

LOCAL IMPACT | NATIONAL INFLUENCE | GLOBAL REACH

Reflecting on Our Global Impact: A 2024 Year in Review



The Global Health Institute (GHI) achieved significant milestones in advancing cuttingedge interdisciplinary education and research, fostering impactful partnerships, and addressing critical public health challenges throughout 2024. With active collaborations worldwide, we provided transformative, research-driven opportunities for students at our main campus in Tucson and at partner institutions across the globe.

Through innovative, interdisciplinary programs, groundbreaking research, and highimpact education initiatives, GHI is at the forefront of shaping a globally minded and culturally competent public health workforce. Our students and faculty engage in dynamic, real-world research, leveraging emerging technologies, data-driven solutions, and collaborative international frameworks to tackle some of the world's most pressing health issues.

We invite you to explore our 2024 achievements and see how our commitment to cuttingedge education, impactful research, and interdisciplinary collaboration is preparing the next generation of global health leaders. From new dual degree programs to trailblazing research partnerships, this year's highlights reflect our collective efforts to create lasting change both locally and globally.

Students Engaging in Cutting-Edge Inter-Professional Global Research

Global Health Institute Scholars Advancing Public Health Worldwide

Summer 2024 saw nine outstanding University of Arizona students participate in the Global Health Institute Scholars program, conducting research and public health projects across the globe. From investigating water contamination in Guatemala to studying climate change and waterborne diseases in Tanzania, these scholars tackled pressing health challenges in collaboration with international partners. Their experiences not only advanced public health knowledge but also prepared them to become leaders in global health.

Applications for the Summer 2025 GHI Scholars program are now open through March 1st. Learn more about the program and watch student experiences here.



Priscilla Valenzuela, '24 GHI Scholar



GHI Scholar Spotlight Katie Herder MPH, 2024

As a Global Health Institute Scholar in Summer 2024, Katie worked at the University of Limerick on the INSIGHT-GP project, which examined multimorbidity and healthcare usage among individuals over 70 in Irish general practices. Her focus was expanding this research to Ukrainian refugees, a population facing unique healthcare challenges due to language barriers and system navigation. The experience was both eye-opening and rewarding, deepening her appreciation for global healthcare systems and policy implications.

In her own research, Katie is interested in biostatistical methods for real-world data and comparative effectiveness research. Her Master's capstone explored memantine's impact on agitation and aggression in Alzheimer's patients, and her dissertation focuses on modeling dose effects in network meta-analyses. While she is still unsure where her path may lead, she hopes to continue working on meaningful research with real-world impact—whether in the U.S. or abroad. She is always eager for new opportunities and grateful for the experiences that have shaped her path so far.





Global Flu View Spark Program

The Global Flu View Spark (GFV Spark) program supports students in developing projects that enhance the impact and reach of the Global Flu View (GFV) digital disease tracking platform. During the summer of 2024, the program's first cohort delivered three innovative projects. MPH student



Lady Dorothy Elli worked in the Philippines to establish a participatory influenza-like illness (ILI) surveillance system. PhD student Oluchi Kanma-Okafor collaborated with the Nigeria Center for Disease Control to promote FluNetNg, the first participatory surveillance platform in Africa. PhD student Joy Kinko Luzingu conducted a qualitative evaluation of GFV by interviewing global users and stakeholders. These projects exemplify the program's mission to drive innovation in digital epidemiology and public health. Read the full story <u>here</u>.



Student Spotlight

Lady Dorothy Avila Elli, 2024

A Global Wildcat herself, Lady has made her mark as a University of Arizona student through her participation on and around campus, and completing both her undergraduate degree here at the U of A, and now, working on her master's degree. While working on her bachelor's, Lady held numerous leadership positions in a plethora of clubs, including the Filipino American Student Association, Pan Asian Council, and ASUA. While completing her master's at MEZCOPH, she has participated in the Global Flu View Spark Program and was able to work in her home country of the Philippines. Her research interests include Tuberculosis, infectious disease, and global health policy.

Lady has been a staple in the GHI, not only because of her work in the Global Flu View Spark Program, but also because she has served as a Graduate Ambassador for our college. To help build on existing partnerships, Lady joined Dr. Priscilla Magrath on a visit to Indonesia in summer 2024. This visit also allowed her to establish the foundation of her MPH internship project "Assessing levels of stigma towards TB among Health Care Workers: A key component in managing the tuberculosis burden in Indonesia." During this visit, Lady visited a local health department (Dinas Kesehatan), a local non-profit working on TB (Mentari Sehat Indonesia or MSI), and a village community engagement activity (Pageraji village) all located in the Banyumas region of Indonesia in Central Java. Read the full story on that trip here.





Ending Pandemics: A Global Health Revolution



The Zuckerman College of Public Health proudly hosted Ending Pandemics: A Global Health Revolution, an engagement event to announce an exciting new partnership with the global disease prevention nonprofit, Ending Pandemics. This collaboration will launch the Ending Pandemics Academy at the University of Arizona in 2025, an innovative digital epidemiology education and research program under the Global Health Institute. The event featured presentations by Ending Pandemics leaders, including Dr. Mark Smolinski and Ms. Nomita Divi, who shared insights into their groundbreaking work in disease prevention. A distinguished panel discussion moderated by Dean Iman Hakim highlighted the urgent need for adaptive, technology-driven public health education. Panelists included esteemed experts such as Dr. Keiji Fukuda, Dr. Margaret Hamburg, Dr. Donna Shalala, and Dr. Judy Wasserheit, whose collective expertise underscored the critical importance of this initiative.

Special thanks were extended to Jeff Skoll and the Skoll Foundation for their unwavering support of Ending Pandemics, as well as Bruce Lowry for attending the event. Their contributions have made it possible to advance innovative global health initiatives that strengthen disease prevention worldwide.

This new partnership marks a significant step toward preparing the next generation of global health leaders equipped to address emerging challenges in disease prevention and epidemiology. Learn more <u>here</u>.



Faculty Spotlight Onicio Leal, PhD, MPH

A pioneer in digital epidemiology, Onicio Leal brings an abundance of experience to not only the Global Health Institute, but also MEZCOPH in general. Growing up in Brazil, Onicio got his start working in the health department for his country's government, which led to a job at UNICEF, where he researched wearable technologies for children in Africa. From there, he spent some time in Zurich, Switzerland, where he was a senior researcher in computer science, and last year, him and his family made their way to Tucson.

Onicio is the brains behind the Global Flu View Spark program and Ending Pandemics at MEZCOPH; He oversees the platform, and also serves as Assistant Research Professor for the Global Health Institute and Department of Epidemiology and Biostatistics. "People are becoming aware of the potential of digital epidemiology and how they and our college can play an important role in this field," Leal said. "I am really committed to seeing change and to teaching public health students how to use technology to understand and solve the new problems emerging in our world."

Botiquin Fronterizo - Advancing Collaborative Border Health Research

In 2024, Dr. Gabriela Valdez, Director of Global Health Programs and Director of MEZCOPH Global Education, collaborated with Rebecca Crocker, Assistant Professor of Research at MEZCOPH, on the research project "Botiquín Fronterizo." This project documents the availability of botanical, pharmaceutical, spiritual, and other materials used in lay healing practices by Mexicans on both sides of the U.S.-Mexico border. Their work will continue into 2025. For information. Dr. Valdez more contact at qvaldez@arizona.edu.



Gabriela Valdez, PhD



Rebecca Crocker, PhD



Maiya Block Ngaybe, MPH, PhD



Maryam Jamila Ali, MBBS, FWACS, FMCOG



Auwal Abubakar, MBBS, MSc, DrPH

Global Health Emerging Scholars: Advancing Global Health Research

The Global Health Emerging Scholars (GHES) program, led by Dr. Purnima Madhivanan, Principal Investigator at the University of Arizona, and part of the NIH Fogarty Global Health Programs for Fellows and Scholars, provides a 12-month mentored research fellowship for pre- and postdoctoral students dedicated to addressing global health challenges. In 2024, three exceptional fellows conducted impactful research in Nigeria and Uganda:

- Dr. Maryam Jamila Ali studied HPV vaccine hesitancy and the persistence of HPV infections among adolescents and young women living with HIV in Nigeria.
- Dr. Auwal Abubakar worked to enhance cervical cancer screening practices for women living with HIV/AIDS in Plateau State, Nigeria.
- Maiya Block Ngaybe, PhD candidate, researched factors influencing the uptake of preventative HIV vaccines among at-risk populations in Uganda.

Congratulations to MEZCOPH's own Dr. Maiya Block Ngaybe, who successfully completed her fellowship in December 2024, earned her PhD, and was awarded the prestigious UA Centennial Achievement Award!

Currently, the program supports two predoctoral fellows completing their research fellowships at the Public Health Research Institute in India, continuing GHES's mission of addressing health inequities worldwide. Learn more <u>here</u>.

Young Global Leaders: Immersive Research & Lab Experience A Summer Program for Future Innovators



The Young Global Leaders program, organized by the Global Health Institute (GHI) and the Environment, Exposure Science, and Risk Assessment Center (ESRAC), provides high school students with a unique opportunity to engage in cutting-edge research across the University of Arizona campus. Through hands-on lab experiences, interactive lectures, and faculty-led discussions, students explore the critical intersection of climate change and health while gaining exposure to diverse fields of study. In Summer 2024, participants delved into active research projects, attended expert guest lectures, and presented their findings in a culminating showcase. The program also featured an "Art for Climate and Health" initiative, reinforcing the power of creative expression in scientific discourse.

Beyond the lab, this program reflects our strong commitment to mentorship, community engagement, and inspiring the next generation of global health leaders.

Applications are now open for the Summer 2025 program! Don't miss this opportunity—apply today and be part of the next cohort of Young Global Leaders.

Read the full story here.

Undergrad Student Spotlight

From Young Global Leader to Future Physician: Ana Fernandez's Journey in Medicine & Public Health

Ana Fernandez is a Freshman double majoring in Medicine: Basic Medical Sciences and Global Public Health at the University of Arizona, W.A. Franke Honors College. Her passion for healthcare began at a young age, but it was during her high school years, through Young Global Leaders, that she discovered the interdisciplinary nature of public health and its ability to address health challenges from multiple angles. Over the course of three summers at MEZCOPH, this experience provided her with her first hands-on opportunity to explore the connection between environmental, preventive, and human health, shaping her commitment to health equity. She is now a stipend volunteer at El Rio's Reproductive Health Access Project (RHAP), helping



provide free health services to youth ages 14-24.preventive, and human health, shaping her commitment to health equity. She is now a stipend volunteer at El Rio's Reproductive Health Access Project (RHAP), helping provide free health services to youth ages 14-24. She helps with presentations, supports teen clinics, and is working to ensure materials are translated into Spanish for broader access. Ana is also a Youth Action Board member at Youth On Their Own (YOTO), part of the United Youth Leadership Council at United Way, an Editorial Board member of Youth Engaged 4 Change (YE4C), and an ACOA/MSTEM Thrive student. Her work and volunteer experiences continue to deepen her passion for public health, where she seeks to address healthcare disparities and expand access to marginalized communities. She hopes to continue making an impact through research and advocacy, with the ultimate goal of attending medical school.

Education & Training Highlights

Universidad del Valle de Mexico (UVM)

We proudly launched our first cohort of Medicine/Public Health Dual Degree students in collaboration with Universidad del Valle de Mexico (UVM) in 2024. This program allows students to earn a dual degree in Medicine from UVM and a Bachelor of Science in Public Health from the University of Arizona's Mel and Enid Zuckerman College of Public Health (MEZCOPH). The inaugural cohort included 29 students, combining medical expertise with public health knowledge to prepare them to address critical healthcare challenges.

We look forward to welcoming a new cohort in the Fall 2025 semester!

Universidad Peruana de Ciencias Aplicadas (UPC)

UPC and the University of Arizona have enjoyed a strong partnership for the past six years, offering successful dual degree programs in fields such as business, communication, psychology, and engineering. Building on this foundation, we are thrilled to announce plans to launch a dual degree Bachelor of Science in Public Health program.

This collaboration was further solidified in November 2024 when we welcomed Dr. Edward Roekaert, Rector of UPC, to our campus, where we cemented plans for this new initiative. These efforts follow a series of productive meetings between leadership from both institutions in Lima earlier this year. Learn more about this exciting partnership <u>here</u>.

Global Collaboration and Learning: UVM Students Explore Public Health in Arizona

In July 2024, the Global Health Institute hosted nine students and a faculty member from the



Universidad del Valle de México for the Global Collaboration, Culture, and Community Health Summer Program. Over two weeks, participants engaged in hands-on public health education, explored Arizona's healthcare systems, volunteered in community health initiatives, and developed health program proposals for their home communities. This immersive program not only strengthened their knowledge of public health but also reinforced the growing partnership between UVM and the University of Arizona.



Exploring Climate Change and Health in Peru

University of Arizona undergraduate and graduate students from various disciplines, including public health, medicine, biochemistry, veterinary science, and healthcare management, recently participated in a week-long immersive summer program in Lima, Peru. Led by Dr. Gabriela Valdez, Director of Global Education at the Global Health Institute, the program explored the intersection of climate change and healthcare challenges. Read the full story here.



Meet our New Coordinator - Hope Noriega



In late November, we were delighted to welcome Hope Noriega as the new Coordinator at the Global Health Institute. Hope joins us from Arizona International and brings a wealth of experience in supporting global programs and initiatives. She will play a key role in advancing GHI's mission by supporting our programming efforts, fostering collaborations, and ensuring our activities align with our strategic goals. We are thrilled to have her on the team and look forward to all that we will accomplish together.

GHI's Scholarly Activities and Publications

- Divi, N., Mantero, J., Libel, M., Leal Neto, O., Schultheiss, M., Sewalk, K., ... & Smolinski, M. (2024). Using EpiCore to Enable Rapid Verification of Potential Health Threats: Illustrated Use Cases and Summary Statistics. JMIR Public Health and Surveillance, 10, e52093. <u>https://publichealth.jmir.org/2024/1/e52093</u>
- Leal Neto O, Von Wyl V. Digital Transformation of Public Health for Noncommunicable Diseases: Narrative Viewpoint of Challenges and Opportunities JMIR Public Health Surveill 2024;10:e49575. <u>https://publichealth.jmir.org/2024/1/e49575</u>
- Noriega, H., Hyde, N. (2024, October). Supporting Domestic Internationals in their College Admissions Process. Presented at the 2024 NAFSA Bi-Regional I/II Conference in Vancouver, Canada.
- Noriega, H (2024, May). Domestic Internationals and Their Place Under the International Education Umbrella. Presented at the 2024 NAFSA National Conference in New Orleans, LA.
- Valdez, G. (2024, April). Desafíos y Oportunidades en la Salud Pública. Invited presentation at College of Health at the Universidad de Guadalajara in Guadalajara, Mexico.
- Valdez, G. (2024, March). Innovación en educación médica: una oferta interprofesional. Invited presentation at the Universidad del Valle de Mexico, Mexicali Campus in Mexicali, Mexico.
- Valdez, G. (2024, April). Development of Spanish Language Culturally Relevant Health Interventions through the First Public Health Course offered in Spanish at the University of Arizona. Presented at the First Annual Bilingual Initiatives Symposium at the University of Arizona in Tucson, AZ.
- Valerio, M. G. P., Laher, B., Phuka, J., Lichand, G., Paolotti, D., & Leal Neto, O. (2024). Participatory Disease Surveillance for the Early Detection of Cholera-Like Diarrheal Disease Outbreaks in Rural Villages in Malawi: Prospective Cohort Study. JMIR Public Health and Surveillance, 10, e49539. <u>https://publichealth.jmir.org/2024/1/e49539</u>





GHI Core Team

Dr. Iman Hakim, Founding Director, ihakim@arizona.edu Dr. Gabriela Valdez, Director of Global Education, gvaldez@arizona.edu Roxanna Apaez, Senior Manager, rapaez@arizona.edu. Hope Noriega, Coordinator, hnoriega@arizona.edu

Closing Note

As we reflect on the accomplishments of 2024, we are inspired by the growth, collaboration, and impact that define the Global Health Institute. Our unwavering commitment to cutting-edge interdisciplinary education and research continues to drive us forward, ensuring that we remain at the forefront of global health innovation.

Through transformative research and impactful education, we strive to empower students, foster meaningful collaborations, and address pressing health challenges. Engaging the next generation of global health leaders remains central to our mission, and we are dedicated to providing them with opportunities to contribute to groundbreaking research and real-world solutions.

Looking ahead, we are excited to strengthen partnerships, advance public health education, and further our impact both locally and globally. Together, with the support of our community, we will continue shaping a healthier world for all.

For more detailed information on our projects, and to donate to the GHI, please visit our website: **<u>ghi.arizona.edu</u>**



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