health plays in the safety of our global community. Despite a pandemic that touched the lives of everyone, we've seen tremendous innovation and communities coming together in ways that we haven't seen before. While there is clearly a lot more work to be done, I am confident that we will emerge stronger and even more committed to addressing health disparities and injustice. In this issue of Healthviews, our goal is to provide you with a sampling of the incredible work of the UIC School of Public Health community. Whether you are an alumni, donor or friend, thank you for your generous investment in and partnership with the UIC School of Public Health.



Wayne H. Giles

This year's cover story demonstrates our commitment to addressing climate change. Though climate change is a huge global challenge, public health professionals often perceive they do not have the knowledge or capacity to address it. We are actively working to change that. When we educate students and raise awareness about climate change, it benefits everyone.

I am very proud of the work being done through our Collaboratory for Health Justice. Under the leadership of Dr. Brenikki Floyd, our faculty and staff are working with local residents to build skills and systems to drive healthier living in Chicago area communities through the Citizen Scientist Certificate Program. The program seeks to empower individuals to embrace a more active role in public health decision-making by reflecting on their own lives and critically investigating the historical and structural factors that have shaped today's health inequities. You can read more about it in the Community Partnerships section.

I hope you'll take a moment to check out the Advancing Health section to learn about how private philanthropy is driving innovation and discovery at UIC. A new grant from the Chicago Community Trust is helping our PHAME Center address the lack of access to health data across Cook County, the EPA is funding our new Climate and Health Institute, and an anonymous gift from an alum helped establish a new scholarship for students interested in racial justice.

Lastly, you'll find updates on the accomplishments of alumni, faculty, students and staff in the Class Acts section. Announcements about job promotions, published articles and other celebratory news is sure to help you feel encouraged by all that is possible.

Here at the UIC School of Public Health, we remain committed to working with you to see continued progress in 2023 and beyond.

In good health,

Wayne H. Giles, MD, MS
Dean

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Many public health professionals point to climate change as one of the largest public health threats of our times. How do we prepare communities to address this crisis in a way that advances environmental justice?

Members of the UIC SPH community weigh in...

There are two key factors to help prepare communities for climate change that also advances environmental justice. First, we need to increase knowledge and awareness among civic leaders, community members, and public health professionals about climate change, its public health threats, and its disproportionate impact on environmental justice communities. Second, we need to appropriately invest in environmental justice communities to increase their resiliency from a climate change adaptation and mitigation perspective. This includes green, gray, social, and economic infrastructure. We know where the most susceptible communities are, we need to start investing in them.



**ELENA GROSSMAN, (MPH '11)
RESEARCH SPECIALIST
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As public health professionals and researchers we are uniquely situated to improve the lives of the communities most vulnerable to the impacts of climate change. Community-based, vulnerability focused, and intervention driven research will be key as we aid communities in allocating limited resources to areas that will have the biggest impacts. In order to do this, researchers need to involve community stakeholders and understand that there is no one size fits all approach.



**MEGAN KOWALCYK, MPH
PHD CANDIDATE IN ENVIRONMENTAL AND
OCCUPATIONAL HEALTH SCIENCES**

In order to prepare communities for climate change we need to understand the environmental determinants of health, the existing conditions in the community and, especially, the concerns of the community. The solutions need to be co-created by bringing our public health expertise, data, and best practices, while incorporating the lived experience of the community and their knowledge of what will work for them to address their concerns.



**CYNTHIA KLEIN-BANAI, (PHD '10), CEFP
ASSISTANT VICE CHANCELLOR AND DIRECTOR OF
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The climate crisis is especially detrimental to vulnerable communities that have been the subject of too many social injustices throughout history. As a public research university with unlimited resources and connections, it is our obligation to actively listen to community needs and develop ways we can support that are non-extractive to the community and the environment. Environmental justice organizations have been at the forefront in creating innovative climate solutions for decades. As we acknowledge this we need to collaboratively develop solutions in an equitable way to advance environmental justice.



**CYNTHIA MEDINA, B.S., MPH CANDIDATE IN
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ENVIRONMENTAL
RESEARCH

Work is in the spotlight – and precarious workers need support more than ever

With renewed funding, the Center for Healthy Work aims to create safe, sustainable jobs for low-wage and precarious workers

Everyone, it seems, has something to say about America's workforce since the onset of the COVID-19 pandemic. While opinions and attitudes have varying degrees of truth to them, Elizabeth Fisher, deputy director of the UIC Center for Healthy Work, says the prevailing societal conversation reflects the collision of the pandemic and pre-existing discontent with unhealthy working conditions.

“Our center is very focused on work as a social determinant of health. We need to talk about the social construction of work and how we live our day-to-day lives,” Fisher said. “People are sick and tired of unhealthy working conditions, and they want to talk about things like rights, wages, benefits, work-life balance, and retirement. We need to give workers the power and space to consider what healthy work is or can be.”

With renewed funding through 2026 from the National Institute for Occupational Safety and Health (NIOSH), the Center for Healthy Work is launching new interventions aimed at strengthening opportunities for low-wage workers and workers in precarious jobs, while also continuing the Center's established projects in Chicago. Kirsten Almberg, (PhD '16, MS '12), research assistant professor of environmental and occupational health sciences, will lead the Center as its new director following the retirement of Lorraine Conroy, ScD, professor of environmental and occupational health sciences.

The Center's Greater Lawndale Healthy Work (GLHW) community-based participatory research project is its longest-



The Greater Lawndale Loteria card game.



Jasmin Cardenas, a Greater Lawndale street vendor who collaborates with the Center for Healthy Work, prepares a Dia de los Muertos memorial for workers who died in the COVID-19 pandemic.

running effort, and the project's evidence-based, community driven interventions have specifically focused on the challenges for workers in precarious jobs that have worsened during the pandemic.

Working with the Street Vendors Association of Chicago and Equity and Transformation, the GLHW team with the support of Susan Kaplan, JD, research assistant professor of environmental and occupational health sciences, published a policy analysis on the home-based business ordinance and ways it could pose challenges for informal workers in Greater Lawndale. Another effort brought together community partners and residents to increase knowledge and awareness about worker cooperatives. With Free Spirit Media and Yollocalli Arts Reach, the GLHW launched a trauma-informed youth-led COVID-19 Stories Project to understand how the pandemic impacted the work situations of Greater Lawndale community members.

Another intervention is aimed at small business owners, policymakers, youth, workers and community leaders to inform critical dialogue and challenge knowledge, attitudes and beliefs related to work and health. The GLHW developed Greater Lawndale Loteria, a traditional game of chance akin to bingo that contains 54 originally illustrated cards created by a local artist in North Lawndale, with educational narratives that

highlights assets, precarity levels, history about Chicago labor movements and know your rights information. Another policy effort aims to support temp workers' health through changes to workers' compensation systems in Illinois.

With renewed NIOSH funding, the GLHW's next steps include a photovoice research study with informal workers, a neighborhood feasibility study of worker cooperatives and a community business healthy work certification program.

Other Center efforts include collaborating with a local large employer to develop and implement a process that uses data to identify the factors that prevent worker well-being – like social determinants of health or diversity, equity and inclusion factors. The goal is to improve worker health through a method for organizational decision-making that fosters healthy work initiatives as a sustainable business strategy.

The center will also expand collaborations across systems-level partners, like those in public health agencies and worker advocacy groups.

“People are opening their eyes and seeing that there are levels of precarity in a lot of jobs,” said Sylvia Gonzalez, (MPH '15), a project manager of the GLHW project. “It's a sign of solidarity that workers are building in these difficult times.” ●

What can we learn from The Great Resignation?

By: Elizabeth Fisher, deputy director, Center for Healthy Work



Elizabeth Fisher

Recent attention has been given to “The Great Resignation” and labor shortages across the country. From April to September 2021, more than 24 million American employees left their jobs, marking the highest number in the 20-year history of the U.S. Bureau of Labor Statistics’ job openings and labor turnover survey. As this is a recent phenomenon, limited research has sought to identify the reasons why workers left their jobs en masse. Various explanations have been offered, such as fear of illness, burnout, toxic organizational culture, insufficient salaries or benefits and a desire for work-life balance.

Since the onset of the COVID-19 pandemic, the workforce has faced unprecedented challenges. However, industries have been differentially affected. Frontline healthcare workers, or workers in low-wage jobs, such as hospitality and the food service industry, have borne the brunt of the pandemic.

Healthcare is experiencing a significant labor shortage that was predicted prior to COVID-19 and exacerbated due to the pandemic. Healthcare workers cite

longer hours, psychological trauma, inadequate staffing and burnout as the leading reasons for leaving their jobs during the pandemic. There are vast public health implications to healthcare worker shortages. Patients have experienced limited access and delays to necessary care. Healthcare workers who have remained on the job are experiencing record rates of depression.

Workers in hospitality and the food service industry experienced the highest quit rates. Many of these workers, upon assuming increased COVID-19 exposure risk, reassessed their priorities at work and in life. Expertly put by Ansari and Hernandez:

“Pandemic labor conditions lay bare the exploitation to which [workers] are subject; paradoxically, this presents an opportunity for solidarity. It might actually bring workers closer together.”

Successful unionization campaigns at Amazon and Starbucks, among others, have brought a national spotlight to labor issues. Collective voice among workers has called attention to pandemic-related labor concerns, as well as labor policy and systems failures. While inadequate personal protective equipment and limited social distancing on warehouse floors were acknowledged early by workers, other issues such as wages, job security, privacy and work-life balance have come to the forefront. As a response to “The Great Resignation”, consumers have altered their behavior, and in industries where workers make low- or subpar wages and have high quit rates, some employers have raised wages or provided enhanced benefits packages. Workers continue to successfully leverage their collective voice and shared power to improve conditions.

Worker health disparities remain evident across demographic and

“Pandemic labor conditions lay bare the exploitation to which [workers] are subject; paradoxically, this presents an opportunity for solidarity. It might actually bring workers closer together.”

geographic divides, and historical and systemic racism has led to inequitable opportunities for healthy work. The Center for Healthy Work, a NIOSH-funded research center, aims to address these inequities by systemically improving worker health through racial justice-centered strategic policy, systems, and environmental change initiatives to support communities in building and sustaining healthy work.

As society’s perception of and experience with labor and employment shifts, we must focus on building worker power. Increased power amongst workers and worker-centered organizations promotes collective voice and increased attention toward labor issues which promotes healthier working conditions for all. ●

Climate change adaptations for healthcare



Photo credit: © U.S. Federal Emergency Management Agency

In early 2019, the contiguous United States recorded the wettest winter on record. As spring kicked into gear, a blizzard powered across the Midwest, followed immediately by rising temperatures into the 60s and heavy rain. With the ground still largely frozen across the region, rapidly melting snow and rainwater led to flooding on a massive scale, including in Illinois towns and cities.

Flooding is the leading cause of federal disaster declarations in Illinois, and climate change will exacerbate flooding in the future. At the UIC School of Public Health, a team of researchers working to prepare the state for the health effects of climate change is studying how extreme precipitation can impact healthcare facilities' flood preparedness activities and is developing tools to inform their plans. Their results, published in the journal "Disaster Medicine and Public Health Preparedness," identified major gaps in awareness, capacity and preparation for severe flooding.



Elena Grossman

"We're seeing with COVID that the local level continues to be the place where responses to disasters happen," said Elena Grossman, (MPH '11) research specialist with the division of

environmental and occupational health sciences., a project funded by the Centers for Disease Control and Prevention. "As state-level programs, we have a role to play to provide these resources to local level activities."

With the Ohio River forming a portion of the state's southern border, the Mississippi River lining the state's western border and its tributaries coursing through the state, numerous

Illinois towns and cities are in 100 and 500-year floodplains. The challenges are not only a downstate issue; according to the Chicago Metropolitan Agency for Planning, vast sections of the south and west regions of the Chicagoland area are at heightened risk for urban flooding.

Grossman and co-author Michelle Hathaway, (PhD '22), built an interactive map plotting the geographic relationship of every hospital, primary care center, long-term care facility, dialysis center, ambulatory surgical treatment center, pharmacy and public health department across the state in relationship to 100 and 500-year floodplains, based on 1996 standards. They also developed a survey that was completed by administrators of healthcare facilities and public health emergency preparedness professionals to gauge their awareness of local facilities in floodplains and if an interactive map would be useful for their flood preparedness and readiness.

The survey revealed that nearly one-third of respondents who work at the state, region, county or city/ town level in planning and emergency preparedness reported not knowing where floodplains are located in their respective area. About ten percent of hospital and long-term care facility respondents were unaware of whether their buildings were at risk. The map itself identifies 40 facilities across the state in floodplains. Among the 40, 12 are long-term care facilities.

The goal is for the map to be a resource in planning for healthcare facilities and encouraging action. The data is limited by the existing federal floodplain designations from 1996, as climate change continually alters flooding patterns. Regardless, Grossman says the research team's spatial analysis builds the case

for climate change adaptations and mitigations in healthcare facilities.

Adaptation activities plan for the inevitable impacts from climate change and reduce risks. One lesson drawn from Hurricane Sandy is the need to locate emergency generators in above-ground locations. Future hospital construction could locate parking areas at the ground level and commence indoor spaces on the second level. Emergency preparedness plans can move points of dispensation of water and supplies to victims in a disaster away from facilities in flood plains.

Mitigation activities seek to slow down climate change by reducing greenhouse gases. Hospitals are huge producers of carbon emissions and plastic waste. Healthcare facilities might seek to utilize sunlight as much as possible to reduce electricity usage, switch off computers and monitors when not in use, optimize energy efficient windows and green roofs (roofs with planted vegetation) to improve insulation, and replace conventional energy with renewable energy sources such as solar, wind or geothermal.

The U.S. Federal Emergency Management Agency is working to update Illinois' floodplain designations, which will offer stronger geographic data for planning and preparedness. Grossman says the definition of healthcare facilities should be expanded as well. For example, this study did not include methadone clinics, a connection point to vulnerable populations that would be impacted by a flooding disaster.

"We're hoping to assess whether healthcare facilities utilized the map to inform and update their hazards assessment and flood preparedness plans," Grossman said. "Considering that increased frequency and severity of flooding is the biggest climate change concern for Illinois, we are hoping to assess the relationship of other health-related infrastructure to floodplains." ●

Understanding the opioid epidemic locally and nationally

SPH researchers are tracking the scope of drug overdose fatalities while aiming to improve trials of a Hepatitis C vaccine

As the opioid epidemic continues, School of Public Health researchers are continuing to shed light on the scope of the challenge and are working to build solutions to the pressing public health challenges associated with drug misuse.

In a new study in the journal *Epidemiology*, SPH's Lee Friedman, PhD, professor of environmental and occupational health sciences, and Alfreda Holloway-Beth, (PhD '14, MS '07), research assistant professor of environmental and occupational health sciences, along with colleagues at the CDC, found that opioid deaths in Cook County have been undercounted by up to 15%.

Their investigation was funded by the Centers for Disease Control and Prevention Overdose Data to Action program.

In their analysis, the UIC researchers found that the overdose deaths most likely to be missed were those of patients over age 50, patients with a diagnosis of malignant cancer, or patients admitted to the hospital or in the hospital for at least four days.

The goal was to capture regional data so that public health authorities might better fight the opioid crisis. According to the CDC, Cook County was ranked second in the nation for the number of fatal overdoses in 2020, with 2021 deaths surpassing the 2020 numbers.

"We began to have this kind of hunch that maybe we're missing those people who are dying in the hospital because they're older," Friedman said. "They don't fit the profile, the stereotype — actually, the stigma — of someone with an opioid use disorder."

The study compared hospital records with Cook County medical examiner data relating to 4,936 deaths that



Lee Friedman

included clinical signs of overdose and met a national case definition for opioid overdose. Researchers found that at least 633 deaths occurring in hospitals that met the criteria of opioid overdose were not correctly identified on death records reported by the CDC from 2016 to 2019. The majority of deaths the CDC missed occurred in hospitals.

Researchers also found that only 19.5% of deceased hospital patients who presented overdose symptoms had their cause of death confirmed by a medical examiner autopsy. Even when hospital staff flagged a patient with a medical code for opioid overdose, the medical examiner confirmed the diagnosis just 24% of the time.

Those least likely to be autopsied included deceased patients over 50 and patients of all ages diagnosed with chronic health conditions, especially malignant cancer, as well as those who were taking prescription opioids. This held even for cancer patients identified as having an opioid use disorder.

Previous studies have shown that nationwide, the undercount of opioid-related deaths may be as high as 20% to 40% based on death certificate records alone. This is due largely to the fact that many death certificates record an "unspecified drug overdose" as the cause of death rather than linking fatalities specifically to the opioid epidemic.

Prior studies also attribute undercounts to increased use of the synthetic opioid fentanyl, which is 10 times stronger than heroin. However, this new research from UIC shows that overdoses from prescription opioids are also significantly undercounted.

Friedman noted that since Cook County has one of the most well-funded and well-staffed medical examiners nationally, prescription opioid overdose undercounts in less well-funded regions could be even more severe. Officially, opioids were responsible for three-quarters of the 108,000 drug overdose deaths reported by the CDC in 2021.

Basmattee Boodram, (PhD '09), associate professor of community health sciences, is aiming to address infectious disease challenges that accompany drug misuse.

Hepatitis C transmission through shared syringes and drug paraphernalia is one of the major public health

“We began to have this kind of hunch that maybe we’re missing those people who are dying in the hospital because they’re older. “They don’t fit the profile, the stereotype — actually, the stigma — of someone with an opioid use disorder.”

— Lee Friedman

challenges of the opioid epidemic in the United States. About 4.1 million Americans are chronically impacted by this virus, and half are not aware they are living with Hepatitis C.

While direct acting antiretrovirals control and eliminate the virus, they do not provide protection against infection or reinfection, and access to these medicines is costly. A Hepatitis C vaccine is needed to stop the spread of the virus.

Boodram is leading a new project modeling clinical trial participation among people who use injection drugs. Funded by the National Institute of Allergy and Infectious Disease at the National Institutes of Health, Boodram is using computational modeling to address the high level of complexity in establishing representative samples of hard-to-reach populations.

“People who inject drugs in the U.S. are stigmatized, and the idea of someone even going to a doctor is a low priority

for people who inject drugs,” Boodram said. “Our model is looking at all the facets related to the infection but also understanding the social level related to reinfection and transmission.”

Boodram is building an agent-based model that creates realistic profiles of people who inject drugs across healthcare access, social determinants of health, geography and more. She is using empirical data from her work with SPH’s Community Outreach Intervention Projects and two decades of her research on people who inject drugs.

In the opioid epidemic, non-urban, non-Hispanic white populations across the country are increasing use of injection drugs. In particular, young people in non-urban areas are experiencing the highest increases.

Boodram’s models will take into account the support services people who inject drugs may access. She says a clinical trial for a Hepatitis C vaccine should take into account access to and limitations of medication and the role of harm reduction services and other strategies to reduce injection drug use (e.g., medication assisted therapy). Trials need to test combinations of these factors, in particular to account for people treated for Hepatitis C who experience reinfection.

Trials also need to account for geographic variation. For example, Chicago is a low incidence location for Hepatitis C because of the current social networks of people who inject drugs. These networks are not interconnected, unlike a city like San Francisco, with a dense and connected network of people who inject drugs with high incidence of Hepatitis C.

Finally, incarceration is a social determinant of health that needs to factor into trial models. For people who use injection drugs, incarceration can be a regular part of their lives. Upon release, some may have lost their old networks and join a new network. How these networks meld and change over time is the subject of connected research from Boodram.

“Treatment alone has never been a solution in the U.S. We’re not addressing the incidence, and more and more people are initiating drug use and sharing in the opioid epidemic,” Boodram said. “We have to address the epidemic with a vaccine, syringe exchanges and treatment.”

Previous Hepatitis C vaccine trials in the U.S. have faced difficulties building representative samples of the population. Often, these trials have been designed by clinicians, but Boodram says introducing social epidemiology is a needed step to address lack of effectiveness in previous vaccine trials. ●



Basmattee Boodram



Bridging biological and social sciences to address health disparities

With her latest research, SPH researcher Sage Kim investigates the connections between lung cancer risk and neighborhood stress

Photo courtesy Ermias Teclerariam © Creative Commons

For years, the so-called African American Smoking Paradox has confounded researchers.

Despite lower prevalence and frequency of smoking – the culprit in some 90 percent of all lung cancer cases, according to American Lung Association data – Black Americans report higher lung cancer incidence and mortality rates than their white counterparts. It's a puzzling mystery and a persistent racial disparity numerous well-intentioned researchers have attempted to unpack.

At the UIC School of Public Health, Sage Kim, PhD, associate professor of health policy and administration, is closing in on a potential explanation she hopes will inform new lung cancer screening protocols that improve early detection, foster improved patient outcomes and combat lingering health disparities.

"We're at the cutting edge of social, biological and health sciences, and it's an incredibly fascinating place to be," Kim said.

EXPLORING ENVIRONMENTAL-BIOLOGICAL CONNECTIONS

Aware of credible research detailing the role social stress plays in immune responses as well as various studies outlining ties between one's zip code and personal health,

Kim wondered if certain environmental factors might heighten lung cancer risk.

But first, she investigated biological factors that might be at play. She explored research linking chronic exposure to violence producing physiological stress responses and worked with colleagues who examined the Cyclooxygenase (COX)-2 enzyme, which promotes inflammation. Increased COX-2 expression, it turns out, frequently occurs in precursor lesions of cancer.

Kim also collaborated with a team of scientists who examined two protein arginine methyltransferases (PRMTs) – PRMT1 and PRMT6 – that are overexpressed in lung cancer. PRMT6 is the only PRMT identified as showing racial difference.

"Greater exposure to social stress among Black Americans increases the inflammatory cell environment that is conducive to epigenetic changes related to lung cancer," Kim explained.

An experienced data scientist, Kim then developed a data model exploring the relationship between communities with high violent crime and the probability of developing lung cancer. Looking at Chicago's 77 community areas, she identified an interesting connection between neighborhood exposure to violence, predominantly Black communities

on the city's south and west sides, and the probability of developing lung cancer.

For those living in low-homicide areas of Chicago, the lung cancer rate for those 60 and older with a history of smoking was less than 13 percent. In communities with high homicide rates, however, the lung cancer rate stood seven points higher at 19.8 percent.

If one were to lay two color-coded maps of Chicago neighborhoods on a table, one featuring neighborhood lung cancer rates and a second identifying community homicide rates, they would look almost identical. Chicago neighborhoods with the highest homicide rates, such as Englewood on the south side and West Garfield Park on the city's west side, also hold some of the city's highest lung cancer rates. By contrast, some of the lowest neighborhood lung cancer rates sit in communities with lower homicide rates, such as Belmont Cragin on the northwest side and Garfield Ridge on the city's southwestern edge.

For Kim, the data offered compelling evidence that neighborhood factors, such as chronic exposure to local crime and violence, alter biological processes and affect individual health – in this case, lung cancer.

PUSHING THE RESEARCH FORWARD

A University of Illinois Cancer Center member, Kim is now working with a team of biologists and pathologists to study lung cancer specimens and investigate PRMT 6. In May, she also kicked off another stage of this National Institute on Minority Health and Health Disparities-funded

project: recruiting Black men at Chicago barbershops to share hair samples and answer survey data. Together, these efforts will help Kim develop a deeper understanding of the connections between exposure to social stress and biophysical changes.



Sage Kim

Whereas researchers once had limited ability to tie environment to biology, Kim said growing technical competencies continue helping investigators measure biological changes due to social stress.

“A decade ago, we couldn't do something like this,” Kim said. “Now, we have the technical know-how and tools to look at social epigenetic changes and biomarkers we can actually measure.”

Ultimately, she hopes her research spurs changes to the current national lung cancer screening guidelines. At present, the U.S. Preventive Services Task Force recommends an annual lung cancer screening for adults over age 50 who have a 20-pack-year smoking history and currently smoke or have quit within the past 15 years. Those guidelines, Kim said, wholly ignore environmental factors.

“Smoking is not the only criteria that's relevant here,” Kim said. “What about addressing neighborhood contextual factors?”

By shifting the national guidelines to account for a key environmental factor that may increase lung cancer risk, Black residents living in high-crime areas can be directed to earlier screenings. Kim said a context-specific lung cancer risk profile and systems-level interventions that may flag this relationship for healthcare providers can help improve early detection of lung cancer, particularly for Black lung cancer patients who tend to be younger and often do not fit existing lung cancer screening criteria.

“Right now, those who don't meet the national screening guidelines simply go on with their lives and some of them end up with a late-stage diagnosis, which heightens the mortality rate,” Kim said. “Those are the cases we want to address and should feel compelled to address.”

Kim considers this transdisciplinary project an example of how the social sciences and health sciences can converge to propel healthier lives and greater health equity.

“While these two fields speak different languages, there is a shared aim to improve health outcomes and reduce health disparities,” Kim said. “Bringing these diverse fields together will advance science and, ultimately, population health.” ●



West Garfield Park

DIVISION OF EPIDEMIOLOGY AND BIOSTATISTICS



Vincent Freeman

For men with prostate cancer whose tumors appear to be limited to the prostate gland, surgery usually results in a clean bill of health from this curable disease. But among men who are obese, their prostate cancers are more likely to recur after surgery. SPH's Vincent Freeman, MD, (MPH '94), associate professor of epidemiology, is studying what exactly might cause this phenomenon.

"We have population-based studies that tell us as body mass index (BMI) increases, your risk of dying of prostate

cancer increases," Freeman said. "What we want to know is whether this might be due to body fat burden, or perhaps because people with a higher BMI might be eating more foods potentially causally related to the prognosis of the cancer."

With funding from the National Cancer Institute, Freeman's cohort study identified a strong association between body fatness and risk of recurrent prostate cancer after surgery. This association was present even in men who were not obese.

Freeman says body fat is known to produce substances that have been implicated in the development and progression of cancers. One hypothesis to explain the results of the cohort study suggests elevated body fat, as reflected to an extent by elevated BMI scores, increases the risk of earlier metastases of the tumor in the prostate in ways that evade detection when the cancer is being staged. As a result, some prostate cancer cells remain in the body after surgery. The substances created by body fat may cause tumors to metastasize earlier rather than later in the course of the disease.

Freeman says a confirmation of this hypothesis would allow for targeted screenings for men with elevated BMI scores, to identify particular proteins in the bloodstream that are associated with earlier metastases. Likewise, he envisions potential interventions and lifestyle modifications toward body composition. At the same time, Freeman cautions that any research or interventions in this vein must take a person-centric approach.

"It's important to remember that the association between body fat and cancer recurrence after surgery was observed in non-obese men," Freeman said. "Therefore, preventing prostate cancer recurrence after surgery may ultimately involve addressing body composition." ●

DIVISION OF COMMUNITY HEALTH SCIENCES



Julie Maslowsky

When the U.S. Supreme Court's decision to overturn *Roe v. Wade* ushered in rapid and drastic changes in abortion access around the country, Julie Maslowsky, PhD, associate professor of community health sciences, had her sights set on a largely overlooked population in reproductive health: adolescents. "Adolescents are very underrepresented given the proportion of pregnancies they represent," Maslowsky said. "Most family planning researchers are not focused on this population, and as a result, our policies

and services are not tailored to young people."

Maslowsky is currently working on two research initiatives aiming to build and understand access to reproductive health services. The first initiative aims to improve contraceptive counseling for this population. The ultimate aim is to create an app that will equip young people with knowledge and information about contraceptive options and side effects before consulting with a doctor.

Through human-centered design research, Maslowsky is engaging with adolescents to ensure the app is developmentally appropriate, given that current contraceptive counseling services are almost exclusively designed for adults. The project is using a reproductive justice framework that reckons with the racist history of gynecology, family planning and coercion in contraception use. The app also will aim for inclusion of LGBTQ+ populations; contraceptive counseling has historically been aimed at people who are cisgender heterosexual.

"We don't have protocols that are developmentally appropriate for adolescents' needs," Maslowsky said. "We want to provide training to doctors and healthcare providers about how to have a patient-centered discussion to make sure they have the best options for their consideration."

Maslowsky is also a co-investigator of a youth voice on abortion project, working with researchers at University of North Carolina Chapel Hill and My Voice, a University of Michigan polling initiative among people ages 14-24. The goal is to understand what young people think about abortion, access, and rights.

So far, the data show that adolescents understand the complexity of decisions around abortion and the

continued on next page...

**DIVISION OF
HEALTH POLICY AND
ADMINISTRATION**



Lisa Powell

Sugar-sweetened beverages (SSBs) are the leading source of added sugars in the U.S. diet, and their consumption is linked with a range of health harms, including obesity, type 2 diabetes and cardiovascular disease. In response, SSB taxes (some of which have also applied to artificially sweetened beverages) have been implemented in eight local US jurisdictions, one of which later repealed its tax. Lisa Powell, PhD, distinguished professor of health policy and administration and director

of the Policy, Practice and Prevention Research (P3RC) Center, is a national expert exploring the impacts of these taxes.

In a series of recent journal articles and research briefs, Powell and fellow researchers found that about 70 percent of the cost of SSB taxes are passed along to consumers and that taxes succeed at reducing demand for sugar-sweetened beverages, to the tune of an average 20 percent reduction across U.S. municipalities with a tax.

Researchers like Powell are studying not only the effects on demand for taxed SSBs but other behaviors that might change. For example, consumers might avoid sweetened beverages but substitute consumption with salty snacks or sweets. Results have been mixed: some studies did see evidence of substitution to sweets, but overall there has been a decrease in grams of sugar sold from SSBs. Another unintended consequence may be that consumers may cross municipal boundaries to avoid a tax. For example, for the tax that was in place in Cook County, IL, Powell's



research identified about one-quarter of reduction in demand for SSBs was offset by cross-border shopping, suggesting that taxes at larger geographic levels such as the state or national level may be even more effective.

Opponents of SSB taxes often argue that tax increases will lead to job losses, but studies available for the Philadelphia and San Francisco taxes have refuted these claims. Powell notes that consumers are likely to reallocate spending to other goods and services, including untaxed beverages often produced by the same companies that produce the taxed products. Governments also will spend the revenue generated by SSB taxes.

"Studies with longer follow-up periods are showing that the impacts [on demand] are sustained, suggesting taxes may permanently reduce demand for sugary beverages and help lower rates of health harms," Powell said. ●

impending impacts of changing legality in the United States. Most respondents were opposed to restricting abortion access and expressed negative emotions about the Supreme Court decision. For example, one young person stated, "Making abortions illegal won't stop people from getting abortions. They'll just get them unsafely. If you really want to stop abortions, you would improve sex education in schools, provide proper resources to young people, and so much more."

Researchers are now poring through data that examines youth responses to access to information on abortion and the ability to travel to another state to have an abortion.

"These projects are tying together reproductive health issues with issues of systemic oppression and racism," Maslowsky said. "Without a reproductive justice framework, you have limited solutions that don't recognize the many systemic and complex barriers." ●

DIVISION OF ENVIRONMENTAL AND OCCUPATIONAL HEALTH SCIENCES



Kirsten AlMBERG

ENVIRONMENTAL AND OCCUPATIONAL HEALTH SCIENCES

Public health researchers and clinicians have been building their understanding of the symptoms and risks of black lung disease for well over a century. Yet despite this long history, current and former coal miners are experiencing an historic rise in black lung disease cases and incidences of severe disease.

With colleagues at SPH's Mining Education and Research Center, Kirsten

AlMBERG, (PhD '16, MS '12), research assistant professor of environmental and occupational health sciences, is digging into why black lung cases are on the rise. Research findings point to increased exposure to silica dust as a possible cause.

"Coal mine dust is a mixture of components, and a lot of those components can be quite toxic, but principle among those is silica," AlMBERG said. "Much of the 'easy', or thin-seamed, coal has been mined out in the U.S., and the trend of extracting remaining coal from thinner, or otherwise hard to reach seams means more grinding of the rock above and below coal seams, leading to higher silica concentrations in the dust these miners are breathing."

In a study of former coal miners from across the U.S. in 2020-21, AlMBERG and fellow researchers found miners in

Central Appalachia - Kentucky, Virginia and West Virginia - are bearing the brunt of the increase in coal mine dust lung disease. Former miners in this region had significantly lower lung function compared to miners from the rest of the nation and these miners also experienced higher rates of black lung disease, including three times higher rates of progressive massive fibrosis, the most severe form of black lung disease.

Another study aimed to characterize mortality among coal miners. Examining more than 230,000 miners from 1979-2017, AlMBERG and co-investigators found significantly higher rates of death from pneumoconiosis and chronic obstructive pulmonary disease among miners, as compared with their counterparts in the general population. These disparities in mortality were highest in the most recent birth cohorts and among Central Appalachian miners.

The silica exposure believed to be driving these trends may have numerous causes. The increase in mechanization of mining, with more powerful machinery to pulverize rock and coal, generates smaller particles that travel deeper into the lungs. AlMBERG also cites the decline in unionization, which has decreased miners' ability to bargain for safer working conditions.

AlMBERG says the Mining Safety and Health Administration should issue a separate rule for regulating silica dust, which currently does not exist despite standards for total respirable dust in mining operations. The Occupational Safety and Health Administration has regulated silica in other workplaces since 2018.

"Coal mine dust lung disease has one cause - over-exposure to coal mine dust," AlMBERG said. "We know the causes, we know the public health implications, so the question becomes, why does this persist?" ●



Global Health Researcher Named Interim Associate Dean for Global Health



Maria Argos

and Biostatistics and has been a member of the SPH faculty since January 2014. Reflecting on her new role, Argos said, "I am enthusiastic to bring my experience to a role that advances SPH's commitment to improving the health and well-being of people throughout the world."

Argos has been engaged in global health research over the last 20 years, conducting cutting-edge epidemiologic research in Bangladesh. She is the

Maria Argos, PhD, was named the new interim associate dean for Global Health in February 2022. She is an associate professor in the Division of Epidemiology

principal investigator of a cohort of mother-child dyads in rural Bangladesh, evaluating the early-life health effects of environmental exposures, supported by funding from the National Institute of Environmental Health Sciences. In addition, in collaboration with colleagues at the University of Chicago, she serves as an investigator of the Bangladesh Center for Global Environmental and Occupational Health (GEOHealth) Hub, a Fogarty-funded center to advance the pace of scientific discovery in environmental and occupational health among Bangladeshi scientists. She recently co-authored one of the largest epidemiologic studies of arsenic and birth outcomes to date.

In recognition of her global health research, Argos was the 2017 recipient of the UIC Rising Star Researcher of the

Year Award in the field of clinical sciences. Created by the Office of the Vice Chancellor for Research, this award recognizes the efforts and commitment of a faculty member who advances knowledge and promotes continued excellence in research at UIC.

Throughout her career at UIC, Argos has advised undergraduate and graduate students in global health research. In this new role, she will spend the next two years working with faculty, staff and students to continue to make global health a strategic priority within the school. Argos said, "My own experiences in global health as a trainee were foundational to my current work in public health, and I am excited to expand on global health educational, training, service, and research opportunities for emerging SPH scholars and public health practitioners." ●

2022 Douglas Passaro Global Horizons Scholarship Awardees

Named in memory of Dr. Douglas Passaro, associate professor of epidemiology and attending physician in infectious diseases at UI Health from 2001-2005, this award supports public health students enrolled in the Global Health concentration complete their applied field experiences abroad.



Rawan Alkhateeb

Location: Chicago
Project: Rawan worked remotely from Chicago with Surge for Water, a non-profit that works with partners in Haiti, Uganda, and Indonesia to provide safe water, sanitation, and hygiene solutions to help end the cycle of global poverty.



Bhagya Galkissa-Dewage

Location: Kenya
Project: Bhagya worked with Safe Water and Aids Project to conduct a comparative

study evaluating the strengths and weaknesses of wastewater-based epidemiology to better understand whether data from community locations can be used to predict the occurrence of COVID-19.



Megan Kowlacyk

Location: Kenya
Project: Megan worked with Safe Water and Aids Project to complete an evaluation of the readiness of the public health infrastructure in Kenya to adapt to climate change.



Kara Nitti

Location: India
Project: Kara worked with SHARE India to assist with research on medication adherence barriers among Indian female sex workers living with HIV.



Samara Reigh

Location: Chicago
Project: Samara worked remotely from Chicago with the Environmental Protection Agency on

data extraction, analysis, and writing about the health outcomes of air pollution in sub-Saharan Africa.



Tanner Shull

Location: Puerto Rico
Project: Tanner worked at the University of Puerto Rico's Comprehensive Cancer Center in analyze oropharyngeal cancer

and other oral hygiene outcomes among people living with HIV and without concomitant HPV infection.



Lily Zheng

Location: India
Project: Lily worked for Ramaiah International Centre for Public Health Innovation's Access to Care through Empathy,

Motivation and Edutainment project, which implements long-term solutions to chronic disease management.

Water Works

Abhilasha Shrestha's pioneering work in Nepal aims to improve environmental water quality



Washing produce in Nepal

The contrast fascinates Abhilasha Shrestha (PhD '19, MPH '13). In the United States, residents turn on the tap and clean water readily flows. Powered by modern water treatment facilities, the U.S. hosts one of the world's safest and most reliable drinking water systems. Even more, public beaches, including those in Chicago, boast advanced monitoring systems indicating if it is safe to swim; Shrestha herself works on such projects in conjunction with the Chicago Park District.

"This is what we are accustomed to in the U.S.," said Shrestha, research assistant professor in the UIC School of Public Health's Division of Environmental and Occupational Health Sciences.

In low and middle-income countries (LMICs), however, water – quite literally – receives a different treatment.

In Shrestha's native Nepal, for instance, a nation of some 29 million people that lacks the capacity to build, operate and maintain contemporary water treatment plants, citizens, particularly those in rural areas, depend on surface water such as lakes, springs and rivers for drinking water – and that water can be less than sanitary. The natural water sources may be more susceptible to contamination and may contain human and animal feces as well as debris and other contaminants, all of which can lead to illness and, in some instances, even death.

During a 2021 trip to Kathmandu, Nepal's capital city, Shrestha watched a group wash carrots in a river just downstream from an unmanaged sewage line as human and animal fecal matter floated along the water's surface. Those merchants then brought those same vegetables to market for sale.

"I stopped eating carrots in Nepal after that," Shrestha said.

The stark contrast in water safety is more than a passing curiosity to Shrestha; it is, in fact, the genesis of her latest research project.

Supported by seed funding from the UIC School of Public Health's Global Health Program, Shrestha is leading a project to preserve the DNA of water microbes from LMICs and return it to the U.S. for advanced molecular testing. With an understanding of the diversity of microbes in those waters, Shrestha said local officials can then create appropriate interventions to control additional contamination and reduce health risks.



Abhilasha Shrestha

to safeguard their microbial DNA and then send them elsewhere for testing.

FINDING A MORE EFFICIENT WAY

While developed countries like the U.S. claim numerous molecular laboratories packed with high-tech equipment to amplify microbial DNA or systems for sequencing DNA, most LMICs lack such infrastructure. So, if a researcher or public health official wishes to test water samples in a country like Nepal, that individual must gather samples, freeze them

Shrestha calls that prevailing method a costly, challenging and inefficient process, especially when dealing with waterborne outbreaks that demand a timely response. According to Shrestha, public health-related environmental microbiology in LMICs would advance significantly if officials had access to both simple methods to preserve microbial DNA in environmental water samples and molecular labs for testing.

And that's where Shrestha applied some novel thinking.

During her 2021 trip to Kathmandu, Shrestha collected river water samples using a special "card" frequently utilized to capture blood and stool samples yet never applied to environmental water samples. When she returned to UIC with the cards, Shrestha immediately measured the samples' regular microbes by quantitative polymerase chain reaction (qPCR) to see if the technology successfully protected the integrity of the water samples.

"And I was thrilled to see it did," Shrestha said.

That single discovery ignites the promise of improving water quality and human health.

MOVING THE SCIENCE FORWARD

Over the summer, Shrestha used the cards to perform microbial source tracking. Taking DNA from the card, Shrestha and her team looked to pinpoint the different sources of fecal pollution in the Nepalese water, whether it is human or animal, such as birds, pigs, cows or dogs.

By understanding the source of the pollution and communicating that to on-the-ground partners, Shrestha said officials can then direct resources to interventions. If

human waste is an issue, for example, they can prioritize sewage-line improvements. If cow waste emerges as the problem, then officials can erect fences to restrict access.

"The burden of waterborne illnesses in LMICs is massive, but if we test samples quickly and accurately, then we can then work with public health agencies on efforts to control the sources of pollutants, protect the public and minimize harm," Shrestha said.

Ultimately, Shrestha hopes her research informs interventions and increases public education.

"I'm motivated by the integration of policy and science," Shrestha said. "If this work in the lab can make a difference and improve public health by developing sensible strategies, then we will have accomplished our goal!" ●



Nepal water source

Making a Difference in the Health of Populations Around the World

1 MEXICO

Celeste Charchalac and Jessica Contreras, MPH students in Community Health Sciences, traveled to Mexico as part of the School of Public Health's 100,000 Strong in the Americas Mexico Exchange Program with the Instituto Nacional de Salud Pública (INSP). Celeste worked at Clínica Especializada Condesa in Mexico City providing preventative services among STI-positive patients to improve adherence to treatment and quality of life. Jessica worked at the Center for Population Health Research conducting a report on C-sections among pregnant persons and their prevalence in Mexico.



Celeste Charchalac and Jessica Contreras

3 GERMANY

Linda Forst, MD, professor of Environmental and Occupational Health Sciences and center director of the Great Lakes Center for Occupational and Environmental Health, worked with collaborators in Germany and the Netherlands to catalogue immigration and labor policies in general and during the COVID-19 pandemic and explored how the policies have impacted immigrant workers in the meatpacking industry. Dr. Forst presented this work at the 2022 International Metropolis Conference in Berlin, Germany.

2 PERU

Jessica Rothstein, PhD, clinical assistant professor of Community Health Sciences, is leading a study to understand the impact of the COVID-19 pandemic on child nutrition in a peri-urban community outside of Lima, Peru.



Jessica Rothstein, middle

4 SENEGAL

Caryn Peterson, PhD, research assistant professor of Epidemiology and Biostatistics, is leading a project to evaluate the implementation of a cervical cancer screening and training (CCST) program in two rural Senegal regions and to assess the readiness of neighboring regions to adopt the CCST program.



Caryn Peterson

6 INDIA

Mark Dworkin, MD, professor of Epidemiology and Biostatistics, works in partnership with SHARE India to conduct projects that study restaurant food safety, rural village child immunization practices, diarrheal disease at a “Cholera Hospital,” diphtheria, and HIV medication adherence in the general population and among female sex workers.



Mark Dworkin

7 JAPAN

Miguel Nunez, MPH student in Community Health Sciences, conducted his applied practice experience at the University of Tsukuba in Japan. Miguel explored the impact of Japanese culture and governance on the hikikomori community, observed Open Dialogue therapy with individuals, and learned how the mental health staff support the needs of this population.



Miguel Nunez

5

5 KENYA

Samuel Dorevitch, MD, professor, and Abhilasha Shrestha, PhD, research assistant professor, in the Division of Environmental and Occupational Health Sciences, along with PhD students Megan Kowlacyk and Bhagya Galkissa-Dewage traveled to Kisumu, Kenya, to work with the Safe Water and AIDS Project (SWAP) on projects focused on clean water access, climate change, and occurrences of COVID-19 in wastewater.



Samuel Dorevitch and Abhilasha Shrestha

Elevating environmental justice

Powered by its early success and a second round of funding, CACHET aims to expand its environmental health research and address health inequities



Photo courtesy © 2013, Jeremy Atherton

In 2018, General Iron announced it was moving its car-shredding operations from Chicago's Lincoln Park neighborhood – a prized plot of north side land – to a new spot on the city's southeast side.

In the largely Latinx east side neighborhood, news of the company's relocation plans was met not with cheers but unease about General Iron's metal-shredding business – and its accompanying environmental hazards – coming to an area already plagued by environmental pollution burdens. The concerns would come to include town hall meetings, City Hall rallies, legal battles and a month-long hunger strike.

Soon after General Iron's announcement, the Southeast Environmental Task Force (SETF), a local nonprofit devoted to environmental justice and sustainable development, approached a seasoned partner, the ChicAgo Center for Health and Environment – or CACHET as it is better known, for a helping hand.

Knowing UIC School of Public Health (SPH) researchers and CACHET-connected investigators Victoria Persky, PhD, and Serap Erdal, PhD, collected prior

air quality data showing the impact of General Iron's emissions on the Lincoln Park community, SETF turned to CACHET for technical expertise, consultation and feedback. The engagement of CACHET with SETF spurred a letter from CACHET in partnership with SPH's Collaboratory for Health Justice and the Dean's Office to the Chicago Department of Public Health (CDPH) detailing the existing research and expressing concerns about the lack of community involvement and a thorough health impact assessment.



General Iron's north side operations before closing down.

In the end, the Chicago Department of Public Health denied the final permit needed for the move.

The General Iron case serves a shining example of how CACHET pursues its collaborative, research-driven mission to elucidate the biological and social underpinnings between relevant urban environmental exposures and human disease and translate the findings to reduce health inequities and disparities within communities.

CACHET builds momentum

For more than 20 years, SPH faculty member Gail Prins researched the impact of the environment on prostate cancer and male reproduction. While Prins produced hearty work, she often felt isolated. She was particularly envious of colleagues at peer institutions who boasted an on-campus National Institutes of Health (NIH) P30 center delivering shared resources and facilities to propel their research efforts.

“Without a P30 center, you're just an individual with an idea trying to put together resources to address questions,” said Prins, a professor in the divisions of environmental



Photo courtesy Eric Allix Rogers © Creative Commons

Industries along the Calumet River in southeast Chicago are located near residential neighborhoods.

and occupational health sciences and epidemiology and biostatistics. “I saw how P3Os could supercharge things.”

CACHET, an effort first ignited by former SPH Dean Paul Brandt-Rauf, changes that for environmental health researchers like Prins.

A cross-town collaboration between UIC and the University of Chicago, CACHET is one of 25 P3O Environmental Health Core Centers in the U.S. – and the only one in Illinois – funded by the National Institute of Environmental Health Sciences (NIEHS).

Upon landing its preliminary funding in 2017, CACHET began working in earnest to build momentum and demonstrate its ability to drive environmental health research among clinician, laboratory and population scientists and attack pressing health inequities.

Over its first four years, CACHET established three research focus groups – Air, Water and Soil Pollutants; Biomarkers of Exposure, Effect and Susceptibility; and Molecular and Cellular Processes on Environmental Toxicity – to understand, evaluate and ultimately reduce environmental health-related disparities and supported investigators’ enterprising research with enhanced facilities. The Environmental Biomarkers Core, for example, is centered around UIC’s Mass Spectrometry, Metabolomics & Proteomics Facility, where cutting-edge tools provide qualitative and quantitative analysis regarding biomarkers of exposure, disease and therapeutic response as well as levels of environmental toxins. Additional core facilities include the Integrative Health Sciences Facility Core and the Microbiome Core.

Through its Community Engagement Core, led by SPH’s former associate dean for community engagement Jeni Hebert-Beirne, (MPH’95, PhD’08), the upstart center also worked to strengthen ties with community partners. CACHET brings epidemiological or bench research to collaborate on environmental justice issues with community organizations like SETF and address environmental health concerns.

“With our setup, we are able to understand community needs, perform research on environmental health and then bring science back to the community where it can help real people,” said Prins, who leads CACHET alongside Dr. Habibul Ahsan, director of the Institute for Population and Precision Health at the University of Chicago.

CACHET’s presence has provided an undeniable push to SPH’s environmental health research efforts. The center offers seminars, grant writing support and community workshops as well as pilot project funding. Since its 2017 launch, in fact, CACHET has awarded more than \$600,000 to kick-start environmental health research projects connected to cancers, respiratory viruses and reproductive health among others. The center has also collaborated with community partners on evidence-informed public statements on matters of environmental justice, such as the open statement urging city officials to deny the permit for General Iron’s proposed move.

CACHET marches ahead

Over its first four years, CACHET established itself as a positive force

as NIH funding surged, community engagement intensified and researchers established new projects on topics such as metal toxins, agriculture herbicide exposure and air pollution’s ties to pregnancy outcomes. As a result, CACHET recently received full funding for another five-year period. The annual \$1 million capital infusion empowers more environmental health research and positions CACHET to further address health disparities.

Prins sees CACHET elevating its impact by developing more community partnerships, fostering more interdisciplinary and interinstitutional collaboration and capturing more grants to study important environmental health issues.

And to be certain, CACHET leaders recognize the positive impact their work can have on communities.

Daisy Magana, MPH ’21, a Community Engagement Core coordinator with CACHET, saw firsthand the benefit of CACHET’s efforts to share academic research with on-the-ground partners. When the SETF needed technical expertise to better understand environmental concerns around General Iron’s relocation, CACHET provided credible support and scientific knowledge to inform SETF’s actions.

“This research and expertise helped a community, my community, chart its path forward,” said Magana, who lives less than a mile from the proposed General Iron site on Chicago’s southeast side.

And in a city like Chicago, where some communities are overburdened with environmental exposures and health disparities, such support proves especially valuable, said Erdal, a CACHET investigator and co-chair of its Air, Soil and Water Pollutants Research Focus Group.

“Untangling these risk factors and providing scientific data is such an important mission because the need is so critical,” said Erdal, an associate professor in the division of environmental and occupational health sciences. “When the scientific community comes together with environmental justice organizations and stakeholders, it becomes an effective instrument for community empowerment and healthier lives.” ●

Cultivating community-based citizen scientists

With two pandemic-era programs, the UIC School of Public Health Collaboratory for Health Justice is working with local citizens to build skills and systems to drive healthier living in Chicago area communities

Rashida Balogun once had her eyes squarely focused on a career as a physician's assistant. An experience with the UIC School of Public Health (SPH), however, pushed the Chicago native to switch course and begin pursuing a Master of Public Health (MPH) degree at UIC in the fall of 2022.

As a member of the City of Chicago COVID-19 Contact Tracing Corps, Balogun learned of SPH's Citizen Scientist Certificate Program and enrolled thinking she would gain deeper insights into healthcare. As she sat in courses learning about social determinants of health and research's role in informing policy, however, she became increasingly intrigued by public health's extensive reach. "As a practitioner, you impact people at a one-on-one level, but the certificate program got me thinking about impacting people at a higher level. It put public health on my radar in a way it never was before," Balogun said, adding that the pandemic underscored the critical role public health plays in contemporary society.

So impactful was the experience, in fact, that Balogun enrolled in the certificate program a second time to confirm her interest in a public health career. Once again, she found herself drawn to the root causes of health problems, not merely the symptoms, the appeal of impacting health at a population level and the role of research in understanding health problems and, even more, designing thoughtful solutions. "I began to look around and think not only about putting band-aids on problems but thinking more holistically about what needs to be done to improve population health," said Balogun, who will



Chi Tracing Corps member Colleen Holifield engages with Chicagoans as part of her contact tracing work.

pursue the Community Health Sciences track in her MPH studies. Balogun, in fact, is one of 19 Corps members of the ChiTracing Covid Response Task Force who are part of the Life Scholars cohort, a community of former contact tracers whose training led them to choose pathways to higher education at UIC.

Borne out of the pandemic, SPH's Citizen Scientist Certificate Program and a sibling effort, the Youth Citizen Scientist Course, seek to empower individuals like Balogun to embrace a more active role in public health decision-making by reflecting on their own lives and critically investigating the historical and structural factors that have shaped today's health inequities. "Rather than public health experts landing in a community and making decisions from the top down, both of these programs encourage community members to use their own lived experiences to create a more collaborative, democratic approach to public health," said Maggie Acosta, assistant director at SPH's Collaboratory for Health Justice (CHJ).

Citizen Scientist Certificate Program

CHJ initially developed the online non-degree Citizen Scientist Certificate Program for contract tracers, supervisors and resource navigators hired through the city's ChiTracing contract tracing program established in response to COVID-19. In the



Chi Tracing Corps members canvas the Englewood neighborhood in Chicago to encourage residents to schedule COVID-19 vaccination appointments and to answer questions and concerns residents may have about the vaccines.

The approach we learned in class allows us to hear the community first before we look at our organization, our capacities and our partners to service needs.”

—George Salter

future, however, the goal is for SPH leaders to expand the program to any Chicago community member interested in developing a research career, advancing their capabilities in evidence-based practice or creating strategic partnerships to improve community health.

The goal of the certificate program, Acosta said, is to build participants' capacity with key public health research skills they might use to advance public health initiatives in local communities. By teaching students how to formulate community-based research questions, collect and analyze data and generate evidence-informed solutions, SPH and CHJ offer a path to more strategic public health work in Chicago area communities.

George Salter and Marissa Thornton from Habilitative Systems, a social and human services organization with 16 different sites across the Chicago area, both completed the certificate program and credit it with giving them the framework, confidence and skills to ensure Habilitative is appropriately responding to community needs and properly assessing its impact. “The approach we learned in class allows us to hear the community first before we look at our organization, our capacities and our partners to service needs,” said Salter, a community response worker supervisor at Habilitative. “Then, we can follow up to see how they are receiving services and their satisfaction because the delivery is really the most important element.”

As one example, the Chicago-based agency coupled a new form to track the resources community members need with a process for individual follow up. “This helps us make sure the resources we are providing are aligned with community needs,” said Thornton, a supervisor lead at Habilitative.

Youth Citizen Scientist Course

Like the Citizen Scientist Certificate Program, the Youth Citizen Scientist Course, since renamed Radically Reclaimed Public Health, was similarly designed to spur more democratic decision-making in public health. A social science program intended for high school and college-aged students, the course spotlights the interdisciplinary possibilities in public health with an additional focus on social justice and activism.



Chi Tracing Corps member Jeff Ashby contacts Chicago residents who may have been exposed to COVID-19 from his home office.

In partnership with One Summer Chicago and the Logan Square Neighborhood Association, CHJ hosted its first youth program in the summer of 2021. Students learned about public health, its history and how they might use data collection in their everyday lives to craft relevant interventions for communities. Participants then pursued projects exploring the root causes of health inequities in which they also applied qualitative, quantitative and mixed-methods data-collection approaches.

One student, Madeline Cardona, a senior majoring in Rehabilitation Sciences at UIC's College of Applied Health Sciences, participated in a group project focused on nutrition in Chicago's West Lawn neighborhood. After conducting an original community survey and assessing community resources and needs, Cardona's team created a pamphlet sharing information on the far-reaching impact of food insecurity, noting local residents' relationship with nutrition and identifying resources capable of helping residents lead healthier lives. “I learned how to think more deeply about my community and how living in a particular neighborhood affects our lives,” said Cardona, who now sits on the Community Scholars Board, the CHJ's community advisory board devoted to helping the program expand its engagement with Chicago area youth. “If you don't view the perspectives of people you are working with, you will struggle to understand proper solutions.”

And that's the philosophy inspiring both of SPH's citizen scientist programs and the mindset SPH and CHJ leaders believe will enhance public health efforts in Chicagoland communities. “When we're able to make better sense of the data we have and truly understand community needs, we are in a better position to make informed decisions that improve lives and strengthen communities,” Acosta said. ●

Donor highlights



New DrPH scholarship in equity and anti-racism

Named in memory of Andre' Gilmore Stanley, the first scholarship established for DrPH candidates will honor a student whose legacy was fighting for justice

Stanley, center, with members of his 2016 cohort, including Thompson, second from left.

André Gilmore Stanley was a proud member of the 2016 cohort of the School of Public Health DrPH in Leadership Program. He passed away in 2017 before he could complete the program, but the mark he left on his classmates and teachers will never be forgotten. “André was an incredible person and, we felt it was important to honor him in an important way. We are happy to share that our fundraising efforts have allowed our program to establish the André Gilmore Stanley DrPH Scholarship,” said Christina Welter, Director of the DrPH Program and clinical associate professor of health policy and administration.

Stanley was a policy analyst for the US Food and Drug Administration’s Center for Tobacco Products in Silver Spring, Maryland. Prior to serving in the federal government, he worked in other various tobacco control capacities around the country. He was an adjunct professor of public health at the University of the District of Columbia and a member of the Executive Board of the American Public Health Association (APHA) where he was previously the chair of the Alcohol, Tobacco and Other Drugs section of the association. In 2011, APHA awarded him a Fellowship in Government where he served on Capitol Hill as a legislative assistant in the U.S. House of Representatives.

Stanley joined the DrPH program as a well-seasoned public health professional who aspired to lead a state health department in the next stage of his long career. “He is described by his classmates as a very positive person, someone who was always willing to support his cohort-mates and share new ideas or approaches to community health,” Welter said.

Rebecca R. Thompson, CPA, CFRE, MPH, who was a member of Stanley’s 2016 cohort, helped initiate the idea to create a scholarship in his memory. “While André will not be present to carry out his desired leadership plans, the tenants of his desired research and experiences serve as a reminder that students in the DrPH program have an important role and responsibility - to be a voice for underserved populations and others who may not have the capacity to speak out and to lead change,” Thompson said. “DrPH students have a tremendous privilege and honor to lead and design new systems of health that are accessible and welcoming to all populations . We look forward to the many contributions that students in the DrPH program will add to public health practice through continued focus on health equity and racial justice.”

continued on next page...

EPA grant funds new climate and health institute

The U.S. Environmental Protection Agency (EPA) announced a \$100,000 grant to the School of Public as part of the Environmental Education Grants Program. The funding will be used to support a new Climate and Health Institute in the division of environmental and occupational health sciences. Led by Elena Grossman, (MPH '11), research specialist, the Institute will prepare future leaders to address the public health impacts from climate change through a two-year training program.

“While we need to slow down climate change, we also need to mitigate what is already happening,” Grossman said. “We’re aiming to provide practical preparation for future public health professionals to step into any job, see how climate change is affecting public health and disproportionately impacting environmental justice communities, and incorporate climate change into their work.”

Though climate change is a huge global challenge, public health professionals often do not identify it as a priority nor perceive they have the knowledge or capacity to address it. In the first year of the training program, academics and

Stanley had a deep commitment to continuously learn, keeping his knowledge and skills relevant to today’s complex public health challenges. With his deep experience and strong interest in tobacco control, his research passion focused more on issues of equity and anti-racism, and the need to further explore and create solutions for police violence against the Black population. Ultimately, he desired to create healthy communities for all through a new culture of health.

With the help of numerous donors, including an anonymous donor who contributed \$50,000, this scholarship was fully endowed within a year. “This scholarship will support DrPH students in good academic standing who express a clear vision for action to address health equity, particularly racism, as a public health issue,” Welter said. The first scholarship will be awarded out in the 2023-2024 academic year to a student who is in the dissertation proposal stage of their DrPH program who has a research focus on equity and anti-racism. “André’s legacy will live on for years to come and we look forward to sharing the impact that this scholarship has on all the future students that will benefit from this scholarship,” Welter said. ●



Jay Babin © Creative Commons

community partners from environmental justice communities will develop and deliver a curriculum of trainings to students and community members. The next year, students will work with one of the community partners and develop a project geared towards awareness in climate change, health, and equity and action by their civic leaders or community members.

“When we equip communities with the right tools to raise awareness and advance environmental education, it benefits everybody,” said EPA Administrator Michael S. Regan. “This funding will empower students and teachers in schools, and support community members in underserved and overburdened areas as we work together to tackle the climate crisis, advance environmental justice and deliver on our mission of protecting human health and the environment for all.”

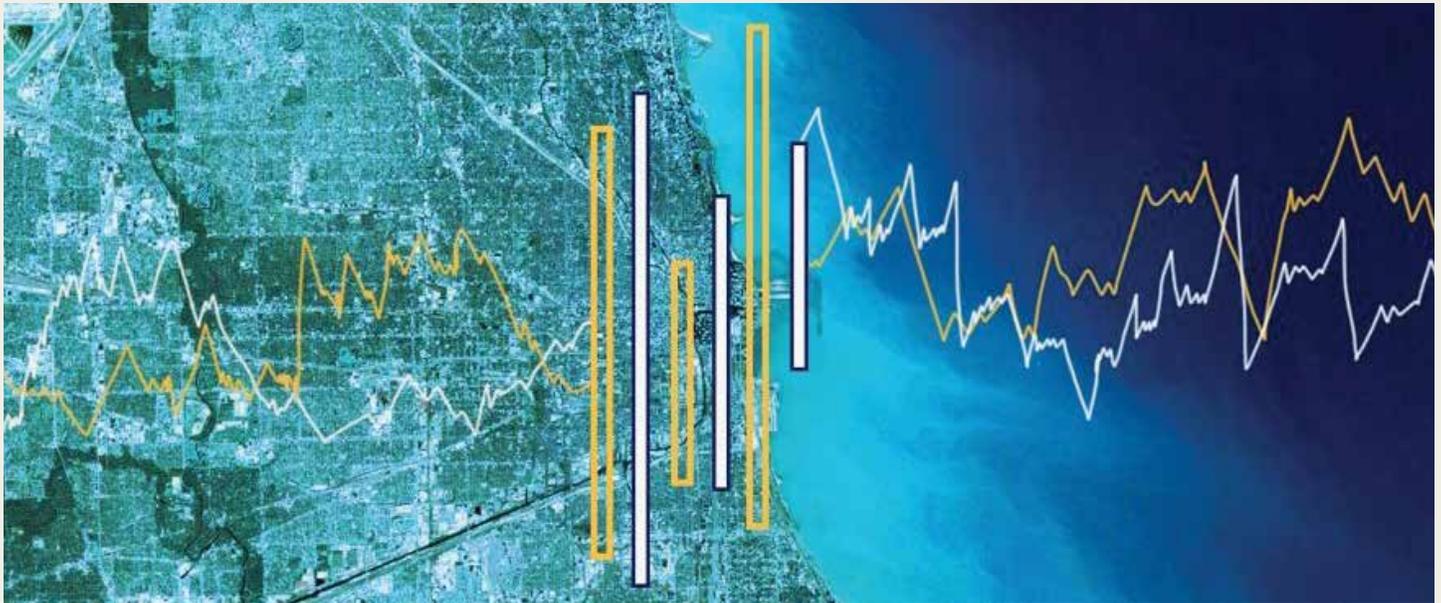
Beyond public health readiness, these partnerships will increase knowledge and awareness among civic leaders and community members in environmental justice communities about climate change, public health impacts and strategies to address it. ●



Jenorta Photography © Creative Commons

Donor highlights

PHAME Center Receives Grant from The Chicago Community Trust



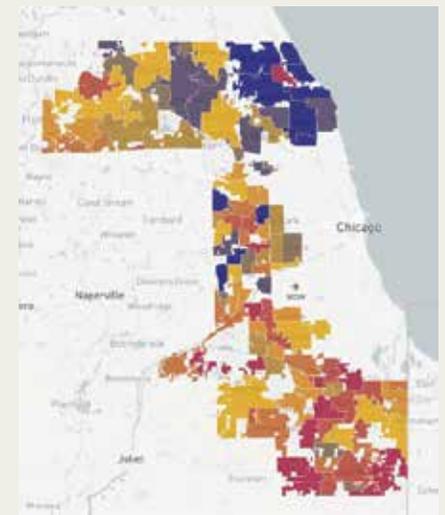
The UIC School of Public Health’s Population Health Analytics, Metrics, and Evaluation (PHAME) Center received a \$750,000 grant from The Chicago Community Trust to help address the lack of access to health data across Cook County. The PHAME Center is led by Dr. Sanjib Basu and Dr. Sage Kim, faculty members who have been leaders in democratizing data for public health, meaningful critical public health indicators, data analytics, and data visualization projects.

This generous support will help PHAME expand, improve, and maintain the Cook County Health Atlas, a free community health data resource. The grant will also help assess accuracy and biases associated with different approaches to estimating the prevalence of chronic health conditions throughout Cook County.

“The Cook County Health Atlas will provide universal access to hundreds of hyperlocal health and neighborhood

indicators and measures for all the 3 million residents of suburban Cook County,” explains Basu. Support from The Trust will expand Atlas’ functionality and identify and incorporate crucial additional data. “The information on the Atlas will be updated based on the continuing Healthy Cook County survey and will provide comprehensive up-to-date municipal-level data for the health and neighborhood indicators within the Atlas, including income, access to care, quality of care, chronic diseases, health behaviors, and diet and exercise,” says Basu.

The project funded by The Trust is led by the PHAME Center in partnership with the Cook County Department of Public Health, Metopio, a Chicago-based analytics and visualization software platform, and CAPriCORN, a patient-centered outcomes research network in Chicago. The core mission of the PHAME Center is to democratize data for population health



through its four pillars of technology, data outreach, community engagement, and education & policy. ●

To visit the Atlas, please visit cookcountyhealthatlas.org.



IGNITE Campaign Exceeds Goal

The Campaign for UIC, the most ambitious fundraising effort in the university's 163-year history, concluded on June 30, 2022 and exceeded its \$750 million goal. The School of Public Health alumni, friends, faculty members and students demonstrated a growing commitment over the course of the campaign, helping to raise more than \$76 million for the school.

Here is what was made possible by your generosity:

Student Success – Fifteen new endowed scholarships were created, impacting more than 230 students during the campaign. One such fund was the 2020 Scholarship Fund in honor of the school's 50th anniversary.

Research Support – Primarily funded through grantmaking, several research projects and centers were established, including the Collaboratory for Health Justice, the Population Health Analytics, Metrics and Evaluation (PHAME) Center, the Mining, Education, and Research (MinER) Center, and the Policy, Practice and Prevention (P3RC) Center.

Faculty Support – Two professorships were created and investiture ceremonies held for the Paul Levy and Virginia F. Tomasek Professor and the Dr. Samuel and Mrs. Catherine Epstein Term Professor in Cancer Prevention.

Lectureships Created – During the campaign, two lecture funds were established to foster continued learning for the community: the Daniel Swartzman Public Health Ethics Lecture and the Dr. Edwin Chen Fund for Public Health Speakers & Lectures.



Celebrating the Achievements of Students, Alumni, Faculty and Staff

DAVID ANSELL, MD, (MPH '91) received UIC's Alumni Achievement Award for his contributions to public health locally and nationally.



David Ansell

TODD BROWN, (MPH '07), was named the Race and Gender in the Built Environment Fellow at the University of Texas Austin School of Architecture.



Todd Brown

THERESA CHAPPLE-MCGRUDER, (PhD '09), director of the Oak Park Department of Public Health, was named the Villager of the Year by the Wednesday Journal of Oak Park and River Forest.



Theresa Chapple-McGruder

PRAMOD DWIVEDI, (DrPH '21), was elected the new president of the National Association of County and City Health Officials.



Pramod Dwivedi

COL. GWENDOLYN FOSTER, DrPH student, recently ended her command of the U.S. Air Force's 60th Medical Group, moving on to a new position as Director of Staff for the Air Force Surgeon General.



Col. Gwendolyn Foster

MELISSA L. GILLIAM, MD, (MPH '95), The Ohio State University's Executive Vice President and Provost, was honored by The King Arts

Complex at its 15th Annual Legends and Legacies Award Ceremony and Reception.

ANDRES GIRALDO LEDESMA, EMHA student and assistant director of clinical support operations at the UIC College of Dentistry, earned the College's Sparky Award in recognition of excellence in care, concern and support for patients, students, faculty and alumni.



Andres Giraldo Ledesma

JENI HEBERT-BEIRNE, (PhD '08, MPH '95), associate professor of community health sciences, was the recipient the 2022 Association of Schools and Programs of Public Health Practice Excellence Award.

YADIRA HERRERA, (B.A. '18, MPH '20), was named a Fulbright finalist and is teaching English to elementary-aged students while based in Spain's Canary Islands.



Yadira Herrera

ELIZABETH JARPE-RATNER, (PhD '18), core faculty in the DrPH program, and Booker Marshall, (MPH '17), authored new research on strategies to support LGBTQ+ students, based on experiences in Chicago Public Schools.



Elizabeth Jarpe-Ratner

RAMANDEEP KAUR, MD, EMHA student, was named a Fellow of the American Academy of Hospice and Palliative Medicine.



Ramandeep Kaur

CYNTHIA KLEIN-BANAI, (PhD '10), was named a Notable Leader in Sustainability for 2022, as honored by Crain's Chicago Business.



Cynthia Klein-Banai

TAMARA KOZYCKYJ, (MPH '14), was named a Fulbright Fellow to work with Ukraine's Ministry of Health.

SASHA KRAVETS, PhD in Biostatistics student, earned the 2022 American Statistical Association Biopharmaceutical Section Scholarship Award.



Sasha Kravets

NATALIA LOPEZ-YANEZ, (MPH '21), was named the new director of the UIC COVID-19 Contact Tracing and Epidemiology Program.



Natalia Lopez-Yanez

REGINA MEZA, (MPH '14), was named to the de Beaumont Foundation 40 Under 40 in Public Health list.



Regina Meza



YAMILÉ MOLINA, PhD, (MPH '05), associate professor of community health sciences, was named associate director for community outreach and engagement at the University of Illinois Cancer Center.

LINDA RAE MURRAY, MD, (MPH '80), earned UIC's Silver Circle Award recognizing the campus' best teachers.



Linda Rae Murray

OLUSEGUN OGUNLEYE, (MHA '09), was named an emerging leader by the Chicago Urban League as a member of the 2022 cohort of its IMPACT Leadership Development Program.



Olusegun Ogunleye

PETER ORRIS, MD, professor of environmental and occupational health sciences, earned a 2021 Health and Medicine Award from the Health and Medicine Policy Research Group.

JENNIFER PLASCENIA LOPEZ, MPH in Community Health Sciences student, earned a Schweitzer Fellowship to implement a high school mentorship program for first-generation, underserved youth in Chicago.



Jennifer Plascenia Lopez

DR. HEATHER PRENDERGAST, (EMHA '19, MS '14, MPH '07), is co-leading UIC's new long-haul COVID research project, funded by the National Institutes of Health.



Heather Prendergast

MARK ROSENBLATT, MD, PhD, MBA, (EMHA '19), Dean of UIC's College of Medicine, was named one of Chicago's top doctors by Chicago Magazine.



Mark Rosenblatt

SOUMYA SAHU, PhD in Biostatistics student, presented research at the National Delta Omega Poster Session at this year's American Public Health Association conference in Boston.



Soumya Sahu

KENNETH SCHOENIG, (MHA '22), earned an administrative fellowship with Franciscan Alliance Health System based out of Indianapolis.



Kenneth Schoenig

TANNER SHULL, MPH in Epidemiology student, earned a Schweitzer Fellowship to establish a group of mothers and community leaders within Little Village churches and organizations to act as health promoters.



Tanner Shull

JAIME SLAUGHTER-ACEY, (PhD '10), earned a new NIH grant on "Looking Back to Look Forward: Social Environment Across the Life Course, Epigenetics, and Birth Outcomes in Black Families."



Jaime Slaughter-Acey

TODD STANKEWICZ, (MPH/MBA '01) earned UIC's Humanitarian Award for his contributions to public health.



Todd Stankewicz

THASARAT VAJARANANT, MD, (EMHA '20), professor of ophthalmology at UI Health, was named one of Chicago's top doctors by Chicago Magazine.



Thasarat Vajaranant

SHANNON WILSON, DrPH student, was named the inaugural vice president of population health and health equity at Priority Health in Grand Rapids, MI.



Shannon Wilson

CALEB WRIGHT, (MHA '22), earned an administrative fellowship at St. Francis Health System in Tulsa, OK.



Caleb Wright

Tell us what you're up to!

Email your news to SPHAdvancement@uic.edu.

Congratulations Class of 2022

On May 6, 2022, the UIC School of Public Health held an in person commencement ceremony for the first time since 2019. Graduates and their guests were welcomed by the school's Dean, Dr. Wayne H. Giles, UIC's Vice Chancellor of Health Affairs, Dr. Robert Barish, and University of Illinois President, Dr. Tim Killeen. The conferral of the degrees for Doctor of Philosophy, Doctor of Public Health, Master of Public Health, Master of Science, Master of Healthcare Administration, Bachelor of Arts and Bachelor of Science, were presented to nearly 200 graduates. After the degrees were granted and the students were now officially alumni of UIC, they were encouraged to stay connected to their alma mater by Katherine Koo (B.A. '17), Co-chair of the SPH Alumni Council.

The keynote speaker was Dr. Rachel Rubin (MPH '88), a senior medical officer, co-Lead of the Cook County Department of Public Health and a board certified physician in Internal Medicine and Preventive Medicine. Her powerful

remarks welcomed the new graduates into a “small, but mighty, committed workforce of public health practitioners that are ready to tackle the next set of public health challenges.” She called upon everyone “to be advocates and activists as part of our core work. Public health work requires understanding the root causes of inequities and disparities that affect our communities’ health in understanding the power structures and political forces that shape health in public health policy in this country.”

An important part of the ceremony each year is the presentation of awards. The Bernard H. Baum Golden Apple Award was presented to Dr. Michele Shade McCay, (MPH '00, DrPH '11), adjunct professor in Health Policy and Administration; the Silver Circle Award was presented to Dr. Linda Rae Murray, (MPH'80); and the Alan W. Donaldson Memorial Award was presented to Sona Fakum, the first undergraduate student to be selected for this award.



2022 grads



Golden Apple Awardee Michele Shade McCay



Donaldson Awardee Sona Fakum



Silver Circle Awardee Linda Rae Murray



Class of 2022



2022 grads

Alumna Appointed New Director of Occupational Medicine Residency Program



Kim Hargis

The UIC School of Public Health's Occupational Medicine Residency Program welcomed a new director last March – and it is someone intimately familiar with the heralded program. Dr. Kim Hargis, a clinical assistant professor in the division of occupational and environmental health sciences, has returned to lead the residency program she herself completed. “After being a resident in the program and having such a rich experience myself, I knew that I would jump at the opportunity to come back if it ever presented itself,” said Hargis, who replaced Daniel Bakston, MD, MBA, (MPH '13), the program's director since 2014.

Hargis earned her medical degree from UIC and followed that with a general surgery residency at UIC and a hand and microvascular surgery fellowship at the Buncke Clinic in San Francisco. While caring for chronically ill patients as a surgeon, she grew increasingly interested in moving beyond acute care. In particular, she developed an accelerating attraction to preventive medicine and public health, so much so that she made the bold decision to shift her career trajectory.

In 2017, Hargis left her post as a general surgeon at Kaiser Permanente West Los Angeles Medical Center to pursue her

MPH at UCLA's Fielding School of Public Health, where she was also a Preventive Medicine and Public Health Fellow. She then returned to Chicago to complete her occupational medicine residency at UIC before serving as occupational medicine physician and center medical director at Kenosha, Wisconsin-based Concentra for two years. “From public health to population health to clinical care and prevention, this field encompasses so many of my interests,” Hargis said.

When applying for the position to lead UIC's Occupational Medicine Residency Program, Hargis touted her diverse background. Having completed multiple residencies and practiced medicine and patient care in different specialties, Hargis felt confident she would bring unique perspectives to the position. Yet more, she possessed an earnest willingness to provide the mentorship so beneficial to her as a UIC resident. “I found UIC faculty members to be incredibly supportive and invested in my success and that's something I wanted to repay,” Hargis said.

The two-year, SPH-housed residency program typically hosts six trainees, split evenly between PGY2 and PGY3 residents, and provides distinct experiences in public health and occupational and environmental medicine. It has launched individuals into careers with the likes of the U.S. Department of Health and Human Services, the Environmental Protection Agency and American Airlines. “The program has been running well under great leadership for a long time, so there's nothing that needs to be rebuilt,” Hargis said. “My goal is for residents to continue to graduate our program having had a rich experience that has prepared them well for the career of their choice.”

Building upon that foundation is now Hargis' principal charge as director, though she will look for opportunities to bring her own “special touch” to the program. Specifically, she is interested in maximizing the resources at UIC, both clinically and academically at SPH, so that residents can explore the diverse possibilities that exist in an ever-growing field of healthcare. “I want to make sure there's mentorship and flexibility within the program so residents get the valuable and individualized experience they need and want,” she said. ●

Representing All of Us

As chief engagement officer for the NIH's All of Us Research Program, SPH alum Karriem Watson leads efforts to build one of the world's largest and most diverse health databases



Karriem Watson

These days, Karriem Watson, DHSc, MS, (MPH'10), is embracing a new challenge.

And it's a big one.

Having devoted his professional life to bridging disparities and improving health equity, Watson is now leading the ambitious effort to build one of the globe's largest and most diverse health databases as chief engagement officer for the *All of Us* Research Program at the National Institutes of Health.

Named to the post last August, the Michigan native is directing the six-year-old program's network of community partners, participant ambassadors and research organizations focused on engaging people and communities historically underrepresented in biomedical research.

"The *All of Us* program is one truly committed to being inclusive and moving us away from a one-size-fits-all approach," said Watson, who served as the associate director of community outreach and engagement for the University of Illinois Cancer Center and the associate executive director of UI Health's Mile Square Health Center prior to joining *All of Us* last fall.

Unlike traditional research studies targeting one disease or group of people, *All of Us* is constructing a diverse database – at least one million enrollees, in fact – to inform studies on various health conditions. With more than 90 percent of participants in genome-wide association studies being of European descent – a severe lack of diversity that widens health disparities and slows scientific discovery – *All of Us* prioritizes diversity. The program's ever-growing database features data from populations historically underrepresented in medical research, including racial and ethnic minorities, individuals from rural populations, people who are LGBTQ+ and those with disabilities.

By providing researchers with data at a scale and level of diversity previously unavailable, *All of Us* unlocks powerful opportunities for researchers to better understand risk factors for certain diseases, discern which treatments work best for people of different backgrounds, connect interested individuals

to appropriate clinical studies and drive biomedical discoveries with the potential to improve health outcomes.

"A lot of the health disparities we see derive from a lack of data," Watson said. "Our aim is to get in front of researchers with diverse data, so they can begin asking questions and disentangling problems."

Watson calls "building a community engagement ecosystem reflective of the rich diversity of the United States" his foremost priority – and a task that will ultimately help science better address community needs. It is an admittedly heavy lift that requires constantly creating opportunities and avenues for participation and involving participants as active partners who feel heard, respected and secure.

"Research moves at the speed of trust," said Watson, who is also charged with helping to build the *All of Us* program's genomic research database in the face of a continued pandemic that stirred new public unease with the medical establishment in some communities.

But the work is not only about broadening the number of participants. Incorporating researchers from diverse groups is critical as well, Watson said, adding that more than 2,000 investigators are currently utilizing *All of Us*' platform for data analysis, the Researcher Workbench, which includes data from surveys, electronic health records, whole genome sequences, wearable technologies and more. The richness and depth of the database ignites opportunities for compelling scientific inquiry and advancing new prevention strategies and treatments for pressing health challenges ranging from obesity and hypertension to heart disease and cancer.

"We want to ensure researchers are aware of the database and access it so they can develop research questions reflective of the populations we serve," Watson said.

It is multi-layered, spirited work that leverages Watson's experience as a cancer disparities researcher, a healthcare administrator and community engagement specialist as well as his education and professional career at UIC.

"My training and work at UIC prepared me for this," Watson said. "I always had a commitment and passion for the equitable engagement of community members, and UIC, where community is part of the education, showed me ways to put that passion into practice." ●

Retirement Announcements

The UIC School of Public Health recognizes the dedication and years of service of the following faculty who are retiring this year.



Lorraine Conroy

Lorraine Conroy, ScD, professor and division director of environmental and occupational health sciences, joined the School of Public Health as a new faculty hire fresh out of graduate school after earning her doctoral degree. More than three decades later, she is still at SPH and wrapping up a long and impactful career in public health.

"I've seen EOHS evolve in quite a lot of different ways," Conroy said. "We've had a very strong air pollution group, a strong occupational health program that is continuing to grow and new faculty that are really growing the environmental side of our work."

Conroy's research expertise is as an industrial hygienist, assessing workplace exposures and creating interventions to control those exposures. In the early 90s, her work focused on the resurgence of tuberculosis and ventilation systems needed to protect healthcare workers. She also worked with construction laborers who were facing severe lead exposures, in an industry that at the time was under-regulated for lead by the federal Occupational Safety and Health Administration. More recently, Conroy has led the UIC Center for Healthy Work's efforts to examine healthy work arrangements - how people are hired, their level of job security, the precarity of their employment and how all those factors influence health.

The COVID-19 pandemic spurred a return to her work on healthcare ventilation, measuring levels of virus exposure at UI Health healthcare facilities.

"Much of my work has been along the same trajectory looking at exposures and working conditions," Conroy said. "The exposures keep changing depending on how employment is changing in the U.S."

Conroy says her retirement will involve more time spent with her family but continued involvement with the Center for Healthy Work along with mentoring of new EOHS faculty.

"I think I'm leaving EOHS on an exciting trajectory," Conroy said. "We have a lot of strengths, new faculty and a lot of opportunities."



Larry Wrobel

When Larry Wrobel, DHA, came to the School of Public Health in 2012 as an adjunct faculty member with the SPH's Master of Healthcare Administration program, he viewed his new role as an encore career.

For the previous 35 years, Wrobel held numerous management positions in healthcare, including chief operating officer of Advocate Medical Group, vice president of operations at Illinois Masonic Medical Center and president and CEO of Ravenswood Hospital and Medical Center. That experience played a key role in reshaping SPH's MHA program, a task Wrobel led as MHA program director for the past six years.

As he retires from program management and teaching, Wrobel leaves a program that has changed significantly to match the evolving leadership needs in healthcare.

"We've gone from a home-grown program in 2005 to significantly enhancing the awareness of the program and participating in national organizations," Wrobel said.

Some of the key changes during his time leading the program include the introduction of data analytics and health policy courses, a focus on preparing students for collaboration with physician leaders in healthcare systems and preparation for quality and performance improvement skills. He collaborated in the hiring of new faculty that have developed a nationally recognized base of research and led the program's latest accreditation, aligned with a new set of program competency models reflecting the latest trends in healthcare management.

"[My time at UIC] really gave me an opportunity to take my experiences and share them with students, and hopefully prepare them to be effective leaders in the healthcare industry," Wrobel said. "I get a great deal of satisfaction from having had the opportunity to teach the future leaders of healthcare."



Jamie Chriqui

Jamie Chriqui named new Senior Associate Dean

In the spring of 2022, SPH introduced Jamie Chriqui, PhD, as the new senior associate dean of the School. Chriqui joined SPH in 2007 in the division of health policy and administration, where she has served as professor

and director of the MPH in Health Policy and Administration program.

Chriqui is a national expert on policy surveillance and evaluating laws and policies and their impact on communities, systems and population health. Her research emphasizes chronic disease issues including obesity, nutrition, physical activity, substance abuse and tobacco control.

Her recent research includes testing the feasibility and impact of Healthy CPS Network Specialists supporting a CPS regional network of schools and students (a project with SPH's Policy, Practice and Prevention Research Center), the impact of state wellness policies on similar policies in school districts and evaluating Safe Streets built environment to foster health and safety for pedestrians, bikers and others forms of transportation.

Prior to joining UIC, Chriqui served as a policy analyst with the federal government's Substance Abuse and Mental Health Services Administration and the National Institutes of Health.

As associate dean, Chriqui's goals include examining the intersection of student success and public health workforce development, as well as faculty development and support. With 32 percent of the public health workforce planning on leaving current positions in the near future, Chriqui sees a need to provide our students with the necessary hard and soft skills to support public health agencies as they face some of the most pressing public health issues.

On the faculty side, she aims to bolster the diversity of SPH's faculty, increase interdisciplinary support and build transparency and equity for faculty work.

"I think my decades of research and collaboration with federal, state and local public health agencies and partners have positioned me to have a broad perspective on the unique needs of our School, faculty and staff, students, partners and the communities that we serve," Chriqui said. ●

EOHS Names New Director



Kristen Malecki

Dr. Kristen Malecki, PhD, MPH is the new director of the division of environmental and occupational health sciences. Malecki comes to UIC SPH from the University of Wisconsin (UW) where she was an associate professor in the department of population health

sciences within the School of Medicine and Public Health. As a nationally renowned leader in environmental health sciences, Malecki held several leadership positions at UW including director for the Center for Urban Population Health and director of the Survey of the Health of Wisconsin (SHOW), a longitudinal cohort and population-based research enterprise serving the entire UW Madison community, monitoring the health of state residents and contributing to a breadth of translational population health and applied public health research.

Malecki's own research focuses on the examination of the combined impacts of chemical (air pollution, water pollution), physical and social stressors, and their influence on adult chronic diseases, aging and health disparities. She serves as the principal investigator for a number of community-academic partnerships and is committed to advancing health equity. Her longstanding partnerships with state and local public health, as well as community-based organizations, supports a breadth of impactful public health projects. During the COVID-19 pandemic, in collaboration with the Wisconsin Department of Health Services and the Wisconsin State Laboratory of Hygiene, her team led the only statewide antibody surveillance initiative.

In addition to her research, Malecki developed several new courses for the Masters of Public Health degree including Quantitative Approaches to Public Health and Public Health Leadership and Environmental Health. Her service also included chairing the University Wide Campus Climate and Diversity Committee. In 2021, she was appointed to the National Academies of Sciences standing committee on the "Use of Emerging Science for Environmental Health Decisions." Malecki received her PhD in Environmental Epidemiology and Health Policy and her Master of Public Health degree from the Johns Hopkins University Bloomberg School of Public Health. ●

Recent Graduates Celebrate In Person

On June 9, 2022, alumni from the Classes of 2020, 2021 and 2022 gathered in person to celebrate their graduation from the UIC School of Public Health. More than 50 alumni networked and mingled, many for the first time due to remote learning. Attendees were welcomed by Dean Wayne H. Giles and Alumni Council Co-Chair, Kera Beskin (MPH/MBA '18).





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