# Health Impact

From the University at Buffalo School of Public Health and Health Professions

Spring/Summer 2023

UB and the School of Public Health and Health Professions Embark on a

# Historic Hiring Effort

#### FROM THE DEAN

Welcome to this season's issue of Health Impact.

The dramatic image on the cover mirrors the dramatic news: the University at Buffalo is undertaking its largest hiring initiative in many years—over 50 years, to be specific. Here at the School of Public Health and Health Professions, every department is in the process of finding and selecting new faculty to add to our already considerable roster of teachers and researchers. The need for faculty is a result of the university's efforts to enter the ranks of the top 25 public research universities in the country. That objective is informed by our ultimate goal: to make a meaningful impact on society via our work in key fields. You can read more starting on page 8.

Another effort underway here at our school is designed to make a meaningful impact on the need for more public health professionals, especially those from underrepresented groups. A substantial new grant from the U.S. Health Resources and Services Administration's Public Health Scholarship Program will support those efforts. You can find out more about our new cohort of HRSA students beginning on page 10.

Now that the rush of the end of the academic year and commencement is behind us, all of us at SPHHP can hopefully enjoy a summer of rejuvenation and renewal. I wish the same for you during the coming months.

Jean Wactawski-Wende, PhD Dean, UB School of Public Health and Health Professions SUNY Distinguished Professor

#### IN THIS ISSUE

2	MESSAGE FROM THE DEAN
3	TRENDING AT SPHHP Commencement, new micro-credential
6	INQUIRY AND SCHOLARSHIP Noteworthy research results from SPHHP
8	<b>SPHHP IN DEPTH</b> Historic hiring effort, grant-funded MPH
12	<b>EVENTS</b> Annual events offer intriguing insights
14	FACULTY AND STAFF UPDATES New SPHHP honorees
16	STUDENT CONNECTIONS Meet Danelly Rodríguez

Epi alumnus focuses on fertility

## SPHHP Receives Federal and Foundation Funds Supporting Mobile Health Unit

More than half of the residents in Buffalo's Seneca Babcock neighborhood don't have a vehicle. That makes getting to medical appointments, and just about anything health care-related, challenging. A community partnership between neighborhood leaders and SPHHP has big plans to break down the two biggest barriers residents face: transportation and access. This initiative will build on interprofessional education and practice opportunities across UB's health science schools.

The project received a major boost when U.S. Rep. **Brian Higgins** announced during a press conference \$933,800 in federal funding for SPHHP to support a mobile health unit providing access and services to Seneca Babcock and other medically underserved communities in Erie, Niagara and surrounding Counties.

"UB's mobile health clinic will build on existing partnerships to meet members of our community in greatest need where they live to provide comprehensive care. Thanks to this critical funding secured in the federal budget, we can eliminate barriers to care and make a long-term investment in a healthier future for our community," Higgins said.

The Mother Cabrini Foundation earlier this year awarded SPHHP \$600,000 for the mobile health program. That, coupled

Attending an announcement of federal funding awarded to SPHHP to support a mobile health unit are (from left) Rep. Brian Higgins; SPHHP Dean Jean Wactawski-Wende; UB President Satish K. Tripathi; Brian Pilarski, executive director, Seneca Babcock Community Association; and Buffalo Common Council member Bryan Bollman. with the federal funding Higgins secured, will be enough to build and staff the unit, bringing to fruition a longtime goal to reach the community where they live.

"We have dreamed for many years about the possibility of setting up a free clinic in the neighborhood and other communities in need. The funding provided by Congressman Higgins will bring this medical mobile unit to our community to help break down some of those barriers," SPHHP Dean Jean Wactawski-Wende said.

The mobile unit will feature rooms for medical exams and a patient interview area, where UB health sciences students and faculty will offer health screenings and prevention services, provide referrals to providers and help people navigate the health care system. -----o







## Plenty to Celebrate During 2023 Commencement

The venue was expansive as this year's School of Public Health and Health Professions' commencement ceremony took place at UB's Alumni Arena. The annual celebration of student success, held this year on May 18, was a festive and occasionally rowdy—gathering of graduating students joined by family, friends and others invested in their success. Over 380 graduate and undergraduate students strode across the stage during the event. There, they found handshakes, smiles and hugs from the assembled faculty, administration and special guests, along with a piece of parchment naming them newly minted graduates of one of SUNY's flagship institutions.

4 UB Health Impact Spring/Summer 2023



# Bringing the World to Public Health

One health-related truth the COVID-19 pandemic underscored is this: public health issues frequently cross borders. That notion is part of the impetus for a new micro-credential, Public Health from Global Perspectives, developed by UB's Office of Global Health Initiatives (OGHI).

The new micro-credential gives UB graduate students focused study of public health in global contexts. The program builds on foundational public health knowledge and offers in-depth study of major global health issues, including social determinants of health, environmental health, non-communicable diseases, infectious disease, pandemics and more. The focus is on growing global and intercultural fluency, criticalthinking and problem-solving abilities, and skills in teamwork and collaboration. A distinctive aspect of the Public Health from Global Perspectives micro-credential is that the training it offers takes place outside the classroom in active-learning, community-based academic activities.

"Students who take part in the Public Health from Global Perspectives micro-credential will be well prepared for potential opportunities to work on global health-related issues," says **Lina Mu**, director of the OGHI and professor of epidemiology and environmental health.

Students who complete the Public Health from Global Perspectives micro-credential will earn a digital badge that they can include in their CV.

0-----0

PUBLIC HEALTH FROM GLOBAL PERSPECTIVES



#### Pandemic drinking

A UB study provides the most comprehensive look to date at drinking patterns during the COVID-19 pandemic and their association with four mental health disorders in the U.S. Study first author Yihua Yue, an epidemiology and environmental health PhD student, looked at alcohol consumption among more than 3,600 U.S. residents, and examined associations between drinking patterns and anxiety, depression, stress and post-traumatic stress disorder. Increased alcohol use and binge drinking were associated with higher odds of mental health disorders, highlighting the relationship between over-consuming alcohol and mental health problems as a public health concern and negative COVID-19 impact. Published in Alcohol and Alcoholism.

#### Diet and vascular health

Kaelyn Burns, PhD candidate in epidemiology and environmental health, is principal investigator and trainee on a highly prestigious F-31 grant from the National Heart, Lung, and Blood Institute/National Institutes of Health for a study she will lead. Burns explains her study's aims: "Choline is a nutrient found in high amounts in foods like red meat, fish and eggs. After consuming choline, it can be metabolized by bacteria in the gut microbiome to produce a metabolite associated with cardiovascular disease, called trimethylamine N-oxide (TMAO). Alternatively, the intake of dietary fiber can suppress the production of TMAO. The role that overall dietary intake plays in TMAO production remains unclear. In hopes of helping to clarify this, the goal of this study is to evaluate associations of an overall dietary pattern predictive of high circulating concentrations of TMAO and choline with the presence of metabolites in circulation, bacteria in the gut microbiome and a measure of vascular health."

#### Dietary fat and breast cancer

Understanding factors affecting survival among women diagnosed with breast cancer is critically important, but study results of one suspected factor on death from breast cancer—dietary fat intake before a diagnosis—have been inconclusive. A new study notes that while various kinds of dietary fat—saturated, polyunsaturated and monounsaturated fatty acids—may have different biological effects, little evidence exists about the association of their intake with death after a breast cancer diagnosis. Researchers, including first author **Danielle Meyer**, director of SPHHP's Undergraduate Nutrition Science Program, looked at the dietary patterns of a population of women with breast cancer in the Western New York Exposures and Breast Cancer (WEB) Study. They conclude that the intake of dietary fats before a breast-cancer diagnosis was not associated with death from breast cancer (or from any cause) in that population. Published in *Cancer Epidemiology Biomarkers & Prevention*.





#### **Cannabis regulation**

The U.S. and Canada regulate cannabis very differently. When it comes to policies regulating cannabis advertising and marketing, the two countries are even further apart, according to a study comparing the countries' cannabis marketing policies. Most states do not address many of the cannabis advertising activities prohibited in Canada, such as glamorization and testimonials. "While Canada has a federal Cannabis Act that provides structured guidance for those in the cannabis industry to communicate about the product in a way that protects vulnerable populations, many states in the U.S. tend to be vaguer in their policies," says Natasha C. Allard, the paper's lead author and a PhD student in the Department of Community Health and Health Behavior. Published in Cannabis and Cannabinoid Research.



#### **Opioid overdose risks**

**Rachel Hageman Blair,** PhD, associate professor in the Department of Biostatistics, is the principal investigator for a new study aimed at discovering the biological basis for the risk of opioid overdose and to discover safe and effective new ways to reverse the effects of overdose. The overall objective of the study, "Genetic Variation in Opiate Induced Respiratory Depression in Mice," is to define the molecular mechanisms that underlie the difference in breathing rates of people who have taken opioids. The results will help explain why the breathing rates of certain people are more sensitive to opioids as well as to suggest alternatives to naloxone, a commonly used overdose treatment. Funder: Jackson Laboratory/National Institutes of Health

#### High blood pressure and pregnancy

Women with high blood pressure during pregnancy are at higher risk throughout their lives for negative cardiovascular health, especially women who experience health disparities. A study in which UB is a partner is trying to improve outcomes among postpartum, at-risk women by growing awareness, detection and timely care of postpartum high blood pressure, mental health and cardiovascular complications. The study has enrolled 6,000 women at Kaleida Health's John R. Oishei Children's Hospital of Buffalo, Yale New Haven Hospital and UMass Medical Center. The project is funded through a \$18.8 million grant from the Patient-Centered Outcomes Research Institute; UB is receiving \$3.7 million. Pauline Mendola, PhD, chair of the Department of Epidemiology and Environmental Health, and Thaddeus Waters, MD, chief of maternal-fetal medicine in the Jacobs School of Medicine & Biomedical Sciences, are principal investigators on UB's portion of the study. The study is led by the Yale School of Public Health.

#### "Transactional" sex and HIV

Does a Tanzanian cash transfer program combined with complementary programming ("cash plus") keep adolescent girls from exchanging sex for material support for basic needs, social status or other benefits? Such "transactional" sex is associated with an increased risk of HIV infection in adolescent girls and young women in the region, so the answer is meaningful. A study led by doctoral student Sarah Quinones and Associate Professor Tia Palermo, PhD, in collaboration with UNICEF and researchers from the London School of Hygiene and Tropical Medicine, found the risk of engaging in transactional sex increases with age, but increased educational attainment and staying in school is protective. However, the cash plus intervention had no impact on reducing transactional sex. The study concludes determinants of transactional sex are complex, but economic insecurity is an important driver for transactional sex and HIV infection. Interventions addressing such drivers of HIV infection should link sectoral programming and focus on efforts to increase school enrollment and completion. Published in the Journal of the International AIDS Society. -----o

UB and the School of Public Health and Health Professions Embark on a

Historic

Hitring of the second scholarship, provide innovative educational and research of popurturities for students and enhance UB's

"This hiring initiative is such remarkable news for the university and for our school," said SPHHP Dean Jean Wactawski-Wende, PhD. "Growth in faculty will enable us to expand our research initiatives and support our rapidly growing student body."

#### Top 25 ambition

As New York's flagship university and a member of the prestigious Association of American Universities (AAU), UB is among the premier research universities in the nation and world. But UB is not resting on its laurels. Building on the university's existing strong foundation of academic and research excellence, its longrange strategic goal is to be recognized among the Top 25 public research universities in the nation. The hiring initiative, "Advancing Top 25: Faculty Hiring," is a vital strategy to do so.

University leaders consider the initiative transformative, calling it an unprecedented opportunity to move UB forward by growing its faculty base. UB wants to substantially grow its ranks of tenured and tenure-track faculty over the next two years in interdisciplinary areas of societal importance and university strength: democracy and society; human health; sustainability; and transformational technology (see next page). Of the 200 tenure-track faculty to be hired, about half will be new faculty added to the ranks in these areas.

SPHHP has already added a number of faculty since the initiative began, including research professors and teaching faculty.

international recognition.

#### Attracting talent

UB's Top 25 Ambition, announced by UB President Satish K. Tripathi in 2019, has guided the university to significant achievements, such as UB's designation last year as New York State's flagship university and achieving historic levels of sponsored research funding. UB is building on those achievements by hiring additional talented faculty and supporting their success. Faculty hiring on this scale hasn't happened at UB since the 1960s, when the university joined the SUNY system. UB is also committed to doubling the number of faculty from historically underrepresented backgrounds between 2020 and 2025.

UB continually pursues academic and research excellence and is focused on expanding the university's engagement and impact locally, nationally and globally. UB is also harnessing its educational, research and engagement energies to combat racism, dismantle structural barriers to equity and make UB a more inclusive place to learn and work. These priorities are all intended to achieve UB's ultimate goal: greater societal impact.

SPHHP's work in women's health, environmental health, addictions and other key areas makes it a prime player in the Top 25 effort.

"SPHHP's mission has always been improving health for everyone," said Wactawski-Wende. "We have been devoted to graduating students who will be—and are—making a difference in the health of people and communities worldwide," said Wactawski-Wende. "In that way, we are already contributing to UB's Top 25 ambition."





#### Four Critical Interdisciplinary Areas

- Human Health: UB will hire faculty focused on critical areas related to human health including aging, personalized healthcare, biomedical technology, climate change and health, and addressing health disparities.
- Sustainability: UB has made environmental sustainability a top priority. Through this faculty hiring initiative, UB will continue building its strength and impact in sustainability.

Scan to learn more, or visit bit.ly/ub-public-health-jobs



507560 (Ab) (C)

Transformational Technology: UB's research

and quantum science continues through the

Institute for Artificial Intelligence and Data

Science, directed by associate Professor of

Education. UB will continue building capacity

and the AI Institute for Exceptional

in artificial intelligence (AI), data science



# Major Grant Helps UB Train Next-Gen Public Health Practitioners

The COVID-19 pandemic made clear that the U.S. needs more public health workers. But many students need help to afford the education required to enter the public health workforce. A significant training grant awarded to the School of Public Health and Health Professions aims to solve that issue. This spring saw the school welcome its first cohort of trainees under that grant.

SPHHP has received \$1.3 million from the Health Resources and Services Administration (HRSA), a U.S. Department of Health and Human Services agency, through its public health scholarship program. The program funds graduate tuition for Master of Public Health (MPH) program and Advanced Public Health Certificate students from underrepresented backgrounds from Western New York. The emphasis is on creating a path to graduate educationfor these students by helping finance their public health education.

SPHHP has a strong track record of training public health professionals, graduating 95% of its students and placing 99% of job-seeking graduates in jobs. Still, the country and Western New York suffer from a severe shortage of public health workers exacerbated by the pandemic. "This funding is a big deal for our school and the university, and especially Western New York, which will benefit tremendously from an influx of much-needed public health practitioners in the coming years," says Jean Wactawski-Wende, PhD, SPHHP dean. "The scholarship program incentivizes individuals to pursue careers in public health and removes an important financial barrier."



#### The next generation

A new path to the profession

"HRSA's scholarship program paves the way for a new generation of public health researchers,

activists, health promoters, health educators and practitioners," says Gregory Homish, PhD, chair and professor in the Department of Community Health and Health Behavior and principal investigator



on the grant. Co-investigators include Heather **Orom,** PhD, associate professor and director of graduate studies; and Sarahmona Przybyla, PhD, assistant dean, director of undergraduate public health programs, and assistant professor.

Equally important, the new generation will comprise students from backgrounds that previously lacked opportunities to pursue graduate education.

"HRSA grant funds provide pathways to public health careers for those from economically,

educationally and environmentally disadvantaged or racially and ethnically underrepresented backgrounds who often do not see a clear path forward," said Kim Krytus, PhD, SPHHP director



of graduate public health programs and program director for the HRSA grant.

"Key to this program is training future practitioners to prevent pandemics and other public health emergencies and eliminate health disparities in medically underserved communities, which our graduates will be well-prepared to do," Krytus said.



Twenty students joined the program this spring, 17 of whom are enrolled in the MPH program and three who are in one of the graduate certificate programs the school offers. Just over half of the first cohort of HRSA-funded students are the first in their family to attend college.

Trainees get extended field training for in-depth exposure to public health practice, a certificate in Public Health Leadership from Coursera, and increased community engagement with SPHHP's Western New York partner organizations. Training includes core public health competencies, strategies to eliminate health disparities, and emergency and pandemic preparedness response.

"We are educating the future of public health to be adaptable to changes in our populations and environment, while being prepared for public health crises that emerge across the globe," says Homish.

Naike Belizaire, a second-year MPH student who grew up in Haiti, is one of those future professionals. The HRSA funding is critical to her ability to pursue a graduate degree in public health.



"I would not have been able to graduate on time if I didn't receive the scholarship...as a full-time independent student who works part time, I wouldn't be able to pay for school and my living expenses at the same time," she says.

Belizaire is exploring the possibility of becoming a public health program manager focusing on refugee health, Black maternal child health and predicting pandemics and epidemics in underserved communities, or possibly following a research path.

For Andy Canizares, HRSA funding "definitely relieves some stress and anxiety" as he enters his final semester of the dual master's program in public health and social work.



"I felt a sense of relief when I learned I was accepted into the HRSA cohort," says Canizares, a Cuban immigrant whose family relocated to Buffalo from Havana when he was an infant. "I come from a low-income background, and I moved into an apartment with my partner for the first time in my life before this school year started. Financial stress has been a constant in my life and, for the first time, I think I can experience some peace with my financial situation, thanks to this grant," he says.

Canizares is currently doing his field placement training at CCNY, a Buffalo-based nonprofit.

#### The growing workforce

The HRSA program "is a great opportunity for our school to help train the public health workforce,"says Homish.

"We're on the forefront of graduating students who possess the in-depth skills that public health employers need to improve health outcomes. Our graduates are sought after by employers because of this, and through the HRSA program, we'll now graduate a larger number of highly skilled candidates for the workforce," Homish says. o-----o



## Gresham Lecturer Takes On Implications of Children's Spinal Cord Injuries

Most of us think of spinal cord injuries (SCI) as an adult problem. But 25% of them happen to children, and the fact that kids are still growing and developing presents many practical issues for rehabilitation professionals to address.

**MJ Mulcahey,** PhD, OTR/L, professor of occupational therapy, Thomas Jefferson University, focused the 15th Annual Glen E. Gresham Visiting Professorship in Rehabilitation Science on the unique practicalities of pediatric SCI and implications of growth and development on rehabilitation principles. Mulcahey is also chair of the board of trustees of the American Occupational Therapy Foundation.

According to Mulcahey, some practicalities of pediatric SCI include more time having to live with secondary complications, like curvature of the spine, and longer exposure to treatments. One important concept in relation to pediatric SCI is anticipatory guidance, which helps parents, and their children, contextualize changes as natural transitions instead of problems. For example, a child with SCI might choose to transition from devices that help them to walk to those with wheels, so that they can keep up with their peers as they progress through childhood.

"Anticipatory guidance refers to the process of ongoing education and preparation for the child and the family about future situations, changes and complications. We use anticipatory guidance to mitigate barriers to future possibilities," she said.

> The annual Glen E. Gresham lecture features a nationally or internationally recognized authority in an area directly related to rehabilitation science.



## 2023 Graham Lecturer Explains Roadmap and Challenges of Tobacco Regulation

One of the first examples of federal tobacco regulation emerged in the 1960s, when the United States passed the Federal Cigarette Labeling and Advertising Act that required manufacturers to place health warning labels on cigarette packages. Since then, tobacco regulation has expanded through legislation like the 2009 Tobacco Control Act, which gave the U.S. Food and Drug Administration the ability to regulate the tobacco industry through the Center for Tobacco Products (CTP).

SPHHP alumnus **Brian King,** PhD '10, MPH '06, focused the 16th Annual Saxon Graham Lecture on his roadmap to successful tobacco regulation and the challenges he faces as CTP's director. One challenge is the ever-changing landscape of tobacco products. While cigarettes continue to be the most used tobacco product among adults, e-cigarettes are the leading the way with youth, with almost one in 10 using these products.

"Our challenge as researchers is making sure we're nimble and mindful of everything that's out there, but also making sure that we have the data to help inform the work that we're doing," King said.

King has worked for nearly 20 years (including his time as deputy director for research translation at the Centers for Disease Control's Office on Smoking and Health) to provide thorough scientific evidence to inform tobacco control policy and to successfully communicate this information to stakeholders like the media, governmental officials and the public.

The Saxon Graham Lectureship honors the life and legacy of the man known as one of the fathers of U.S. chronic disease epidemiology.



# Research on Multiple Women's Health Topics Drives Symposium

Women's health is global health.

This year's Global Health Day Symposium, organized by UB's Office of Global Health Initiatives, underscored that notion with researchers focused on the topic. The symposium's theme, "Women's Health," prompted presentations looking at a range of pressing issues that often disproportionately affect women, including the effect of environmental exposures, reproductive health and more.

Keynoter **Junfeng Zhang,** PhD, professor of global and environmental health at Duke's Nicholas School of the Environment, showed evidence that



women's exposure to air pollution in a range of countries can affect not only their health, but also the health of their fetuses and children.

The University at Albany's **Erin Bell**, PhD, focused on women's health related to per and polyfluoroalkyl substances (PFAS), chemicals used worldwide in products like non-stick cookware and stain-resistant fabrics. They've been linked to numerous health problems in males and females. Some health issues, however, are specifically linked to women. For instance, decreased growth in infants and fetuses occurs because PFAS pass through the placenta and through breastmilk.

SPHHP and Jacobs School faculty, SPHHP graduate students and community organizations also offered compelling looks at other women's health topics, including:

- » deaths related to pregnancy, the factors that contribute to those deaths, and the higher risk of death for Black, non-Hispanic women no matter their age or education level.
- » interviews with LBGTQ+ people focusing on their experiences of abortion during routine health care, the notion of "identity erasure" they encountered during that care and the importance for community connection that provides support. (Presented by Elizabeth Bartelt, PHD, MPH, clinical assistant professor, SPHHP Department of Community Health and Health Behavior.)
- research using data from the Women's Health Initiative's OsteoPerio Study that looked at the complex relationship between periodontal disease and dietary patterns. (Presented by Yihau Yue, PhD student, SPHHP Department of Epidemiology and Environmental Health.)

The Global Health Day Symposium is co-hosted by the Community for Global Health Equity.

2023 Global Health Day Symposium keynoters Junfeng Zhang (left) and Erin Bell (second from right) with SPHHP Dean Jean Wactawski-Wende and Office of Global Health Initiative Director and Professor Lina Mu.

### Noyes Receives National Organization's Team Science Award

Katia Noyes, PhD, team science core director in the University at Buffalo's Clinical and Translational Science Institute (CTSI), has received the 2023 Team Science Award from the Association for Clinical and Translational Science. Noyes' research has repeatedly demonstrated that team-based approaches in research and care



Katia Noyes, with Timothy Murphy, SUNY Distinguished Professor and director of UB's Clinical and Translational Science Institute, received the 2023 Team Science Award from the Association for Clinical and Translational Science at the ACTS Translational Science meeting in Washington, D.C.

delivery significantly outperform services provided by individuals working alone.

ACTS is a nonprofit membership association of translational scientists from the nation's leading academic medical centers. Its annual Translational Science Awards recognizes investigators for their outstanding contributions to the clinical research and translational science field. The ACTS Team Science Award acknowledges and catalyzes the growing importance of interdisciplinary teams to the translation of research discoveries into clinical applications and eventually widespread clinical practice.

Noyes was recently named SPHHP's associate dean for translational and team science. She is also director of the Division of Health Services Policy and Practice; director, MPH concentration in health services administration; and professor, Department of Epidemiology and Environmental Health.

Noyes' research topics over the past 20 years include health outcomes and quality of care assessment, economic evaluation of health care programs and regional care delivery in surgical oncology. She is among the academics "who are pioneering, globally, the study of team-based cancer care delivery, with a particular interest in communities that are underserved," Nick Sevdalis, professor at King's College London, wrote in a letter supporting Noyes' nomination for the ACTS award.

Noyes credited UB CTSI, her UB colleagues in the School of Public Health and Health Professions, her project coordinator Liz Bengert, and her research team for their creativity and passion for promoting team-based approach in translation science: "I have been extremely fortunate to have colleagues and mentors who genuinely value collaborative work and create a culture of success that is shared and where challenges are tackled together."

### Violanti Recognized for Outstanding Contributions to Epidemiology

John M. Violanti, research professor of epidemiology and environmental health in the School of Public Health and Health Professions, has received the Outstanding Contributions to Epidemiology Award from the American College of Epidemiology.

The award recognizes an active epidemiologist for outstanding contributions to the field in one of three areas: methods development, etiologic research and applied epidemiology.

> Violanti's research has made significant contributions to recognizing and studying the unique health and safety concerns—suicide in particular—of first responders. His work includes a 2012 landmark study that found this population experiences

significant health risks, including higher rates of chronic disease and suicide, than the general population. In 2019, he received funding from the Department of Justice's National Institute of Justice (NIJ) to study police health. And, earlier this year, he was first author on a study published in *Policing: An International Journal* that examined COVID-19 deaths among members of law enforcement in 2020.

Violanti brings his experience as a 23-year veteran of the New York State Police to his research and understanding of the sources and implications of police stress and psychological trauma. He has written and edited 17 books on these topics, and frequently provides expert commentary for news media organizations, among them USA Today, the BBC and The Boston Globe.



# Finding Our Motivation to Eat

From a young age, **Elizabeth Mietlicki-Baase**, PhD, associate professor in the Department of Exercise and Nutrition Sciences, has been fascinated by what motivates us to eat what we eat. Perhaps unsurprisingly, her research focuses on how the brain controls what we eat.

Mietlicki-Baase strives to understand the reward systems of the brain: "How do we choose what we eat, and why are certain foods more or less rewarding?" she asks. Ultimately, she wants to translate her discoveries into treatments for obesity because "available treatments are limited right now," she adds.

Her current project, funded by an NIH Research Project Grant (R01), focuses on amylin. That's a pancreatic hormone affecting food intake and motivation to choose appetizing foods, and the brain has numerous receptors for it. A new project "delves further into the mechanisms of how amylin acts in the brain to control intake," Mietlicki-Baase explains, "especially looking at how this interacts with the types of food eaten and with sex differences."

During her college years, Mietlicki-Baase became interested in the neurobiology of eating and trained in biochemistry and psychology. Her grad training in behavioral neuroscience at UB focused on the intersection of feeding and drinking. As a post-doc at the University of Pennsylvania, she examined the intricacies of the brain's mesolimbic pathway, sometimes referred to as the "reward pathway," to find out how hormones act on it.

"There's so much we don't understand," Mietlicki-Baase says, "about why a single hormone can affect what we eat and how much fluid we take in."

Mietlicki-Baase is intrigued by interdisciplinary trends in her field, noting the work of the UB Ingestive Behavior Community, a "large group of researchers who study behaviors like feeding and drinking at multiple levels."

Trying to join forces with researchers in other fields is a growing interest for her, which might explain a UB Blue Sky Coin project Mietlicki-Baase is involved in, together with investigators in the Departments of Biological Sciences and Biochemistry. She's looking at the effects of microplastics—tiny pieces of plastic shed off items like plastic bags or plastic dishes—on eating and drinking behavior.

Mietlicki-Baase feels privileged to have been a research associate and post-doc at UPenn, but as a Buffalo native, she always wanted to get back to UB in a faculty position. She did that in 2016 and recently was promoted from assistant to associate professor. While research is her passion, teaching comes in a close second.

"During my post-doc training, I was fortunate to have a mentor who was open to my pursuing my interest in teaching," she recalls. Today, Mietlicki-Baase is teaching a graduate-level micronutrients class. She has also developed a nutritional neuroscience course, which will run this fall, for the Undergraduate Nutrition program.

Mietlicki-Baase's goal as a teacher is to help students realize that scientists are "everyday people who decided to pursue a passion. I also tell them that science and our knowledge of it change. Perhaps you can bring a new perspective." o-----o Meet Danelly Rodríguez



**Danelly Rodríguez** is a first-generation university student taking the road less traveled from growing up in a disadvantaged neighborhood in Queens to a doctorate in epidemiology. She's a firm believer in following your passion: "There are obstacles that evidently stop us minorities from succeeding. You have choices, but you may need to work a bit harder as you break barriers around you. If I can, you can."

## What was your path to higher education?

Higher education was not a priority in my household, so my education and desire for a professional career were mainly self-driven. At first, I wanted to find a job where I could make the most money and help my parents pay bills, which led me to start taking business classes in college. Still, I quickly realized I needed to be more passionate about the field. Still deciding what I foresaw myself doing, I took an Introduction to Neuroscience course, where I became intrigued by how the brain works and how brain diseases manifest. It was then that I found my passion for science.

## What led you to the laboratory?

I applied and was accepted into a prestigious NIH-funded scholarship program at Hunter College designed to help underrepresented students get research experience. I got a full ride to finish my undergraduate degree and began doing basic laboratory research. Everything in the lab was very controlled; I kept asking myself, "How do things work in an actual population?" I then worked for a couple of years on a randomized clinical trial where I got the opportunity to contribute to an important project validating a novel cognitive screening assessment designed specifically for utility in a low-income neighborhood that was predominantly Hispanic/Latino and Black. I was primarily responsible for recruiting patients and administering the cognitive screener, and just by my own observation, I noticed how often dementia went undiagnosed in my community.

I developed a project with my research group where we assessed usual cognitive screener questions that have been validated in white populations. We found these "validated" questions did not capture cognitive impairment in Blacks and Hispanics/Latinos. I realized the only way we could build a better screener tool was to study the disease in this population and their risk factors. That was my "aha" moment. I googled what kind of field could lead me to that research. Epidemiology came up, and the rest was history.

#### What kind of research are you doing in your doctoral program?

I'm working with [Associate Professor of Epidemiology and Environmental Health] Kasia Kordas, researching environmental factors and cognitive health in children. We're looking at the mixture of arsenic and pesticides-because these are very prevalent in minority Hispanic populations-and how they affect executive function in children. We know so much about lead but not about these other pollutants in urban environments that experience different routes of exposure compared to rural populations. For example, urban populations, especially those from low-income neighborhoods, tend to use pesticides in their homes. Still, we don't know about the effects. o-----o



## SPHHP Students Win High Honors



An anti-racism activist and community organizer studying statistics and health and human services is UB's second-ever winner of the Harry S. Truman Scholarship, a nationally competitive award given to college juniors for leadership in public service. centers around building empathy across backgrounds and belief systems to forge a more equitable, tolerant world, is one of 62 undergraduate scholars from 60 U.S. institutions chosen for the nominated by their institution based on their records of leadership, public service and academic achievement.



Public health student Grace Assistant Award to Slovak Republic. Van Vessem is a graduating senior, Honors Presidential Scholar who majors in public health and minors in environmental studies. Van Vessem's motivation for pursuing an **English Teaching Award** in Slovakia is as much personal as it is academic. Her mother's family roots are in Slovakia, and, while her great grandmother was during the Second World War, Slovakia has remained identity. Van Vessem 's future goals include going to law school to prepare her for a environmental policy.

الم

σ



Third-year epidemiology received an American Heart Doctoral Fellowship. The prestigious award is designed to advance the research and clinical training of predoctoral or clinical health professional students who plan to conduct research or work in careers aimed at improvina cardiovascular, cerebrovascular and brain health. He will receive an annual stipend and other project support. Soliman's research examines the impact of proton pump inhibitors (PPIs) on the cardiovascular health of postmenopausal women. PPIs are medications routinely prescribed to treat heartburn, acid reflux and stomach ulcers, with widespread use among older adults. Prescriptionstrength and over-the-counter PPIs are sold under the trade names Nexium, Prevacid, Prilosec and Zegerid.

# Alumnus Enrique Schisterman Paves a Path for Pregnancy

Whether you've experienced it or know someone who has, you realize the hardships some people can have getting pregnant. UB alumnus **Enrique Schisterman** has devoted much of his career to ameliorating that problem.

Schisterman got his master's degree in statistics in 1995 and his doctorate in epidemiology in 1999, both from UB. Today, he is Perelman Professor of Biostatistics, Epidemiology and Informatics and chair of the 120-strong Department of Biostatistics, Epidemiology and Informatics at the University of Pennsylvania's Perelman School of Medicine.

"I want to get to the point that everyone has insurance to have care for fertility and everyone who wants to have a healthy child can have one." Along the path from UB to UPenn, Schisterman became a leader in reproductive epidemiology and epidemiological methods. A notable position before he reached UPenn was senior investigator and epidemiology branch chief in the Division of Intramural Population Health Research in the Eunice Kennedy Shriver National Institute of Child Health and Human Development/National Institutes of Health. He's also currently editor-in-chief of the *American Journal* of *Epidemiology*.

Because dealing with infertility and issues during pregnancy can become so stressful and expensive, Schisterman focuses on finding low-cost interventions to help couples become pregnant and maintain healthy pregnancies. A study he led suggests low-dose aspirin can help increase live birth overall for some women with chronic inflammation. He also discovers what doesn't help: for instance, another of his studies debunked the effectiveness of folic acid and zinc supplements for fertility in men.

Ultimately, he says, "I want to get to the point that everyone has insurance to have care for fertility and everyone who wants to have a healthy child can have one."

Maybe his characterization of epidemiology as "an unselfish discipline" helps explain his interests. As for the field itself, he switched his studies from theoretical statistics to epidemiology so that "my research connected to people, and I could see the impact on them."

Another characterization: His time at UB was "wonderful. Very nurturing and personable, not only for my educational needs but for my needs as a person new to this country," Schisterman says. He worked closely and is still in touch with former SPHHP Dean Maurizio Trevisan. Current SPHHP Chair of Epidemiology of Environmental Health Pauline Mendola "was a few years ahead of me and had a great impact on me," he adds. "She opened some doors and has always been a wonderful mentor."

Mendola likewise highly values her relationship with Schisterman: "He is so generous with his time and always thinking about ways to support his trainees and colleagues as well as the populations he studies. He is a true leader in our field."

Although his research has proven fruitful, Schisterman says that mentoring students and young faculty might be the true joy of his career: "I enjoy the trust that they place in me very much and don't take it for granted. You propagate your research through your mentors." He encourages students to embrace the unknown and embrace "ambiguity and unknowing."

He also hopes that "people like me, who started from humble beginnings, especially of Hispanic origin, know that there are opportunities to help others and move science to help our community."

o-----o

# Do we have your email? Submit it today! ub-alumni@buffalo.edu

0212/55 GA=17w4d



# Health Impact

The University at Buffalo is a premier research-intensive public university, the largest and most comprehensive campus in the State University of New York system. Health Impact is published by the School of Public Health and Health Professions, one of 12 schools that make UB New York's leading public center for graduate and professional education and one of six schools that constitute UB's Academic Health Center.

 

 Dean:
 Jean Wactawski-Wende

 Editor:
 Grace Lazzara

 Contributing writers:
 David Hill, David Goodwin, Jay Rey

 Design:
 Front Porch

 Photography:
 Douglas Levere, Yves-Richard Blanc, Onion Studio, Samantha Maiarana

#### CONNECT WITH US PUBLICHEALTH.BUFFALO.EDU #UBSPHHP ON SOCIAL MEDIA



@ubsphhp

#### @ubsphhp

linkedin.com/school/university-at-buffalo's-school-ofpublic-health-and-health-professions/

23-SPH-001

6

in



#### Hooding Symbolizes Success

The 2023 Department of Rehabilitation Science Hooding Ceremony took place on May 17 in UB's beautiful Slee Hall. The annual ceremony recognizes and honors candidates who have attained academic degrees beyond the bachelor's. Faculty members from the Physical Therapy and Occupational Therapy programs placed hoods on 88 graduates receiving Doctor of Physical Therapy and the BS/MS Degree in Occupational Therapy, signifying their success in completing their programs. The ceremony began in 2004 with UB's first class of DPT graduates. The OT students joined the ceremony the following year, with the graduation of the first BS/MS class.



401 Kimball Tower 3435 Main St. Buffalo, NY 14214 Nonprofit Org. U.S. Postage PAID Buffalo, NY Permit No. 311

a

0