

UB INTERNATIONAL

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UB International

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ASIA RESEARCH INSTITUTE LAUNCHED

By Grace Gerass

The Office of International Education launched the Asia Research Institute (ARI), a multidisciplinary hub and collaborative space for research and education about Asia and its diasporic communities, with an inaugural conference in April 2023.

“Following numerous conversations with faculty in my first months at UB, it became clear that a central institute supporting faculty research and student learning about Asia would be extremely valuable for faculty, students and our community, and would enhance the university’s profile nationally and internationally,” says Nojin Kwak, vice provost for international education.

ARI aims to establish UB’s prominence on important and contemporary issues regarding Asia, and provide regional and national leadership on Asia research. The institute leverages and amplifies the expertise of faculty across the university, while engaging the university’s diverse Asian and Asian American stakeholders.

ARI also provides enriching research and volunteer opportunities for students, including the new Undergraduate Fellows Program, to further UB’s mission to cultivate future generations of leaders with international acumen.

The institute’s inaugural conference April 21-22, titled “#Asia: Here and Now,” engaged UB faculty and colleagues from around the country in conversations on four major themes: crossing boundaries in Asian studies, current issues in pub-

lic health in Asia, comparative education in Asia and the U.S., and being Asian in America: politics, education and the pandemic. The conference featured two panels highlighting the Asia-related research of UB faculty from the College of Arts and Sciences, the School of Architecture and Planning, and the School of Social Work.

Sessions, held over two days in the Buffalo Room in Capen Hall, included 60 in-person and 30 virtual attendees, among



Nojin Kwak welcomes ARI conference participants (Douglas Levere)

them UB faculty, students and community members.

The conference also featured an evening of celebration at the Center for Tomorrow, with remarks from President Satish K. Tripathi; A. Scott Weber; provost and executive vice president for academic affairs; and Kwak. Attendees enjoyed performances by UB student groups Buffalo Bhangra, KASANOVA and the Buffalo Chips, as well as a viola-guzheng duet by Leanne Darling, adjunct instructor in the UB Department of Music, and Daisy Wu, visiting associate professor of music at Alfred University.

“Our Asia Research Institute builds on UB’s commitment to global engagement by enriching our understanding of 21st-century Asia,” Tripathi said in his remarks. “This new institute will have a significant impact on our research enterprise,

FROM THE VICE PROVOST

A few weeks ago, I had the great pleasure to join many UB colleagues and visiting faculty attending our inaugural conference of the Asia Research Institute (ARI). Titled “#Asia Here and Now,” this exciting gathering of scholars and students announced the launch of our new institute as a major center for research about Asia and the Asia diaspora. Our cover story describes the great conference program and exceptional speakers from UB and from around the world.

What better way to inaugurate the Institute than to bring together some of the best minds doing Asia-related research? Asia has always loomed large in UB’s international outreach and global engagement.

ARI is taking advantage of the intellectual capital UB has assembled respecting Asia to amplify the impact for all our stakeholders—students, faculty, and our larger community.

Our conference aimed to foster robust conversations on four major themes: (1) comparative education in Asia and the U.S.; (2) public health in Asia; (3) crossing boundaries in Asian Studies; and (4) the Asian-American experience. The conference was guided by the ARI steering committee, made up of faculty representing UB’s colleges and schools who work in many disciplines and regions of Asia.

As I told the 100 attendees at our conference opening celebration, ARI marks a new stage in UB’s engagement with Asia, as we advance research excellence at UB and scholarly collaboration with Asia and the Asian diaspora.

With this issue we also report on the launch of our new First-Year Global Experience Program in Costa Rica (p. 5) that provides a transformative study abroad experience to

students in their freshman year, as a way to kick start their Global Pathway in the UB Curriculum and foster a lasting appreciation for the value of international experiences.

While our pilot program this past January (understandably) did not have a large enrollment, it was one of the most diverse of any study abroad program we have conducted, and thus achieved one of our key objectives—to bring into study abroad students who typically do not or cannot participate.



My congratulations to Adam Rubin, Assistant Vice Provost and Director of Education Abroad for his work in developing and conducting this successful inaugural program with the help of our faculty leader, Professor Laura Lewis of the School of Social Work.

Building on this pilot year’s success, we expect to expand the First-Year Global Experience to include new destinations and new courses, and thus increase the number of participating students.

The past year has seen the implementation of our OIE grants program, and I am pleased to share in this issue an update on the impact our grants are already having in advancing our faculty’s global and international research (p. 11). We report on the impressive number of applications and grant awards as well as the range of disciplines, faculty and projects involved.

Lastly, we note with sadness the untimely passing of our beloved colleague, Steven Shaw, long-serving Director of International Admissions, who throughout his career was a remarkable practitioner and advocate of international education and who served our office and the university with distinction for many years (p. 21). He will be sorely missed. ♦

ASIA RESEARCH INSTITUTE

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our education and our student experience.” Added Kwak: “The inclusion of community leaders and student performers at the inaugural celebration highlighted the broad impact the institute will have on campus and throughout Western New York.”

Prior to its official launch, ARI had organized and co-sponsored a variety of symposia, lectures and student events throughout the spring semester, among them a roundtable on supply chains in Asia, an undergraduate student conference on South Asia, a symposium on Korean film and drama, and celebrations and contests for Korean language students. Financial support for ARI’s Korea-related research, events and student experiences is provided by

a grant from the Academy of Korean Studies.

“The Korean film symposium involved panels and keynote addresses by leading scholars of Korean cinema and television from around the world and included a number of impressive graduate student presentations,” says Bruce Acker, ARI assistant director.

This summer ARI will welcome 50 students from Korea as part of a program sponsored by Gyeonggi Province in South Korea. The four-week program in July offers students an opportunity to learn about U.S. higher education and research universities, introducing them to American culture as experienced in Western New York with the help of UB students serving as “cultural liaisons.” ♦

Grace Gerass is an internal communications manager for University Communications.

TRIPATHI CO-CHAIRS AAU TASKFORCE ON PARTNERSHIPS WITH INDIA

By Sue Wuetcher

President Satish K. Tripathi is among AAU leaders named as co-chairs of a new Association of American Universities task force to study expanding research and higher education partnerships between the United States and India.

Venu Govindaraju, vice president for research and economic development, has been named a member of the task force, which was created in coordination with the Biden administration's U.S.-India initiative on Critical and Emerging Technology (iCET). iCET seeks to grow technological and industrial collaboration between the two nations.

The AAU task force will meet monthly to determine key focus areas for bilateral research and education cooperation, identify existing programs that could provide blueprints for future partnerships and formulate strategies on how best to move forward.

Other co-chairs of the AAU Task Force on Expanding United States-India University Partnerships are Neeli Bendapudi, president, The Pennsylvania State University; Robert J. Jones, chancellor, University of Illinois Urbana-Campaign; Pradeep K. Khosla, chancellor, University of California San Diego; and Sunil Kumar, provost and senior vice president for academic affairs, Johns Hopkins University. Kumar will become president of Tufts University on July 1.

Task force members include administrators at AAU institutions including MIT, Vanderbilt University, Purdue University and the University of Chicago.

"It is an honor to be named to the AAU Task Force on Expanding United States-India University Partnerships," Tripathi said. "As we forge and strengthen research and education partnerships with our colleagues in India, we will do so with an eye to bringing the benefits of this binational collaboration to our respective countries and our broader global society — all in service of the greater good.

"I look forward to helping cultivate these productive partnerships with our Indian higher education counterparts, and to building on the work we are doing at the University at Buffalo and across the AAU."

Govindaraju noted that international collaboration in science and technology is "paramount in our collective efforts to tackle society's most pressing global challenges."

"This historic task force will bring together leading research institutions from the U.S. and India, such as the India Institutes of Technology, to promote technological and industrial innovation, as well as educational cooperation," he said.

AAU President Barbara R. Snyder also stressed the importance of international collaboration. "It is nearly impossible in today's world to make advancements in scientific research and technology without international collaboration and cooperation," Snyder said. "This is why the Association of American Universities is proud to lead this effort to strengthen relationships between leading U.S. and Indian research universities and to lay the groundwork for shared future scientific and economic success."

UB has long been collaborating with Indian universities.

The university last May hosted the UB-Indian Institute of Technology (IIT) UB-Indo Workshop focusing on the development of joint projects relating to nanomaterials.

During the workshop, UB and six institutes of higher learning from India signed a five-year memorandum of understanding in which the institutes agree to collaborate in educational and research fields "that are relevant to the academic, scientific, industrial, social, and cultural interests and needs" of the counties involved. Those fields include, but are not limited to, "nanomaterials and nanotechnology, biotechnology, advanced sensors, photonics and cyber-physical systems including artificial intelligence," the agreement states.

And just last month UB partnered with the Indian Institute of Technology (BHU) Varanasi to create a research center in the areas of materials, artificial intelligence, drug development and biotechnology.

UB maintains institutional partnerships with 13 universities in India, including the Indian Institute of Information Technology and the Indian Institute of Technology in Delhi, Bombay and Hyderabad. ♦



UB AT THE FOREFRONT OF U.S. UNIVERSITIES ENGAGING WITH INDIA

Over the past year, the University at Buffalo (UB) has taken major strides in advancing research collaborations with leading institutions in India, building on strong institutional and faculty ties in that country and solidifying UB's leadership position in this regard among its AAU peers.

Indo-US cooperation in critical areas of research and technology development is a key priority for the US government as well as the AAU. In fact, UB President Satish K. Tripathi was recently appointed co-chair of a new AAU Taskforce on Expanding Higher Education Partnerships between the United States and India, an

effort spurred by the two governments (see p. 3).

The UB initiative has focused on partnerships with the pre-eminent Indian Institutes of Technology (IIT) in critical areas of mutual interest. In May 2022, at the invitation of President Tripathi, UB hosted leaders and faculty from five of the top-ranked IITs—Bombay, Delhi, Jodhpur, Kanpur and Varanasi—as well as Ashoka University, a private university in North India, for a three-day research workshop at which an inter-institutional memorandum of understanding was signed to explore and identify specific research projects that could be jointly supported with seed funding from both sides.

According to that three-year agreement, the participating institutions would collaborate in educational and research fields “that are relevant to the academic, scientific, industrial, social, and cultural interests and needs” of the countries involved. Those fields include, but are not limited to, “nanomaterials and nanotechnology, biotechnology, advanced sensors, photonics and cyber-physical systems including artificial intelligence.” Collaborative research projects will be the basis for the exchange of faculty and graduate students and the potential development of joint degree programs.

Focused on the design, synthesis and data-driven discovery of nanomaterials for electronics, photonics and biotechnology, the May workshop featured presentations, strategy sessions, laboratory and facility tours, and many opportunities for networking. Co-chairing the UB workshop and spearheading the initiative are Paras Prasad, SUNY Distinguished Professor in the UB departments of Chemistry, Physics, Medicine and Electrical Engineering, and executive director of the Institute for Lasers, Photonics and Biophotonics; and Ashok Ganguli, PhD, deputy direc-

tor for IIT Delhi and the Prof. N.K. Jha Chair Professor in the IIT Delhi Department of Chemistry.

Faculty with shared interests from UB and the signatory institutions in India followed up with virtual discussions over the summer and fall of 2022 to further refine these projects in advance of a second in-person faculty workshop at IIT-Delhi November 28-30, 2022, convened by co-chairs Prasad and Ganguli and titled, “IIT-UB Conclave on Nanomaterials, Photonics, Sensors, AI and their Applications in Security, Healthcare, and Smart Living.” President Tripathi and Vice President Govindaraju led the UB delegation attending the Delhi conclave.

The Delhi meetings served to clarify the projects and co-principal investigators that would lead

joint centers of excellence to be established by UB and four of the IITs focusing on the areas of greatest mutual interest and potential payoff in terms of real-world applications: IIT Jodhpur (AI and Data Science), IIT Delhi (Quantum Photonics), IIT Kanpur (Biosciences and Biotechnology), and IIT Varanasi (Nanomaterials).

It was agreed that the implementing MOUs would be executed during visits to each of the four participating IITs by a delegation led by Provost A. Scott Weber and Vice President Govindaraju in March 2023. These visits to the participating IITs served as the launching point for the respective projects receiving seed funding from the partner institutions that will leverage external funding once the projects mature. Each project involves lead faculty and graduate students on both sides who have benefited from the series of intensive in-person and virtual meetings over the past year.

The **UB-IIT-Delhi Center of Excellence in Photonics** will undertake three joint projects. The first will focus on quantum photonics for quantum sensing and imaging, particularly for biomedical applications. The second addresses photon conversion science and technology using inorganic nanostructures, which can provide new ways of manipulating light to improve the efficiency of solar cells and to advance biomedical imaging and diagnostics. The third involves two-photon lithography as the basis for a point-of-care platform for real-time sensing of drug abuse and the administration of antidotes like naloxone to counter the drugs' effects.

The **UB-IIT Jodhpur Center of Excellence in Artificial Intelligence and Data Science** has identified two major projects. The first, Joint Vision Language Grounding for Robotic Manipulation, will advance learning representations



Scott Weber (r) with IIT Kanpur Director Abhay Karandikar

FIRST-YEAR GLOBAL EXPERIENCE FOCUSES ON SUSTAINABILITY

By Matthew Biddle

Growing up in a small town can sometimes feel like living in a bubble. So, when Jack Misenheimer arrived at the University at Buffalo last fall, he quickly sought out opportunities to engage and expand his worldview.

During the winter semester, that pursuit took Misenheimer to Costa Rica as part of UB's new First-Year Global Experience program.

"UB offers so many opportunities, and it's important to take advantage of every moment you can," he says. "As soon as I heard about it, I immediately knew I wanted to do this program."

For 10 days in January 2023, Misenheimer and his classmates traveled around the Central American nation, learning from faculty leaders and locals along the way about media advocacy, biodiversity and human rights. They saw where coffee comes from, hiked the trails at Cahuita National Park and visited with members of the Bribri Indigenous community.

The program engages first-year students from across UB — and their experience doesn't end with the trip. Now that they're back on campus, the students will come together again to share reflections with the UB community and prospective students and families during Accepted Students Day.

For Misenheimer, the experience gave him a deeper look at issues of social justice and sustainability, including the United Nations' Sustainable Development Goals (SDGs).

"This program really was very special to me and helped me gain a whole new perspective on life," he says. "We met people who've been through a lot of hardships, but they still had this positive outlook. It made me appreciate everything I'm able to do more."

As UB prepares students to lead in a global world, study abroad may be out of reach for many because of financial means, the course sequence within their major or other reasons. First-year programs aim to get ahead of these challenges.

"We wanted to create an opportunity that increased access to study abroad for students and provided a transformational global experience right at the beginning of

their time here," says Adam Rubin, assistant vice provost and director of education abroad at UB. "We also wanted the program to tie into UB's focus on sustainability, while remaining affordable and accessible to students from a broad range of academic perspectives."

The Costa Rica program checked all those boxes — and proved so successful that Rubin envisions it as a pilot for future First-Year Global Experience programs, starting next winter with courses in Costa Rica and the UK.

Moving forward, each course will focus on the SDGs, while allowing the individual faculty leaders to infuse their expertise and discipline into the experience. As the program grows, so too will the opportunities for students in different courses and countries to participate in cross-dis-



First-Year Global Experience group at the coffee farm; Laura Lewis is far right and Adam Rubin, 3rd from r.

ciplinary discussions and reflection.

"Once this model is fully up to speed, we plan to offer multiple programs in multiple countries every winter, which will help to engage a diverse range of first-year students, increase retention and set UB apart from other institutions," Rubin says.

Laura Lewis, clinical associate professor and assistant dean for global partnerships in the UB School of Social Work, taught and co-led the course in Costa Rica.

"I loved the idea of a program that could give first-year students access to these kinds of opportunities," she says. "It was also a great way to show students how social work relates to issues they care about, like sustainability and social change."

Through the coursework, Lewis taught students to identify problematic depictions of global issues in American media — often by juxtaposing the superficial representation with what students were seeing on the ground. In addition, she discussed the SDGs and how students can take

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FROM SEED TO CUP: EXPERIENTIAL LEADERSHIP THROUGH COFFEE

Students in the Social Innovation and Entrepreneurial Leadership in Latin America course (MGG 302/MGG 606) are as varied as the types of coffee preparation methods. Open to graduate and undergraduate School of Management students, and graduate students from the School of Engineering and Applied Sciences, this virtual class explores the region's cultural differences and similarities in business management compared to the U.S., societal norms for entrepreneurs and historical impact on social innovation.

Highlighting their individual skills throughout the semester, students work on a project for a Costa Rican non-

profit, women's-based group or indigenous population. Prof. Pancho received con-

sulting input from School of Management students on the same trip in 2019. Since then, he has expanded his efforts, improved his coffee tours and more.

Through experiences like this, students see the lasting impact they can make on a small business. Sophie Schindler MBA '23 was grateful to learn from Pancho about the intricacies involved in creating coffee.

Beyond learning about Costa Rican cultures, UB students also gave back to the community by acting as consultants for Fundación Mujer, a nonprofit focused on meeting the U.N.'s sustainable development goals through their work microfinancing entrepreneurs, with a specific focus on female entrepreneurs and providing resources to refugees and nationals.

to refugees and nationals.

"Having the opportunity to work with businesses in Costa Rica during the semester was incredible," says Grace Murphy, BS '24. "But when we were able to work with the Fundación Mujer in person, the impact we had was visible. We could better see how the work we were doing was actually helping them."

Halfway through each morning session at Fundación Mujer, the group stopped to enjoy a cup of coffee (or two) during *cafecito*. Recognizing the change in pace of the workday is something many students highlighted in their experience.

"One thing I really appreciated about Costa Rican business culture was the concept of 'no working lunches,'" says Srikrithi Krishnan MBA/MPH '25. "We used our lunchtime to connect with each other and discuss things about our lives outside of work. This gave me the opportunity to learn more about my classmates and the business employees and volunteers we worked with."

Students also visited a private company, CMA, and met with the head of the Costa Rican Chamber of Commerce, Julian Castillo.

"There were more similarities between Costa Rica and the U.S. than I had anticipated," says Kennethea Wilson, MBA '23. "We saw franchise restaurants, a strong emphasis on family and work culture, and highly developed urban areas with breathtaking landscapes and art throughout the inner city."

Of the three projects the students worked on virtually, they were able to visit one in person: Asociación por la Sonrisa de los Niños, a nonprofit that provides services to children in highly marginalized communities. There, staff members and volunteers enrich students' formal education in an after-school program that offers a safe space filled with joy and laughter where they can form bonds with other students and receive free, nutritious meals.

Students rounded out the week with a reflective activity

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At Cafe Los Volcanes, with Naomi Smith Perrone (far left) and Joana Gaia (far right)

profit, women's-based group or indigenous population.

In addition to the required online portion of the class, students are encouraged to take part in an optional in-person trip during spring break to San Jose, Costa Rica, where they enhance their learning through experiential leadership.

This year, students spent each morning with their host families before joining the larger group. Breaking bread and enjoying a piping hot cup of coffee during the morning set the tone for the day.

The trip included an extensive walking tour of the city led by Javier Arguedas from the Institute for Central American Development Students (ICADS), with stops at government buildings and cultural sites. Throughout the action-packed week, students learned about how Costa Rica's unique history was a beacon of democratic values, as well as the nation's commitment to honoring its laborers.

After getting to know a bit of the city, students also spent time becoming familiar with the Costa Rican tradition of *cafecito* — or little coffee — by learning more about coffee cultivation. The group visited Café Los Volcanes, where the owner, Miguel Castro Murillo (Pancho), received con-

MANAGEMENT STUDENTS PARTICIPATE IN GREEN SUMMIT IN THAILAND

By Kevin Manne

In December 2022, four UB School of Management Undergraduate Honors students attended the inaugural Green Summit in Bangkok, Thailand, where they learned from experts in sustainable development and networked with like-minded peers from around the world.

Led by Professor Dorothy Siaw-Asamoah, clinical associate professor of organization and human resources and faculty director of global programs, the students had the opportunity to broaden their horizons, become global citizens and commit to the advancement of a healthier planet.

As one of the nation's leading public research universities, the University at Buffalo is committed to addressing regional and global environmental challenges through innovative research, education and outreach programs.

In the School of Management, students learn why sustainability makes smart business sense, and use their skills to help local nonprofits. Meanwhile, our faculty study climate change through the lens of business — from responsible investing to the market for recycled plastic, and beyond.

Robert Siegel, a junior studying business administration, says he was nervous about taking the trip because he'd never been that far from home, but the experience made a lasting impact.

"We were able to learn about climate change and its effects from a wide variety of perspectives," he says. "Through these discussions and information sessions, we made friends with students from many different countries. Being immersed in Thailand's culture is something I'll never forget and I look forward to traveling more in the future."

Throughout the four-day event, the students learned ways to take action against climate change, from what we eat to how we communicate. They also took part in an ongoing climate project where they planted mangroves — groups of trees and shrubs that provide the basis for rich biodiversity and water absorption.

Grace Conrad, a senior studying business administration and law, says sustainability is now one of her life's passions, even though it wasn't a personal focus before the trip.

"It was fascinating to learn all the facets of climate change and how the issues and problems we face in Buffalo are completely different from those in other parts of the world," she says. "These problems will continue to impact us all at an exponential rate, and I've realized that this substantial change won't happen overnight — it's up to us as individuals to include climate change as part of the conversation when making decisions, both big and small."

Business administration senior Jared Pawlak was inspired by the passion of those around the world who share a similar commitment to sustainability and the future of the planet.



L to r: Jared Pawlak, Grace Conrad, Colleen Chen, Dorothy Siaw-Asamoah, and Robert Siegel at the Green Summit in Thailand

"It put into perspective how big this fight is, and how many great minds we have working towards creating a better tomorrow," he says. "I learned so much about ways to take action against climate change that I am eager to share with those around me. There are so many little things that can go a long way."

For Colleen Chen, a senior studying accounting, the trip brought awareness to topics she didn't even realize were related to sustainability, such as eating a cleaner diet, practicing eco-mindfulness, or

even using humor to combat large corporations. "One of the speakers said 'there is no planet B' and that took me a few moments to digest," she says. "There was a theme throughout the conference that there is no perfect solution — if we wait around for the perfect solution, it'll be too late. Instead, we just need to do our best."

Known as The Green Team, the four School of Management students had a full schedule of events this spring to share their Thailand experience with the rest of the UB community. Throughout the semester they met with a wide range of stakeholders, including School of Management faculty, staff and students, the school's Global Advisory Council and Dean's Advisory Council, and the UB Sustainability Team. And during Sustainability Month in April, the team visited the United Nations headquarters in New York City — and a UN representative came to the School of Management for an in-person lunch and learn session. ♦

Kevin Manne is assistant director of communications for the School of Management.

UB AT THE FOREFRONT

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for relative spatial relationships such as “in front of,” “next to,” and “to the left of,” in order to enhance human-robot interactions. The second project, Smart Transportation Systems with Connected and Autonomous Vehicles, concerns future smart transportation systems involving a mix of autonomous and human-driven vehicles to assure both safety and efficiency of transport.

The **UB-IIT Kanpur Center of Excellence in Biotechnology and Biomaterials** is launching four joint projects. Nanotheranostics for brain diseases and dysfunction will explore nasal delivery of medications to the brain to better treat Alzheimer’s disease, traumatic brain injury, and aging-associated neurocognitive impairment. The second project will develop a portable sensor to detect volatile organic compounds in breath and body odor that could provide a non-invasive way to detect occult disease. The third project will focus on the detection, prevention and

removal of biofilms on catheters, dental implants and other structures non-invasively to reduce morbidity and mortality from infection. The last project will concern nanotheranostics for cancer, a nanoplatform for delivery of anticancer agents for difficult-to-treat metastatic breast, prostate and oral cancers.

The **UB-IIT (BHU) Varanasi Center of Excellence in Nanomaterials** will focus on two collaborative projects. The first will advance applications for novel 2-D nanostructures involving borophene and clay as well as their organic inorganic hybrids and heterostructures; this class of new materials is a platform for numerous important applications, including membranes and sorbents for water purification, photo- and electro-catalysis for H₂ production and CO₂ reduction to address climate change, and photonic and electronic devices that support computing and telecommunications. The second project investigates the biosynthesis and bioprocessing of nanomaterials, including materials for extreme environments and remediation to remove toxic heavy elements. ♦

FIRST-YEAR GLOBAL EXPERIENCE

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action on sustainability.

“With its unique focus on the broader social, economic and environmental dimensions of problems, and its bottom-up approach to partnership, social work has an important role to play in enacting transformational change in society while ensuring that no one is left behind,” Lewis says.

The course’s focus on human rights resonated with Samantha Bordonaro, an undergrad in health and human services who hopes to pursue a social work career.

“Social work is about providing for people’s needs and

helping them be successful, so I was curious to see how Costa Ricans’ needs are taken care of in certain areas and how they’re not,” Bordonaro says.

Business administration major Samantha Ezihie says one of her favorite parts was the chance to stay with a local family — to hear their stories and bond over meals together.

“I was neighbors with other people from the program, so our families would host big group meals. We’d even finish each other’s sentences when someone didn’t know how to translate exactly what they wanted to say,” Ezihie says. “We all got very close in just a few days.” ♦

Matthew Biddle is director of communications and marketing for the School of Social Work.

FROM SEED TO CUP

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at a dinner led by our ICADS partner, Javier. During this exercise, each person at the table shared a highlight, lowlight and takeaway, along with and changes that they will make in their future.

“This was a wonderfully eye-opening experience,” says Sydney Merritt, MS’23. “The opportunity allowed me to become a more globally minded person, and to reflect on my own cultural values.”

Ben Yeung, BS ’24, encourages future students to partic-

ipate in Global Programs trips.

“It was truly a life-changing experience being able to connect with and learn from people in a different part of the world,” he says. “I hope more students will take advantage of this opportunity to learn and grow.”

Joana Gaia, clinical assistant professor of management science and systems, served as faculty lead for the spring 2023 trip, along with Naomi Smith Perrone, academic programs assistant, as professional staff assistant. ♦

EARTHQUAKE EXPOSES STRUCTURAL VULNERABILITIES IN TURKEY AND SYRIA

By Cory Nealon

The images are chilling. One building collapses and the neighboring building, which looks similar, remains standing.

It's a scene that unfolded in numerous videos captured during the 7.8 magnitude earthquake and subsequent shakes that struck central Türkiye (the nation announced a name change from Turkey last year) and northern Syria in February 2023.

While collapses might appear random, there are most likely underlying causes for this disorienting site, say UB earthquake engineers.

"There are many factors that can contribute to a building collapsing during extreme earthquake shaking, such as that measured close to the epicenters of the Feb. 6 magnitude 7.8 and magnitude 7.5 earthquakes," says Andrew Whittaker, SUNY Distinguished Professor in the Department of Civil, Structural and Environmental Engineering.

"They can range from shaking intensity and duration, building design and detailing, quality of construction and adherence to construction documents, as well as local soil conditions, construction oversight and structural modifications."

Whittaker and colleague Michael Constantinou visited Türkiye following the 1999 İzmit and Düzce earthquakes to analyze the region's infrastructure.

Later, they helped design and conduct peer reviews of Ataturk International Airport, Istanbul Sabiha Gökçen International Airport, hospitals and other structures — all of which were equipped with seismic protective systems that were developed with the aid of UB researchers and/or facilities.

While İzmit and Düzce are hundreds of miles from the region devastated earlier this week, there are similarities between all three areas' building stock, says Constantinou, Samuel P. Capen Professor and SUNY Distinguished Professor in the Department of Civil, Structural and Environmental Engineering.

"In Türkiye, there are many modern buildings, mostly of reinforced concrete, designed per modern building codes, but there are also many older buildings with non-ductile concrete framing. The latter buildings are brittle and are more prone to damage or collapse during significant earthquake shaking," Constantinou explains.

"Modern reinforced concrete buildings in the United States are designed to suffer damage but not collapse in severe earthquake shaking, and a similar philosophy has been adopted in many other countries. However, modern buildings may collapse if the construction quality is poor, there are design errors, or the shaking is more intense than design basis, or due to a combination of the three," he says.

He adds: "Based on the published information on the ground-shaking in the epicentral region, the seismic forces would have been very high for stiff structures, and is ex-



Structural failure in the concrete building in rear contrasts to the traditional building in front

pected that many reinforced concrete with shear walls and masonry will be more vulnerable, as opposed to modern, flexible steel moment frame buildings or seismically isolated buildings, provided of course that they are properly designed and built."

Constantinou and Whittaker, both faculty members in the School of Engineering and Applied Sciences, stress it is far too early to make any definitive determinations as to what caused structures in Türkiye and Syria to collapse, and that the reasons for building-specific failures may never be known because of the scale of the damage.

They add that making each nation's infrastructure more earthquake-resistant will not be easy, as the cost of retrofitting existing buildings to better withstand powerful earthquakes may cost as much as replacing them.

"Unfortunately, there are no simple, inexpensive solutions," says Whittaker. ♦

Cory Nealon is director of news content for University Communications.

UB SELECTED TO HOST ZIMBABWE FACULTY DEVELOPMENT PROGRAM

The University at Buffalo has been selected to be the United States host for the Zimbabwe Emerging Faculty Development Program (ZEFDP). Through a grant funded by the U.S. Department of State to the Institute of International Education, the program will bring nine faculty from different universities in Zimbabwe to UB for 6 weeks beginning in early June 2023. The theme areas include biomedical research, pharmacy, university administration, public health, and sustainable development.

The ZEFDP faculty include: Dr. Annabel Banda, Gwanda State University (Tropical Entomology), Ms. Winnet Enerita Chipato Harare Institute of Technology (Biomedical Sciences/Microbiology and Molecular biology, Mr. Prosper Denhere, Manicaland State University of Applied Science (Health Information Systems), Mr. Gregory Dowo, Midlands State University (Botanical Sciences), Dr. Rutendo Gutsire, University of Zimbabwe (Immunology, Investigative Sciences), Mrs. Leah Kashiri, University of Zimbabwe (Clinical Scientist- Medical Microbiology, Molecular biologist and Ecologist), Ms. Celia Moffat Joel Matyanga, University of Zimbabwe (Pharmacy), Miss Nyasha Mukonowenzou, National University of Science and Tech (Physiology), Mr. Tawanda Tinago, Chinhoyi University of Technology (Molecular ecology/ Conservation genetics).

UB's Center for Integrated Global Biomedical Sciences (CIGBS), in the School of Pharmacy and Pharmaceutical Sciences, will develop the curriculum, plan for mentored training, develop micro-credentials and organize a post-training project that each faculty member will complete when they return to Zimbabwe.

"This is a great opportunity to build on our 25-year capacity building collaboration with the University of Zimbabwe funded primarily by the Fogarty International Center at the National Institutes of Health," said Dr. Gene Morse, CIGBS director and SUNY Distinguished Professor Gene

Morse. Along with Professor Charles Maponga of the University of Zimbabwe, Morse is working to develop a new national university network in Zimbabwe. "This program will enable the initial group of emerging faculty, representing seven Zimbabwean universities, to contribute to the initiative and hit the ground running upon return to Zimbabwe," said Professor Charles Maponga, a co-investigator on the Zimbabwe Emerging Faculty Development Program.

Additional innovative aspects of the project include contributions from Professor Gina Prescott, Director, Global and Community Outreach in the School of Pharmacy and Pharmaceutical Sciences, Dr. Dorothy Siaw-Asamoah with a focus on sustainable development and workforce planning through the Global Leadership Program in the UB School of Management, novel experiential learning led by Dr. Mara Huber, Associate Dean for Undergraduate Research and Experiential Learning and Director of the UB Experiential Learning Network, and collaboration with local refugee programs with the International Institute of Buffalo.

"We value our longstanding partnership with the Institute of International Education and welcome the opportunity to collaborate with IIE and our colleagues in Zimbabwe on this important initiative, providing mutual benefit to Zimbabwean universities and the UB projects with which they are involved," said Nojin Kwak, Vice Provost for International Education.

The Planning Committee members are Gina Prescott (Pharmacy Practice), James Mohler (Roswell Park Comprehensive Cancer Center), Matt Entice (Buffalo Niagara Medical Campus), David Holmes (Medicine) John Wood (International Education), Dorothy Siaw-Asamoah (School of Management), Mara Huber (Undergraduate Education) and Trevor Poag, Sam Gavi (CIGBS). ♦



Buffalo Bhangra student group performing at the ARI opening celebration (Douglas Levere)

OIE RESEARCH GRANTS PROGRAM HAS EXCELLENT RESPONSE

Since launching in spring 2022, the new Office of International Education Research Grants program has seen an excellent response from the campus, with a total of 92 applications across all seven grant categories, with the Faculty Grants in Global and International Research having the most—41 applications overall. Award selections have been the responsibility of a faculty selection committee chaired by Professor Janina Brutt-Griffler, Department of Learning and Instruction.

A total of 46 grants were funded in the first three cycles (spring 2022, fall 2022 and spring 2023), with the most awards in the Rapid Grants for Global and International Research category (14) to support urgent short-term needs.

Overall, nearly \$223,000 in grant funding has been awarded to faculty and graduate students through this program so far. The following are examples of the impactful global and international projects funded through the OIE Grants program, drawn from awardees' reports on their grant activities.

Associate Professor Fund in Global and International Research

Professor Katarzyna Kordas, Department of Epidemiology and Environmental Health: "Diet as a source of heavy metal exposure in low-income children, a case study in Uruguay"

The aim of this grant is to help advance the global and international research program of associate professors planning for promotion to full professor. Priority is given to those who are in their 3rd or 4th year in the rank, or tenure-track associate professors whose application is timed in such a way that it will have the biggest impact on the major research that will be presented during the process for promotion to full professor.

With the help of funding from the Office for International Education, my colleagues from the Catholic University of Uruguay and I have set out to measure toxic elements in foods typically consumed by children in Montevideo Uruguay, a city where I have worked for over 16 years. Notably, this would be the first of its kind study on food contaminants in Uruguay.

The water and soil used to grow our food may contain toxic metals like cadmium and lead or metalloids like arsenic and mercury (referred to here as "heavy metals") from natural sources, industrial activity, or large-scale farming. Such contamination could have consequences for food security, which encompasses access to sufficient, safe, and nutritious foods to support human health.

Across the globe, people consume foods contaminated with heavy metals that should not be part of a safe food system. These heavy metals in foods are also reflected in body tissues, including blood or urine, across population groups, but most critically, in children. Young children are

uniquely vulnerable to heavy metals, due to their relatively high consumption per body weight and rapid growth. Young children are also thought to absorb a higher proportion of the metals they ingest than adults and may have poorly developed mechanisms for the elimination or detoxification of heavy metals.

Following the Food and Agriculture Organization's guidelines for a Total Diet Study, we first compiled a list of foods/food groups frequently consumed by Uruguayan children. We identified the top 125 foods, by frequency and amount of consumption; then through a consensus process, we developed a list of individual items and brands that should be included in our study.

In a pilot phase that took place in December 2022, we purchased and prepared samples of 20 different food groups, including breads, cereals, rice. The samples were analyzed via inductively coupled plasma emission spectroscopy (ICP-ES) at the Robert Holley Center for Agriculture and Health at Cornell University.

This pilot pointed to the need for use of more sensitive methods (inductively coupled plasma mass spectroscopy, ICP-MS) for the quantification of heavy metals in foods, which is currently underway. In the meantime, our team is preparing to purchase and process the next batch of foods that will include fruits and vegetables. This exciting work will allow us to estimate the level of dietary exposure to heavy metals; which is the first step to understanding the potential health effects.

Seed Grant in Global and International Research

Professor Deborah L. Chung, Department of Mechanical and Aerospace Engineering: "Building energy conservation through innovative weight-based occupancy monitoring"

This grant provides seed funding for research projects that will qualify for larger external grants. Professor Chung's project involves structural self-sensing, which refers to the structural material sensing itself without sensor incorporation.

The proposed work is aimed at addressing the frontiers of science through (i) laying the interdisciplinary scientific foundation of capacitance-based and inductance-capacitance-based structural self-sensing in a broad range of structural materials that include conductors and nonconductors (namely carbon/glass fiber composites, cement/concrete, asphalt, steel and aluminum, all without poling), and (ii) investigating the feasibility and methodology of the sensing of strain/stress, temperature and damage in applications that pertain to the building, transportation, energy and border security sectors world-wide.

AC/DC polarization, piezopermittivity (not piezoelectricity), pyropermittivity (not pyroelectric) and flexure/undulation-induced inductance affecting the capacitance will

OIE GRANTS

continued from page 11

be studied and assimilated for formulating the emerging science of capacitance-based self-sensing (which differs from the well-studied resistance-based self-sensing, which is limited to conductors) and of the dielectric behavior of conductors (which differs from the well-studied dielectric behavior of nonconductors).

In addition, the formulated science will be applied to promote urgently needed national border security, transportation safety, building/school security, oil-spill prevention, and wind-turbine damage monitoring.

Sensor material design/development/processing, material/structure design for structural self-sensing, and capacitive energy storage are outside the scope.

The proposed research is within NSF's purview and cannot be supported by existing NSF programs or multidisciplinary initiatives. Convergence research beyond the project will be sustained by follow-on funding and consortium formation.

The seed grant funded preparatory work for an application to the National Science Foundation for a pending \$3.6 million, 5-year (2023-2028) grant for the project, "Convergence structural self-sensing science and technology for wide societal impacts in buildings, transportation, energy, and border security."

Graduate Student Research Community (GSRC) Grant

Surabhi Pant, Department of Sociology, Student Coordinator: "International Critical Ecology Lab"

The GSRC grant supports graduate-level student groups involved in activities that facilitate greater understanding of important international and global topics. Through the GSRC grant support, International Critical Ecology Lab, based in the Department of Sociology, has fostered an intellectual, engaging, and dedicated community of graduate students in multiple departments working on contemporary global environmental issues.

Together the group has, over the last year, held several reading and dissertation writing sessions; invited faculty from UB Critical Research Collaborative for student research workshops; and invited three speakers from different disciplinary backgrounds.

The Dissertation Reading and Writing sessions were able to create a stimulating co-working environment wherein participants were motivated to set and achieve research and writing goals through a lively and productive intellectual interchange. Various research paradigms were discussed and the writing sessions were structured to make progress on participants' individual work.

In the Student Workshops, faculty were invited from the UB Critical Ecology Research Collaborative - to offer critical feedback on graduate students' work-in-progress, as well

as academic mentorship that created a mutually beneficial professional community around Critical Ecologies.

These workshops provided consistency and continuity in graduate student research, writing, publication, and presentation. Grad students were able successfully finish two dissertation proposal defenses, three dissertation chapters, and one publication and one manuscript ready to be submitted for publication in a peer-review journal.

Three professors from across the US who work on issues related to global critical ecologies were invited: Prof. Matthew Huber, Syracuse University in Fall 2022; in Spring 2023, Prof. Hannah Holleman, Amherst College, and Prof. Michael Levien, John Hopkins University.

Through graduate student meetings with the invited speakers, the group was able to get insights and inspirations for their work and build an intellectual network with scholars working in similar areas. These talks were open and free to all members of the UB community, and all three talks were well attended.

Global Research Scholar in Residence Grant

Professor Jasmina Tumbas, Department of Global Gender and Sexuality Studies: "Queer and Feminist Yugoslav Diaspora: Art, Film, and Activism"

This grant enables UB faculty to host collaborators in global and international research from both the US and abroad for short-term visits for the purpose of advancing and sharing their joint research. In this instance, Dr. Dijana Jelača of Brooklyn College in New York was a Global Research Scholar in Residence from April 23 – April 28, 2023, at the invitation of Professor Tumbas.

During this period, Jelača was a keynote speaker for a four-day hybrid symposium, titled "Queer and Feminist Yugoslav Diaspora: Art, Film, and Activism, which ran from April 24 through April 27, and included a keynote lecture and masterclass on "Queer and Feminist Yugoslav Diaspora in Film" by Jelača, along with multiple panels and film screenings, a book launch, as well as an in-person performance.

Among the scholars participating remotely were Dr. Bojan Bilić of the University of Vienna and Dr. Aleksa Milanović of the Faculty of Media and Communications, University of Belgrade. The film screenings at Hallwalls Contemporary Art Center in Buffalo included "Logbook Serbistan" (2015) by Želimir Žilnik, and "Landscapes of Resistance" (2021) by Marta Popivoda.

Jelača's residency at UB allowed organizers to design a groundbreaking symposium that brought together scholars, artists, film directors, students and activists who work from within the context of the Yugoslav diaspora for the very first time in North America. There was a large turnout, both on zoom and in person. Participants developed new scholarship and collaborative frameworks with one another, and with other scholars and artists. ♦

FULBRIGHT GRANTS AWARDED TO SIX UB STUDENTS AND ALUMNI

By Charles Anzalone

Six University at Buffalo students and alumni have won Fulbright awards, the prestigious national scholarship competition for grants to study, research and teach abroad.

"UB's success in the Fulbright is both a testament to our growing international orientation as a university and an integral part of our development into a Top 25 public university," says UB's Fulbright program advisor Patrick McDevitt, PhD, associate professor of history in the College of Arts and Sciences.



L to r: Jane Halfhill, Emma Correia, Alivia Smeltzer-Darling, Grace Van Vessem and Fiona Pratt-MacDonald; not pictured: Caleb Walcott (Meredith Forrest Kulwicki)

"Whether it is studying how to better predict volcanic eruptions in Italy, researching better methods for evaluating the effects of climate change on the Greenland ice sheet with world experts in Austria, or teaching English in Andorra, Slovakia, Spain or Taiwan, UB's Fulbrighters are actively working to create a better and more integrated world," McDevitt says. "We couldn't be prouder of them."

The Fulbright recipients:

Grace Van Vessem of Buffalo. A graduating senior, Honors College member and Presidential Scholar, Van Vessem received an English Teaching Assistant (ETA) Award to the Slovak Republic. Van Vessem majored in public health and minored in environmental studies, and has wide experience working with non-native English speakers. Her motivation for pursuing the award in Slovakia is as much personal as academic: Her mother's family roots are in Slovakia. Van Vessem's future goals include going to law school to prepare for a career in public health and environmental policy.

Oress (Fiona) Pratt-MacDonald of East Amherst. A 2022 sociology graduate of UB, Pratt-MacDonald received an ETA Award to Taiwan. She is a member of Phi Beta Kappa and an alumna of the Honors College's Advanced Hon-

ors Program. Pratt-MacDonald works as an AmeriCorps volunteer in Buffalo. Upon completion of her Fulbright year, Pratt-MacDonald hopes to earn a PhD in sociology and pursue a career in academia.

Alivia Smeltzer-Darling of Buffalo. A 2021 graduate of UB, Smeltzer-Darling received an ETA Award to Spain. She double-majored in Spanish and health and human services at UB, with minors in education and psychology. A member of the Honors College, Smeltzer-Darling served as a teaching assistant for the Honors Colloquium.

She is currently a senior program specialist at Erie Niagara Area Health Education and is pursuing an advanced certificate in public health at UB. After completing her Fulbright grant, Smeltzer-Darling plans to pursue a master's degree in elementary education and earn certification to teach in New York State. Her ultimate career goal is to become a leader in the field of educational nonprofits.

Emma Correia of Newark, N.Y. A graduating senior, Correia received an English Teaching Assistant Award to Andorra. Correia will graduate with a double major in Spanish and linguistics, and a minor in education. A member of the Honors College, Correia was a teacher's assistant at UB. Her long-term plans include pursuing graduate work in linguistics and higher education, with a particular focus on bilingualism.

Jane Halfhill of San Antonio, Texas. A master's student in geology, Halfhill received a research grant to Italy, where she will create a set of numerical models of phreatic eruptions at the primary vent of Vulcano in the Aeolian Islands. She will work at the Istituto Nazionale di Geofisica e Vulcanologia in Pisa, Italy, where she will work with fellow researchers specializing in computational models to better understand when eruptions occur. Halfhill earned a Bachelor's of Science from Arizona State University, and would like to pursue a PhD in geology and work for the United States Geological Survey (USGS).

Caleb Walcott of Portland, Oregon. A doctoral student in the Department of Geology, Walcott received a research grant for study in Austria. He will work with Michael Meyer and his team at the University of Innsbruck to conduct research of the Greenland Ice Sheet using a novel geologic technique known as luminescence rock surface exposure dating. Walcott earned bachelor's degrees in German and geology from Middlebury College. His work in Austria will form the basis of his dissertation, under adviser Jason Briner, professor of geology.

Three UB students were selected as alternates: Russel Bassarath, a history and social studies education major who is an alternate for an ETA Award to Cyprus; Leah Cabarga, a UB Teach English/English education major and alternate for an ETA Award to Montenegro; and Kaitlyn Flynn, a global affairs major with a Korean language minor, who is an alternate for an ETA Award to South Korea. ♦

FACULTY FULBRIGHT RESEARCH TO IMPROVE EDUCATIONAL EQUITY IN ASIA

GSE faculty member and former dean Jaekyung Lee received a 2020-21 Fulbright Global Scholar Award, one of the most competitive research awards from the prestigious, world renown Fulbright U.S. Scholar Program.

For his Fulbright work, Lee, a professor in the Department of Counseling, School and Educational Psychology, has traveled to South Korea (2021), Vietnam (2022) and Kazakhstan (forthcoming 2023) to investigate educational equity and engage in collaborations and trainings with international universities and think tanks.

The Fulbright program, coordinated by the U.S. Department of State, is devoted to improving intercultural relations, diplomacy and competence between the people of the U.S. and other nations through educational exchange.

Fulbright alumni have become heads of state, judges, ambassadors, cabinet ministers, CEOs and university presidents. They include 60 Nobel Laureates, 86 Pulitzer Prize winners and 74 MacArthur Fellows, as well as leading journalists, artists, scientists and teachers.

Lee, an internationally recognized leader in education policy and equity, and international and comparative education, examines how well public schools in Asia provide safe, supportive learning environments for vulnerable students to overcome adversity and succeed.

Amid rapid economic growth and widening social inequalities, developing nations in Asia are faced with the challenge of providing equitable education for all students, particularly high-risk populations such as female, rural, low-income, immigrant and refugee children.

Lee explores transformative educational policies that close academic achievement and socioemotional well-being gaps for vulnerable students by analyzing international datasets, conducting in-depth case studies, interviewing education policymakers and practitioners, and visiting schools with innovative and inclusive child development programs.

“What lessons can developing nations in Asia, such as Vietnam and Kazakhstan, learn from South Korea? While Korea was a war-torn society, held back by very low literacy levels in the early 1950s, today its young people achieve the highest level of education,” Lee said.

During his visit to Korea, Lee visited many local schools and worked with two hosts: Korea Education Development Institute (KEDI) and Yonsei University.

In spite of the past success, he finds many problems and challenges with South Korea’s current education system and society: overreliance on standardized curriculum, excessive private tutoring for college entrance exam, students’ well-being problems such as poor self-esteem,

identity and sense of belonging. While there are ongoing reform efforts in Korea to promote more student-centered and career-oriented education, more systematic government support for high-need populations such as low-income families, refugees, and immigrants are crucial to ensure equity.

During his visit, Lee has delivered special “dream lecture” for Korean middle and high school students for career guidance (see picture 1). It emphasized the need for students to look beyond the boundaries of “here and now”, that is, the development of future-looking and global mindsets, with 21st century competencies and skills in preparation for new industrial revolution and globalization forces.

During his visit to Vietnam, Lee worked with two hosts: Vietnam National Institute of Education Sciences (VNIES) and Mekong Development Research Institute (MDRI). He delivered lectures and workshops for professional development (see picture 2).

He also visited local K-12 schools and met with educators. The interviews and observations revealed that Vietnamese education is currently in transition to embrace more modern educational methods and technologies, including student-centered and competency-based education along with digital transformation across the nation.

Educators in Vietnam were generally positive about those government-driven changes over the past 10 years that helped improve more universal access to public education.

However, Vietnamese educators also felt that much more needs to be done to improve educational quality and equity, expressing concerns about the issue of educational inequalities, between urban and rural areas and between ethnic majority and minority groups. This issue of inequality became more salient during the COVID-19 pandemic period.

“By pursuing more effective and equitable policy interventions, I hope my Fulbright study can help improve educational opportunities and realize career dreams for disadvantaged children and youth across the region,” he said. He recalls that during one of his elementary school visit, children wrote down their dream in English on handmade paper airplane, like “I want to be a doctor” “I want to make a robot”.

How can schools help realize all children’s dreams, whether it is Korean dream or Vietnamese dream? “My ultimate goal is to inform global education policy initiatives, such as the United Nations Sustainable Development Goal (SDG) on Education, to ensure inclusive and equitable quality education for all.” ♦

UB SENIOR AWARDED A PRESTIGIOUS MARSHALL SCHOLARSHIP

By Barbara Branning

A senior psychology and sociology major from UB has been awarded a 2023 Marshall Scholarship by the British government.

Alexis Harrell, a racial justice researcher and artist, is one of 40 students chosen nationwide to receive the award from more than 900 applicants.

Marshall Scholarship recipients are considered among the most accomplished undergraduate students and recent graduates in the United States. Scholarship recipients study an academic subject of their choice for up to three years at a university in the United Kingdom.

The 2023 winners will begin graduate studies at 21 universities in September 2023.



Alexis Harrell during her Humanity in Action Fellowship in Warsaw

“As the number of awardees indicate, the Marshall Scholarship is among the most selective postgraduate honors a student can receive,” President Satish K. Tripathi said.

“I am so proud of Alexis for being selected for this prestigious distinction, as she embodies UB’s mission of excellence in everything she does. Through her innovative work on social and racial justice, she is demonstrating her commitment to our university’s most cherished values.

“As Alexis looks toward her studies abroad, we look forward to seeing how UB’s newest Marshall Scholar takes her research and creative endeavors to the next level and makes her mark on the world.”

Harrell plans to pursue a MS in “Narrative Futures: Art, Data, Society” at the University of Edinburgh, and a master’s in an art-related field at Goldsmiths, University of London. The Albany native said her interdisciplinary program of study will focus on how narratives shape social, political and economic worlds, and how stories can be used to forge new futures.

“My research centers on achieving narrative justice for Black communities through visual mediums,” she said. “I am very interested in how Black experiences are displayed in various forms of narrative, such as literature, visual me-

dia, music, video games and so forth, and how those narratives can advantage or disadvantage Black communities.”

In Edinburgh, she will learn how narratives are being transformed in artistic domains like creative writing and design, in social life and through emerging technology like artificial intelligence, she said. “Narrative/storytelling is a core component to all spheres of life but is not always recognized as such, and it is often the most discreet forces that can cause a large impact on society,” she said.

“Therefore, I am eager to learn more about the pervasiveness of narrative and how to build a better future through creating and sharing ethical stories.”

Harrell said she plans to immerse herself in diverse cultures in the U.K. to expand her worldview and document examples of cultural diversity through photography and film. She will travel to various artistic hubs to learn more about using art as a form of activism.

In the future, Harrell said she would like to work as a visual artist using photography, design and film to highlight the diversity of Black experiences through activist-driven projects. “I would also love to start a non-profit organization dedicated to social justice education through artwork — conducting research on the art-activism connection, running multimedia workshops and collaborating with global artists to help reduce prejudice and promote understanding within society,” she said.

Harrell is a Presidential Scholar and a McNair Scholar at UB. She was the first UB undergraduate to receive an international Humanity in Action Fellowship. She served as president and research director of the UB Society and Computing Club, and was a programs coordinator for Gi-Gi’s Playhouse Buffalo, a Down syndrome achievement center.

The Marshall Scholarship Program is named for U.S. Secretary of State George C. Marshall. The program began in 1953 to thank the people of the United States for the assistance that the U.K. received after World War II under the Marshall Plan. Previous scholarship recipients include university presidents, Pulitzer-Prize winners, MacArthur fellows, Academy-Award nominees, U.S. Supreme Court justices, a Nobel laureate and a NASA astronaut.

“Marshall Scholars continue to embody the spirit of the scholarship’s namesake in their commitment to making the world a better place.” said John Raine, chair of the Marshall Aid Commemoration Commission. The Marshall Scholarship Program is principally funded by the British government, with additional support from British academic institutions, the Association of Marshall Scholars and the British Schools & Universities Foundation. ♦

Barbara Branning is a member of the media relations team in University Communications.

AFGHAN STUDENT'S DREAM OF SERVICE

By Archana Mohan

Freshta Masoud arrived at JFK International Airport with a determined, but wavering hope for a better life. She barely spoke English. Her parents and five siblings were the only familiar faces in the teeming crowd. Masoud knew then her life had changed.

That was five years ago.

Today's Masoud is a far cry from the ninth-grader navigating TSA checkpoints for the first time. She is now a sophomore in UB's biomedical sciences honors program and a pre-med student.

And from distributing boxed foods as a teen to dragging carts at care centers, she has offered a part of herself to her community. She continues that work at UB, currently sitting on the boards of two influential organizations on campus: the Honors Student Council and Muslim Students Association.

Plucked from her home country at a young age, she hopes to make change in a world that hasn't been kind to its womankind.

"There are moments in life when your life completely turns upside down," says Masoud. "Coming to the U.S. was that for me."

She was born and raised in Afghanistan as part of a large family in Kabul. Even as the streets scented in oud and mouthwatering bolanis called to her, young Masoud remained indoors for most of her childhood.

"I spent a lot of my childhood playing in our backyard," Masoud recalls. "My mom wouldn't allow us to go outside, since it was not safe. I spent almost my entire life in that family house in Kabul. I loved it there."

Masoud knew that all of her dreams could never be realized once the school doors were permanently shut for young girls. She went to an all-female private school in Kabul, an institution whose existence attracted the ire of the militant Taliban.

"At first, we took the bus to school," says Masoud. "Since our school was threatened by the Taliban many times, my dad decided to have a driver for us. It was a bit safer. The situation was getting worse and worse, as different schools across the city were being attacked. We would go to school not knowing if we would return alive."

When peace became scarce, the Masoud family took off from Kabul, leaving behind the city where poet Tabrizi envisioned "a thousand splendid suns" behind its walls, and where girls' pursuits of knowledge were shattered at the hands of its despot.

The Masoud family moved to Rochester in March 2017 with the help of No One Left Behind, a veteran service organization. It wasn't easy for Freshta to adapt to the new land.

"It was very difficult at first," she says. "Back in Afghanistan, I was top of my class. Here, I didn't speak the language and couldn't even understand my teachers."

Despite the barriers, Masoud did not give up.

"I remember doing different things just to be able to speak English," she explains. "I would read so many books, watch YouTube videos and try different things."

Within a year, she had mastered the foreign language and ended up in the top ranks of her high school.

Masoud joined the first-year class at UB in fall 2021. She had been interested in community service even before she started at the university, helping transport patients at Unity Hospital in Rochester and distributing boxed foods through Foodlink while still in high school.

But it was at UB where she learned to carve a path for her

enduring dream to be a humanitarian.

She interned at Luna Medical Care in the UB Commons, learning how to take patients' vitals and perform clinical testing. Along with other UB students, she traveled to Peru last month to assist with outreach clinics run by the global health organization VAW. Her bio reaches beyond biomedical sciences. She serves as director of community service for the Honors Student Council, organizing service trips and crafting events for honors scholars.

"Freshta is spectacular," says Darius Melvin, assistant director of the Honors College. "I sincerely believe she has the temperament, intellect and vision to be an incredible leader." Her persistent efforts to navigate life in the U.S., her abiding faith and her goal of becoming a doctor come together to complete Masoud's objective to serve this world.

"My personal goal is to get my education done here and go work in another country in the global south, like Syria or Yemen. Even Afghanistan, if it is possible. All the opportunities I have today are merely dreams for the women back home," she says. "I want to do whatever I can with the position I will have one day." ♦



Freshta Masoud with women in Peru

Archana Mohan is an MS student in Finance.

FORMER UB INTERNATIONAL STUDENT NAMED DEAN OF DENTAL MEDICINE

By Bert Gambini

Marcelo W.B. Araujo, an internationally recognized clinical researcher and epidemiologist who currently serves as chief science officer of the American Dental Association (ADA) and chief executive officer of the ADA Science & Research Institute (ADASRI), has been appointed dean of the School of Dental Medicine.

The appointment, effective May 15, 2023, was heralded by A. Scott Weber, provost and executive vice president for academic affairs, and Allison Brashear, vice president for health sciences and dean of the Jacobs School of Medicine and Biomedical Sciences, after an extensive international search that yielded a pool of highly qualified candidates.

"A widely respected leader in his field, Dr. Araujo has an approach to innovative dental education, impactful research, dedicated community engagement and outstanding patient care that will take our School of Dental Medicine to new heights of excellence," said President Satish K. Tripathi.

"Dr. Araujo brings to this role impressive leadership experience, an extensive network in scientific and clinical dental research, a deep understanding of the challenges and opportunities in the field of dental medicine, and a strong vision for expanding the impact of the school," said Weber and Brashear. "He has been at the forefront of emerging scientific issues affecting oral health, dental practice, patient care, and health programs nationally and globally."

Araujo succeeds Stefan Ruhl, who has served as interim dean of the dental school since December 2021.

Weber and Brashear noted that Araujo has a broad knowledge and extensive experience in clinical research, medical and scientific affairs. He has a strong commitment to improving oral health globally through research and public health policy.

Araujo joined the ADA in 2015 as vice president of its Science Institute and was named the ADASRI's chief science officer and chief executive officer in 2019. He has provided strategic leadership for the ADA's research enterprise, developing collaborative opportunities for the ADA's key scientific initiatives, increasing grant funding and enhancing the ADASRI's impact.

Araujo earned his PhD in epidemiology and community health, and a master's degree in oral sciences from UB, where he also completed a fellowship in periodontology research and teaching. He received his DDS and a certifi-

cate in periodontology from Universidade Gama Filho in Rio de Janeiro, Brazil.

Araujo previously held faculty appointments in both UB's School of Dental Medicine and the School of Public Health and Health Professions. He says his appointment is both a career achievement and a homecoming.

"Coming back to UB is an opportunity to give back to the university, the school and the community that provided me with an excellent education and great friends," said Araujo.

"The face of dentistry has changed in the last decade, and we need to make certain that our school will continue to lead into the future," he added. "As UB moves toward becoming one of the top 25 public universities in the nation, our

job is to ensure that the School of Dental Medicine continues to excel in its mission by graduating exceptional dental professionals and excelling in dental research."

Araujo is an active clinical researcher who has published extensively on impactful issues in dental medicine. He has more than 25 years of experience in clinical practice, academia, regulatory and medical affairs. His current work focuses on developing guidelines for antibiotic prescriptions for dentists and periodontists, and is supported by the National Institutes of Health.

He is a member and upcoming chair of the American Association for Dental Oral and Craniofacial Research's ethics in dental research committee, and he serves on the medical advisory board for the HPV Alliance.

He received the International Association for Dental Research and American Association for Dental Research William J. Gies Award for clinical research, the International Distinguished Alumnus Award from the UB Alumni Association, and is an honorary member of the American Academy of Periodontology.

Weber and Brashear thanked the search committee members and Gary Pollack, dean of the School of Pharmacy and Pharmaceutical Sciences, who chaired the committee. "We would also like to thank interim dean Stefan Ruhl for his leadership and stewardship of the School of Dental Medicine during the transitional period," they said. ♦

Bert Gambini is a news content manager for University Communications.



HISTORIC FACULTY HIRING PRESENTS UNIQUE OPPORTUNITY FOR UB

By Jay Rey

UB is embarking on its largest faculty-hiring initiative in recent history, with plans to hire upward of 200 full-time faculty over the next two years.

The initiative, “Advancing Top-25: Faculty Hiring,” is considered transformative for UB, with university leaders calling it an unprecedented opportunity to move the university forward by growing its faculty base.

“This is a very exciting time to be at the University at Buffalo,” says President Satish K. Tripathi.

“We now have the opportunity to enhance the depth and breadth of our academic and research programs. We are excited to recruit and hire faculty to add to our highly engaged and collaborative community of scholars. With these new faculty hires, UB will further broaden our impact locally, nationally and globally.”

“We’re recruiting emerging and established scholars who will deliver groundbreaking research and provide students with extraordinary educational experiences,” says Provost A. Scott Weber. “In doing so, we are advancing President Tripathi’s vision of being recognized among the Top 25 public research universities in the nation.”

The university’s Top-25 Ambition, announced by 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, including recently securing a \$20 million grant from the National Science Foundation to create the AI Institute for Exceptional Education. This is one of the most prestigious and competitive research grants UB has received in its history. In addition, UB faculty have increasingly received the most select scholarly honors in their fields, and the university is nearing completion of the most ambitious fundraising campaign in its history.

UB is poised to build on those achievements by hiring additional talented faculty and supporting their success at

the university. Faculty hiring on this scale hasn’t happened at UB since the 1960s, when the university joined the SUNY system, Weber notes.

Of the 200 tenure-track faculty to be hired at UB over a two-year period, about half will be new faculty added to the ranks in four key interdisciplinary areas addressing issues of global importance: democracy and society, human health, sustainability, and transformational technology.

While all are areas of strength for the university, these broader themes signal to peer institutions and potential candidates that UB is growing its faculty in critical fields. Additionally, UB is committed to doubling the number of faculty from historically underrepresented backgrounds between 2020 and 2025, Weber says.

A member of the prestigious Association of American Universities (AAU) and the largest, most comprehensive public research university in SUNY, the university is able to attract faculty candidates because of the breadth of its research, service and academic mission.

UB offers exciting opportunities for new faculty through its Top 25 ambition; its commitment to academic freedom and diversity, equity and inclusion; its culture of collaborative, cross-disciplinary research; and its deep engagement in the region’s well-being.

The Buffalo area, with its strong sense of community, cultural and recreational offerings, and affordability, offers candidates an excellent environment in which to live, work and raise a family.

“This is a historic opportunity for the university to build on our strengths and enhance our impact,” Weber says. “I’ve never been more excited about the possibilities of our continent – to Western New York to New York State and to the rest of the world.” ♦

Jay Rey is a public affairs communications manager for University Communications.



Provost A. Scott Weber

GHANAIAN-BRITISH ARCHITECT AWARDED SUNY HONORARY DEGREE

By David J. Hill

Sir David Adjaye OM OBE, a champion for the role architecture and design can play in creating a more equitable world and lead designer of the Smithsonian National Museum of African American History and Culture in Washington, D.C., was awarded a SUNY Honorary Doctorate during a special presentation hosted by the University at Buffalo's School of Architecture and Planning.

"Through your innovative contributions to architecture and design, and your prolific scholarship on these subjects, you have distinguished yourself as a global leader in your profession and beyond," UB President Satish K. Tripathi said during the degree conferral presentation, which was held virtually due to Adjaye's schedule.

Renowned for his work in designing the Museum of African American History and Culture, as well as the Abrahamic Family House in Abu Dhabi, United Arab Emirates, and the Nobel Peace Center in Oslo, Norway, among other projects, Adjaye is the recipient of numerous accolades, including the prestigious Royal Institute of British Architects Royal Gold Medal.

The Ghanaian-British architect's work has "tremendously influenced" the field of architecture, Tripathi said, adding that it also serves as a source of great inspiration for UB students and faculty in architecture and planning.

"As an advocate for equity and inclusion, you embrace values our university holds dear," Tripathi said. "Moreover, in using your platform to promote these values, you are furthering a conversation that is of critical importance to us as a scholarly community as we seek to dismantle structural barriers to equity."

State University of New York Trustee and UB alumna Eunice Lewin conferred the honorary doctorate in humane letters to Adjaye on behalf of the SUNY system. The entire presentation is available on the School of Architecture and Planning's YouTube channel.

"I am deeply humbled by this honor," Adjaye said.

Adjaye is the first architect to receive this distinction since the School of Architecture and Planning was founded in SUNY more than 50 years ago, said Robert G. Shibley, SUNY Distinguished Professor and dean of UB's School of Architecture and Planning. (In 1962, UB awarded Japanese architect Kenzō Tange an Honorary Doctor of Fine Arts.)

"While his prestige as a designer is well known, he has used his voice to promote ideas that are nesting in significant ways with respect to anti-racism, equity and inclusion.

In the summer of 2020, Adjaye used his platform to call for the removal of monuments that are rooted in racist ideology and is helping to further the conversation on a national scale," Shibley said.

Following the degree conferral, Adjaye participated in a panel discussion with Shibley and Charles L. Davis II, a UB alumnus and former faculty member who is now an associate professor of architectural history and criticism in the University of Texas at Austin School of Architecture. Davis is known worldwide for his research on race in architecture, particularly the role of racial identity and race thinking in architectural history and contemporary design culture.

The conversation covered a range of topics centered on the role the fields of architecture and planning can play, especially within the academy, in breaking down barriers and addressing matters of social justice and equity.

A formative moment in Adjaye's childhood was when he realized the inequities that his brother Emmanuel – who was

partially paralyzed — faced when visiting his specialized school.

Adjaye noted how inefficient, run-down and degrading the actual facility was. During his university education at South Bank he began to think about designing a facility that would provide better care for disabled people, a moment he describes as changing everything. He came to the understanding that architecture should serve people and as a prevalent force within all our lives it too should take to the realm of egalitarianism.

"I saw within that experience of life how structurally inefficient the world was. That was a tipping point for me," he said, adding that those experiences opened his eyes to the indispensable role of research in the process of designing buildings.

"It just felt as though there simply was not enough information about other ways of looking at the world and other knowledge systems, and also facing head on some of the structural issues that were just baked into architecture."

Adjaye also shared his belief that the city is forever dynamic. "To understand it as a living dynamic system that continually has to be rebuilt is to then fully understand and embrace the idea that there is no fear of what has been done, but there is always a questioning that has to



David Adjaye by Pari Dukovic

C.R. RAO AWARDED INTERNATIONAL PRIZE IN STATISTICS

In music, there's Bruce Springsteen. Soccer has Pele and Mia Hamm. Tom Brady is considered the "greatest of all time" in the National Football League.

He won't quite fill an arena, but in the field of statistics, C.R. Rao is a rock star, considered the G.O.A.T. And recently, Rao added to his long list of awards by being named the recipient of the 2023 International Prize in Statistics, considered the Nobel Prize for the field.

Dubbed "a living legend" of statistics, Rao brought nine decades worth of knowledge to UB in 2010, when he was named a research professor in the Department of Biostatistics, School of Public Health and Health Professions.

"Dr. Rao's pioneering scholarship has transformed not only the theory and methods of statistics but has wide-ranging practical applications in areas ranging from risk analysis and weather prediction to medical diagnosis and genetics," says President Satish K. Tripathi, who himself holds two master's degrees in the discipline.

"He is a towering figure among statisticians, so it is only fitting that his genius be recognized with the most prestigious honor one can receive in the field. All of us at UB are delighted to see him receive this richly deserved recognition for contributions that have indelibly impacted statistical science over more than seven decades," Tripathi adds.

In announcing the award on April 1, the International Prize in Statistics noted that Rao's "work more than 75 years ago continues to exert a profound influence on science." It added: "In his remarkable 1945 paper published in the Bulletin of the Calcutta Mathematical Society, Caly-

ampudi Radhakrishna (C.R.) Rao demonstrated three fundamental results that paved the way for the modern field of statistics and provided statistical tools heavily used in science today."

The first result, known as the Cramer-Rao lower bound, provides a means for knowing when a method for estimating a quantity is as good as any method can be, the announcement notes. The second result, named the Rao-Blackwell Theorem, provides a means for transforming an estimate into an optimal one. Taken together, the two methods form the foundation on which much of statistics is built.

The insights from Rao's third result pioneered a new interdisciplinary field called "information geometry," which has recently been used in Higgs boson measurements at the Large Hadron Collider, as well as in recent research on radars and antennas, along with contributing significantly to advancements in artificial intelligence.

The International Prize in Statistics has been awarded every two years since 2017 and is stewarded and managed by a foundation comprising representatives of five major statistical organizations. "In awarding this prize, we celebrate the monumental work by C.R. Rao that not only revolutionized statistical thinking in its time, but also continues to exert enormous influence on human understanding of science across a wide spectrum of disciplines," says Guy Nason, chair of the International Prize in Statistics Foundation.

Rao will receive the award and its \$80,000 prize in July 2023 at the biennial International Statistical Institute World Statistics Congress in Ottawa. ♦



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happen," he said.

Architecture schools and the research their faculty and students conduct play a pivotal role in that questioning, which is central to the profession's renewed urgency to dismantle structural barriers to social justice and equity, Adjaye said.

"Research is a device, and it's amazing what the academy does," he said. "Research is the deep dive to re-analyze,

to rethink and also to evaluate, to conduct post-occupancy evaluations through the lens of history to test whether the propositions that were proposed in the built environment actually hold true and hold true for all citizens."

Adjaye's challenge to young architects and planners is to continue to ask questions that push the boundary of knowledge within these fields.

"It's not interesting to play in the arena that we know, but to keep expanding it," he said. ♦

David J. Hill is director of news content for University Communications.

COLLEAGUES MOURN PASSING OF STEVEN SHAW

Steven L. Shaw, associate vice provost and director of the Office of International Admissions, died May 2 at his Amherst home. He was 63.

A UB employee for more than 30 years, Shaw was considered by colleagues at UB and others in the international admissions field as a respected, knowledgeable and experienced professional who not only excelled as a practitioner, but who also trained and mentored fellow admission professionals — both from UB and other institutions — throughout his career.

“Steven was a diligent and meticulous individual, known for his thoughtfulness and strong work ethic,” says Joseph J. Hindrawan, associate vice provost for overseas programs and partnerships, and a longtime friend and colleague of Shaw’s. “He consistently exhibited great patience when communicating with prospective students and their parents, taking the time to listen and address their concerns. At education fairs, he was always the last university representative to pack up, ensuring that he answered all inquiries before leaving.

“Whenever I assigned a project to Steven,” Hindrawan says, “he approached it with utmost seriousness and always delivered a superb job. In addition to being an excellent colleague, he was also a close friend. His absence will be deeply felt.”

A native of San Francisco, Shaw grew up in Santa Rosa, Calif., and in Oregon. His first international travel experience was a trip to Switzerland as a young teenager for an international youth convention. His second experience was on a church mission trip to Africa as a high school student.

His interest in international education and exchange began after college, with a stint in the Peace Corps in Thailand from 1984-87, an experience that kindled a deep love for the Thai people, culture and language, and a passion for facilitating cross-cultural understanding. After the Peace Corps, he worked as a teacher of English and teacher trainer at Khon Kaen University in Thailand. He returned to the U.S. in 1990 to earn a master’s degree in TESOL at the University of Washington in Seattle.

He went back to Southeast Asia in 1992 as program coordinator for UB’s English Language Training Center at the Cambodia Development Resource Center in Phnom Penh, a position he held until 1994, despite challenging circumstances.

During this period, civil conflict in Cambodia and the ravages of war and genocide were still very evident. Con-

ditions worsened to the point that he had to return to the U.S. Back at UB, Shaw found another opportunity to work in Southeast Asia through the Office of International Education, serving as director of the UB American Studies Degree Program in Kuala Lumpur (KL), Malaysia, a program at Stamford College in KL that offered the first two years of a U.S. undergraduate degree for Malaysian scholarship students planning to transfer to U.S. institutions to complete their bachelor’s degrees.

In 1998, Shaw was named assistant director of international enrollment management, and a year later became UB’s first director of international admissions. As founding director and later associate vice provost, Shaw oversaw the creation, development and expansion of the Office of International Admissions, and by 2010, UB was among the top 10 U.S. institutions hosting international students.

That same year, Shaw was recognized for his contributions with a SUNY

Chancellor’s Award for Excellence in Professional Service.

Shaw shared his expertise with other international admissions professionals and international recruiters, conducting workshops and training sessions across the country. He served as a consultant to universities in the U.S. and was a regular presenter at national conferences of NAFSA: Association of International Educators, AIEA: Association of International Education Administrators, and AACRAO: American Association of Collegiate Registrars and Admissions Officers.

Outside his professional life, Shaw was an accomplished choralist, pianist and organist, who played at the weddings of family and friends, as well as professionally. He was an excellent student and avid reader. A loving son, Shaw traveled back to Oregon to care for his mother during an extended illness. He called and visited his father regularly, and always made an effort to return to Oregon for family reunions. UB colleagues and students praise him for his unfailing professionalism, kindness, integrity and dedication to his work.

A memorial service will be held this fall at a date to be determined. Donations in Shaw’s name may be made to the International Admission Program, New Century Circle, NAFSA: Association of International Educators, 1425 K St. NW, Suite 1200, Washington, D.C. 20005. ♦



RESIDUAL EMISSIONS CRITICAL TO FIGHTING CLIMATE CHANGE

By Mary Durlak

Humanity is not on track to avoid the deadliest effects of climate change, according to University at Buffalo researcher Holly Jean Buck. “Our plans are not adequate to meet the goal of limiting the earth’s temperature increase to no more than 1.5 degrees C by 2050,” said Buck, PhD, assistant professor of environment and sustainability.

She is the lead author of “Why residual emissions matter right now,” published recently in *Nature Climate Change*. Co-authors are Wim Carton, PhD, of Lund University in Sweden; Jens Friis Lund, PhD, of the University of Copenhagen in Denmark; and Nils Markusson, PhD, of Lancaster University in the United Kingdom.

“Residual emissions” are one obstacle to achieving the goal of net-zero greenhouse gas emissions. To limit the earth’s temperature increase, the United Nations’ panel of scientific advisors says that the world must reach net-zero greenhouse gas emissions this century. Greenhouse gas emissions are a major cause of the rise in temperature.

Residual emissions are those that remain after efforts to eliminate such emissions have been implemented. For example, even with a concerted effort to eliminate all emissions, industries such as agriculture and shipping are likely to continue releasing greenhouse gases into the atmosphere.

Residual emissions would need to be balanced by techniques that remove carbon dioxide from the atmosphere to meet net-zero goals — that is, any greenhouse gases entering the atmosphere are offset by those being removed.

Buck and collaborators argue that a better understanding of residual emissions is essential to achieving net-zero. According to countries’ long-term strategies, the average level of residual emissions by 2050 will be 18% of current emissions — an amount that cannot easily be offset by removing carbon.

They looked at long-term low-emission strategies submitted by 50 countries and found that only 28 even quantified the amount of residual emissions expected by 2050.

Because managing residual emissions is critical to achieving the goal, Buck and her colleagues have identified several steps they say are necessary to tackle the problem.

The first is to develop clear projections for the amount of residual emissions. The amount, the source, and the type of gas — carbon dioxide or other greenhouse gases — need to be identified so that appropriate offsetting strategies can be developed.

Such strategies include enhancing existing carbon sinks, which are anything that absorbs more carbon from the atmosphere than it releases. Naturally occurring carbon sinks include the ocean, forests and soil.

“We can enhance carbon sinks,” Buck said. “We can plant trees, we can conserve land, we can engineer carbon removal, but it’s not enough to bring us to net-zero by 2050 with these projections of residual emissions.”

Another issue relating to residual emissions includes detailing the approach to net-zero: is it a temporary target pending further reduction of emissions, or is it meant to be a fix requiring permanent offsetting?

Some carbon-emitting activities, such as aviation and shipping, are generally seen as truly hard to abate; other sources may be challenging for economic and political reasons, but technically feasible. Clarifying such issues establishes the groundwork for including residual emissions in strategies to achieve net zero by 2050.

What happens if the goal isn’t met?

“More frequent floods,” said Buck. “Devastating heat waves. Extreme economic damage from extreme weather. Agricultural production will be affected.”

While the article identifies significant challenges to reducing residual emissions, it identifies those challenges as opportunities for research and cooperation. “We hope to affect policy makers and non-government organizations that are working to achieve net zero,” said Buck.

“We can achieve it. I’m hopeful we will.” ♦

Mary Durlak is a media relations manager for University Communications.

RIGA STRADINS UNIVERSITY

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UB, specifically Engineering and Management have been cooperating for several decades with Riga University, facilitated in the early days by Dr. Mirzda Neiders, Professor Emeritus, Department of Oral Diagnostic Sciences and a native of Latvia.

Thanks to Dr. Neiders for her continued support, and to John Wood, Senior Associate Vice Provost for International Education, and Katrina Zepowitz, Executive Secretary to the Dean, for facilitating this visit. We hope for many meaningful exchanges. ♦

STUDY FINDS DRAMATIC CLIMATE IMPACTS ON SPECIES' HABITATS

By Vicky Santos

A new study led by a team of researchers, including UB's Adam Wilson, found that climate change will expose species to temperatures above those they have experienced over the past 150 years and may drastically reduce their available habitat.

Even a small environmental variation can lead to a large and abrupt change in the area that a species can persist. For example, if the temperature of a species' habitat rises too high, the species may only survive by moving to a new location, which can be impossible.

The study, published May 18, 2023 in *Nature Ecology & Evolution*, predicts when and where climate change is likely to expose species across the globe to potentially dangerous temperatures.

The authors – Wilson, Alex L. Pigot, University College London (UCL), Cory Merow, University of Connecticut, and Christopher H. Trisos, University of Cape Town – analysed data from over 35,000 species of animals (including mammals, amphibians, reptiles, birds, corals, fish, whales and plankton) and seagrasses from every continent and ocean basin, alongside climate projections running up to 2100.

They investigated when areas within each species' geographical range will cross a threshold of thermal exposure, defined as the first five consecutive years where temperatures consistently exceed the most extreme monthly temperature experienced by a species across its geographic range over recent history (1850-2014).

Once the thermal exposure threshold is crossed, the animal is not necessarily going to die out, but there is also no evidence that it can survive the higher temperatures due to climate change.

"The loss of biodiversity is concerning because it threatens the stability of ecosystems, disrupts essential ecological processes, and undermines the well-being of both human societies and the planet as a whole," said Wilson, PhD, an associate professor of geography in the UB College of Arts and Sciences.

The researchers found a consistent trend that for many animals, the thermal exposure threshold will be crossed for

much of their geographic range within the same decade.

Pigot (UCL Centre for Biodiversity & Environment Research, UCL Biosciences) is the lead author and said: "Our findings suggest that once we start to notice that a species is suffering under unfamiliar conditions, there may be very little time before most of its range becomes inhospitable, so it's important that we identify in advance which species may be at risk in coming decades."

While some animals may be able to survive these higher temperatures, many other animals will need to move to cooler regions or evolve to adapt, which they likely cannot do in such short timeframes.

"To minimize biodiversity loss due to climate change, it is crucial to implement effective conservation strategies, promote sustainable land and resource management practices, and reduce greenhouse gas emissions to mitigate the impacts of climate change on ecosystems," said Wilson, who also holds an appointment in the UB Department of Environment and Sustainability.

The researchers found that the extent of global warming makes a big difference: If the planet warms by 1.5°C, 15% of species they studied will be at risk of experiencing unfamiliarly hot temperatures across at least 30% of their existing geographic range in a single decade, but this doubles to 30% of species at 2.5°C of warming.

"Our study is yet another example of why we need to urgently reduce carbon emissions to mitigate the harmful effects climate change is having on animals and plants, and avoid a massive extinction crisis," Pigot said.

The researchers hope their study could help target conservation efforts, as their data provides an early warning system showing when and where particular animals are likely to be at risk.

The study was supported by the Royal Society, the Natural Environment Research Council, the National Science Foundation, the African Academy of Sciences and NASA. ♦

Vicky Santos is a news content manager for University Communications.

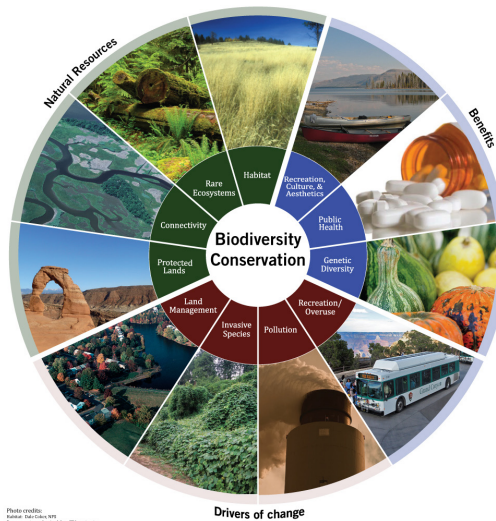


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INTERNATIONAL ACTIVITIES OF FACULTY AND STAFF

SCHOOL OF ARCHITECTURE AND PLANNING

Department of Architecture

Christopher Romano, assistant professor, conducted a 15-day winter study abroad seminar titled 'Stories of Sustainability' during Winter Session 2023 in Tanzania, East Africa. While in-country, the UB team collaborated with a diverse group of community partners that work toward the implementation of the UN Sustainable Development Goals (SDGs) to improve the life and well-being of the inhabitants of Tanzania. The program is co-directed by **Dan Nyaronga**, professor of psychology at Empire State College, along with in-country program assistance by Anna Nyaronga. The interdisciplinary team comprised of 12 undergraduate and graduate students from Architecture, Environmental Design, Engineering, Environment and Sustainability, Public Health, Geology, Psychology, and Biological Science. Upon returning from Tanzania, students synthesized their experience into a 2-minute story focused on 1 of the 17 SDGs which, as an example, explore how clean water and sanitation contributes to good health and well-being. The video work and commentary that emerged generates evidence of the student experience and has been utilized to earn a digital badge in 'Sustainability' through the Experiential Learning Network (ELN) Project Portal. The digital badge certification was directly integrated into the seminar and coordinated by **Mara Huber**, associate dean for undergraduate education and director of the ELN Program. Huber also served as program liaison between the UB team and NGO partner, Kennedy Mahili, executive director of Community LIFE Amelioration Organization (CLAO), an NGO based in Mwanza, Tanzania that focuses on the implementation of sustainable building technologies and community development. The collaboration with CLAO culminated with the construction of a 20,000-liter (5,300 gallon) rain-water collection tank at the Kabuhoro Secondary School which currently receives municipal water only once per week. Thus, the tank greatly improves water access for the students and teachers while serving as a demonstration prototype that be replicated throughout regions where water is scarce. It was constructed from approx. 1,000 Compressed-Earth-Blocks (CEBs) using small amounts of Portland Cement to stabilize the clay soil. The project was led by local masons with technical as well as hands-on assistance from our team. The strength analysis and recipe design for this low-carbon and inexpensive masonry technique is an active research project that Romano is leading under the moniker 'Soilworks'.

Department of Urban and Regional Planning

Annie Schentag, adjunct professor, has been named by the Society of Architectural Historians as a 2023 recipient of the H. Allen Brooks Travelling Fellowship. The fellowship enables emerging professionals to study by travel and contemplation with the goals of experiencing the built environment firsthand, thinking about their profession deeply, and acquiring knowledge useful to their future work and contributions to their field and society. During her fellowship, Schentag plans to visit Panama, Colombia, Bolivia, Argentina, and Uruguay, countries that are currently reframing their interpretations of the historic built environment through preservation, planning, and heritage practices. She designed her three-month itinerary in order to examine the intersection of preservation practices and urban reinvention in a transnational context, where she will view sites through the multiple lenses of architectural history, historic preservation, urban planning, and art history. Schentag will explore examples of locally designed modern and contemporary architecture in balance with their colonial and Indigenous manifestations. Through her travels, she hopes to develop a deeper understanding of the power and privilege entrusted in the task of preserving histories for a variety of marginalized communities. She will begin her fellowship in May 2023. The five countries have never been visited on the Brooks Fellowship, which begins to adjust a canonically disproportionate emphasis on European examples that her students often encounter in their coursework. She hopes that traveling on this itinerary can be an education in all these intertwined fields—historic preservation, urban planning, and art history. Schentag will document her fellowship journey through monthly posts on the SAH Blog that will include written narratives, photographs, video, drawings, and other media.

COLLEGE OF ARTS AND SCIENCES

Department of Anthropology

Edith Gonzalez, assistant professor of archaeology and the Critical Museum Studies MA Program, was keynote speaker at the Society for Caribbean

an Research virtual conference "WHOSE VOICE? Power, Knowledge and Positionality in Caribbean Studies," jointly hosted by Universidad Central de Las Villas, Cuba and Kunstuniversität Linz. She was an invited participant to the Islanders at the "Helm: Traditional Knowledge Solutions for present and future climate change adaptation and resilience in the Caribbean" Symposium held in Oranjestad, Aruba presenting the paper *SciComm for Community Self-advocacy: Centering Barbudan Voices*. This work was funded by a research grant from the Society of Antiquaries - London, and a fellowship from the Eccles Centre for American Studies @ the British Library. She has curated an exhibition component for Oxford University in England about her archival work on the West Indian Codrington Collection at the Bodleian Library. She was an invited participant at the Society for Historical Archaeology annual conference in Lisbon, Portugal, presenting her work, "Retire to the Country: Recent Research at the Highland House Site, Antigua and Barbuda," as part of the session "In Small Islands Forgotten: Insular Historical Archaeologies of a Globalizing World." She is continuing her work with the British Library in London, to create greater access and awareness of colonial records available to descendant communities and is a contributor to the edited volume *Barbuda: Changing Times Changing Tides*, newly released by Routledge. She is co-PI on a National Science Foundation IRES Track 1 research award and will be bringing graduate students to the island nation of Antigua & Barbuda to work on the project entitled, "At the Frontier of Big Climate, Disaster Capitalism, and Endangered Cultural Heritage."

Department of Art

Crystal Z Campbell, visiting associate professor of art and media study, was invited to premiere their short experimental film, REVOLVER, at the Berlinale Film Forum expanded. REVOLVER features an archive of pareidolia (a situation in which someone sees a pattern or image of something that does not exist) narrated by a descendant of Exodusters. The film will be part of the exhibition with other artists and filmmakers: Tamer El Said, Takahiko Iimura, Jasmina Metwaly, Tenzin Phuntsog, Walid Raad, and Eduardo Williams from February 16-26, 2023. REVOLVER will also be part of a group exhibition in Montréal, Québec (Canada) at SBC galerie d'art contemporain with Seth Cardinal Dodginghorse, Deanna Bowen, and Jenneen Frei Njootli from March 30-May 20, 2023.

Stephanie Rothenberg, professor, presented her paper co-authored with visiting assistant professor Suzanne Thorpe (Manhattan College) on the collaborative multimedia artwork "Tending Ostreidae: Serenades for Settling" at the 3rd FEMeeting: Women in Art, Science and Technology conference in Evora, Portugal on September 14, 2022. The artwork recently received a 2023 NYSCA/New York State Council on the Arts Support for Artists award in the category of Interdisciplinary art.

Department of Communicative Disorders and Sciences

In June 2023, **Ahmed Nagy**, clinical associate professor, is presenting a poster titled "Fundamental Frequency and Jitter Percent in MDVP and PRAAT" at the Voice Foundation Symposium, an international meeting held in Philadelphia, Pennsylvania featuring advanced programming presented by leading professionals in the voice care field.

Department of English

Rachel Ablow, professor, delivered the keynote address at the 2023 interdisciplinary conference, "Feeling in the Long Nineteenth Century," sponsored by the journal *Romanticism, Revolution, and Reform* and held at Trinity College, Cambridge University on Jan. 13-14, 2023. Her talk was entitled, "The Limits of Love: Skepticism at the End of the (Nineteenth-Century) World." Ablow then went on to Oxford University where she delivered a talk at Merton College on Jan. 16, 2023, entitled, "Revenge Tragedy: Harriet Martineau and the Haitian Revolution."

Department of Global Gender and Sexuality Studies

Elizabeth Otto, professor of modern and contemporary art history, delivered a keynote address titled "Gray Zones in Black and White: A 'Bauhaus' Photograph and the Holocaust" at the Bibliotheca Hertziana, Max Planck Institute for Art History in Rome, Italy, in March 2023, where she also co-convoked the week-long seminar "Archival Absences: An Incomplete History of Photography." "Bauhaus for Children: Art Therapy with Friedl Dicker-Brandeis, Johannes Itten, and Edith Kramer" was the title

of her February 2023 talk for the “Confabulations: Critical Perspectives on Art Therapy” roundtable, hosted online at the University of Lincoln in the UK. In December, she spoke on her current book project, “Bauhaus Under Nazism,” to directors from the International Association of Holocaust Organizations. In May, Otto will speak on “Das fehlende Archiv: Bauhaus-Designer:innen und der Holocaust” [The Missing Archive: Bauhaus Artists and Designers and the Holocaust], for the “Bauhaus and National Socialism” conference that she is co-convening at the Bauhaus Museum in Weimar, Germany. The conference is a part of preparations for her co-curated exhibition of the same title that will open as the city of Weimar’s main exhibition for summer 2024 and will span three museums. Otto’s work during the 2022–23 year has been supported by the Weimar Classic Foundation, where she was the Distinguished Fellow in residence in summer 2022; the US Holocaust Memorial Museum’s Mandel Center for Advanced Holocaust Studies, where she was the inaugural Kurt and Thea Sonnenmark Memorial Fellow in September and October; and a year-long Research Scholarship from Germany’s Gerda Henkel Foundation.

Department of Romance Languages and Literatures

David Castillo, professor, is part of group of scholars who recently launched the International Cervantes Public Project. Castillo’s recent book *What Would Cervantes Do?* was featured in the *History of Literature* podcast (Episode 445). This is a wide ranging interview that touches on all manner of works, from Orwell’s *1984* to Atwood’s *The Handmaid’s Tale*, Huxley’s *A Brave New World* and of course Cervantes’s work, in the context of a conversation about the current media condition and the imminent and present danger the spread of disinformation poses to democratic societies.

Department of Sociology

Sampson Lee Blair, associate professor, completed the book, *Conjugal Trajectories: Relationship Beginnings, Change, and Dissolutions* (2023), with Ana Josefina Cuevas Hernández (University of Colimas, Mexico). The book addresses the paths by which individuals move through stages of intimate relationships. In collaboration with Veronica L. Gregorio (National University of Singapore) and Clarence M. Batan (University of Santo Tomas, Philippines), he has also completed *Resilience and Familism: The Dynamic Nature of Families in the Philippines* (2023), a book which examines the changing nature of Filipino family structures and dynamics. In the fall of 2022, he presented “Changes in Policy, Changes in Fertility? An Examination of Changes in Fertility Aspirations in China” at the 2022 Asian Conference of the International Chinese Sociological Association in Guangzhou, China. In the fall of 2022, he made a research presentation to the General Assembly of the Faculty of Arts and Letters at the University of Santo Tomas (Philippines), entitled: “Family, Modernization, and Change: Understanding the Institution of the Family from a Global Perspective.” In the summer of 2023, he will be presenting “Adolescents’ Perceptions of Spousal, Parental, and Worker Self-Efficacy: Examining Gender Differences in their Views of Future Adult Roles” and “Modernization, Filial Piety, and the Decreasing Appeal of Marriage and Parenthood in China” at the International Sociological Association’s World Congress of Sociology in Melbourne, Australia. He also organized two research paper sessions at the ISA World Congress of Sociology: “Young People’s Experiences and Relationships in the Global Pandemic” and “Politics, Family, and Familial Relationships.”

SCHOOL OF DENTAL MEDICINE

Department of Restorative Dentistry

Sebastiano Andreana, professor and director of implant dentistry, traveled to Pune, India in August 2022 to serve as visiting faculty at the D. Y. Patil School of Dentistry, in collaboration with Dental Academy of Clinical Excellence to teach in the annual course in the Implantology Program. Andreana lectured to residents in the Implant Program, as part of their training. Also in August 2022, Andreana hosted Professor Covani, from the UniCamillus, International Medical University in Rome, Italy, who was visiting the Buhite-DiMino Center for Implant Dentistry and Advanced Dental Education at the University at Buffalo, School of Dental Medicine. In November 2022, Andreana traveled to Sidney, Australia, to be a faculty instructor at the Australasian Implant Academy annual course in Implant Dentistry. More than 25 dentists from the Australasian region attended the course, which included lectures and hands-on training sessions. On November 14, Andreana gave an online seminar to the Istituto Stomatologico Toscano in Tuscany, Italy. More than 100 dentists worldwide attended the lecture titled “Controversies in Implant Dentistry” In January

2023, Andreana traveled to Abu Dhabi UAE, and then to Bangalore India, to be faculty at the 18th and 19th American Academy of Implant Dentistry Maxi Course. All 4 courses were attended by over that 25 dentists from the Middle East and South Asia. In March 2023, Andreana lectured at the TI-MAX AAID Maxicourse, in Waterloo, Ontario, Canada. Immediately after that, Andreana lectured at the AIDE Global Implant Program held at the School of Dental Medicine, with participants and faculty from different parts of the globe.

GRADUATE SCHOOL OF EDUCATION

Department of Information Science

In fall 2022, **Africa Hands**, assistant professor, presented posters at two international conferences hosted in the U.S.: the annual conference of the Association for Library and Information Science Education in Pittsburgh, PA, and the annual conference of the Association for Information Science and Technology in Pittsburgh, PA. She presented a poster “‘I won’t lie. I’m pretty anti-Twitter’: LIS students’ perceptions toward the use of Twitter” at the virtual Association for Information Science and Technology 2023 Mid-Year Conference in April 2023 and a poster “Crisis as a catalyst for change: Exploring care-centered pedagogical practices for all times” at International Conference on Digital Transformation and Inclusiveness of The Higher Education Institutions in the Time of Crisis Situations in Osijek, Croatia in May 2023.

In January 2023, **Heidi Julien**, professor, traveled to Kuala Lumpur, Malaysia, where she was a visiting professor at the Universiti Malay (UM). During her week-long visit, she presented several papers and workshops on digital literacy, information behavior and misinformation, photovoice, grant-writing, and publishing in top-tier journals. She also provided research consultations with local doctoral students and faculty members in the UM Department of Library and Information Science.

Department of Learning and Instruction

Tasha Austin, assistant professor of teacher education, language education and multilingualism joined the Graduate School of Education faculty in the fall of 2023. She was invited to moderate a panel for the American Council on the Teaching of Foreign Languages on Black world languaging entitled, “This is How We Do It” which is publicly available on YouTube and other streaming platforms. In addition, she was an invited speaker at the Teachers of English to Speakers of Other Languages (TESOL) International conference in Portland, Oregon in March of 2023 for two separate panels. She presented along with Kisha Bryan, Ayanna Cooper, Madji Fall and Elizabeth Chen on a panel entitled, “Courageous Conversations: Racism & Linguistic Well-Being in English Language Teaching.” She presented with Mary Romney, Rasheda Young, Lavette Coney and Peiro Carlini on a panel entitled “Decolonization, DEIA, and Antiracism in ELT: Theory to Practice.”

Noemi Waight, associate professor of science education, gave an invited talk for the School of Education Seminar Series at the University of Southampton in the UK—“Dismantling the Status Quo, ‘black box’ of Technological Implementation in Science Classrooms and Re-envisioning Equitable, Transparent Pathways for the Future of Science-Technology Education,” in October 2022. In addition, Waight led a workshop, “Biking as Engaged Pedagogy: Transforming Pre-service Science Teachers’ Critical Conscientization of Cultural and Historical Scientific Community Assets,” for the Mathematics, Science and Health Education group, School of Education, University of Southampton. Waight was hosted by Professor Knut Neumann at the Leibniz Institute for Science and Mathematics Education in Kiel, Germany. During this visit they explored mutual research interests related to science education and technology and data analytics.

SCHOOL OF ENGINEERING AND APPLIED SCIENCES

Department of Chemical and Biological Engineering

In November 2022 **Paschalis Alexandridis**, UB Distinguished Professor, presented a virtual seminar on “Plastic Recycling: Societal Challenges and Opportunities for Research” at the Polymer & Elastomer R&D Townhall, Reliance Industries Limited, Navi Mumbai, India, hosted by Virendra K. Gupta Head R&D- Polymer & Senior Vice President. In February 2023 Paschalis Alexandridis gave a virtual presentation on the topic “Molecular Recycling of Plastics for a Sustainable Future” at the International Conference & Exhibition for Science (ICES2023), held in Riyadh, Saudi Arabia. In February 2023 Alexandridis delivered a keynote lecture on “Valorization of Plastic Waste: Research

Advances in Molecular Recycling” at the Polymers/Composites/3Bs Materials 2023 Joint International Conference in Bangkok, Thailand. In March 2023 Alexandridis hosted at UB Nozomi Watanabe, Assistant Professor in the Division of Chemical Engineering, Graduate School of Engineering Science, Osaka University in Japan.

Department of Civil, Structural and Environmental Engineering

Cemal Basaran, professor, is on sabbatical in spring 2023 and is a visiting professor at the Cracow University of Technology, Poland, where he gave a lecture on April 19. He also lectured at the Polish Academy of Sciences on April 24 and the University of Science and Technology in Bydgoszcz, Poland on April 25. Basaran also delivered a lecture at Belgrade University in Serbia on April 18, 2023. His lectures focused on the “Recent Developments in Unified Mechanics Theory.”

SCHOOL OF MANAGEMENT

Department of Finance

Dominik Roesch, associate professor, presented his new working paper on tax abuse at the 4th Research in Behavioral Finance Conference in Amsterdam, The Netherlands and at the 28th Annual Meeting of the German Finance Association in Marburg, Germany. The paper provides empirical evidence suggesting that US institutions traded foreign securities to claim back taxes that were never paid. In 2022 the German Supreme Tax Court rejected claims that such trades were legal.

Department of Marketing

Sunye Yoon, assistant professor, presented her three ongoing projects—“Contagion of Inequality: How Perceived Income Inequality Influences Animal Welfare Consumption,” “Animal Welfare Consumption: The Interactive Effect of Power and Animal Anthropomorphism,” and “The Color of Status: Color Saturation, Brand Heritage, and Perceived Status of Luxury Brands”—at the Society for Consumer Psychology Conference, an international meeting held in San Juan, Puerto Rico in March 2023.

JACOBS SCHOOL OF MEDICINE AND BIOMEDICAL SCIENCES

Department of Family Medicine

David Holmes, clinical associate professor and director of the Global Medicine Program, worked with faculty colleagues John Hu and Scott Darling to lead three winter 2023 global health trips to Panama, Ghana and Costa Rica, respectively—the first such trips since the pandemic. Two more global health trips were organized to Panama and Costa Rica April 1-8, 2023; and to India, August 1-12, 2023. Holmes co-authored recent articles with his medical students in peer-reviewed journals in global health: Ewing B, Holmes D. “Evaluation of Current and Former Teleradiology Systems in Africa: A Review.” *Annals of Global Health*. 2022; 88(1): 43, 1-10; Moses S, Holmes D. “What mental illness means in different cultures: Perceptions of mental health among refugees from various countries of origin.” 2022;5(2); Claffey AJ, George JC, Thorne KA, Zittel KW, Zelasko JC, Holmes DM. “Impacts of village isolation on childhood nutritional status in rural Malawi.” *Journal of Global Health Reports*. 2020;4:e2020079; and Herskind J, Zelasko J, Bacher K, Holmes D. “The outpatient management of hypertension at two Sierra Leonean health centres: A mixed method investigation of follow up compliance and patient reported barriers to care.” *African Journal of Primary Health Care and Family Medicine*; 2020; June 17 ISSN: 2071-2928, E-ISSN: 2071-2936.

Department of Ophthalmology

Steven J. Fliesler, SUNY Distinguished Professor and Meyer H. Riwchun Endowed Chair Professor of Ophthalmology, and vice-chair/director of research, gave the Retina Research Foundation’s (RRF) Paul Kayser International Award in Retina Research Lecture at the XXV Biennial Meeting of the International Society for Eye Research (ISER) in February 2023 in Australia. First presented in 1986, the Kayser award is given every two years, and recognizes lifetime achievement by a vision scientist who has made a significant contribution to the understanding of vitreoretinal diseases or disorders. He also chaired a platform session at that meeting and delivered a lecture entitled “Sterols and oxysterols in the retina: biology and pathobiology.”

Department of Structural Biology

Thomas D. Grant, assistant professor, was an invited guest seminar speaker for the University of Bristol Physics Colloquium in the UK on the topic of how macromolecular structure leads to fundamental breakthroughs in biology in January 2022. Grant also was an invited plenary speaker

and session chair for the 4th International Webinar on Nucleic Acids and CRISPR held in February 2022, a virtual symposium hosted in London, UK, speaking on the application of his novel algorithms for reconstructing 3D density maps of nucleic acids using solution X-ray scattering data. He is also an invited speaker at the upcoming 14th International Conference on Biology and Synchrotron Radiation in Lund, Sweden in June 2023 to speak on his algorithms enabling high-resolution structures of protein-drug complexes using solution X-ray scattering.

Department of Surgery

P. Ben Ham III, assistant professor in the Division of Pediatric Surgery, has two presentations on optimizing management of appendicitis at the International Pediatric Endosurgery Group Annual Conference to be held in Sorrento, Italy on July 5-8, 2023. Also, as a member of the committee on education for the group, he will also help teach an international audience strategies for performing complex neonatal surgeries in a minimally invasive fashion.

SCHOOL OF PHARMACY AND PHARMACEUTICAL SCIENCES

Department of Pharmaceutical Sciences

In February 2023, **Jun Qu**, professor, presented a virtual seminar titled, “In-depth, Accurate Whole Tissue Mapping with a Micro-scaffold Assisted Spatial Proteomics (MASP) Strategy” to a proteomics forum hosted by Westlake University in China. The seminar attracted an audience of more than 18,000 attendees.

SCHOOL OF SOCIAL WORK

Elizabeth A Bowen, associate professor, presented (virtually) “Policy mapping as a methodology to inform policy research and practice” in June 2022 for the Marmara University Population and Social Policies Application and Research Center, Istanbul, Turkey.

In April 2022, associate professors **Filomena Critelli** and **Lisa Butler** were invited by Tata Institute of Social Sciences (TISS), Naoroji Campus, Mumbai India as guest lecturers for a presentation titled “Trauma and Human Rights: Views at their Intersection.” The lecture was drawn from the book Butler, L., Critelli, F.M. and Carello, J. (2019). *Trauma and Human Rights: Integrating Approaches to Address Human Suffering*. Butler, Lisa D., Critelli, Filomena M., Carello, Janice (Eds.), Palgrave Macmillan. From January to February 2023, on sabbatical, Critelli conducted research in Lahore and Islamabad, Pakistan, where she interviewed women activists and NGO leaders who are engaged in the implementation of sexual harassment legislation and are raising awareness through the #MeToo movement and mass mobilizations in Pakistan. The research is funded through the Baldy Center for Law and Social Policy and a recent Faculty Grant from the Office of International Education. Critelli and a former Ph.D. student, **Asli Yalim**, also published a research article “Changes in Gender Roles among Syrians in Post-Resettlement Contexts” in *Women’s Studies International Forum*. This qualitative study was based on interviews with Syrian refugees in Turkey and the United States.

Jangmin Kim, assistant professor, presented a workshop, “Toward a healthy workforce: Supporting frontline workers serving children without placement,” with colleagues (LaBrenz, Jenkins, Choi, Wildberger & Ryan) at the 2022 Virtual Kemp International Conference in October.

Laura Lewis, clinical associate professor and assistant dean for global partnerships, taught and co-led a course in Costa Rica during the winter semester as part of UB’s new First-Year Global Experience program (see pp.). The course, “Media Advocacy and the UN Sustainable Development Goals: Living and Leading in a Global World,” focused on human rights, media advocacy and sustainability and included cultural experiences and a visit with members of the Bri Bri Indigenous community. Moving forward, the course will serve as a model for future First-Year Global Experiences to expand access to transformative study abroad opportunities to more first-year students at UB.

Braden K. Linn, visiting assistant professor, presented a paper, *Assessing emotional betrayal from child sexual abuse: A psychometric analysis of the EBSCAM*, with a colleague (Wolf, M.R.) in October 2022 at the International Society for the Study of Trauma and Dissociation Conference (virtual).

Patricia Logan-Greene, associate professor, was invited to participate in the European Union Radicalisation Awareness Network US Study Visit on “Racially- and Ethnically Motivated Violent Extremism/Violent Right-Wing Extremism (REMVE/VRWE) in US and EU.” This event was organized by regional Homeland Security officials and hosted by Barnard College in

New York City on March 15-16th 2023. A small number of participants from the EU and the US discussed best practices using a public health approach for the prevention of the growing threats of extremist and racially-motivated violence.

Nadine “Shaanta” Murshid, associate professor, completed a sabbatical in spring 2022 in Bangladesh, finishing data collection for “Intimacies of violence among transnational middle class Bangladeshi women in the US,” a project which just culminated in a signed book contract with Oxford University Press.

Maria Y. Rodriguez, assistant professor, published *Color-blind and racially suppressive discourses on German-speaking Twitter: A mixed method analysis of the Hanau White nationalist shootings*. *Journal of Community & Applied Social Psychology* in 2022 with colleagues Windel, Than, & Perkins.

Several faculty and staff members from the School of Social Work developed and facilitated a unique study abroad internship experience during the spring 2023 semester in Santo Domingo, Dominican Republic for MSW student Ejayah Arrington-Davis. **Laura Lewis**, assistant dean for global partnerships, connected Arrington-Davis with her field site and provided weekly clinical supervision, while **Marjorie Quartley**, assistant director of field education, acted as field liaison for Arrington-Davis and her internship site, nonprofit Community Service Alliance (CSA). Finally, with support from a Dean’s Scholarship, Arrington-Davis blogged about her experience abroad, and two staff members — **Debbie Hill** and **Pat Shelly** — provided technical support ahead of her departure. At CSA, Arrington-Davis worked with a volunteer group and school, creating a social-emotional curriculum, tutoring students in English and running a physical education class, among other activities.

The school’s **Immigrant and Refugee Research Institute (IRRI)** partnered with the Karen Society of Buffalo (KSB) to host a delegation from the Korea Association of Social Workers (KASW), a national membership organization of professional social workers in South Korea. Established in 2001, KASW’s Oversea Training for Social Workers Project helps social workers gain knowledge, awareness, and skills from all over the world to enhance the quality of service in Korea. The delegation included 11 social workers who were selected through a competitive application process managed by KASW. Associate professor **Isok Kim**, assistant professor **Jangmin Kim**, and associate professor **Wook-soo Kim** created and curated the educational content for the weeklong training in Buffalo. The program provided opportunities for Korean social workers to exchange ideas and strategies and develop foundational skills to effectively serve people of immigrant and refugee backgrounds, bridging sociocultural differences using trauma-informed, human rights perspectives. The social workers participated in workshops and visited five community organizations in Buffalo serving refugees and asylum seekers. To conclude the weeklong training, the faculty members led the delegation on cultural tours

across Western New York and Canada while helping them to further understand the immigrant and refugee issues embedded throughout the region.

The school’s Institute on Trauma and Trauma-Informed Care (ITTIC), directed by **Susan A. Green**, clinical professor, facilitated a trauma-informed community needs assessment in the spring of 2022 and a hybrid “Trauma-Informed Care Champion Learning Collaborative” from September 2022 – March 2023 to train leaders from various organizations in Canada’s Niagara region on trauma-informed organizational change. The collaborative, funded by Pen Financial and the Armstrong Group, supported a total of 36 individuals from 20 different organizations to become more knowledgeable in trauma-informed approaches, tools and resources. The Champions came from a variety of different settings, such as healthcare, higher education, legal services, mental health, addiction, shelters and even two library systems. Champions participated in two, half-day, in-person events: one to kick-off the collaborative and one at the end to come together and plan for next steps individually and as a team. The Champions attended monthly virtual consultation sessions and completed small assignments between consults to learn and discuss the nuances of each of the 10 key development areas involved in creating a trauma-informed organization.

An online international classroom exchange took place in spring semester 2023. SSW students enrolled in Global Child Advocacy, taught by PhD Candidate, **Sarah Richards-Desai**, and social work students taught by Vildens Dorvilier at Faculté de Travail Social et de Justice Sociale/ College of Social Work and Social Justice (FTSJS) in Haiti, worked jointly on an assignment called Transnational collaboration: Media literacy in Haiti, the US, and Beyond. The assignment focused on media literacy and the importance of diverse perspectives. Students also completed a reflection video about the collaboration. The School of Social Work’s Institute for Sustainable Global Engagement, co-directed by **Filomena Critelli** and **Laura Lewis**, received funding from the Katherine Kendall Institute for the project.

UNIVERSITY LIBRARIES

Erin Rowley, senior assistant librarian and head of the Science and Engineering team, and **Amanda McCormick**, senior assistant librarian, were invited to present at the United Kingdom Serials Group (UKSG) Usage Data Online Seminar in November 2022. The presentation, “Cancelling the Big Deal at the University at Buffalo: Two Years Out,” was an update following their previous invited talk for the UKSG in October 2021, titled “Cancelling the Big Deal at SUNY: Making the Decision and Impacts on the STEM Faculty at the University at Buffalo.” The November 2022 presentation reviewed journal article request data following SUNY’s cancellation of Elsevier’s ScienceDirect database. Rowley and McCormick also spoke about the impact they have perceived working with engineering and science faculty and students, as well as how they approach information literacy instruction. The presentation was very well-received.

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RIGA STRADINS UNIVERSITY VISIT

During the last week of April 2023, a delegation from Riga Stradins University in Riga, Latvia, traveled to the University at Buffalo for the formal signing of a Memorandum of Understanding with the University at Buffalo. The agreement was signed by President Satish K. Tripathi and Rector Professor Aigars Petersons, and by Interim Dean Stefan Ruhl and Dean Andris Abeltins. It recognizes the mutual desire of both institutions to promote cooperation and development of activities in the general areas of: 1) exchange of scholars and scientists to conduct research of mutual interest; 2) exchange of faculty for lectures and short-term visits; 3) student exchange; and 4) invitations to scientists to participate in conferences and symposia.

Rector Petersons and Dean Abeltins were joined for the visit to Buffa-



Rector Petersons and President Tripathi, center front (Douglas Levere)

lo by Dr. Agrita Kiopa, Vice-Rector for Science, Professor Guntis Bahs, Vice-Rector for Health Studies, and Mr. Toms Baumanis, Vice-Rector for Administration and Development. The delegation met with faculty from the School of Dental Medicine in particular areas of interest to begin to explore topics for possible exchange. The RSU visitors also had meetings

with colleagues in the Jacobs School of Medicine and Biomedical Sciences, and the School of Public Health and Health Professions.

The formal agreement was the culmination of a year-long exploration with a delegation from Riga visiting UB SDM last year in May and Dr. Ruhl visiting Riga in October 2022. However, other schools within

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John J. Wood, Editor