University at Buffalo Health Intersity at Buffalo

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

Feeding the Future How UB Researchers

How UB Researchers Are Planting Seeds of Food Security Spring 2025

Inside: Mentoring, faculty honors, more

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Welcome to the Spring 2025 edition of *Health Impact.*

In this issue, we're spotlighting groundbreaking work addressing one of our most pressing public health challenges: food security. The cover story, Feeding the Future: How UB Researchers Are Growing Paths to Food Security, delves into the innovative efforts of our faculty and students to ensure access to nutritious food—locally and nationwide. From the transformative Veggie Van program to campus initiatives like free farm stands, our researchers are leading the way in reshaping how communities and institutions address hunger.

Beyond the cover, this issue highlights many of our school's proud accomplishments and meaningful initiatives. You'll find stories about a program mentoring undergraduate public health students of color, leadership at our new Center for Climate Change and Health Equity, and award-winning faculty research into topics ranging from alcoholrelated health risks to data-driven approaches to health challenges. We also celebrate our alumni's achievements, such as Nkume Sobe's inspiring work improving physical therapy care for seniors, and recognize the exceptional students and faculty who are shaping the future of public health.

Thank you for joining us in exploring these stories. Together, we're advancing health and making an impact.

Warm regards.

Jean Wactawski-Wende, PhD Dean and SUNY Distinguished Professor

Mentorship Program Brings Public Health Minds Together

Mentors: knowledgeable, helpful, engaged—and often hard to come by.

But not for undergraduate public health students of color in SPHHP, where the Envision Mentoring Program makes finding a mentor easier.

Created by Ebehitale Imobhio, assistant director of equity, diversity, inclusion, and community engagement, and Rose Thomas, MPH/MSW '23, Envision is a now four-year-old effort to bring together professionals in the community who offer experience, insight and support to students hungry for guidance.



The idea for Envision came through conversations Imobhio and Thomas had at the height of the COVID-19 pandemic. They wondered how they could boost the sense of community among students while also helping them see that they're "not alone," Imobhio says.

A mentorship program seemed like a natural fit, especially given the size of the undergraduate public health program—more than 300 students and growing every day. After a successful, if entirely virtual, pilot in spring 2021, Envision got a name and funding. The yearly slate of Envision activities has expanded organically since then. After mentors and students are paired, they generally meet once a month, some in person and others still virtually. Students and mentors also get a comprehensive resource guide to help them make the most of the program.

Monthly events include graduate student panels, speed mentoring, visits to local health organizations, mock interviews and more. End-of-the-year events might offer chances for budding gingerbread house artists to hone their skills, as well as take part in other activities.

Participant stories

Rouge Rodriguez, currently a Master of Public Health student, values their Envision experience. "[It] has been an amazing program for me to receive guidance, especially during the last two years of my undergraduate career," Rodriguez says. "The program connects undergraduate students of color with alumni or graduate students of color, which provided me with a lot of support and a safe space for me to express my challenges and barriers as a student of color with someone who could relate to me and advise me."

Andy Canizares, MPH/MSW '23, currently a project coordinator at the BRAVE (Buffalo Rising Against Violence) program at ECMC, was one of Rodriguez's mentors.

"The most rewarding part of being a mentor is that feeling of paying it forward to students who, like me when I was their age, did not have the connections, social capital or professional experience that would help them navigate a successful career in public health," Canizares says

Room to grow

Envision has 19 pairs of students and mentors this academic year, which is about capacity given the number of available mentors. Imobhio and Thomas say they would love to expand the program because applications from students nearly always exceed mentor availability. The number of available mentors has grown each year of the program, however, and with enthusiastic reactions. Many students say Envision changed their life in some way.

- "I gained necessary skills useful for graduate school and beyond, and the program also allowed me to be in direct contact with a professional in health-related fields I am interested in," Rodriguez adds.
- "We're always excited when we get a positive email from students," Thomas says.

Adds Imobhio: "There are mentors who say they wish this program had existed when they were students. If this program can change one student's life or make their story better, we've had a successful year."

New Center, Interprofessional **Education Welcome Leaders**

The director of SPHHP's newest center is all about "creating an incubator." In such a space, she says, "collaborative teams of researchers who want to make an impact can work with policymakers and communities to address emerging climate and health eauity challenges."

Kelly K. Baker PhD, director of the Center for Climate Change and Health Equity (CCCHE), arrives at UB with a focus on transdisciplinary research and the "big picture



questions" that always involve a team of people working on them.

With Baker at the helm, the center will serve as a resource to UB, local community organizations, policymakers and global partners for climate and health research, education, and policy initiatives. It will also provide strategic support for transdisciplinary initiatives with strong potential to improve climate resiliency and health outcomes for people experiencing vulnerability and communities in Western New York and globally.

Baker approaches her work through the lens of "one health," which is a way of designing health programs that benefit humans, animals and the environment. One health recognizes the deep and complex connections among human, animal and environmental health, and aims to address health challenges at their intersection. At its core is "bringing different disciplines together to work productively," Baker explains.

The project on which she's been co-principal investigator for the past five years exemplifies that approach. The Pathogen Transmission and Health Outcome Models of Enteric Disease (PATHOME) study is a one-health study of a complex disease system, funded by a grant from the National Institutes of Health Fogarty Institute. Through PATHOME, Baker and an extremely multidisciplinary team aim to lay the scientific groundwork for practical, communitybased policies that prevent earlychildhood infectious diseases.

Michael Oldani, PhD, is the



new executive director for interprofessional education (IPE) at UB, taking over from the university's first IPE director, Patricia Ohtake, now retired. Oldani will also have a faculty appointment in the Jacobs School of Medicine and Biomedical Sciences.

Oldani is a trained medical anthropologist, earning his PhD from Princeton University. His initial clinical ethnographic work, sponsored by a U.S.-Canada Fulbright Award, began in Manitoba, where he studied collaborative care teams and examined the racial prescription of psychotropics for Anglo and First Nation children with behavioral disorders.

He has conducted research that critically examines the impact of pharmaceutical sales and promotion on provider prescribing practices, changes in psychiatric practices during the pharmaceutical era, and medical and prescribing practices within vulnerable populations, such as the incarcerated mentally ill.

Oldani's recent research has focused on collaborative deprescribing; the role of focused ethnography within interprofessional medical education; the impact of collaborative practice agreements on chronic disease management, such as type 2 diabetes; and medical entrepreneurship and the prescribing of ketamine.

His scholarly contributions include publications in Medical Anthropology Quarterly, Anthropology & Medicine, and the Journal of Interprofessional Care. In May 2023, he co-edited a special volume of the American Medical Association Journal of Ethics on "IPE and Innovation" with Erica Y. Chou, MD, from the Medical College of Wisconsin. His book, Tales from the Script, is forthcoming from Duke University Press. o-----o

More Evidence about Harms of Alcohol

The work of **Jo L. Freudenheim**, PhD, SUNY Distinguished Professor in the Department of Epidemiology and Environmental Health, is contributing to growing evidence about the connections between alcohol and adverse health outcomes.



Freudenheim served on the 15-member Committee on the Review of Evidence on Alcohol and Health, which wrote a report at the request of Congress outlining linkages between moderate alcohol consumption and several health outcomes. The report, released by the National Academies of Sciences, Engineering, and Medicine, came just weeks before U.S. Surgeon General Vivek Murthy released a new advisory on the direct link between drinking alcohol and increased cancer risk.

In addition to the relationship between moderate alcohol consumption and certain types of cancer, the report also examined linkages to seven other health outcomes, including cardiovascular disease, weight changes, all-cause mortality, and neurocognitive health.

The report will help inform the next edition of the *U.S. Dietary Guidelines for Americans,* which was last updated in 2020. The next update of the guidelines, which are revised every 5 years, is expected to be released in the next few months.

Freudenheim also co-authored a paper in the journal *Breast Cancer Research* that examined the effects of quitting drinking compared to continuing drinking alcohol on breast cancer risk. Several different subtypes of breast cancer exist, Freudenheim explains, and evidence supports differences in what causes these subtypes. "Alcohol is often generally found to be more associated with 'ER positive' than 'ER negative' breast cancer," she says.

The study suggests that stopping alcohol use compared to continuing to drink is associated with lower risk of ER positive breast cancer and higher risk of ER negative breast cancer. One of the strengths of

the meta-analysis conducted by the researchers is the assessment of breast cancer risk for alcohol cessation compared to that for continuing consumption rather than for abstention from drinking.

In late 2023, Freudenheim was a co-author on a report in the *New England Journal of Medicine* in which the International Agency for Research on Cancer (IARC) issued a summary review of alcohol reduction or cessation and cancer risk.

Freudenheim was part of a working group of 15 scientists from eight countries that reviewed published studies and evaluated the strength of epidemiologic evidence on the potential for alcohol reduction or cessation to reduce alcohol-related cancer risk.

"We found that for some kinds of cancer there's not enough research yet, but for oral and esophageal cancer, there is strong research that if you cut down or stop drinking it will reduce your risk," Freudenheim says. •----•



The Patient Centered Outcomes Research Institute (PCORI) has awarded **Marianthi Markatou**, PhD, SUNY Distinguished Professor of Biostatistics, over \$1 million to leverage artificial intelligence to integrate multiple data sources and develop statistical and computational methods for extracting knowledge from these data. She is the principal investigator on the project, the potential impact of which could affect the management of multiple medical conditions, including opioid use disorder. The work also aims to develop novel methods for the analysis of social determinants of health.

"This research is an example of use-inspired research. That is, research that combines the development of scientific knowledge with the goal of creating solutions to solve societal and scientific challenges," Markatou explains. "A fundamental component of such research is the improvement and creative use of technology. In our context, large language models fulfill that role."



Vijaya Prakash Krishnan Muthaiah, PT, PhD, MPH, CPH, is the lead investigator on the study "Hearing Loss by the Synergistic Effect of Chronic Inhalation of Exposure of Manganese Fumes with Occupational Noise Exposure." He and multiple principal investigator Kasia Kordas and co-investigators Lili Tian and Meng Wang will determine if chronic inhalation of manganese fumes generated by welding induces hearing loss and if it has a synergistic effect with occupational noise exposure happening at the same time. The study is funded by the National Institute for Occupational Safety and Health/Centers for Disease Control and Prevention.



Children with special health care needs, including chronic conditions such as attention deficit/hyperactivity disorder (ADHD), autism, depression, spina bifida or Down syndrome, are at greater risk for developing hospital complications following physical trauma. The reasons for this are unknown, but UB researchers are now leading a study to find out why these complications may occur by understanding the experiences of parents and caregivers seeking emergency care for their injured child.

"Depending on the special health care needs, the child may need more intensive monitoring because they are not taking their medications, or the child is removing equipment such as IVs that they need to recover. Additionally, it may be more challenging to obtain vital signs, which are important to detecting if the child's life is in danger," says **Denise Lillvis**, **PhD**, the study's principal investigator and assistant professor in the Department of Epidemiology and Environmental Health. Lillvis received the grant from the National Center for Advancing Translational Sciences/ National Institutes of Health for the two-year project. SPHHP IN DEPTH

Feeding the Future

From Veggie Vans to food policy reform, innovative programs are reshaping access to healthy meals—on campus and beyond

In an era where millions of Americans don't have enough—or enough highquality—food, School of Public Health and Health Professions researchers are at the forefront of studying, developing and implementing practical interventions that are already showing promise. Led by Lucia Leone, PhD, associate professor in the Department of Community Health and Health Behavior, the team is tackling food (in)security through novel approaches that combine research, community engagement and policy advocacy.

Leone's journey to food security or, the term she prefers, "nutrition security"—research began with personal experience. Growing up on Buffalo's West Side before the prevalence of farmers markets, Leone witnessed firsthand the challenges of accessing fresh, healthy food without reliable transportation.

"I was always interested in nutrition as a kid, but my mom's experience trying to get healthy food on a limited income helped me to have empathy for people who are food insecure," she explains. "My mom was good



at stretching her food benefits by planning meals, but she still had to rely on family and food pantries for help occasionally. She didn't have a car, so we only were able to get fresh fruits and vegetables occasionally and had to fill in with frozen and whatever was available at the nearest convenience store."

Moving from the personal to the national, the scale of the problem becomes evident. According to United States Department of Agriculture measures, about 12 percent of the U.S. population experiences food insecurity, with higher rates among families with young children and Black and Hispanic families.

Discoveries driving interventions

The research team's work has yielded several meaningful findings, reshaping their understanding of food security interventions.

"The notion of availability is huge. We see such a correlation between access to a car and people's food access," Leone explains. "If the food is not available nearby, transport is paramount. Quality is also up there as a factor."

Another discovery is that improving food environments alone—for instance plopping a supermarket into a neighborhood—isn't enough. Success requires community engagement and communication.

"We've shown that you can change people's diet/food security by changing the food environment," Leone explains. "But we also see that having community engagement and buy-in will help stores be successful. Mobile produce markets do this really well: they engage the community in food choices—it's not for them, it's with them."

The team's flagship work, the Veggie Van program, is, indeed, a mobile produce market initiative and has been operating for nearly 15 years. In fact, they just finished a seven-year study about mobile markets that showed, albeit on a small scale, they could improve food security.

"Now our work is going toward implementation, because these are hard programs to run," Leone explains. "We're trying to understand how community organizations and retailers can implement these evidencebased practices so that they're sustainable." UB VEGGIE VAN

Food help close to home

Interestingly, at the tail end of the team's seven-year study, they realized they hadn't looked at their own campus. Data from UB's Office of Student Life and analysis by one of Leone's graduate students revealed a definite need, as does a recent survey by the National Center for Education Statistics at the U.S. Department of Education. It confirms that more than 4 million students in U.S. higher education institutions experience food insecurity, and 2.3 million more students have marginal food security. A survey conducted by Leone's team on the University at Buffalo campus found the rate to be a striking 58 percent.

Leone notes, "Having a meal plan doesn't help, and we're still analyzing the data on why that is. For a college student working multiple jobs, they might get the cheapest meal plan, which doesn't cover all their meals, and they're still trying to figure out how to get food for their other meals."

Enter the UB Veggie Van, which has been operating on North and South campuses for more than a year now.

Leah Vermont, director of the Veggie Van Training Center, emphasizes the program's impact, which is focused on increasing access as well as affordability through student discounts: "Our current research is showing a significant reduction in food insecurity so far, and interest is strong among a campus community. Students can now build this into their daily lives at UB. We're basically filling the gap between Blue Table [UB's emergency food pantry] and Campus Dining."

In another direct outreach program, the UB Free Farm Stand Markets also began this past year to operate across all three campuses, offering—at no cost—not just fruits and vegetables but also protein, dairy and pantry items.

The initiative has been particularly valuable for international students, who face additional barriers.

"They face the same issues that other students do, but it's exacerbated," Vermont notes. "They can't access state/federal programs, often don't have cars, and the food environment here can be very different, with difficulty accessing culturally appropriate food."

While efforts to improve food security exist within different areas UB, the current imperative is to emphasize collaboration. "We're all starting to make partnerships and understand what's happening within departments and schools. The players that can help have been really helpful, and there are still great opportunities to get students access to fresh food and veggies," Vermont says.

One way UB Veggie Van is building ties is in connecting more students to SNAP (the federal Supplemental Nutrition Assistance Program) by accepting SNAP at the market and helping to increase awareness of SNAP eligibility for college students through its ambassador program. "A low percentage of students utilize these benefits even through they're eligible," Vermont explains. UB's Division of Student Life also helps to address this policy barrier and provides outreach and assistance to encourage students to sign up for SNAP.

The impact of student food insecurity extends far beyond immediate hunger.

"There's a strong relationship between food insecurity and academic outcomes, which has been shown in college campuses on an observational level," Leone notes. "Once we can demonstrate that programs like Veggie Van can improve not just food security but also educational outcomes, we hope we can get policymakers to listen and possibly get campuses to pay for these programs. Think about the long-term effects maybe you can change someone's academic trajectory."



Breaking through policy barriers

While the boots-on-the-ground approach is exceedingly important, shaping public policy is another key team effort. Christina Kasprzak, PhD, is postdoctoral associate and research assistant professor in the Department of Community Health and Health Behavior working on policy related to nutrition security. She notes that policy changes tend to address access and affordability.

"At the federal level, nutrition assistance programs [like SNAP and WIC] hold a lot of potential for combatting food insecurity and are recognized for having positive impacts on food insecurity and health outcomes," she says, "but there is still room for improvement and expansion of these programs." Changes could be things like increased benefits for participants, and expansion of program eligibility to include students, immigrants and Asset-Limited-Income-Constrained (ALICE) households, among others.

"Increased funding to healthy food incentive programs," Kasprzak adds, "either at the federal or state levels, can maximize nutrition assistance benefits by incentivizing the purchase of healthy, often locally grown, food. Regarding access, we also need increased recognition and state or federal funding toward food access solutions to either open or expand their operations in food insecure communities." Recognition at the federal and state levels of mobile produce markets, for instance, could remove the regulatory barriers they face in starting and staying successful.

"We also know that small food retailers, including corner stores, dollar stores and grocery stores, have an interest in expanding their options to include healthier food to better serve food insecure communities. Receiving subsidies would incentivize small retailers to do so, which would increase access," she says.

ONDOPES

One significant policy development the team is involved with is New York's Medicaid Section 1115 Medicaid Redesign Team Waiver, which now allows Medicaid to cover food needs based on social determinants of health.

"You get screened by a doctor, and you can get a prescription to get free food, in theory," Leone explains. "We're trying to work out the details with the Western New York Integrative Care Collaborative, which takes in referrals and identifies organizations who can provide the food."

One approach the team is testing involves combining food prescription deliveries with choice-based options.

"We're trying to combine food prescription deliveries with the ability to choose what you want to eat," Leone explains. Their research with seniors who receive care at Erie County Medical Center has shown promising results with this hybrid model. They've found that while choice is important, many people prefer pre-selected bundles when they perceive them as a good value and when the bundles reduce the effort needed to get healthy food.

"We're already seeing much larger redemption rates with the food delivery method," Leone notes. "People who actually get the food seem to be using it. We hope we can directly apply our results in New York State to affect what the waiver looks like."



Dispelling myths and designing answers

A sidebar to Leone's research is its influence on dispelling common myths about food insecurity. For instance, she explains that the federal Special Supplemental Nutrition Program for Women, Infants, and Children–WIC–has bi-partisan support because it's focused on moms and kids, and only allows purchase of certain healthy foods. SNAP gets more regulatory attention because recipients can buy what they want.

"The scrutiny is based on the misconception that people don't know how to eat or spend their money," Leone says. "In reality, the problem is that healthy foods are often just not accessible or affordable."

Looking ahead, the team has more major initiatives in progress in addition to the Medicaid Waiver work.

"We're transitioning to disseminating best practices for food security interventions and implementing with organizations across country," Leone explains. "The Veggie Van model needs training and technical assistance, which we're trying to get to more organizations."

Through Leone's food business, FreshFix, they're also investigating sustainable models that combine charitable efforts with grant-supported projects. The recently launched Eat Local WNY initiative aims to strengthen the local food economy while improving access to fresh, local produce.

Visions of the future?

The research team's work represents a comprehensive approach to addressing food insecurity, combining direct intervention with policy advocacy and community engagement.

Kasprzak emphasizes, "Receiving subsidies would incentivize small retailers to [offer healthy food], which would increase access. Thinking bigger picture, policies that address the root causes of poverty such as guaranteed income, affordable housing, livable wages, and access to health care and education will increase the likelihood food insecurity strategies will be effective."

The team's success in demonstrating the effectiveness of mobile markets and other interventions is helping to shape the future of food security programs both locally and nationally. As the work expands, it offers a vision—and plan—for what effective, sustainable efforts to growing food security across diverse populations can be.

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Nutrition security within the health access framework

The work of Leone and her team closely tracks with what the public health field identifies as the five critical components of health care accessibility. Their research shows that addressing all these factors is crucial for successful interventions, especially since they're central to addressing inequities.

> **1. Availability:** Can I find the food we need and want?

2. Accessibility: Is my market convenient to get to? Do the hours work?

3. Affordability: Can I afford to buy healthy foods? Are discounts available if I need them?

4. Acceptability: Can I find food for my cultural and dietary preferences? Is the food I can buy high <u>quality?</u>

5. Accommodation:

Does the market staff speak my language? Can I pay for food using SNAP, WIC or another program? What if I'm a senior?

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Perry, Lee Lecturers Aim for Meaningful Results from Complex Factors, Data

Our exposure to the environment is made up of more than the air we breathe. Add noise, light, natural vegetation, water and more, and you've got the "exposome"—the factors around us that can affect our health.

Teasing out which among the multiplicity of factors in the exposome are meaningful for health and how they work together is the purview of environmental epidemiology expert **Francine Laden, ScD, MS**, who presented this year's Richard V. Lee, MD Lecture in Global Health. It's a complex topic, further complicated by other factors that Laden, professor of Environmental Epidemiology at the Harvard T.H. Chan School of Public Health, and her team examine such as geography or social networks.

"When I'm talking about the exposome, I'm really thinking about how everything that we experience, externally and internally, emotionally, and through connectiveness. All interact together to influence our health," Laden said.

During her talk, Laden described her work drawing on data from long-running research still conducted at Harvard: The Nurses' Health Study; The Nurses' Health Study II; the Health Professionals Follow-up



Study; and the Growing Up Today Study 1 (GUTS 1) and GUTS 2.

These studies have different participants and examine different health risks and outcomes. However, all collect residential information, which meant Laden could use residential addresses to create a map of the distribution of each study's participants across the United States. Her team then examined questions about things like whether a neighborhood is walkable or near greenspace, and mapped environmental exposures like air pollution.

Laden is also interested in noise exposure or noise pollution. Although people's experience of noise is subjective, research found exposure to noise is associated with immediate concerns, such as sleep disturbance, and chronic health issues.

Not all exposures are associated with negative health effects. Exposure to green space, for example, seems to be associated with better health. Although researchers, Laden included, are still exploring how time in nature leads to better well-being, "... green space makes you happier and improves your mental health," she said.



The Office of Global Health Initiatives holds the Richard V. Lee, MD Lectureship in Global Health annually to celebrate the life and work of former UB faculty member Richard Lee, who engaged in research and service around the world and in Buffalo.

Data can be a bonanza for researchers seeking understanding from it—as long as the studies examining data are well designed, according to **Kiros Berhane, PhD,** chair of the Biostatistics Department at Columbia University's Mailman School of Public Health. He visited UB as the 2024 J. Warren Perry lecturer, discussing some of the impacts biostatistics has had in children's health and climate change.

Berhane has played a major role in the ongoing Southern California Children's Health Study, a largescale look into how air pollution has affected those in the area where he lives.

The Southern California study has observed roughly 11,700 children throughout multiple neighborhoods in the Los Angeles area. Researchers identified 12 different pollution profiles and measured lung function and many other variables, Berhane said. These measurements, he continued, were compared to determine if growing up in polluted areas had any true effects on children compared to those living in relatively cleaner neighborhoods. Regarding the study design's impact on results, Berhane noted the outcome may not have been as intuitive as first glance may suggest.

"You can live in a very clean community, but if you live in a house next to a school bus barn and every day you're breathing diesel fumes, living in a clean community doesn't help," he said. "So, you have to be able to identify where the effect is coming from, and you need to have the right study design."

Berhane's work as a biostatistician has allowed him to step in and model better, more functioning studies, he said. That's been his role with teams he's worked on, including a National Institutes of Health P20 study, "Climate and Health: Action and Research for Transformational Change (CHART)."

The group, which consists of many disciplines but includes several biostatisticians, has taken a multisectoral approach to try and address how research approaches the massive global health problem of climate change and how it's being studied, he said.

Gresham Lecturer Advocates for Universal Design



In architectural design, the understanding of how places are accessed and used by all people, regardless of ability, is crucial. **Edward Steinfeld**, SUNY Distinguished Professor, School of Architecture and Planning, explained the concept of universal design and how it has helped architecture become more accessible at the 18th Glen E. Gresham/RESNA Colin McLaurin Distinguished Lecture.

Steinfeld is internationally known for his research and publications on accessibility and universal design. He has written or edited 10 books, including *Universal Design: Creating Inclusive Environments*, the first textbook on the subject.

While accessibility focuses on generating solutions that accommodate individuals with disabilities, universal design goes beyond disability-specific adaptations, aiming to produce inclusive environments and products that are usable by everyone, regardless of ability, age or other factors.

"Accessibility is actually a compensatory strategy. It's implemented as a top-down activity to adjust a world that is designed to exclude the disabled body. Universal design, on the other hand, is a bottoms-up activity that seeks to change the consciousness of designers so that they will take diverse bodies and abilities into account in all their work," Steinfeld said.

He explained that universal design's foundational period began in the 1980s after advocates lobbied for improved accessibility standards. It has continued to evolve until today, where Steinfeld believes it has started to penetrate mainstream society.

He also believes in engaging other disciplines and professions that may see the benefits of universal design, including the audience of rehabilitation science students, faculty and community members attending the lecture.

The Gresham Visiting Professorship in Rehabilitation Science was endowed by the late Albert Rekate and his wife, Linda, and is presented by the Department of Rehabilitation Science. This lecture was co-sponsored by the Rehabilitation Engineering and Assistive Technology Society of North America (RESNA), of which Jim Lenker, associate professor in UB's Department of Rehabilitation Science, is current president.

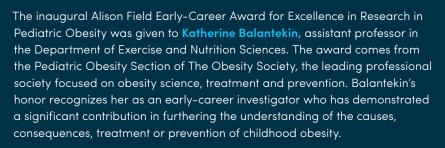
Get Your Walk on for the 10th Annual Step Challenge, April 1 to 30

That's right—School of Public Health and Health Professions and the greater UB community have been putting their best feet forward for an entire decade! Join the 2025 Step Challenge for the chance to get your walk on, connect with friends and family, and compete for 10X the prizes!





Honors and Accomplishments



Turquessa Francis, clinical assistant professor of occupational therapy, authored *Literacy and Occupational Therapy: Enabling Participation Across the Lifespan.* Published by AOTA Press, the tome offers a roadmap for clinicians to empower their clients through literacy-based interventions. By addressing a critical yet overlooked area, Francis aims to equip OT practitioners with tools to foster meaningful engagement and break cycles of disadvantage.

Kasia Kordas, associate professor in the Department of Epidemiology and Environmental Health, was elected to the council of the International Society for Children's Health and the Environment. Her election reflects her "deep commitment to advancing children's environmental health," according to an organization representative. The society is made up of environmental health professionals who use research, training, policy, clinical care, community outreach and education to reduce the impact of adverse chemical, physical, biological and social influences on children's health.

Schneider's Introduction to Public Health: Seventh Edition, co-authored by Jessica S. Kruger, clinical associate professor of community health and health behavior, will provide students with an important foundation and act as the entry point for their journey in the field. The textbook focuses on the present day and covers the foundational knowledge required for undergraduate or graduate public health students. Kruger also was named a Distinguished Fellow of the Public Health Academy of the National Academies of Practice. This prestigious honor recognizes individuals who exemplify leadership and outstanding achievements within their profession and interprofessional care.

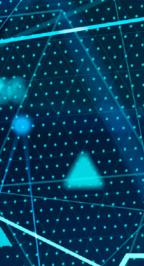
Honors and Accomplishments (cont.)

The New York State Occupational Therapy Association (NYSOTA) gave its 2024 Merit Award for Service to Clinical Assistant Professor Christine Linkie. This award recognizes a NYSOTA member for outstanding contribution to the profession through service to the association. Linkie was nominated for her advocacy and service on behalf of the mental health community. She is an active member of NYSOTA's Mental Health Task Force and helped coordinate the collection of data from educational institutions throughout the state on the mental health content in their curricula, oversaw dissemination of this material and presented the findings at the NYSOTA Conference. She has also been working with New York State's Office of Mental Health and Psychiatric Rehabilitation Services to advance occupational therapy practice and research in mental health.

Pauline Mendola, chair of the Department of Epidemiology and Environmental Health, was honored with the Distinguished Service Award from the American College of Epidemiology (ACE). This prestigious award recognizes Mendola's exceptional contributions and dedication to the organization; the recipient is chosen by the group's executive committee. ACE is an organization of epidemiologists dedicated to continued education and advocacy for epidemiologists in their efforts to promote good science and the public health.

Occupational Therapy Program Director Janice Tona received the Jim Hinojosa Memorial Lectureship Award from NYSOTA. The award honors a member of NYSOTA who is influential in the profession of occupational therapy; has substantially and innovatively contributed to the profession through research, education and/or practice; demonstrated leadership qualities and provided mentorship; and whose insight and work have shaped the way the profession thinks about occupational therapy as well as the way OTs practice. As part of the lectureship, Tona will give the keynote lecture, considered a career milestone, during the organization's 2025 conference.







Blair Goes the Distance with Network Optimization



For **Rachael Hageman Blair, PhD**, complex biological networks aren't abstract mathematical concepts: they're tools that could help solve realworld challenges, from containing disease outbreaks to optimizing plant genetics. An associate professor of biostatistics in the School of Public Health and Health Professions, she's working to make these mathematical frameworks more accessible and practical.

"Sometimes you want to improve a disease outcome or use social influence metrics to minimize disease spread," says Blair, whose current research focuses on network optimization. Her work ultimately could help identify novel quarantine strategies to mitigate disease outbreaks or help scientists prioritize which genetic mutations to test in laboratory settings.

The path to becoming a network optimization researcher wasn't straightforward for this firstgeneration college student. Encouraged by parents who fostered her natural curiosity—particularly her father, whom she describes as a naturally curious "genius"—Blair started high school in basic math classes before a teacher recognized her potential and moved her to an honors class. Her educational journey led her to graduate school at Case Western, where she worked in computational biology and applied mathematics, then to the Jackson Laboratory, where she was part of the sole statistical genetics group at the "mouse genetics capital of the world."

Now, back in her hometown of Buffalo, she's helping prepare the next generation for an AI-driven future. She developed and teaches very popular courses in statistical data mining that emphasize "storytelling with data," drawing students from a range of fields. As associate director of education for the Institute for Artificial Intelligence and Data Science (IAD), she organizes workshops and specialized courses, seeing an encouraging surge in interest in AI and data science training.

Practical philosophies

Blair's research and teaching philosophies converge in their emphasis on practical application. Last semester, she helped coordinate an IAD experiential course. Students' projects included a law firm developing an AI chatbot for competitive research and a historical society using data science to promote historic property preservation.

Her collaborative approach has already yielded promising results. Through her National Science Foundation-funded research on plant networks, she's developing methods to help scientists navigate what can often be an overwhelming number of possible genetic modifications.

"If you think about what perturbations—small changes can be made to a highly interconnected network to achieve a desired health outcome, the number of perturbations is impossible to enumerate and test experimentally," she explains. "Things don't happen in isolation, and our work provides a way to identify and test network perturbations in computational statistical models."

When she's not solving complex mathematical problems or teaching, Blair finds clarity in long-distance running, completing two to three marathons annually. "Training is the best part—the solitude, the hard work," she says, having conquered races from Nashville to Bar Harbor.

Growing data literacy

Blair is truly an evangelist for a data-literate world, which accounts for her role in helping to bake the opportunity to gain data literacy into a UB education, no matter which discipline a student comes from.

Blair is also knee-deep in interdisciplinary research, which she considers a career highlight. That's partly because her work, she asserts, has "very broad applicability; it can be generalized in many fields that want to move to more data-driven approaches and use data better." •••••••



Athlete to Aspiring Dietitian: A Conversation with Alexa Hurley

Foodie and college athlete Alexa Hurley is a first-year student in the School of Public Health and Health Professions' Clinical Nutrition MS program. Her dual interests have serendipitously converged into a passion for bringing fact-based nutrition practice to patients.

How did you first become interested in nutrition?

I've been an athlete all my life. I played basketball and soccer in high school, basketball in college my first year and track and field the last two years. As an athlete I started to realize how important food is—not just in training, but in what you do before and after training and what you put into your body. One day, my dad brought me into the grocery store and said, "You've got to start really fueling yourself, start eating things that are better for you to help you perform." My dad is not into nutrition or anything—he's a chemical engineer, and I thought, "Hmmm, this is interesting."

When did you decide to make it your career?

When I discovered there's a professional called a registered dietitian, I said, "I love this!" Then I became more interested in cooking and baking. I love food. I love trying new food. I like the way that food makes me feel—why not make a career out of it? I knew by sophomore year of high school that I was going to do what I'm doing now.

What brought you to UB's Clinical Nutrition MS program?

I researched UB's program and saw it's a clinically focused program and that they also dip their toes in research. The program is very well known and one of the oldest programs in the region. It's a big school, which is such a difference from my old school. I wanted to go big, and that's what brought me here.

What's been your experience in the program so far?

One of my favorite things about this program, which you don't know when you're going in, is the people. They're great supporters and friends and make it enjoyable. This program is rigorous, and there is a lot of stress that comes with it, but they make it fun. The information we learn is so rich and interesting that it's a good kind of stress.

Why did you become interested in clinical nutrition specifically?

Before I came to UB, I wanted nothing to do with clinical nutrition practice. I was never going to work in a hospital. Then I did an internship in my undergrad program when I worked in a hospital and thought, "This is cool." I also really like the idea that food is medicine. That's why I love the clinical area; I feel like food can be a cure.

What are your plans after graduation?

The first thing I'm going to do after graduation is go to Italy because they eat the Mediterranean diet there. I want to see what and how they eat and what they do with their food because the intervention for many conditions we've studied in our medical nutrition therapy class is the Mediterranean diet. Long term, I want to work in a hospital, a big fast-paced clinical center, specifically a teaching hospital. I'm not sure what I'm going to do in terms of specialties—be a regular clinical dietitian or specialize in something like pediatrics, gastrointestinal or renal.

What advice would you give to future students?

Say yes to everything. Do it because, in my mind, no matter what you do, you're going to learn something or take something from it. Make those memories and learn from them. o-----o



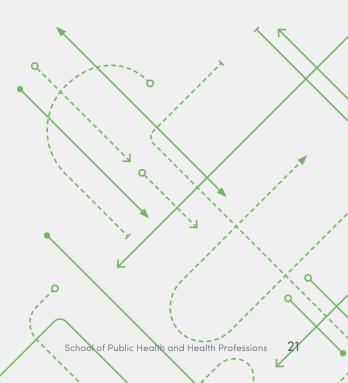
Community Health and Health Behavior program doctoral student Michelle Goulette began studying drug-related health policy after seeing the toll of the opioid epidemic on the people she cared about. Her passion and determination to tackle the issue took her all the way to the White House, where she interned in the Executive Office of the President's Office of National Drug Control Policy studying policies that impact communities at the national level.



During the culminating event of UB's Social Impact Fellows program, MPH student Diana Sieracki joined Pratiksha Biswal, MBA '25; Nana Afia Owusu-Ansah, MSW '26; and Shuyang Sun, PhD '28, in earning the award for best implementation for their project with Partnership for the Public Good. The program brings together students from the College of Arts and Sciences, School of Management, School of Social Work and—for the first time—the School of Public Health and Health Professions. Working in interdisciplinary teams, the students used different perspectives and skills to make an impact at local nonprofit organizations. The award recognized the immediate and future impact of the team's project to meet the organization's needs with meaningful, practical applications that included a proposal to bring a community responder team to East Buffalo.



Yohane Phiri, PhD, postdoctoral research associate in the Department of Epidemiology and Environmental Health, won first place at UB's 14th Annual Postdoctoral Scholars Research Symposium, which showcases the research done by postdoctoral scholars through a research abstract/poster competition. Phiri won for his project "Pre-conception health and ambient air pollution associated with preterm birth and low-birth weight among US singletons." The project was one of 23 posters from 15 departments across UB that competed at the symposium this past fall. Phiri is pictured with Kristen M. Coakley Ashare, director of UB's Office of Postdoctoral Scholars.



Nkume Sobe Listens to His Voice Within

As a high schooler in the Rochester, New York area, Nkume Sobe, DPT '10, took part in the Science and Technology Entry Program (STEP) at the University of Rochester.

"That program was instrumental in getting me interested in health sciences," he said.

"Interested" might be underselling what happened as a result of the experience.

Once in college, Sobe intended to become a pediatrician but soon realized pre-med classes "did not excite me. I yearned to learn more about the human body, injuries and recovery. I found physical therapy and was reinvigorated."

His academic rebirth flourished during his "thorough" education in UB's Doctor of Physical Therapy program. The professors were "so passionate about the field," he said. "That was palpable—every lecture, they would pour their heart out. I still remember them like it was yesterday."

Instilled with that passion, Sobe entered the world of clinical physical therapy, confident that "there wasn't anything I felt unprepared for."



Real-world results

Today, Sobe is the CEO of Sobe Rehab, which he founded in 2012 after perceiving a special need for therapeutic services for patients in assisted living facilities. His firm specializes in providing physical, occupational and speech therapy to patients in Florida, Virginia and North Carolina, aiming to improve quality of life and length of stay in senior living communities and, ultimately, help people age in place successfully.

Sobe Rehab follows a proactive, preventive model that identifies seniors at risk of falls or who have difficulty being mobile, and then implements rehabilitation intervention in a timely way.

In that way, he said, "we increase assisted living facility resident length of stay and retention by 129%, reduce hospitalizations by 82% and show a 32% functional independence improvement in every patient we treat," Sobe explains. "We're helping to give seniors their life back—their independence, dignity, strength and confidence."

Support for up-and-comers

While Sobe's long-ago STEM experience clearly launched him on his trajectory as a physical therapist, it's also the core of his firm's exclusive, five-year sponsorship of UB's Blue Path summer program. Conducted by the School of Public Health and Health Professions, Blue Path brings Western New York high school students interested in health careers to UB's campus for two weeks during the summer to cultivate and refine skills central to thriving careers in epidemiology, health policy and economics, exercise science, occupational therapy, community health, nutrition and more.

Sobe explained, "As a student, your aspirations are limited by what you view as attainable. Programs like Blue Path expose students to avenues once unimaginable, making possible the impossible."

And those avenues, Sobe thinks, are only going to grow.

"Physical therapy is a growing field mostly because of demographics: the baby boomers are turning 80ish and are in need. Salaries are increasing, and graduates get the most bang for their buck as far of years in school and break-out income. "

The voice within

Ultimately, for Sobe, nothing is more satisfying than seeing a patient who was bedridden walk on their own, giving people their quality of life back. He abides by the notion that one's profession, ideally, "should be what you would do for free."

For students and professionals, he's got one key piece of advice: "Listen to God or that inner voice within us. Sometimes we're too busy in filling our time up and not listening to that voice or doing the opposite, and it doesn't feel right. That voice is working to guide you." o-----o

Eminent Researcher Giovino is SPHHP's Distinguished Alumnus

Gary Giovino, PhD, SUNY Distinguished Professor Emeritus in the Department of Community Health and Health Behavior, has been recognized with the Distinguished Alumni Award for the School of Public Health and Health Professions.

"Most of us at SPHHP know that Gary has been an accomplished and tireless researcher, teacher and advocate for many years. As his biography demonstrates, he is well deserving of this honor," said Jean Wactawski-Wende, PhD, SPHHP dean.

Giovino is an epidemiologist who focuses primarily on behavioral issues. His research interests have included patterns, determinants, consequences and control of tobacco use, which are part of a more general focus on disease prevention and health promotion. As a SUNY Distinguished Professor Emeritus, he continues to study possible relationships between suboptimal nutrition and addictions, particularly nicotine addiction.



Following his doctoral training at UB, Giovino

worked as a research associate at the University of Rochester, where he co-led the evaluation of one of the nation's first successful telephone quit lines. He joined the Office on Smoking and Health at the U.S. Centers for Disease Control and Prevention, where he served as chief of the Epidemiology Branch during most of the 1990s. There, he became the federal government's lead scientist on tobacco surveillance. Subsequently, he conducted tobacco surveillance and evaluation work at local, national and international levels.

From 1999 until 2006, Giovino served as senior research scientist in the Tobacco Control Research Program at the Roswell Park Cancer Institute. After moving to UB in 2006, he served as chair of the Department of Community Health and Health Behavior and associate dean for faculty affairs in SPHHP.

Giovino has authored or co-authored 268 scientific publications and delivered 77 invited presentations. He has also received the Innovators Combating Substance Abuse Award from the Robert Wood Johnson Foundation, the Doll/ Wynder Award for research in tobacco epidemiology from the Society for Research on Nicotine and Tobacco and the Joseph W. Cullen Memorial Award from the American Society of Preventive Oncology. o-----o

Health Impact

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