CHW would like to thank the following donors for their generous gifts:

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The Edwin S. Shirley, III ’78 Research/Internship Fund
The Spitzer Family Program Fund for U.S. Health Policy
The Peggy and David Tanner ’80 Fund for the Center for Health and Wellbeing

CHW thanks and recognizes the time and efforts of its Advisory Council members:

Robert Kasdin ’80 (Chair), Former Senior Vice President, Chief Financial Officer, and Chief Operating Officer, Johns Hopkins Medicine
Raymond Baxter ’68, MPA ’72, Ph.D. ’76, Chair, Blue Shield of California Foundation; and Vice Chair, CDC Foundation
Galen Benshoof MPA ’14, Enterprise Director, Employee Insurance, State of Minnesota Management and Budget
Ruth Berkelman ’73, Rollins Professor Emeritus, Rollins School of Public Health, Emory University
Rima Cohen MPA ’86, Founder and Principal, Rima Cohen Strategies LLC
Emily King MPA ’15, Senior Policy Advisor/Deputy Director, Office of Saving People Money on Health Care, State of Colorado
Catherine Klema ’80, President, Nettleton Advisors LLC
Beth Rom-Rymer ’73, President, Rom-Rymer and Associates
Anthony So MPA ’86, Professor of the Practice, Johns Hopkins Bloomberg School of Public Health; and Founding Director, Innovation + Design Enabling Access (IDEA) Initiative
Jeffrey Sturchio ’73, Past Chairman, Rabin Martin
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Another year has flown by at CHW. In 2023, we are pleased to have added 11 new faculty affiliates reflecting a wide variety of disciplinary perspectives on health policy, from neuroscience and biomedical informatics to Slavic languages. Our affiliates were honored with a range of awards in recognition of their outstanding achievements. As just a few examples, Angela Creager received the 2023 Robert K. Merton Award for her book, “Residues: Thinking Through Chemical Environments,” Alexander Ploss was elected to the Class of 2023 of the American Academy of Microbiology, and Keith Wailoo was awarded the 2023 Hughes Prize for an accessible book in the history of science. Sir Angus Deaton was uniquely honored when his portrait was unveiled in the Scottish National Gallery in Edinburgh.

Some highlights of our activities this year included supporting the Princeton Serology Conference, which explored ways in which blood collected for medical purposes can be used to track disease; the Systems Summit on Clinical Wellbeing, which explored ways to improve the wellbeing of clinicians and prevent burnout; and the Conference on Health Equity in Africa, which brought African partners to Princeton to explore how health policies can be reshaped to meet the needs of the most disadvantaged.

Closer to home, Heather Howard continued to anchor the Princeton Pulse Podcast. We encourage you to explore the thoughtful discussion of topics ranging from approaches to both vaccine hesitancy and climate change (with Prof. Simon Levin and Nicholas Silitch, former chief risk officer for Prudential Financial) to gun violence (featuring Senator William H. Frist and Chethan Sathya, a trauma surgeon). Episodes are available at the CHW website and all major podcast platforms.

Our Internships in Global Health have rebounded from the pandemic. In 2023, we offered a record 87 summer internships spanning six continents and 20 cities. Settings ranged from the Rutgers Cancer Institute and New York City Health and Hospitals Special Pathogens Unit in the United States, to the Telethon Kids Institute in Australia, the Oswaldo Cruz Foundation in Brazil, and the Clinton Health Access Initiative in South Africa. You can read some of our students’ reflections on these experiences on pages 32-34 of this report. We also continued two special internship endeavors, including the Africa Health Research Initiative and the Pandemic Preparedness and Response Initiative.

Reflecting a strong commitment to partnerships, CHW gave back to longtime partner organizations who have hosted and mentored many Princeton students by inviting their graduate students to Princeton for semester-long visits. You can read about our visitors Ana Cláudia Barbosa, Sam McBride, and Felipe Betoni Saraiva on pages 15 and 16.

We continually work to improve our communications and outreach. Please visit us at chw.princeton.edu, and follow us on Facebook (@CHWPrinceton), X (@PrincetonCHW) and Instagram (Princeton_CHW). We also welcome your feedback. We love to hear from our students, affiliates, friends, and alumni to learn more about your achievements and ambitions.

Best regards,

Janet Currie
CHW Co-Director
Henry Putnam Professor of Economics & Public Affairs

Kate Ho
CHW Co-Director
John. L. Weinberg Professor of Economics and Business Policy
The Center for Health and Wellbeing (CHW) fosters research and teaching on diverse aspects of health and wellbeing in both developed and developing countries. The Center’s goals are to understand the determinants of health and wellbeing; investigate the role of public policy in shaping the quality of people’s lives; and educate undergraduate and graduate students who aspire to careers in health and health policy.

In 2000, former Princeton Professor and current President of Brown University Christina Paxson founded CHW to create a home for interdisciplinary scholarly collaboration and education around topics in health at Princeton University. Today, CHW is a thriving and vibrant community with a tremendous capacity for health-focused research. The Center, led by Co-Directors Janet Currie and Kate Ho, and Executive Director Gilbert Collins, supports its associates and students through grants, academic programs, mentorship, and events.

Housed within the School of Public and International Affairs (SPIA), the Center offers an undergraduate minor in Global Health and Health Policy (GHP) and a graduate certificate in Health and Health Policy (HHP).

Also under the CHW umbrella are the Program on U.S. Health Policy, which sponsors research and activities addressing aspects of domestic health care and health policy, and the State Health and Value Strategies Program, a Robert Wood Johnson Foundation-funded program assisting states with health reform implementation.
CHW affiliates are Princeton University faculty members and lecturers from diversified disciplines in the natural sciences, social sciences, and humanities. Our affiliates teach health-focused courses, advise students in health-related research, and mentor students on internships and careers in global health.

**NEW AFFILIATES IN 2023**

**Pascaline Dupas**  Economics and School of Public and International Affairs

Pascaline Dupas, professor of economics and public affairs, is a development economist seeking to better understand the challenges facing poor households in lower income countries and their root causes. Her goal is to identify interventions and policies that can help overcome these challenges and reduce global poverty. She conducts extensive fieldwork. Her ongoing global health research concerns government subsidized health insurance in India, the health impacts of access to clean water in Nigeria and Kenya, and health providers’ accountability in Tanzania.

Dupas joined the Princeton faculty in July 2023. She was previously the Kleinheinz Family Professor of International Studies at Stanford University, where she spent 12 years on the faculty. She has also held faculty positions at Dartmouth College and UCLA.

She is the co-president of the Bureau for Research and Economic Analysis of Development, a board member and affiliate of the Jameel Poverty Action Lab, and a research associate at the National Bureau for Economic Research.

In 2013, Dupas received a National Science Foundation CAREER award, presented by the U.S. government to recognize and honor outstanding scientists and engineers at the outset of their independent research careers. In 2015, she received the Best Young French Economist Prize, awarded to the French economist under 40 whose work is most influential. Furthermore, she is a fellow of the Econometric Society, a former Sloan fellow, and a former Guggenheim fellow.

CHW affiliate and Professor of African American Studies Ruha Benjamin studies the social dimensions of science, technology, and medicine.

Jesse Gomez
Princeton Neuroscience Institute

Jesse Gomez is an assistant professor at the Princeton Neuroscience Institute and principal investigator at the Brain Development Lab, where he studies how the structure and function of the human brain develops from childhood into adulthood, in an effort to model what happens when this development goes awry. He received his Ph.D. in neuroscience from Stanford University in 2018 and joined the Princeton Neuroscience Institute as an assistant professor in 2020. In addition to running the research lab, he teaches the Introduction to Cognitive Neuroscience undergraduate course. From small scale structures like dendrites to larger scale structures like cortical folding patterns, Gomez studies how experience and learning shape the development of the living brain in both health and neurological disorders.

Seema Jayachandran
Economics and School of Public and International Affairs

Seema Jayachandran is a professor of economics and public affairs. Her research focuses on environmental conservation, gender equality, health, and other microeconomic topics in developing countries.

Varun Gauri
School of Public and International Affairs

Varun Gauri is a lecturer at the School of Public and International Affairs, where he teaches courses on ethics, behavioral public policy, and international development. Previously, he was for two decades an economist in the World Bank’s research department. He founded and headed the World Bank’s Behavioral Science Unit and also was co-director of the World Bank’s “World Development Report 2015: Mind, Society, and Behavior.” He has served on the Technical Advisory Group for Behavioral Insights at the World Health Organization, the Advisory Board of the Behavioral Science and Policy Association, and the Advisory Board of the Behavioral Economics in Action Centre at the University of Toronto. Additionally, Gauri is a member of World Economic Forum Council on Behavior and is on the editorial boards of several journals, including Behavioral Public Policy, Health and Human Rights, and BMJ Global Health. His publications have appeared in Proceedings of the National Academy of Sciences (PNAS), American Political Science Review, Journal of Political Philosophy, Global Public Health, World Bank Economic Review, and other journals. His current research addresses behavioral economics, human rights, and health policy in developing countries.

Elena Fratto
Slavic Languages and Literatures

Elena Fratto is an assistant professor in the Department of Slavic Languages and Literatures. Her research focuses on the health and environmental humanities and theories of narrative. She is the author of “Medical Storyworlds: Health, Illness, and Bodies in Russian and European Literature at the Turn of the Twentieth Century” (Columbia University Press, 2021), and co-editor of Russian Literature of the Anthropocene (2020) and other special journal issues. She has also published on Russian formalism, and science, literature, and the visual arts in Russianophone and culture of the late-nineteenth and early-twentieth century. Fratto is a faculty associate of the Health Language Lab, a project housed at Columbia University in partnership with the Centers for Disease Control and Prevention, in which she co-leads a project that examines recurring imagery and language employed by Covid-19 vaccine-hesitant communities to describe vaccines and vaccination.

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Varun Gauri
School of Public and International Affairs

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Prior to joining Princeton, Jayachandran was a faculty member at Northwestern University and Stanford University. She earned a Ph.D. in economics from Harvard University, a master’s degree in physics and philosophy from the University of Oxford, where she was a Marshall Scholar, and a bachelor’s degree in electrical engineering from MIT.

John Jimah  Molecular Biology


Jimah obtained his B.A. in molecular biology from Colgate University and his Ph.D. in biology and biomedical sciences from Washington University, St. Louis. His doctoral research focused on the mechanism of CelTOS, a malaria vaccine candidate that creates pores in human and mosquito cells for parasite traversal and propagation.

As a Nancy Nossal fellow and National Institute of General Medical Sciences Maximizing Opportunities for Scientific and Academic Independent Careers scholar, Jimah conducted further research into membrane remodeling processes at the National Institute of Diabetes and Digestive and Kidney Diseases. His postdoctoral work involved studying dynamin-mediated membrane fission during endocytosis, bacterial outer membrane protein folding, and the interaction between dynamin and actin during cell-cell fusion.

Jimah's work is supported by grants from the National Institutes of Health and the Sloan Research Fellowship.

Ai Ing Lim  Molecular Biology

Ai Ing Lim is an assistant professor of molecular biology. Her research explores how maternal infections impact offspring immune system, and how maternal immunity adapts to pregnancy and lactation. Originally from Malaysia, Lim received her master’s degree from The University of Hong Kong. Prior to launching her laboratory at Princeton University, she completed her graduate studies at The Pasteur Institute in Paris and pursued her postdoctoral training at the National Institutes of Health. Her motivation to study maternal-offspring immune crosstalk is threefold: (1) to determine the etiology of immune disorders, with the ultimate goal of improving health trajectories in children; (2) to interrogate how interactions with microbes contribute to the evolution and sophistication of our immune system; (3) to mitigate pregnancy complication and advance women’s health.

Bentley MacLeod  Economics and School of Public and International Affairs

W. Bentley MacLeod is professor and research scholar at Princeton University, Sami Mnaymneh Professor Emeritus of Economics, and professor of international and public affairs emeritus at Columbia University in New York City. MacLeod is a labor economist specializing in organizational economics and its application to problems of incentive design in education, health, and employment.

His teaching career began with a two-year stint teaching mathematics and physics at Okundi Secondary School in Nigeria, an experience that led to his interest in economics in order to understand the large variations in national economic performance. After completing his Ph.D. in economics, MacLeod taught at Queen’s University, Université de Montréal, Boston College, University of Southern California, California Institute of Technology, and Columbia University before coming to Princeton University. He has held one year visiting positions at CORE, Belgium, IAE, Barcelona, Russell Sage Foundation, Princeton University, the California Institute of Technology and The Institute for Advanced Studies, Princeton, NJ. He was program director for Personnel and Behavioral Economics, IZA, Bonn from 2003-2007.

MacLeod is past president of American Law and Economics Association, past president of the Society of Institutional and Organizational Economics, and fellow of the Econometric Society and the Society of Labor Economists.

Bentley holds a B.A. (with distinction) and an M.Sc. in mathematics from Queen’s University, Kingston, Canada, and a Ph.D. in economics from the University of British Columbia, Vancouver, Canada.

Erik Nook  Psychology

Erik Nook is an assistant professor of psychology and an associated faculty member at the Princeton Neuroscience Institute. Nook directs the Logic of Emotion Laboratory, which seeks to advance understanding of human emotion using developmental, neuroscientific, and translational tools. Prior to his current position, he completed a Ph.D. in clinical psychology at Harvard University, a predoctoral clinical internship at Weill Cornell Medical College, and a postdoctoral fellowship at Yale University. Nook is a licensed clinical psychologist in the state of New York. His work leverages basic research on emotion to refine our methods for promoting psychological health.

Beth Semel  Anthropology

Beth Semel is an assistant professor in the Department of Anthropology and a faculty affiliate of the History of Science Program, the Program in Cognitive Science, and the newly launched Language and Intelligence Center. She is an ethnographer of computing, medicine, and listening who studies the sensory politics and technopolitics of artificial intelligence (AI) in American mental health care. Semel’s current book project traces the people, interpretive practices, and ethical tensions involved in building “vocal biomarker AI,” computational voice analysis technologies designed to track and triage people experiencing mental distress based on the sounds of their voice. She recently served as a subject matter expert for an Access Now report on the risks and harms of emerging biometric technologies.

Olga Troyanskaya  Computer Science and Lewis-Sigler Institute for Integrative Genomics

Olga Troyanskaya, a member of the Princeton University faculty since 2003, is a professor at the Lewis-Sigler Institute for Integrative Genomics and the Department of Computer Science. In 2016, she became the deputy director of genomics at the Center for Computational Biology at the Flatiron Institute of the Simons Foundation. Her lab employs machine learning and modeling techniques to decode genomes and understand cellular specificity, genotype-phenotype relationships, and cellular networks. Through the development of integrative analyses and modeling of complex molecular-level changes captured via diverse multi-omics techniques, including in experimental and clinical context, the approaches enable systems-level molecular views of human health and complex diseases. Most recently, Troyanskaya conceived Princeton Precision Health, launched in early 2023, which aims to create collaborations from seemingly unrelated disciplines in pursuit of innovative research and its translation to equitable health policy.

Troyanskaya holds a Ph.D. in biomedical informatics from Stanford University. She has been honored as one of the top young technology innovators by the MIT Technology Review, and is a recipient of the Sloan Research Fellowship, the National Science Foundation CAREER award, the Overton award from the International Society for Computational Biology, and the Ira Herskowitz award from the Genetic Society of America.
2023 CHW AFFILIATES

Anna Arabindan-Kesson  African American Studies and Art & Archaeology
SAMPLING OF CHW AFFILIATE AWARDS & HONORS IN 2023

Anna Arabindan-Kesson was elected as a fellow of the American Antiquarian Society, an independent research library and learned society. Members encompass a wide variety of scholars, both academic and independent, librarians and curators, collectors of Americana, booksellers and others who deal in manuscripts, newspapers, graphic arts, and ephemera, as well as those who have achieved distinction in a range of fields.

Angela Creager and her colleagues received the 2023 Robert K. Merton Award for their book, “Residues: Thinking Through Chemical Environments.” The award is presented by the Science, Knowledge & Technology Section of the American Sociological Association. Creager’s work draws on case studies and approaches from history, sociology, and science and technology studies to develop a new approach to the environmental and health impacts of chemicals production, consumption, disposal, and regulation.

Janet Currie served as president-elect of the American Economic Association in 2023 and currently serves as president. Currie joins a long list of distinguished Princeton economists to hold this position and is one of only a handful of women selected to lead the organization. Additionally, Currie was awarded the 2023 Klaus J. Jacobs Research Prize for work aimed at improving learning, development, and living conditions of children and youth. She was also named the 2023 Distinguished CES Fellow laureate, which ranks among the most prestigious awards in economics.

Angus Deaton was honored with a portrait in the National Portrait Gallery of Scotland in recognition of his lifetime work. The painting by Michael Gaskell was unveiled in Edinburgh on November 29, 2023. Deaton is one of only two economists represented in the gallery.

Simon Levin was named a Highly Cited Researcher by Web of Science in recognition of significant and broad influence in his field of research. Levin was also awarded the Sven Berggren Prize from the Royal Physiographic Society, which is presented to an eminent person who has distinguished themself in the service of science or society, in areas that lie within the Society’s sphere of interest. Additionally, the University of Maryland Alumni Association announced that Levin will receive the 2024 Research Excellence Award, which is presented annually to three alumni whose research is transformational and making an impact.

Sanyu Mojola and her colleagues received the 2023 Eliot Freidson Outstanding Publication Award for their paper, “’A Nowadays Disease’: HIV/AIDS and Social Change in a Rural South African Community,” published in the American Journal of Sociology (November 2021). The award, given by the Medical Sociology Section of the American Sociological Association, recognizes scholarship that has had a major impact on the field of medical sociology.

Erik Nook received an Editor’s Choice Paper award by the journal Emotion. His publication focuses on the spread of affective language between anxious children and their mothers when in a frustrating situation. Additionally, Nook was presented with a Young Investigator Grant from the Brain & Behavior Research Foundation. This two-year, $70,000 award will be used to support studies on how language shapes effective emotion regulation.

Alexander Ploss was among 65 fellows elected to the Class of 2023 of the American Academy of Microbiology, an honorific leadership group and think tank within the American Society of Microbiology. Fellows are elected annually through a highly selective, peer-review process, based on their records of scientific achievement and original contributions that have advanced microbiology.

Keith Wailoo was awarded the 2023 Hughes Prize for an accessible book in the history of science. The prize recognizes his book, “Pushing Cool: Big Tobacco, Racial Marketing, and the Untold Story of the Menthol Cigarette.” The award jury noted the book’s originality and timeliness, lauding Wailoo’s “meticulous research to uncover the enmeshment of social sciences, racial exploitation, and corporate interests, with catastrophic consequences for public health in the United States.”
CHW’s Visiting Scholars Program invites researchers from other leading institutions to devote either an academic year or semester in residence at Princeton. They spend this time focused on research, discussion, and scholarly collaborations concerning the determinants of physical, mental, and emotional wellbeing along with the effect of public policy on health and wellness. Visiting researchers are specialists in a variety of health-related fields, including medicine, psychology, biology, epidemiology, economics, sociology, and other social science disciplines.

### 2023 VISITING SCHOLARS

**Soumitra Bhuyan**  
Visiting Research Scholar

Soumitra Bhuyan is an associate professor at the Bloustein School, Rutgers University-The State University of New Jersey, New Brunswick. His primary teaching and research interests include chronic disease management and health information systems with an overarching emphasis on strategies to improve population health. Apart from academic writing, Bhuyan’s work has appeared in various regional and national news outlets, such as The Hill, ABC News, Becker’s Hospital Review, and The Star-Ledger. Dr. Bhuyan is also an associate editor of BMJ Global Health and serves on the editorial boards of The Journal of Health Administration Education, the flagship journal of the Association of University Programs in Health Administration, and Hospital Topics.

Bhuyan has received awards from several national organizations, including the American Public Health Association and AcademyHealth, for his research and
leadership activities. He and his colleagues received the 2017 Charles E. Gibbs Leadership Prize for their research in women's health issues, which is awarded annually to recognize excellence in research on women's health care or policy. Additionally, Bhuyan was honored with the “Rising Star” award from the American Public Health Association Health Administration Section, in recognition of outstanding potential in health administration and public health practice.

Valentina Duque  Visiting Research Scholar

Valentina Duque, an assistant professor at the School of Public Affairs at American University in Washington D.C., is an economist specializing in health economics, economic development, and public policy. In her academic work, Duque has studied the effects of economic and environmental shocks on children's physical and mental health and educational outcomes, as well as the role of social policies in mitigating early-life adversities and fostering long-run human capital outcomes. Currently, she is working on analyzing the effects of public housing on the education and health outcomes of children in developing countries using a large-scale randomized controlled trial. Duque received her Ph.D. in social policy from Columbia University and later pursued a postdoctoral program at the University of Michigan. Before joining American University, she was an assistant professor in Economics at the University of Sydney, where she taught courses in applied empirical methods, health, and social policies.

Maria Fitzpatrick  Visiting Research Scholar

Maria D. Fitzpatrick’s research focus is on child and family policy, with a particular interest in education and health. She has worked in a number of areas, including early childhood education, child health and wellbeing, child maltreatment, teacher compensation and the education workforce, and retirement and health.

Fitzpatrick is also the senior associate dean of academic affairs in the Brooks School. She is a research associate at the National Bureau of Economic Research, as well as an affiliate in the CESifo Research Network, the Cornell Population Center, and the Center for the Study of Inequality.

Furthermore, Fitzpatrick was a Searle Freedom Trust postdoctoral fellow at the Institute for Economic Policy Research at Stanford University. After receiving an undergraduate degree at the University of North Carolina at Chapel Hill, she earned her Ph.D. in economics from the University of Virginia, where she was both an Institute for Education Sciences and Spencer Foundation Pre-Doctoral Fellow.

Ori Heffetz  Visiting Research Scholar

Ori Heffetz is a professor in the Bogen Family Department of Economics and the Federmann Center for the Study of Rationality at the Hebrew University of Jerusalem; an associate professor in the Johnson Graduate School of Management at Cornell University; and a research associate at the National Bureau of Economic Research.

Heffetz is a data-based economist, using lab and field surveys and experiments to study the psychological, social, and cultural aspects of economic behavior, wellbeing, and policy. His work investigates what we can and cannot learn from economic and wellbeing indicators—household expenditures, the unemployment rate, or self-reported happiness—and how governments can use such data to guide policy. Heffetz also studies people’s economic perceptions, inferences, beliefs, and expectations, how they are related to behavior, and how policymakers can take them into account to design better policies and markets.

Heffetz holds a B.A. in physics and philosophy from Tel Aviv University and a Ph.D. in economics from Princeton University. He co-authored a widely used “Principles of Economics” textbook, and has created an award-winning macroeconomics course that introduces basic concepts and tools from economic theory and applies them to current news and global events. Beyond his academic research and teaching, Heffetz advises governmental and non-governmental institutions, and writes and speaks about economic issues.
Joanna Kempner  Visiting Research Scholar

Joanna Kempner is an associate professor of sociology at Rutgers University. Kempner, an award-winning sociologist of science, medicine, technology, and inequality, investigates the political and social mechanisms that produce widespread bias and ignorance in medicine. She publishes in various journals, including Science, Public Library of Medicine, and Social Science & Medicine. Kempner’s research has been widely recognized for excellence. Her first book, “Not Tonight: Migraine and the Politics of Gender and Health” (Chicago 2014), won top awards from both the American Sociological Association’s Medical Sociology Section, and the Society for Medical Anthropology. Kempner also earned the Rutgers’ Board of Trustees Research Fellowship for Scholarly Excellence, one of Rutgers’ highest honors. In addition, her research has been extensively covered by major national media outlets, including NPR, The Washington Post, Associated Press, Science, the Guardian, and National Geographic. Kempner is using her time at the Center for Health and Wellbeing to complete a book tracking citizen scientists’ role in the reemergence of psychedelic medicine.

Tanisha Spratt  Visiting Research Scholar

Tanisha Spratt is a medical sociologist whose research centers on the relationship between self-presentation, neoliberalism and health outcomes among marginalized groups. Spratt’s research particularly focuses on the role of neoliberalism in promoting and sustaining understandings of personal responsibility, deservedness, and grievability when it comes to health and illness. Her most recent project, “The Health Costs of Colourism in Black British Communities: Stress, Inequality and Everyday Racism,” considers the relationship between racism-induced stress and poor health outcomes for Black British women by examining how perceptions of skin color influence those health outcomes. Spratt’s forthcoming book, “Ungrievable Lives: Race, Risk and Responsibility in Neoliberal Societies” (Bloomsbury Academic, 2024), considers the role of racialized perceptions of fault in determining disparate health outcomes and mortality rates among Black and Minority Ethnic groups in the U.K. and U.S.

Spratt earned her Ph.D. in sociology from the University of Cambridge in 2019 and was a postdoctoral research fellow in the Nuffield Department of Primary Care Health Sciences, University of Oxford, from 2019-2021. Spratt then joined the University of Greenwich as a lecturer in sociology until 2023. She is currently a senior lecturer in racism and health at King’s College London.

Daniel Villela  Visiting Research Scholar

Daniel A.M. Villela is a senior research scientist at the Oswaldo Cruz Foundation (Fiocruz), where he is a professor in the graduate program of Epidemiology and also affiliated with graduate programs in Computational Biology and Parasitic Biology. He held the position of chair of the Program of Scientific Computing at Fiocruz from 2017 to 2023 and served as the deputy coordinator of the Program of Epidemiology from 2021 to 2023.

Villela earned his Ph.D. from Columbia University in 2005. He served on the Brazilian Advisory Committee on Immunization from 2021 to 2023 and is a member of the advisory council of the City of Rio de Janeiro. In 2022, the book he co-edited, “Covid-19 in Brazil: Epidemiological Scenarios and Health Surveillance,” was selected as one of the best books of the year in the Health and Sciences category (Abeu Prize and Jabuti).

Villela’s research interests are epidemiology and ecology for public health, with a focus on vector-borne diseases, such as malaria and arboviruses, and SARS-CoV-2 infections. Recent works include a comprehensive spatiotemporal analysis of malaria transmission in the Amazon basin, studies aimed at understanding the population ecology of mosquito species that are vectors of infectious diseases, and large-scale studies evaluating the effectiveness of vaccinations against severe cases of Covid-19.
Esther Annan  Postdoctoral Research Associate

Esther Annan received her medical degree from the Kwame Nkrumah University of Science and Technology, Ghana. After close to three years of clinical work, she pursued an MPH with a concentration in public health policy at New York University, focusing on how to bridge the gap between medicine, research, and health policy implementation. She then acquired a Ph.D. in epidemiology at the University of North Texas Health Science Center to strengthen her research skills and further explore her interest in infectious diseases.

Annan’s research primarily examines how spatiotemporal relationships and demographic patterns play a role in the etiology of infectious diseases. Of particular interest are vector-borne diseases, such as dengue fever. Her research interests also involve utilizing epidemiological methodological approaches to assess and establish causal inference. Much of her work has used large datasets from Mexico to advance our understanding of dengue fever severity in Mexico. Furthermore, Annan hopes to use her medical background and training in public health policy to examine how these relationships may help to guide location-specific policies in the management and eventual prevention of vector-borne diseases.

Michael Cassidy  Postdoctoral Research Associate

Michael Cassidy is an applied microeconomist whose research spans labor, public, and urban economics, with particular emphasis on welfare, education, and health. His current work focuses on homeless families, while his overall research agenda endeavors to understand how people make decisions and how social policy, broadly construed, can help them make better ones. Cassidy earned a B.A. from the University of Pennsylvania, an MPA from Princeton University, and a Ph.D. in economics from Rutgers University.

Hui Ding  Postdoctoral Research Associate

Hui Ding’s research focuses on demand and supply-side factors of health care utilization, especially in the mental health care setting. In her current work, Ding studies the geographic variation in mental health care use among the Medicare population, primary care physicians’ practice patterns in diagnosing and treating depression, and the relationship between educational stress and child mental illnesses. She also has been working on infectious disease spread within households and the role of public insurance in setting prices and promoting primary care services. Ding received her Ph.D. degree in economics at Stanford University, after graduating from Peking University with bachelor’s degrees in economics and psychology. In 2023, Ding joined Fudan University in Shanghai, China as an assistant professor in the Economics Department.

Katie Donnelly  Postdoctoral Research Associate

Katie Donnelly received her Ph.D. in sociology and social policy from Princeton University in 2023. Her research centers on women’s health. Using a critical theoretical lens, she investigates the ways in which social factors shape the construction of medical knowledge and practice, and (re)produce inequalities in health care. Katie’s dissertation analyzes technoscientific narratives surrounding intrauterine devices and how discrepancies between expert and lay understandings of these devices pose a barrier to women’s reproductive care.

Arbel Griner  Associate Research Scholar

Arbel Griner uses her multidisciplinary training in social medicine, anthropology, and social studies of science and technology to produce a nuanced critical perspective of how ideas of pathology, normality, and health are conceptualized in contemporary neuroscience, and how...
these ideas are integrated into medicine, public health, and ethical debates. She received her Ph.D. in collective health from the Institute for Social Medicine of the State University of Rio de Janeiro. In her dissertation, Griner scrutinized the claims of neuroscientific theories about biological affectivity and examined the ways in which they are appropriated by biomedical practices and bioethical regulation. She is now interested in looking more carefully into the use of biotechnology, more specifically pharmaceuticals, as treatment resources for so-called affective and gender-based pathologies in Brazil’s public health clinics.

**Boriana Miloucheva** Postdoctoral Research Associate

Boriana Miloucheva’s current work focuses on the financial relationships between pharmaceutical firms and physicians, and their consequences for patient outcomes. She has also examined the role of inequality on health as well as the health consequences of pollution and natural disasters. Miloucheva holds a B.A. from York University’s Glendon College, and an M.A. and Ph.D. from the University of Toronto. In 2023, she joined the University of Toronto’s Institute of Health Policy, Management and Evaluation in the Dalla Lana School of Public Health as an assistant professor.

**Gugulethu Moyo** Postdoctoral Research Associate

Gugulethu (Gugu) Moyo obtained a Ph.D. in nutritional science at Texas Tech University. Prior to that, she completed an MSc in international public health nutrition at London Metropolitan University and worked for several years within the international development sector. In her dissertation, Moyo investigated the social and nutritional determinants of favorable fetal growth conditions in pregnant women living in South Africa. She now seeks to design and test the efficacy of interventions that leverage traditional ecological knowledge, with the goal of improving the food and nutrition security status of pregnant and lactating women. She also aims to explore the chrononutrition of human milk and its role in infant health.

**ARBEL GRINER HONORED WITH GLIDE RESEARCH AWARDS**

Arbel Griner, an associate research scholar at Princeton’s Center for Health and Wellbeing, has received two prestigious awards from GLIDE, the Oxford-Johns Hopkins Global Infectious Disease Ethics Collaborative. The initiative aims to foster collaborations and dialogues to identify and analyze “ethical issues arising in infectious disease treatment, research, response, and preparedness, through the lens of global health ethics.”

At the 2023 Oxford Global Health & Bioethics International Conference, Griner was part of a research team honored with the GLIDE “Global Health Ethics Leadership Award” for “sustained contribution to the field of bioethics.” The team, led by Professor Debora Diniz and also including Luciana Brito and Ilana Ambrogi, was recognized for their dedication to advancing research and policy related to gender equity, reproductive health and justice, and other pressing issues. The group’s work has focused on the effects of the Zika and Covid-19 pandemics on women’s lives. Griner’s research, in particular, has explored the ethical intricacies related to the rise in maternal mortality in Brazil during the Covid-19 years.

Additionally, Griner and her co-authors were awarded the GLIDE Wellcome Open Research Gateway “Best Paper Prize” for their publication entitled, “Gender Inequality and Covid-19 Vaccination Policies for Pregnant Women in the Americas.” This work explores the disproportionate mortality rates among women in several Latin American and Caribbean countries during the Covid-19 pandemic. GLIDE Gateway is a new platform for publishing open access peer-reviewed articles on ethics, infectious disease, and global health.

(From left) Arbel Griner and co-authors Susan Bull (Oxford University), and Ilana Ambrogi and Luciana Brito (both from Anis Institute for Bioethics, Brazil), received the GLIDE Gateway Best Paper Prize for their work on disproportionate mortality rates among women in Latin American and Caribbean countries during the Covid-19 pandemic.
INTERNATIONAL COLLABORATION BRINGS HEALTH RESEARCHERS TO PRINCETON

Three graduate students from South America and the United Kingdom visited Princeton University in fall 2023 to further their research on antimicrobial resistance, male psychology, and social determinants of health. Doctoral candidates Ana Cláudia Barbosa and Felipe Betoni Saraiva from the Oswaldo Cruz Foundation (Fiocruz) in Brazil, and Sam McBride from the University of Sunderland in England, participated in the International Health Research Collaboration, an exchange program sponsored by the Center for Health and Wellbeing (CHW) and the School of Public and International Affairs.

“The Center for Health and Wellbeing has a long history of collaborating with research institutions around the world. Princetonians regularly travel overseas for internships and research projects that offer new insights into the field of global health and related disciplines, allowing them to bring lessons home to the United States,” stated Gilbert Collins, director of global health programs and executive director of CHW. “This endeavor allows us to reciprocate, making it possible for international students and stakeholders, from both developed and developing countries, to benefit from Princeton’s vibrant research community and to bring lessons back with them in turn,” added Collins.

**Fall 2023 Visiting Scholars**

The 2023 participating scholars came to Princeton with diverse, accomplished backgrounds and inspiring pursuits.

**Ana Cláudia Barbosa**, who holds a master’s degree in public health, is working toward a Ph.D. in the same area at Fiocruz. She is also a professor at Instituto Federal do Rio de Janeiro and a physiotherapist specializing in orthopedics and gerontology. Barbosa’s career began as a clinician, but her interests evolved over time. “I enjoyed caring for people as a physical therapist, but I was also concerned about how they got sick, especially the elderly,” she explained. Her attention shifted to the influence of age, gender, race, socioeconomic status, housing, and other factors on health outcomes.
Barbosa’s doctoral research examines how health care can effectively serve vulnerable populations, such as Black and elderly women, through the lens of intersectionality in the Brazilian context of Covid-19. She is looking at inequality markers that affect groups already at risk and in need of social justice. Ultimately, her goal is to better understand social determinants of health and to identify alternative ways of delivering care to achieve more equitable outcomes.

In addition to conducting research, Barbosa audited two classes at Princeton: one focused on gender in global society, and the other on publishing articles related to race, gender, and sexuality studies. “Princeton is a very plural place,” she added. “I interacted with researchers from around the world and faculty I’ve only dreamed of meeting. In every way, the experience exceeded my expectations.”

Sam McBride, who holds a Master of Science in psychological research methods, is a Ph.D. candidate and academic tutor at the University of Sunderland, where he is focused on male psychology. He learned about this emerging area of study, which explores how men and boys think, feel, and behave, when Sunderland launched the world’s first male psychology module while he was studying for his master’s degree. “While the world has become more aware of inequalities around women, we tend to overlook ways in which men are disadvantaged,” he noted, “For example, suicide, homelessness, and obesity are more prevalent among men.”

McBride’s doctoral research project seeks to identify facilitators and barriers to bariatric, or obesity-related, care for men. His study targets Sunderland, England, where the obesity rate exceeds 70 percent and men are far less likely than women to seek treatment, especially bariatric surgery. This disparity is significant because obesity is linked to many chronic diseases, and men are predisposed to additional complications.

During his time at Princeton, McBride discussed his research with Professor Alin Coman in the Department of Psychology and other faculty members. He also participated in health-focused campus events and audited classes on inequities in health and the anthropology of mental health. “This visit has been academically rewarding while broadening my horizons in other ways, such as strengthening my independence,” he added.

Felipe Betoni Saraiva, who holds a Master of Science in biological chemistry, is a Ph.D. candidate in cell and molecular biology and a public health technician at Fiocruz. He is particularly fascinated by multidrug-resistant microorganisms (MMR), which are increasingly common and pose a significant threat to public health. “Some people predict that, in 20 years, antimicrobial resistance will be the leading cause of death,” said Saraiva, adding that MMRs also have a substantial economic impact. “By 2050, the economic cost is estimated to reach $100 billion.”

One of the critical MMRs is Acinetobacter baumannii, classified as a top priority by the World Health Organization. Conventional drugs are losing their effectiveness against this bacterium, making it difficult to treat and creating an urgent need for alternatives. While monoclonal antibodies have shown promise, the therapy is complex, costly, and not readily available. Saraiva’s doctoral research explores a new therapeutic option that may be more viable from economic and regulatory points of view. His project is focused on aptamers, also known as “chemical antibodies,” which are small, synthetic molecules that can bind to targeted molecules and block enzymatic activity. At Princeton, Saraiva worked with Professor Zemer Gitai in the Department of Molecular Biology to analyze this approach and determine its effectiveness. His goal is to develop an innovative treatment for Acinetobacter baumannii infections and potentially other diseases.

Additionally, Saraiva audited classes (on antibiotics through the life span, cellular biology, and biophysics immunology), attended seminars, and collaborated with researchers who share his interest in antimicrobial resistance. “This research partnership between Fiocruz and Princeton is crucial for advancing my project and addressing the antibiotic resistance challenge,” he stated.
MINOR IN GLOBAL HEALTH AND HEALTH POLICY

Faculty Directors: Heather Howard Professor of the Practice, School of Public and International Affairs (SPIA), and Director, State Health and Value Strategies (SHVS); and Jessica Metcalf Professor of Ecology & Evolutionary Biology and Public Affairs

The undergraduate minor in Global Health and Health Policy (GHP) addresses global health through an interdisciplinary lens. The program emphasizes determinants, consequences and patterns of disease across societies; the role of medical technologies and interventions in health improvements; and the economic, political and social factors shaping domestic and global public health.

Passionate students are attracted to GHP’s close-knit campus community where, blending coursework and hands-on experience, issues in global health policy are brought to life by renowned faculty. The program currently enrolls students from 15 diverse departments including Molecular Biology, Anthropology, Ecology & Evolutionary Biology, the School of Public and International Affairs (SPIA), Neuroscience, History, Chemistry, and Economics, among others.

For the GHP minor, students must complete two core courses and four GHP approved health-related electives; conduct an approved field-based or lab-based research project during the summer between their junior and senior year; and write a senior thesis in their department of concentration addressing or relating to global health and health policy in an interdisciplinary manner.

2023 GHP Students by Major

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<tr>
<th>Major</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Natural Sciences</td>
<td>57%</td>
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<tr>
<td>Molecular Biology</td>
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<tr>
<td>Ecology &amp; Evolutionary Biology</td>
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<tr>
<td>Neuroscience</td>
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<tr>
<td>Chemistry</td>
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<tr>
<td>Social Sciences</td>
<td>35%</td>
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<tr>
<td>Anthropology</td>
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<td>Psychology</td>
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<td>Sociology</td>
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<td>Politics</td>
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<tr>
<td>Economics</td>
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<tr>
<td>Engineering</td>
<td>6%</td>
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<tr>
<td>Chemical &amp; Biological</td>
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<td>Computer Science</td>
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<td>Operations Research &amp; Financial</td>
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<tr>
<td>Humanities</td>
<td>2%</td>
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<tr>
<td>Spanish &amp; Portuguese</td>
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<tr>
<td>Comparative Literature</td>
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GHP MINOR COURSE HIGHLIGHTS

All GHP students are required to take **Critical Perspectives in Global Health Policy** and **Epidemiology**. Students also choose four electives from a pre-approved list. Below is a sampling of the 90 elective courses offered by 40 departments and programs this year.

- The Aesthetics of Hunger
- Anthropology of Mental Health
- Antibiotics: From Cradle to Grave
- The Art & Archaeology of Plague
- Biochemistry of Physiology and Disease
- Bioethics: Ancient and Modern
- Biotechnology
- Catastrophes Across Cultures: The Anthropology of Disaster
- Disability, Difference, and Race
- Diseases in Children: Causes, Costs, and Choices
- Economics of Health and Health Care
- Eliminating Suffering: Netflix, Drugs, and Spiritual Practice
- Facing Difference: Visual Politics and the Body
- Food Culture and Food Justice
- Global Air Pollution
- The Healing Humanities: Decolonizing Trauma Studies from the Global South
- Health Policy in Low and Middle Income Countries
- Health Psychology
- Health Reform in the US: The Affordable Care Act and Beyond
- Immune Systems: From Molecules to Populations
- Inequities in Health
- Literature and Medicine: Illness, Writing, and Repair
- Making Post-Pandemic Worlds: Epidemic History and the Future
- Mathematical Modeling in Biology and Medicine
- Medical Anthropology
- Medical Spanish
- Medicine, Literature, and the Visual Arts
- Pathogens, Pandemics, and Technologies
- Race, Drugs, and Drug Policy in America
- Viruses: Strategy and Tactics

BETH N. ROM-RYMER, CLASS OF 1973, SENIOR THESIS PRIZE IN GLOBAL HEALTH AND HEALTH POLICY

As a capstone experience, all GHP students complete a thesis or final paper centered on a global health theme. The Beth N. Rom-Rymer, Class of 1973, Senior Thesis Prize in Global Health and Health Policy is awarded in recognition of the most outstanding theses.

Three awardees were selected in 2023:

**Nannette Beckley ’23** School of Public and International Affairs

“Community Violence and Postpartum Depression: Associations and Potential Intervention Strategies”

**Nelson Chow ’23** Molecular Biology

“Transmural Pressure and Retinoic Acid Signaling in the Mouse Lung Mesothelium”

**Chloe Fox-Gitomer ’23** Anthropology

“Sharps Containers are Red, Tourniquets are Blue: Harm Reduction’s Abridged History and an Ethnography of Contemporary Programs”
GHP STUDENT AWARDS AND ACCOMPLISHMENTS

Seth Kahn ’25 School of Public and International Affairs

Kahn’s paper titled “Increased Body Mass Index Augments Endothelial Injury and Clinical Outcomes after Hematopoietic Stem Cell Transplantation” was published by Transplantation and Cell Therapy. Additionally, Kahn presented a talk at the ImproveCareNow conference on helping teenage and young adult patients transition to college, adult medicine, and beyond.

Tiffany Tsai ’25 Psychology

Tsai’s internship with Texas Tech University’s Nutritional and Metabolic Health Initiative was featured by Lubbock News. She and her mentor, Dr. Martin Binks, were interviewed by the local ABC television affiliate for its “Trends and Friends” news segment, during which Tsai shared her experiences in her host organization’s clinic.

Ella Morgan ’24 Neuroscience

Morgan’s paper titled “Juvenile Nasopharyngeal Angiofibroma: Outcomes Analysis Based Upon Hospital Volume” was published by The Laryngoscope. The paper highlighted her work at Boston Children’s Hospital, where she completed an internship.

Tiffany Zhong ’25 Neuroscience

At the conclusion of her internship at the National Institutes of Health, Zhong presented her research during the agency’s Summer Poster Day. Her poster was titled “Cell-Specific Genetic Manipulation of Cholesterol Content in Insect Brain.”

GHP STUDENT REPRESENTATIVES

GHP benefits greatly from the contributions of student representatives who offer program feedback, support recruitment efforts and social media outreach, and provide valuable perspective.

HEALTH SCHOLARS PROGRAM

CHW Health Scholars, selected through a rigorous application process, receive two years of mentorship, opportunities, and financial support. Health Scholars are advised by program faculty and assist in planning health policy seminars and lectures, where they meet and interact with distinguished speakers in intimate settings. The students receive financial support to pursue health-related internships or independent research the summer before their senior year. Finally, they are expected to write health policy-related senior theses.

The class of 2025 cohort joins CHW’s returning scholars from the Class of 2024: India Behl (SPIA), Alaina Joby (SPIA), Ive Jones (Politics), Julia King (Politics), Bella Moscoe (SPIA), and Kennedy Walls (Anthropology).

The six Class of 2025 Health Scholars, all of whom are minoring in Global Health and Health Policy, are:

- **Thia Bian**, a comparative literature major, is interested in how language shapes and limits the way we perceive illness. Specifically, she plans to study potential differences between English and Chinese texts on illness. She believes this work could support the development of culturally sensitive policies and lead to a more nuanced understanding of why certain treatments work or don’t work in various contexts.

- **Tara DSilva**, an anthropology major, plans to center her project on the dissonance between India’s policy goals and results by tracking the lived experiences of people with mental illnesses. Her research will focus on the southern state of Tamil Nadu, where rates of depressive and anxiety disorders are especially high compared to other states.

- **Issa Mudashiru**, an anthropology major who is on the premed track and also minoring in Chinese Language Studies, plans to study the impact of China’s involvement in Sierra Leone’s health care system. He will investigate the origins and current state of Chinese economic, political, and medical investment in Sierra Leone and West Africa generally, as well as ethnographies relating to Sierra Leone’s rich history, cultures, and traditions.

- **Emmie Pickerill**, an anthropology major, plans to research the points at which large scale health organizations intersect with local health initiatives. She will explore the dynamics of collaboration from multiple perspectives, considering historical and contemporary influences. Ultimately, she aims to identify successes to build upon and challenges to overcome.

- **Catalina Posada**, an economics major, will examine how experiencing disease in childhood impacts financial outcomes later in life. Moreover, she will study the effects of maternal socioeconomic status on the incidence of disease in their children. The research will explore such issues as socioeconomic inequality, social determinants of health, and spread of disease.

- **Kiara Wassoodew**, a molecular biology major, will study dowry (or “bride price”) as a public health crisis. She aims to better understand the sociocultural, religious, political, regional, and economic forces that surround the dowry system in India and how this system affects the mental wellbeing of women. She hopes this research will inform future policies and legislation to protect women’s health.
Mikaela Gerwin ’19, a history graduate with a certificate in Global Health and Health Policy, understands the value of storytelling. In many ways, it’s been a common thread in her early, service-driven career. While her work has tackled a diverse range of issues contributing to health and wellbeing, from domestic violence to housing, her approach is often the same. She solves problems by listening to individuals, seeing the bigger picture, and building a narrative to inspire changes in policy and outcomes.

Gerwin’s journey to Princeton began with a bridge year fellowship in Urubamba, Peru, where she built water filters and clean-burning stoves, and taught English and Spanish reading comprehension to Quechua-speaking children. “I saw the kinds of problems that arise when you only think about health in a medicalized way,” said Gerwin. She saw, for example, how inadequate daycare could lead to injuries and poor nutrition.

The fellowship, combined with insights gained from living and volunteering in New York City, sharpened her focus on health equity and health policy. “I learned, early on, that there are people with complicated stories behind issues such as homelessness and other challenges,” she explained.

Those stories were of great interest to Gerwin, prompting her to study both history and global health at Princeton. She saw a connection between the two fields, how each offered context, nuance, and tools for viewing the world through a wider lens. In particular, the Center for Health and Wellbeing (CHW) and its Global Health Program satisfied Gerwin’s desire for meaningful impact. “The program helped me understand public health as an interdisciplinary field driven by people with different vantage points, all working together to solve one problem.”

As a CHW Health Scholar and participant in the Scholars in the Nation’s Service Initiative (SINSI), Gerwin received a Princeton-funded fellowship with the U.S. Department of Health and Human Services (HHS). While at HHS, she had the opportunity to spend time in Alaska evaluating domestic violence prevention programs for Athabaskan women in the Yukon, and helped to implement various Violence Against Women Act programs. That work heightened Gerwin’s awareness about preventing and addressing interpersonal violence within a public health framework.

After graduating from Princeton, Gerwin earned a master’s degree in history and philosophy of science and medicine from the University of Cambridge as a Gates-Cambridge Scholar. She then worked on the Biden Presidential Campaign in Colorado and the Ossoff-Warnock Senate Campaign in Georgia before joining Health Care for All, a non-profit organization focused on equitable access to health insurance and care in Massachusetts. The advocacy group offered a valuable training ground for Gerwin, developing her skills and leading her to federal government.

In 2021, Gerwin joined the U.S. Department of Housing and Urban Development (HUD) as a political appointee in the Secretary’s office, focused on such issues as asset building and access to mental health, before taking a position with the Domestic Policy Council at the White House. There she worked on a myriad of health-related challenges, including hunger and nutrition, flavored cigarette regulation, and the Indian Health Service. Notably, she helped to produce the first ever federal government framework on social determinants of health, the *U.S. Playbook to Address Social Determinants of Health*, and other resources to advance health equity, strengthen health systems, and encourage cross-sector partnerships.

Recently, Gerwin stepped into a new role at the Department of Treasury, supporting implementation of the Inflation Reduction Act and modernization of the Internal Revenue Service. In this capacity, she is championing health more broadly by working to improve economic security for American families.
STUDENTS PRESENT HEALTH-FOCUSED RESEARCH

GHP Poster Session

Students enrolled in the Critical Perspectives in Global Health Policy course presented their health-focused research at a poster session hosted by the Global Health Program on December 6, 2023. University faculty, staff, visiting scholars, and peers stopped by Frist Campus Center to hear brief presentations summarizing research related to the students’ final projects.

Critical Perspectives in Global Health Policy is one of two core courses for the GHP minor. In this course, taught by Professor Heather Howard, students gain tools to critically analyze the key theories and interdisciplinary frameworks underpinning the expanding field of global health policy.

Conference Presentations

The Center for Health and Wellbeing sponsors opportunities for students to present their work at various conferences and events. These experiences also allow students to see and discuss other research projects, attend workshops, and network with experts in their respective fields.

The following students received funding in 2023:

Kira Emsbo ’23  Anthropology

Emsbo presented a poster on the perceived benefits of presbyopia correction in a rural Ecuadorian community at the 14th annual Global Health Conference organized by the Consortium of Universities for Global Health. The event, held in Washington, D.C., also offered the opportunity for Emsbo to learn more about other global health challenges, including pandemic prevention and access to reproductive health services.
Maryam Kamel ’23  Molecular Biology

Kamel attended the ENT World Congress hosted by the International Federation of Otorhinolaryngological Societies in Dubai, United Arab Emirates. She presented research on sialolithiasis, the medical term for salivary gland stones, highlighting the need for minimally invasive approaches to diseases of the salivary glands.

Rachel Kulchar ’23  Chemistry

Kulchar was invited to present her research on oral therapeutics and global health inequities at a conference hosted by the International Association for Dental, Oral, and Craniofacial Research in Bogota, Colombia. She met with global dental leaders, colleagues, and mentors while learning more about oral health problems in Latin America and strategies for reducing oral health inequalities.

Yubi Mamiya ’26  Computer Science and Bioengineering

Mamiya presented her work at the 2023 International Diabetes Federation Conference. Her research, conducted during a GHP-funded internship at the University of Malaya, studied disparities in treatment and treatment outcomes of Type 2 diabetes patients with minority racial backgrounds in Malaysia. She also presented a predictive model to classify early-onset versus late-onset disease.

Chloe Searchinger ’23  SPIA

A CHW Health Scholar, Searchinger presented global health research at the 2023 American College of Cardiology Scientific Session in New Orleans, Louisiana. Her work explored the quality of life for Ugandan children and young adults with repaired congenital heart disease.

BLACK PREMEDICAL SOCIETY VISITS PERELMAN SCHOOL OF MEDICINE

In November 2023, 22 members of Princeton’s Black Premedical Society visited the University of Pennsylvania’s Perelman School of Medicine. The trip, co-sponsored by the Global Health Program, was the first of its kind in the club’s history. Students participated in a Q&A with a head University Health Services physician and Princeton alumni studying at Penn, received an insider tour of the world-class medical school and laboratory spaces, and connected with fellow pre-health students over lunch with UPenn’s Minority Association of Premed Students and Perelman’s Student National Medical Association.
HEALTH & HEALTH POLICY CERTIFICATE

Program Director: Janet Currie, Henry Putnam Professor of Economics and Public Affairs and Co-Director, Center for Health and Wellbeing

Since 2003, CHW’s Health and Health Policy (HHP) certificate program has prepared graduate students for health-related careers in both the public and not-for-profit sectors. The program was developed as part of Princeton’s ongoing commitment to teaching and researching health and health policy. HHP leverages the best of what CHW and Princeton have to offer: world-class global and domestic health coursework; partnerships with faculty and thought leaders who are redefining the field; graduate research support; and connection to, and support of, a vibrant, multidisciplinary community through collaboration, conferences, and events.

While most students who join the HHP program are MPA and MPP candidates from the School of Public and International Affairs, the certificate is open to all graduate-level students at Princeton. Future and current medical professionals who have completed the certificate cite the value of examining the drivers of health disparities not taught in medical school. Other alumni, such as Ph.D. scientists, say the program lends richness to their studies.

“2023 exposed and reinforced the critical role health policy, and health policy leaders, play in a well-functioning society,” said HHP Program Director Janet Currie. “We are pleased to be playing such an important role in shaping and guiding current and future leaders at Princeton.”

HHP COURSE SPOTLIGHTS

The HHP curriculum is designed to offer insight into the contexts that create health disparities while exposing graduate students to an interdisciplinary approach by which these issues can be addressed. All HHP students take two core courses: Epidemiology, and Public Policy Approaches to Health and Health Care. Certificate candidates also choose from a curated array of approved health-related electives, such as Disability, Difference, and Race; Antibiotics: From Cradle to Grave; Social Determinants of Health; Reproductive Justice and Public Policy; and Climate and Health: Risks and Opportunities.

Spotlight: Public Policy Approaches to Health and Health Care

Professor Janet Currie’s Public Policy Approaches to Health and Health Care course engages students in a thoughtful examination of the role of public policy in improving health and health care delivery systems. While the main focus of the course is on U.S. health policy, evidence from other countries is frequently discussed to provide a broader international context.

In 2023, several guest lecturers contributed to the course, including:

- David S. Kountz, M.D., chief academic officer and vice president for academic diversity at Hackensack Meridian Health, and professor of medicine and founding associate dean for diversity and equity at Hackensack Meridian School of Medicine
- Robert A. Kasdin '80, former senior vice president, chief financial officer, and chief operating officer at Johns Hopkins Medicine; and chair of CHW’s Advisory Council

- Brian Hasselfeld, M.D., senior medical director for digital health and innovation at Johns Hopkins Medicine, and associate director at Johns Hopkins in Health

- Mustafa Basij-Rasikh, professional specialist at CHW and former managing partner of the QARA Consultancy Group in Afghanistan

- Sejal Hathi M.D., New Jersey’s deputy commissioner for public health; and former senior policy advisor for public health in the Domestic Policy Council of the Executive Office of the President

In the course, students are required to prepare a policy brief inspired by their expertise and interests. In 2023, students submitted briefs addressing a wide range of health-related topics, including: reducing racial gaps in maternal mortality; evaluating harm reduction strategies for confronting the opioid epidemic; improving organ donation rates in Australia; taxes on sugary treats vs. addressing portion sizes in reducing obesity; addressing gaps in the availability of menstrual supplies in Ethiopia; and improving the financial integrity of the Medicaid program.

The combination of topics, perspectives, and exposure to issues facing health systems builds a solid base from which HHP students can further their careers.

**Spotlight: Policy Workshop**

Professor Heather Howard offers a yearly policy workshop, a popular selection among HHP students. Participants are tasked with solving real-life policy, operational, and political challenges in implementing the coverage expansions, delivery system reforms, and other innovations resulting from the Affordable Care Act (ACA). The workshop client is a U.S. state or territory taking a unique approach to an element or elements of ACA implementation.

In 2023, workshop students traveled to Albuquerque and Santa Fe, New Mexico. They interviewed state officials, health care providers, advocates, and other stakeholders to inform their research on advancing health equity in state health care programs. Students then produced a policy report outlining options and considerations for the state and presented their findings to officials with the New Mexico Office of the Superintendent of Insurance.

Many alumni cite this course as a pivotal experience, both in shaping their careers and in providing a tangible perspective on how the work they do can impact people’s lives.
DISEASE GROUP

A multi-disciplinary Disease Group invites Princeton students, faculty, and visiting scholars to discuss the ecology and evolution of infectious disease and their public health consequences. Bi-weekly meetings feature updates on current infectious disease issues, discussions about particular problems and data sources, and research presentations. For example, Qiqi Yang, an Ecology & Evolutionary Biology graduate student, shared her work on optimal design of cross-protective influenza vaccine formulations, while Postdoctoral Research Fellow Benny Rice addressed the impact of climate on malaria transmission risk.

The Disease Group also hosted Visiting Scholar Wariri Oghenebrume from the London School of Hygiene & Tropical Medicine, who argued for timely childhood vaccinations in both low-coverage and high-coverage countries.

The group receives funding from the Center for Health and Wellbeing and is coordinated by three graduate students concentrating in Ecology & Evolutionary Biology.

GLOBAL HEALTH CONFERENCE

The Center for Health and Wellbeing sponsored two students to attend the 2023 Consortium of Universities for Global Health (CUGH) conference held in Washington, D.C. HHP students Katie Comando MPA ’23 and Evelyn Wong MPA ’23 attended the event, which focused on the interaction of global health with equity, climate change, microbial threats, and other issues. Individuals from nearly 150 countries participated in the conference, sharing knowledge, insights, and cutting-edge research on contemporary global health challenges.

FILM SCREENING

In April 2023, the Center for Health and Wellbeing sponsored an educational film screening for HHP students. The featured film, “Heroin(e),” examined how a West Virginian town is coping with the opioid epidemic. Following the screening, students engaged in a lively conversation about the intersection of physical and mental health, poverty, and the judicial system.

HHP Student Representative

Gillian Tisdale MPA ’24 served as the 2023 HHP Student Representative. In that role, she supported the graduate certificate program by providing feedback on course offerings, recruiting students, proposing and organizing events, and representing the program to stakeholders.
MINDSCAPES UNVEILED: AN ART EXHIBITION

The Center for Health and Wellbeing co-sponsored a health-focused art exhibition presented by Chanika Svetvilas, the 2022-23 Artist-in-Residence at Princeton’s Ida B. Wells Just Data Lab. The exhibition, named Mindscapes Unveiled, culminated a year-long, CHW-supported research project, named Anonymous Was the Data, which uplifts the individual lived experiences of Asian Americans and Pacific Islanders who have a mental health difference or condition by mapping their survey data about health care access and stigma. Collected data determined the shape of 3D printed prescription bottles in hybrid forms. Centered around accessibility, the exhibition included drawings, video, sculpture, and mixed media. Princeton’s Department of African American Studies collaborated with the Lewis Center for the Arts to orchestrate the event. The Program in Asian American Studies, Council on Science and Technology, Effron Center for the Study of America, Office of Disability Services, and Princeton Humanities Council joined CHW as sponsors. Svetvila's work can be viewed on her website, chanikasvetvilas.com.

HEALTH POLICY CAREER EVENT

In 2023, CHW hosted a virtual career event featuring Princeton alumni from its HHP and GHP programs. The event was designed to help current graduate and undergraduate students explore international career possibilities within the realm of health policy.

Panel participants discussed their backgrounds, career pathways, and perspectives on a myriad of topics, from current roles and responsibilities, to challenges and opportunities at various levels of government to health equity. They also offered practical advice, and explained how students can leverage their Princeton education and experiences to attain their career goals and advance public health.

Panelists included:

Kim Bonner Dube ’08, MPA ’12, epidemiologist, U.S. Centers for Disease Control and Prevention, Global Immunization Division; past experience with Doctors Without Borders, Tanzania Ministry of Health, and Oregon State Public Health Division; former Princeton Scholars in the Nation’s Service Initiative (SINSI) fellow

Erin Ferenchick ’00, M.D., assistant clinical professor of medicine, Columbia University; past experience with the Global Fund to Fight AIDS, Tuberculosis, and Malaria, the World Health Organization, and Gavi, the Vaccine Alliance

Cathy Nguyen, MPA ’04, senior HIV strategy advisor, U.S. Agency for International Development’s Office of HIV/AIDS; past experience with the President’s Emergency Plan for AIDS Relief (PEPFAR), Doctors Without Borders, Africare, and the U.S. Peace Corps

Julie Whittaker, MPA ’17, program quality technical advisor, Catholic Relief Services; co-founder, Jusoor-Amal Scholarship Fund; former Fulbright Scholar in Jordan

Moderated by Alyssa Sharkey, lecturer, School of Public and International Affairs
HHP STUDENT REFLECTIONS

Gillian Tisdale MPA ’24 took the long road to a career in public health. Nevertheless, her unwavering interests in women’s health issues, health equity, and a “failing” American health care system eventually paved the way to Princeton University, where she is pursuing a Master in Public Affairs and a Certificate in Health and Health Policy.

Throughout her lifetime, Tisdale has witnessed the repercussions of unjust, often unaffordable health services in the United States. “I’ve watched my mother deal with complications of chronic illness, my grandmother try to navigate Medicaid, and many people that I care about struggling to access support for their basic health needs,” she explained. Those personal experiences solidified Tisdale’s belief that health care should be a fundamental human right, not a privilege, and laid the groundwork for her professional pursuits.

Her education began with a Bachelor of Arts in philosophy and logic at Smith College, which provided the tools to think critically about any issue. Upon graduation, she was drawn to the continued education and exposure provided by consulting, where she focused on market access in the pharmaceutical industry and subsequently ventured into health technology, where she was particularly intrigued by the ‘femtech’ wave and how it sought to improve women’s health.

Tisdale quickly gained insight into the U.S. health care system and the life-altering effects of medications and other interventions. She also saw, however, how structural barriers limited access to a subset of the population – often leaving out those with the greatest need. Then Covid-19 came along, which only exacerbated the disparities.

“The pandemic was the catalyst for bringing me to Princeton,” said Tisdale. “I knew that I wasn’t done learning, but I didn’t know how to focus my graduate studies until I saw the challenges of responding to a global health issue.” At the same time, she became increasingly concerned about the inaccessibility of valuable products and solutions developed by the private sector.

Tisdale was attracted to Princeton’s School of Public and International Affairs (SPIA) for its highly regarded graduate programs, esteemed faculty, and health-focused programming. Furthermore, she recognized that the school’s unique funding not only alleviated personal burdens but also contributed to its diversity. “SPIA does a good job of recruiting students with backgrounds as multifaceted as the constituencies we’re trying to serve,” she asserted.

The Health and Health Policy Certificate program has enabled Tisdale to hone her skills and explore various aspects of public health, from epidemiology to medical ethics. She also values the program’s flexible curriculum and robust core classes, including the policy workshop led by Professor Heather Howard and Dan Meuse, through which she developed policy recommendations for improving health equity in New Mexico.

Additionally, Tisdale completed an internship at the Center for American Progress in Washington, D.C., where she conducted research and authored papers addressing such issues as HPV vaccine hesitancy, the direct care workforce, and the equity implications of the 2022 Inflation Reduction Act.

Tisdale will leave Princeton this spring with renewed inspiration and expanded possibilities for her career. She is especially interested in domestic policy pertaining to sexual and reproductive health, rights, and justice.

“We are going through a time of immense change and disruption in the women’s health space,” she said. “In this moment in history, my postgraduate work could really make a difference among myriad policies and programs.”

“Global and domestic health issues change. The world changes,” added Tisdale. “But helping people live their happiest, healthiest lives will always be important.”

As part of her health policy workshop, Tisdale prepared and presented a policy report to state officials in New Mexico.
HHP ALUMNI REFLECTIONS

Julianne Whittaker MPA '17

began her academic journey with an impassioned call to service and an appreciation for the world around her. She credits her parents on both fronts – for instilling values of empathy, generosity, and social responsibility, while also fostering an underlying spirit of adventure.

“My parents were a huge influence in different and interconnected ways,” she said. Whittaker’s mother encouraged volunteer work in support of people experiencing food insecurity or homelessness. At the same time, her father nurtured interests in international affairs and history. “At a young age, I was excited by travel, new cultures, and the broader global community,” she asserted.

As an undergraduate student at Fairfield University, Whittaker majored in international studies and economics. She also studied Arabic, fueled by a love for languages and desire to learn about an unfamiliar region. These concentrations, combined with her wanderlust, led to three years in Jordan. She studied abroad for one semester at the country’s largest university before becoming a Fulbright Scholar and later working with a relief agency that assisted Syrian refugees. The experiences were formative.

“Working with people impacted by conflict forever changed how I look at the world,” she stated. “It fundamentally shifted how I thought about resiliency and how I wanted to live my own life.”

With that in mind, Whittaker decided to pursue a Master in Public Affairs and a certificate in Health and Health Policy at Princeton University. Her studies reflected a burgeoning specialization in global health and strengthening conflict-affected communities. “I learned how to think about social determinants of health in an interdisciplinary way, expanding my perspective on what enables people to live safe, healthy lives,” she said. “In addition to setting up health services, it is important to provide educational opportunities and to create spaces where children and adults can exercise, read, write, and engage in basic activities that are essential for wellbeing.”

While at Princeton, Whittaker co-founded The Amal Foundation to aid refugee students through advocacy, fundraising, and scholarships for higher education. She also completed a fellowship with UNICEF in East Jerusalem, researching programming and policies to protect the welfare of children, and participated in an international relations workshop through which she developed recommendations for U.S. policymakers to promote peace in Israel and Palestine.

“Princeton was rigorous academically, but it was also a space where people came to question and exchange ideas,” she said. “It was enriching and motivating to be in an environment with peers, professors, and mentors from very different backgrounds but united by a common interest in public service.”

After earning her MPA, Whittaker resumed her professional career with Catholic Relief Services, where she has held various roles managing international relief and development efforts. In her current position as a technical advisor, she supports the organization and its partners throughout Europe, the Middle East, and Central Asia with the design and implementation of quality programming for communities in need. Whittaker has responded to some of the world’s most devastating humanitarian crises.

“Working in the humanitarian field means you see the worst of our world, but also the best of it. We see the doctors and nurses who stay with their patients even when they’re under siege, teams that deliver lifesaving supplies by foot, donkey, or any means available, and families that open their homes to those who have nowhere else to go,” she added. “I feel privileged to lift up the voices of communities affected by conflict and to collaborate with people who are committed to building a better future together.”

Whittaker supporting a refugee camp in Jordan.
A cohort of nine Princeton students spent the summer at Telethon Kids Institute (TKI) in Perth, Australia, a research entity dedicated to the health and wellbeing of children. Pictured with them, from left, are: Ben Andrews, manager, leadership & organizational development, TKI; Professor Catherine Elliott, deputy director and director of research, TKI; and Gilbert Collins, director of global health programs and executive director of CHW, Princeton University.

INTERNERSHIP PROGRAMS
CHW sponsors a robust Internships in Global Health program, encouraging students to probe a myriad of health topics affecting the developed and developing world, from fighting AIDS, tuberculosis, and malaria, to curbing antimicrobial resistance and understanding the drivers of climate change.

In 2023, CHW funded 87 opportunities for research, senior thesis projects, and other health-focused endeavors. The fully funded internships, spanning six continents and 20 cities, offered immersive experiences for undergraduate and graduate students interested in global health.

**Sampling of Host Sites**

- Department of Health, South Africa
- Western Cape Province
  Cape Town, South Africa
- The Oswaldo Cruz Foundation (Fiocruz)
  Rio de Janeiro, Brazil
- One Health Trust
  Bengaluru, India
- Oxford University Clinical Research Unit (OUCRU)
  Hanoi, Vietnam
- Texas Tech University, Nutrition and Metabolic Health Initiative
  Lubbock, Texas
- NYC Health + Hospitals, Special Pathogens Unit
  New York City, New York
SUMMER INTERNSHIP HIGHLIGHTS: IN THEIR OWN WORDS

Through GHP’s many worldwide partnerships, students gain hands-on experience with leading global health researchers and practitioners. Whether supporting a collaborative institutional study or conducting independent research, the students find these opportunities transformative and often life-changing. The following narratives highlight a few of their endeavors during the summer of 2023.

Yonatan Ambrosio ‘24
Psychology
Telethon Kids Institute

Last summer I had the opportunity to intern at the Telethon Kids Institute in Perth, Australia. I mainly worked on two projects under the guidance of Dr. Vincent Mancini of the Population Health Team. First, I led the early stages of a collaborative research project on the usability and acceptability of a series of videos offering tips, resources, and support for culturally and linguistically diverse (CALD) fathers. My role entailed creating a survey on Qualtrics to distribute to CALD fathers, submitting an ethics application for review, and designing a page on the Fathering Project website for distribution of the videos. By the end of the summer, the ethics application for this project was approved, allowing us to distribute the survey for data collection.

I also contributed to another project, where I took part in a scoping review that sought to identify the current tools that are being used to screen fathers for perinatal mental health issues during the first year of their child’s life. In this role, I screened thousands of articles, registered the study in the Open Science Framework (OSF), and began drafting the scientific article for future publication.

Throughout this internship, I engaged in a range of activities outside of my on-site work. From exploring Western Australia’s coastline and islands to eating Australian cuisine, I fully embraced Perth’s beautiful natural landscape and culture to make the most of my experience abroad. At the same time, the internship provided me with a lot of life lessons. For example, I learned how to navigate public transportation and immerse myself in a new city.

Overall, I feel that the academic, professional, and personal development I gained from this internship was invaluable, and something that I will carry with me for the rest of my life. Dr. Mancini provided me with skills, advice, and mentorship that will be helpful during my final year at Princeton, as I work on my senior thesis and apply to Ph.D. programs in clinical psychology.

Umar Aulia ‘24
School of Public and International Affairs
One Health Trust

Last summer I interned at One Health Trust in Bengaluru, India, working alongside Dr. Varun Manhas and Dr. Ramanan Laxminarayan to design, develop and pilot a National Medical Oxygen Grid (NMOG) platform. The idea for this initiative arose following fatal oxygen shortages in India during the Covid-19 pandemic.

In this role, I conducted comprehensive reviews of the NMOG platform and identified potential areas for improvement; prepared detailed reports summarizing the NMOG’s features and efficacy for government health authorities; and visited medical facilities to train staff in the field. After identifying possible areas for refinement, I worked to effectively communicate these proposals to the NMOG project supervisor and helped to ensure that necessary software changes were completed in a timely and satisfactory manner. My tasks also included making appropriate changes to the NMOG user manual, as well as scripting tutorial videos on how to use the platform.

Yonatan Ambrosio ‘24 engaged in two research projects at Telethon Kids Institute.
I greatly enjoyed the opportunity to live and work in Bengaluru. The city and surrounding areas were very exciting to explore, and it was a huge privilege to immerse myself in India’s culture and traditions.

As a whole, my internship at One Health Trust was an incredible experience that I will never forget. It solidified my desire to pursue a career in health/health care and to incorporate public health in my future endeavors.

Once a week, I rotated in the National Institute of Infectiology at Fiocruz, where I observed the comprehensive care and clinical procedures involving patients with leishmaniasis and similar dermatological infections. This experience in an outpatient setting allowed me to understand the patient impact and treatment challenges associated with cutaneous leishmaniasis, while also gaining insight into Brazil’s Unified Health System.

When not in the laboratory or the clinic, I immersed myself in the city’s culture by visiting museums, dancing to samba music, and attending Festa Junina celebrations. I was struck by the incredibly unique interlacing of the natural and the urban in Rio, which curves along the coastline, mountains, and vast national rainforest.

I now have a better appreciation for the challenges of researching a neglected tropical disease and an expanded perspective on health care systems and the health disparities that communities may face. I foresee a more enriching course of study in Princeton’s Global Health Program and a greater interest in pursuing research opportunities as I work toward a career in medicine.

Bethany Villa ’26
University of Sunderland

I applied for an internship with the University of Sunderland to learn more about its social prescribing program and initiatives aimed at improving the health and wellbeing of its residents. In England, social prescribing is a program that enables health care professionals to refer patients to non-clinical interventions, such as gardening, arts and crafts, cooking, and other activities to improve their overall quality of life. My internship was primarily observational, with the opportunity to interact with individuals who participate in social prescribing initiatives. I was able to hear their stories and learn more about the impact of these programs. I found that most people who rely on social prescribing come from disadvantaged backgrounds and/or dysfunctional families. They often struggle with isolation, low self-esteem, and exclusion, but find their way back into society through these services. Their experiences sometimes brought me to tears, opening my eyes to the barriers these patients face and the benefits of social prescribing.
Bethany Villa ’26 works on a social prescribing project in England.

Through my internship, I worked alongside community-based services across the city aimed at improving the health and wellbeing of the U.K.’s population. In doing so, we were able to reduce the loneliness and isolation of many individuals as well as address the health inequalities in Sunderland. Additionally, I supported research at Helen McArdle Institute and assisted with the planning of several social prescribing projects.

The best part of this experience was the people I met along the way and the memories I created with them. I learned about their backgrounds and heritage, and about the culture in Sunderland. I will apply these insights during my future career as a health care professional, considering the holistic health and wellbeing of each individual and using non-clinical interventions to make them feel comfortable and improve their health. It was amazing to see how medicine is progressing and what health could look like in the future if more countries implemented a social prescribing model in their health care systems.

Kiara Wassoodew ’25  Molecular Biology
Clinton Health Access Initiative

Last summer, I interned at the Clinton Health Access Initiative (CHAI) in Pretoria, South Africa, primarily supporting the HIV prevention team. Given that South Africa has the fourth highest HIV-burden among countries of the world, I was grateful for the opportunity to work on a grant-funded project designed to lower the incidence of HIV in the region. The HIV prevention team’s current grant seeks to integrate all HIV prevention services in South Africa, with the goal of closing existing gaps and paving a path towards the elimination of HIV in the region. Through the course of my internship, I assisted with data collection in various provinces. I traveled to clinics and community centers, went through health records, and compiled data for review and analysis. I then used this information to develop presentations for each of South Africa’s nine provinces. This included graphing the prevalence of sexually transmitted diseases, evaluating trends, and providing recommendations for improvement.

Additionally, I worked on a solar electrification project, which aimed to introduce solar electrification into health care spaces in order to improve access and availability to medical support. I also conducted a cost-benefit analysis to determine the strength and state of the current national tender for oxygen cylinders, designed informational and educational materials on various public health topics, conducted literature reviews on the current HIV-prevention landscape in South Africa, and assisted with community outreach.

Upon reflection, I am thankful for the opportunity to immerse myself in a new cultural, social, and health landscape, and to understand the struggles and strengths that exist in South Africa’s public health system. These experiences have confirmed my passion for public health and outreach. I aspire to support organizations similar to CHAI in the future.

In July 2023, a CHW staff team visited student interns at three host organizations: Telethon Kids Institute in Perth, Australia; Oxford University Clinical Research Unit in Hanoi, Vietnam; and University of Sunderland in Sunderland, England.

Scan here to read about the students’ research and experiences.
The Center for Health and Wellbeing, with generous financial support from the School of Public and International Affairs, operates two special internship initiatives as part of the broader Internships in Global Health program.

**Africa Health Research Initiative**

The Africa Health Research Initiative offers supervised, health-focused research experiences for Princeton undergraduate and graduate students with partner institutions in Africa, including the Mpala Research Centre in Kenya. These research visits take place over the summer and during the University’s two-week January Wintersession period. In 2023, the program funded six Princeton students’ research activities.

**Pandemic Preparedness and Response Initiative**

The Covid-19 crisis has underlined the importance of effective preparedness and response to pandemic disease. With this in mind, the Pandemic Preparedness and Response Initiative supports the academic and professional development of the next generation of global health leaders addressing epidemiological threats. Available to both undergraduate and graduate Princeton students, the program funds experiential opportunities focused on the biological, economic, political, social, and cultural dimensions of pandemic preparedness and response.

In 2023, this initiative sponsored four summer internships with the following host institutions:

- **One Health Trust** – Bengaluru, India
- **The Oswaldo Cruz Foundation (Fiocruz)** – Rio de Janeiro, Brazil
- **NYC Health + Hospitals Special Pathogens Unit** – New York, New York
- **Oxford University Clinical Research Unit** – Hanoi, Vietnam
CHW-FUNDED RESEARCH

The Center for Health and Wellbeing funds innovative and groundbreaking health-focused research in the natural sciences, social sciences and humanities. Affiliates, postdoctoral researchers, and graduate students are eligible to apply for grants. Following is a list of projects supported in 2023, with additional details about a few of these endeavors.

2023 CHW-Funded Affiliate Projects

“Art Hx: Visual and Medical Legacies of British Colonialism”
Principal Investigator: Anna Arabindan-Kesson African American Studies and Art & Archaeology

“Socio-Cognitive Strategies to Change Health-Relevant Beliefs and Behaviors”
Principal Investigator: Alin Coman Psychology and SPIA

“Evaluating Wastewater Surveillance using a Value of Information Framework”
Principal Investigator: Ramanan Laxminarayan High Meadows Environmental Institute

“The Effect of Depression on Reinforcement Learning on Social Media” and “Randomized Controlled Clinical Trial of the Efficacy of Internet-Delivered Cognitive-Behavioral Therapy (iCBT) for Children and Adolescents with Anxiety Disorders”
Principal Investigator: Yael Niv Psychology

“Understanding the Role of RNA Structure in Flaviviruses Virulence”
Principal Investigator: Alexander Ploss Molecular Biology

“Development of a High-Throughput, Predictive RNA Quantitation Tool Using CRISPR-Cas13”
Principal Investigators: Alexander Ploss and Cameron Myhrvold Molecular Biology

“What Enabling Factors Prevent Disruptions in Health Services During Crisis? A Case Study of Afghanistan Post August 2021”
Principal Investigators: Alyssa Sharkey and Mustafa Basij-Rasikh SPIA
“Multiplexed Detection of Immune-Stimulatory Viral RNAs Implicated in Disease”
Principal Investigators: A.J. te Velthius and Cameron Myhrvold Molecular Biology

“Debating DNA: Exploring the Health and Social Implications of the Genomic Revolution”
Principal Investigator: Sam Trejo Sociology

Project Spotlights

“Evaluating Wastewater Surveillance Using a Value of Information Framework”
Principal Investigator: Ramanan Laxminarayan High Meadows Environmental Institute

This project will create a general framework for assessing the value of surveillance systems for epidemic and pandemic preparedness. The framework, which will incorporate input from wastewater and surveillance experts, will be easily scalable to compare the relative value of both systems for gathering surveillance data and to compare attributes of surveillance data, including frequency and geographical variability. In stage two, the framework will be applied to two case studies on detection of AMR and V. cholerae in wastewater. Specific attribute set and geographical context will be determined in collaboration with researchers looking to evaluate alternate approaches to surveillance. Based on the outcome of these two pilots, the VOI approach can be expanded to other areas of investment in surveillance and data gathering.

“The Effect of Depression on Reinforcement Learning on Social Media”
Principal Investigator: Yael Niv Psychology and Princeton Neuroscience Institute

The interplay between social media use and mental health is complex, bidirectional, and poorly understood. One crucial piece of the puzzle is how mental health interacts with the reward structures on social media. Reinforcement-learning theory predicts that social rewards received on social media – likes, shares and comments – will shape our posting behavior. These effects may be more extreme for those struggling with depression, which has been linked to atypical reinforcement learning. Therefore, this research examines how depression affects reinforcement learning on social media. The study will recruit active social media users, retrieve their social media posting data, and measure their depressive symptoms longitudinally. Researchers will then fit a reinforcement-learning model to participants’ posting data to quantify precise differences in how they change their posting behavior in response to social rewards, and they will relate these to depressive symptoms. Niv and graduate student Dan-Mircea Mirea predict that people with depression are more sensitive to the variable amounts of reward on social media, changing their behavior more and investing more effort as a result. Such a finding would be highly relevant to the development of policies around social media use.

“Development of a High-Throughput, Predictive RNA Quantitation Tool Using CRISPR-Cas13”
Principal Investigators: Alexander Ploss and Cameron Myhrvold Molecular Biology

The global economic burden of the eight most economically impactful infectious diseases is an estimated 8 trillion U.S. dollars annually. While the last 10 years have seen a surge in research and investment in pathogen detection methods, we lack tools that can predict health outcomes in infected patients. Researchers will continue their work on a novel Cas13-based technology, termed qCARMEN, suitable for monitoring simultaneously the expression of dozens of human genes across hundreds of samples in a time- and cost- effective manner. By identifying unique host response signatures, they can develop models that correlate patterns of gene expression with outcomes such as immediate recovery, hospitalization, and death.
2023 CHW-Funded Postdoctoral Research Projects

“Dengue in Ghana: Is There a Case for Active Surveillance?”
Principal Investigator: Esther Annan  Center for Health and Wellbeing

“Exploring the Drivers of Acute Malnutrition in Children and Designing Methods to Improve its Detection in Laikipia, Kenya”
Principal Investigator: Gugulethu Moyo  Center for Health and Wellbeing

“Toxoplasma Gondii Infection in Chickens Across a Gradient of Environmental Condition and Husbandry Practices: Evaluating the Risks of Infection in Humans”
Principal Investigator: Fidisoa Rasambainarivo  Metcalf Lab and High Meadows Environmental Institute

“Amazonian Tipping Points and Indigenous Health Challenges”
Principal Investigator: Fabio Zuker  Princeton Institute for International and Regional Studies and High Meadows Environmental Institute

Project Spotlights

“Dengue in Ghana: Is There a Case for Active Surveillance?”
Principal Investigator: Esther Annan  Center for Health and Wellbeing

Dengue fever is an arboviral disease caused by a flavivirus and has two main causative mosquito vectors, namely Aedes aegypti and Aedes albopictus. The disease may be caused by one of four dengue virus (DENV) serotypes: DENV-1, DENV-2, DENV-3 and DENV-4. Within the last two decades, there has been an eight-fold increase in the number of cases globally and the World Health Organization has reported dengue fever to be endemic in 100 countries, including regions in Africa. Although the presence of Aedes aegypti has been clearly established in Ghana, the trend of dengue fever cases is ill-defined due to a lack of active surveillance. Furthermore, with the endemicity of malaria in the region, and the similarity of malaria’s symptomology to flaviviruses like dengue and yellow fever, there is a likelihood of disease misclassification. Establishing a baseline dengue disease burden and the characterization of which serotype(s) may be endemic in the region would allow researchers to model the implication of subsequent serotypes in the region. It would also help to determine the distribution of primary and secondary infection, and how this may influence severe dengue and mortality attributable to dengue, particularly among infants and the elderly.

“Exploring the Drivers of Acute Malnutrition in Children and Designing Methods to Improve its Detection in Laikipia, Kenya”
Principal Investigator: Gugulethu Moyo  Center for Health and Wellbeing

This study explores the drivers of acute malnutrition in children under the age of five and design methods to improve its detection in Laikipia, Kenya. It utilizes a mixed methods cross-sectional design, including interviewer administered questionnaires and focus group discussions with mothers and primary caregivers of children under the age of five. The research covers topics related to sociodemographic characteristics, food security, and nutrition. Anthropometric measurements (heights, weights, and mid-upper arm circumference) will be collected. Additionally, key informant interviews will be conducted with health care workers, such as doctors, nurses, and community health workers working in the area, to assess health and nutritional challenges they observe in the community and potential leverage points for future intervention.
Bananal Island, in the Brazilian state of Tocantins, is one of the largest – if not the largest – river islands in the world. Despite living between two of the planet’s richest and most biodiverse biomes, the Cerrado and the Amazon, Indigenous people living on the island now find themselves reliant on supermarkets rather than the land to fulfill their needs. Droughts, floods, soil erosion, and the silting of the Javaé and Formoso rivers and their tributaries have led to food insecurity for these tribes. The rivers have been adversely affected by decades of damming and irrigation projects initiated in 1979 by the Brazilian military regime, which sought to convert the region into an intensive agriculture hub. Forty-five years on, such projects continue despite evidence of their human and environmental impacts. This exploratory study investigates the health effects of monoculture and water infrastructures of Bananal Island on Indigenous communities. In particular, it explores how these communities assess the environmental determinants of their health conditions, and how they mobilize socially and politically to guarantee their constitutional rights to their lands and health.

2023 CHW-Funded Graduate Research Projects

“Predicting the Impact of Two New Dengue Fever Vaccines in Cambodia”
Principal Investigator: Holly Burrows  Ecology & Evolutionary Biology

“Health Effects from Artificial Fertilizer and Pesticide Use on Indo-Fijian Farms in the Sigatoka Valley”
Principal Investigator: Ipsita Dey  Anthropology

Principal Investigator: Darius Sadighi  Anthropology

“Indigenous ‘Living Labs’: Pluralizing Taiwanese Health Through Participatory Design”
Principal Investigator: Aaron Su  Anthropology

“Affording Queer Aging. Modes of Intervention on the Social Determinant ‘Sexual Identity’ in Geriatric Settings”
Principal Investigator: Christopher Zraunig  Anthropology

Project Spotlight

“Affording Queer Aging. Modes of Intervention on the Social Determinant ‘Sexual Identity’ in Geriatric Settings”
Principal Investigator: Christopher Zraunig  Anthropology

To counter possible adverse health outcomes due to sexuality- and gender-based minority identification, several German cities have initiated intervention programs to make nursing homes and other geriatric spaces more inclusive of LGBTQI+ seniors. Through their dissertation research, Zraunig is probing the effectiveness of such initiatives. Beyond that, however, Zraunig also investigates their productiveness: what new norms are being established when “diversity” becomes institutionalized as a gerontic value? Drawing on 14 months of ethnographic fieldwork in Berlin, Germany, Zraunig provides empirical answers to these questions.

Other 2023 CHW-Funded Project

“Anonymous was the Data”
Principal Investigator: Chanika Svetvilas  Ida B. Wells Just Data Lab, Artist-in-Residency Program
PROGRAM ON U.S. HEALTH POLICY

Faculty Director: Janet Currie  Henry Putnam Professor of Economics and Public Affairs

In 2011, CHW’s Program on U.S. Health Policy was created after receiving a generous gift from Daniel Spitzer ’79 and Eliot Spitzer ’81. The U.S. Health Policy Program sponsors research and activities addressing aspects of domestic health care and health policy. The program supports innovative faculty and student research, conferences, policy forums, and special issues in health policy journals. Below is a list of current research projects.

Active Faculty Projects

“Navigating Food Insecurity in the Post-Covid-19 Era in South LA”
Principal Investigator: Hanna Garth  Anthropology

“Exploiting Healthcare Consumerism”
Principal Investigator: Adam Goldstein  Sociology and SPIA

“Aging and Work: The Health Consequences”
Principal Investigators: W. Bentley MacLeod  Economics and SPIA and Elliott Ash  ETH Zurich

“Intellectual Disability and Adult Health-Related Outcomes”
Principal Investigator: Kelly Noonan  Economics

“Gender Affirming Care for Transgender Youth: Associating Biological Effects and Psychological Response” and
“Understanding Chronic Traumatic Encephalopathy: Characterizing Tau and Mediators in an In Vitro Repetitive Injury Cell Model of Brain Injury”
Principal Investigator: Daniel Notterman  Molecular Biology

Active Postdoctoral Research Project

“Mental Health and Body Image Trajectories of Medically Transitioning, Early Socially Transitioned Transgender Adolescents”
Principal Investigator: Natalie Wittlin  Psychology
Faculty and Postdoctoral Research Spotlights

“Navigating Food Insecurity in the Post-Covid-19 Era in South LA”
Principal Investigator: Hanna Garth  Anthropology

This study explores how household needs have shifted after the Covid-19 pandemic in low-income, under-resourced areas. Preliminary research indicates that economic loss and ongoing morbidity due to Covid-19 have made these households even more vulnerable through issues such as food insecurity, which is the central focus of this investigation. Researchers aim to understand the extent to which vulnerable residents innovate solutions by seeking assistance from friends, family, community members, and community organizations. The findings will have broad implications for health policy, as they have potential to indicate various barriers and facilitators of program use and uptake. For example, preliminary data suggests both a lack of awareness of community-based programs and a deep-seated distrust of programs that are tied to government funding sources or affiliated with entities that have caused problems for the community historically. This research may reveal ways to repair this distrust and facilitate uptake of community-based health and wellbeing programs.

“Exploiting Healthcare Consumerism”
Principal Investigator: Adam Goldstein  Sociology and SPIA

This study examines the potentially adverse complementaries between two facets of marketization in social provision: the activation of risk-managing consumer-subjects, and the displacement of non-profit/public/professional service providers by investor-owned for-profits. Each of these respective trends have been viewed as key indicators of marketization, but scholars have not adequately unpacked the relations between them. This research focuses on U.S. health care, which has witnessed the rise of a consumer-centric governance paradigm alongside a growing role of investor-owned healthcare providers. Specifically, it explores to what extent private equity owned hospitals are more prone to 1) exploit asymmetric information by using customer service and amenities in order to mask worse health care provision; and 2) heighten the financial risks faced by patients through the use of more aggressive billing strategies.

“Gender Affirming Care for Transgender Youth: Associating Biological Effects and Psychological Response”
Principal Investigator: Daniel Notterman  Molecular Biology

Transgender adolescents consistently report higher levels of depression, anxiety, suicidality, and stress than their cisgender peers, which has largely been attributed to their experience of gender dysphoria. Research has demonstrated these adverse outcomes may be avoided by gender-affirming care. The gender-affirming care model utilized in this study is referred to as the “Dutch approach” for its origins in the Netherlands; it recommends affirming social, psychological, and medical interventions, including hormonal therapy consistent with the person’s gender identity. Despite data supporting use of the Dutch Protocol, gender-affirming medical care has become increasingly controversial, even contentious, and several jurisdictions are making policy decisions and changing health law based on still-incomplete knowledge about the relevant biological and health effects of both gender dysphoria and its current mode of treatment. Based on a cohort of youth who are receiving gender-affirming medical interventions in New Jersey, this research will provide new data about both the psychological effects and the biological response to gender dysphoria and its treatment. Findings can be used to inform and facilitate sound, fact-based policymaking about this important health issue.
“Mental Health and Body Image Trajectories of Medically Transitioning, Early Socially Transitioned Transgender Adolescents”
Principal Investigator: Natalie Wittlin  Postdoctoral Research Fellow, Psychology

Over the past two years, the U.S. has seen a surge of state bills, laws, and executive orders seeking to bar transgender youth from accessing gender-affirming medical care. Past longitudinal work has linked this care—and puberty blockers and hormone therapy in particular—to improvements in mental health among transgender adolescents. This work, however, has not examined the experiences of the small but growing group of transgender youth who, with their parents’ support, socially transitioned at an early age, well before puberty. Further, with few exceptions, it has not explored the mechanisms by which gender-affirming medical care may improve mental health, nor has it compared the mental health trajectories of transgender adolescents to those of their cisgender peers. The aim of this project is therefore fourfold: (i) to examine the mental health trajectories of medically transitioning, early socially transitioned transgender adolescents in the U.S. and Canada; (ii) to examine the body image trajectories of these adolescents; (iii) to determine whether changes in body image can help to explain any changes in mental health that occur as these adolescents medically transition; (iv) to compare the mental health trajectories of these adolescents and their cisgender peers. The findings could help to inform and potentially shape U.S. state and federal health care policy.

Active Graduate Projects

“The Impact of Algorithmic Predictions in Child Protection: Evidence from a Randomized Controlled Trial”
Principal Investigators: Chris Mills  Economics and Marie-Pascale Grimon  Stockholm University

“Understanding Sex Differences in Stress-Related Disorders: Exploring Sexual Dimorphism in Transcriptomics and Behavior in Response to Stress in Drosophila Melanogaster”
Principal Investigator: Elisabeth Tawa  Neuroscience

Graduate Research Spotlight

“The Impact of Algorithmic Predictions in Child Protection: Evidence from a Randomized Controlled Trial”
Principal Investigators: Chris Mills  Economics and Marie-Pascale Grimon  Stockholm University

Uncertainty regarding how human experts use algorithm recommendations and fear of bias have forestalled the adoption of machine learning-based tools. In this study, Mills and Grimon randomize social workers’ access to an algorithmic risk prediction in the context of Child Protective Services (CPS). Access to the algorithm reduced child harm, lowering children’s injury-related hospitalizations by 26 percent. It also reduced both the disproportionate investigation of Black children by CPS and disparities in child harm by race, ethnicity, gender, and socioeconomic status. Benefits are accrued through workers using complementary information more effectively, and not through stricter adherence to algorithmic predictions.
States play a pivotal role in pushing health care innovation forward and face a number of structural barriers—cost, lack of specialized expertise, staffing constraints, bureaucracy, time, and politics—that often prevent them from achieving their health policy goals. The State Health and Value Strategies (SHVS) program, a grantee of the Robert Wood Johnson Foundation, is a nationwide health policy consortium that provides technical assistance, peer-to-peer learning opportunities, publications, and webinars to help states overcome these obstacles and transform their health care systems.

In 2023, SHVS focused on the following key domains: Medicaid; health equity; health care access and coverage; affordability; and operational excellence.

Unwinding the Medicaid Continuous Coverage Requirement: Highlights and Accomplishments

In March 2020, as part of Covid-19 relief enacted in the Families First Coronavirus Response Act, Congress provided increased Medicaid funding to states. This funding required states to meet several conditions, including a “continuous coverage” requirement that prohibited states from terminating most Medicaid enrollees’ coverage until after the end of the public health emergency. As a result, Medicaid/CHIP enrollment grew by 23.3 million from February 2020 to the end of March 2023.

States began unwinding the Medicaid continuous coverage requirement in April 2023, an effort that requires state Medicaid agencies to assess the eligibility of over 90 million enrollees. States face steep challenges as they undertake this process, including: the technical and operational aspects of handling the volume of redeterminations, workforce shortages, navigating and implementing guardrails set by the Centers for Medicare & Medicaid services to avoid coverage loss for individuals who continue to be eligible, effectively communicating with enrollees, and monitoring and measuring the impact of eligibility redeterminations. Not only is the volume of eligibility redeterminations unprecedented, but states’ handling of coverage transitions has enormous equity implications.
In 2023, SHVS projects to support states’ unwinding included:

**Promulgating successful state strategies for unwinding** – SHVS launched a new series, the States of Unwinding, to highlight examples of how states are preparing for and operationalizing the unwinding of the continuous coverage requirement to minimize coverage losses. The series showcases strategies that other states may be interested in adopting and highlights how states are leveraging federal flexibilities, forging ahead with innovative efforts to expand coverage and improve care, and actively supporting transitions to other forms of coverage.

**Helping consumers navigate transitions between Medicaid, Marketplace plans, and employer-sponsored insurance** – SHVS created several resources for state Marketplace and insurance departments seeking to reduce gaps in coverage and minimize disruptions in care. These resources offered strategies for targeting and streamlining outreach efforts to help consumers understand and navigate their coverage options.

**Using data to measure the impact of unwinding** – As the unwinding of the Medicaid continuous coverage requirement progressed in 2023, states were required to report data to the Centers for Medicaid & Medicaid Services about activities related to Medicaid eligibility redeterminations. SHVS supported states by sharing best practices, an analysis of various indicators, and guidance on how to communicate more effectively during this transition period.

**Summit meeting for states on the unwinding of the Medicaid continuous coverage requirement** – SHVS sponsored a summit meeting, hosted by the National Association of Medicaid Directors, to discuss the “state of play” with unwinding. The meeting covered such topics as the challenges and successes that states have faced in their redetermination processes, enacting course corrections, and federal reporting requirements. A total of 139 state and territory Medicaid leaders from 43 states, the District of Columbia, and five U.S. territories attended the summit.

**Continuous enrollment for children** – Unwinding has highlighted how the administrative requirements of the eligibility process result in individuals who are otherwise eligible losing coverage, particularly children. SHVS provided tools to help states implement 12 months of continuous enrollment for children enrolled in Medicaid and CHIP. This not only eliminates coverage gaps for this population during the one-year eligibility period, but also reduces administrative burden and costs that states, plans, and providers incur due to churn.

**Overcoming challenges to implement ex parte processes** – States are obligated to make a redetermination of eligibility for an individual who is enrolled in Medicaid or CHIP without requiring information from the individual if able to do so based on current information available to the agency and deemed reliable. These are called *ex parte* or “automated renewals.” SHVS produced two diagnostic tools for states to assess their compliance with individual *ex parte* requirements and hosted four support sessions for state officials and their IT vendors.
**Striving for Health Equity: Highlights and Accomplishments**

SHVS programming supported states’ efforts to make health care more accessible and equitable. Initiatives focused on using policy effectively and engaging community stakeholders to inform policy and improve outcomes.

2023 projects included:

**Supporting health care services for justice-involved populations** – In January 2023, California amended its California Advancing and Innovating Medi-Cal Section 1115 demonstration. This amendment allowed California Medicaid to provide a targeted set of services to youth and adults in state prisons, county jails, and youth correctional facilities for up to 90 days prior to release. The goal is to build a bridge to community-based care, offering services to stabilize their physical and behavioral health conditions and establish a reentry plan prior to release. SHVS publicized California’s example as a model for other state officials and provided funding and technical assistance to those states interested in supporting reentry for justice-involved populations.

**Improving equity for mental health care** – SHVS identified and shared strategies to help states leverage their Medicaid managed care programs to promote greater equity in mental health care.

**Measuring the effectiveness of policies aimed to improve health equity** – SHVS developed The State Health Equity Measure Set, a standard set of health equity measures that states can use to assess their performance against other states and inform interventions that strive to improve equity in health care access and outcomes within their state.

**Using community engagement to improve health equity** – Community engagement can promote equity by fostering trust and mutual respect and by responding to the experiences of people impacted by programs and policies. SHVS developed a selection of strategies and tactics for states to consider when working towards transformational community engagement and achievement of their health equity goals. Highlighting the examples of Virginia and Colorado, SHVS shared pioneering work and insights on how to structure community engagement to foster participation and improve program outcomes.

**Affordable Health Coverage for Non-Citizen Populations: Highlights and Accomplishments**

A growing number of states view extending affordable health coverage to lower-income residents, regardless of immigration status, as a critical step towards narrowing the gap in health coverage, advancing health equity, and improving the overall health and wellbeing of all residents.

SHVS developed the following toolkits and resources to help states improve health coverage for non-citizen populations:

**Communicating to drive health coverage enrollment among non-citizen populations** – SHVS provided states with research-informed resources to support outreach and education targeting non-citizen populations. Recommendations, based on qualitative studies regarding barriers to health care coverage and services for Latino/a/x adults and effective messaging strategies, offered culturally and linguistically-responsive tactics for driving enrollment in new or existing health coverage programs.

**Expanding health coverage options for certain DACA recipients** – SHVS provided states with an analysis of the United States Department of Health and Human Services’ proposed rule that enables health care access to certain recipients of Deferred Action for Childhood Arrivals (DACA) status.

**Workgroup focused on affordable health coverage for non-citizen populations** – SHVS formed a workgroup of health officials from 15 states that are actively working on providing non-citizen residents with improved access to affordable, high-quality health coverage and care.
Other SHVS Initiatives

Overview of states’ 2023 legislative sessions – SHVS examined trends arising from states’ legislative sessions to identify and share examples of states that prioritized the expansion of health coverage for vulnerable populations, enhanced health care affordability, and/or implemented system innovations.

Encouraging high quality health care by using aligned measure sets – SHVS highlighted how Medicaid programs in Connecticut, Massachusetts, and Rhode Island have successfully engaged with commercial payers, providers, patients, advocates, and other parties to create and adhere to multi-payer aligned measure sets. SHVS continues to support states interested in developing these sets by providing and maintaining a suite of measure alignment resources.

Convening for Marketplace/Division of Insurance officials on the individual market in 2023 – SHVS convened over Marketplace and Division of Insurance officials from 15 states to discuss upcoming opportunities and challenges that impact the individual market. Partnering with the University of Pennsylvania’s Leonard Davis Institute at Health Economics, the meeting hosted representatives from the federal Center for Consumer Information and Insurance Oversight and included sessions on a myriad of topics, such as preparing for the impact of the Medicaid unwinding, recent developments and next steps for facilitated enrollment programs, and policy design.

SHVS Thought Leadership on Health Care Reform

SHVS Director Heather Howard and her team, in collaboration with Princeton students and alumni, continued to drive transformational change in the U.S. health system through leadership, service, and advocacy.

2023 activities included:

• Together with colleagues from Manatt Health, Howard co-authorized an article about maintaining coverage gains during the Medicaid unwinding for Health Affairs Forefront. The piece highlights strategies that states, the federal government, and community partners can employ to limit the loss of coverage among eligible people, and to connect individuals who are no longer eligible for Medicaid to other sources of coverage.

• Howard co-authored a Health Affairs Forefront article examining new policy from the Centers for Medicare and Medicaid Services (CMS) on budget neutrality for state Medicaid waivers. Howard and co-authors from Manatt Health observe that the new policy direction from CMS creates significant opportunities for a broad range of states to invest Medicaid funds in initiatives that will advance health equity, expand coverage, improve quality, and spur reforms.

• Howard and Bronte Nevins MPA ’24, who is pursuing a certificate in Health and Health Policy, published research in Public Health Post on potential policies to support those living with Long Covid. They chronicled the weaknesses in the current safety net and called for more robust interventions to help those who suffer. Their investigation drew from health-related policy responses to previous disasters.

• Howard and Madison Linton ’24 published an Op-Ed in NJ Spotlight News on New Jersey’s leadership in combating medical debt and addressing the racial wealth gap.
Howard was featured in the June 2023 edition of the Princeton Alumni Weekly. The profile highlighted several of her projects focused on expanding health insurance coverage and implementing creative strategies to improve health equity.

Howard moderated a panel with Planned Parenthood of New Jersey and the ACLU of NJ on abortion access in the state. She also published an Op-Ed in the New Jersey Globe on state efforts to shore up the reproductive health care safety net after the Dobbs decision, highlighting initiatives to increase Medicaid reimbursement rates for reproductive health care.

Howard joined the New Jersey Office of Health Care Affordability and Transparency’s Healthcare Affordability, Responsibility and Transparency Program Advisory Committee. The committee includes representatives from hospitals and physician providers, health insurers, consumer advocates, labor, employers, and policy experts to provide expertise on slowing down the cost of health care. Howard also presented on Using Data to Advance Affordability for Consumers in New Jersey as part of a public webinar hosted by the New Jersey Governor’s Office of Health Care Affordability and Transparency.

In March of 2023, Heather Howard was invited to the White House for an event commemorating the 13th anniversary of the Affordable Care Act, also known as Obamacare, which President Barack Obama signed into law on March 23, 2010. President Joe Biden delivered remarks on the law’s impact.
The Princeton Pulse Podcast, launched in 2022, highlights the vital connections between health research and policy. Hosted by Heather Howard, professor at Princeton University and former New Jersey Commissioner of Health and Senior Services, the show brings together scholars, policymakers, and other leaders to examine today’s most pressing health policy issues — domestically and globally. Guests discuss novel research along with partnerships aimed at improving public health and reducing health disparities.

“Research is a critical tool for crafting, implementing, and evaluating the effectiveness of policy interventions,” stated Howard. “Our show offers an opportunity to take a closer look. We cover the latest policy trends, discuss how research is informing policies to improve health outcomes, and elevate partnerships with policymakers.”

Episodes in 2023 included:

**Measuring “The Good Life” – Alternative Metrics for National Wellbeing**
This episode’s guests argue the need for a better metric to assess a country’s performance and prosperity — one that considers health, access to education, happiness, and other dimensions of human welfare. Howard was joined by Professor Ori Heffetz, a Princeton alum and 2023 visiting research scholar from Cornell and The Hebrew University of Jerusalem; and Yanchun Zhang, former chief statistician at the United Nations Development Programme and proponent of the Human Development Index.

**Can We Tackle Vaccine Hesitancy and Climate Change With a Similar Playbook? Researchers Think So.**
Vaccine hesitancy and climate change are distinct public health challenges, yet researchers believe they can be solved with the same general playbook. Howard explores the issue with Princeton Professor Simon Levin, who conducted a study on this topic, and Nicholas Silitch, former chief risk officer for Prudential Financial, who speaks to the role of corporations in addressing these issues.
Why Millions of Americans May Lose Their Health Insurance
This episode spotlights health insurance in the U.S. and why an estimated 15 million Medicaid enrollees are at risk of losing their health insurance coverage and access to care after the end of the public health emergency. Howard discusses “the Medicaid unwinding” and implications of this unprecedented health insurance transition with Kate McEvoy, executive director of the National Association of Medicaid Directors, and Dr. Kemi Alli, a pediatrician and chief executive officer of Henry J. Austin Health Center in Trenton, New Jersey.

Which Country Will Be the First to Wipe Out Cervical Cancer? (The Answer May Surprise You.)
Rwanda, a low-income country, could become the first country in the world to eradicate the disease. Howard explores keys to success with Professor Cristina Stefan, director of the Institute of Global Health Equity Research in Rwanda, and Princeton Lecturer Alyssa Sharkey, whose research interests include global health equity and immunization.

A Public Health Approach to Gun Violence in America
This episode tackles gun violence in the U.S., a serious and escalating public health crisis. Howard examines challenges and potential policy solutions with two staunch advocates for depoliticizing gun safety and uniting for the common good: Senator William H. Frist, M.D., a practicing physician and former U.S. Senate Majority Leader, whose ongoing work proposes a shift in culture and targeted, bipartisan legislation; and Chethan Sathya, M.D., a pediatric trauma surgeon and director of the Northwell Health Center for Gun Violence Prevention.

Who's Caring for the Caregiver? Strategies for Reducing Clinician Burnout
Clinician burnout is a public health issue affecting up to 54 percent of nurses, physicians, and other clinicians. Howard explores the drivers and rising costs of clinician burnout with Dr. Bryant Adibe, Sugarman Practitioner in Residence at Princeton's School of Public and International Affairs, and Dr. Wayne Jonas, a practicing family physician and president of the Healing Works Foundation.

Lessons from America's Former Top Doctor – from Covid to the Opioid Crisis
Howard visits the front lines of the Covid-19 pandemic and other public health crises with Dr. Jerome Adams, former Surgeon General of the United States and current executive director of health equity initiatives and Distinguished Professor of Practice at Purdue University. They discuss the importance of depoliticizing public health, improving science and health literacy, preventing misinformation, and preparing for the next public health crisis.

Scan for links to all episodes on the CHW website. The Princeton Pulse Podcast is also available on all major podcast platforms.
The Center for Health and Wellbeing hosts and co-sponsors many domestic and international health events for the benefit of the Princeton community and the general public.

**CHW SEMINAR SERIES**

In 2023, CHW presented several engaging seminars on global health and development topics led by researchers from Princeton and beyond:

- **Do Children’s New Mental Health Conditions Spillover Onto Parents and Siblings?**  
  Speaker: Mike Cassidy, CHW postdoctoral research associate

- **The Effects of Public Housing on Children: Evidence from a National Experiment in Colombia**  
  Speaker: Valentina Duque, CHW visiting scholar

- **The Productivity of Professions: Evidence from the Emergency Department**  
  Speaker: Yiqun Chen, assistant professor of economics, University of Illinois at Chicago

**GHP COLLOQUIUM SERIES**

Among its most anticipated offerings, CHW sponsors an annual Global Health Program Colloquium Series, where students, faculty, researchers, and the general public can hear about innovative approaches to current global health issues.
Colloquium topics in 2023 included:

**A Systems Approach to Social and Behavior Change, and Discussing Recent Initiatives with UNICEF in Europe and Africa**
Speaker: Dr. Chris Dickey, director of global and environmental public health, NYU

**Competing Global Health Priorities and Why Nutrition Matters**
Speaker: Nkosinathi Mbuya, Ph.D, senior nutrition specialist, World Bank

**Conceptualizing Time as a Social Determinant of Health in Cancer (Outcomes) Research: Two Case Studies at the Intersection of Rurality x Access to Care**
Speaker: Arrianna Marie Planey, assistant professor in the Department of Health Policy and Management, University of North Carolina Gillings School of Global Public Health

**Movement Building in Restrictive Contexts: Lessons from the Green Wave in Latin America**
Speaker: Giselle Carino, director and chief executive officer, Fòs Feminista

**Global Oncology: A Call for Equity**
Speaker: Dr. Cristina Stefan, Ph.D., founder, African Medical Research and Innovation Institute and African Cancer Institute

## CONFERENCES

**Princeton Serology Conference**
*Sponsored by CHW*

This conference brought together researchers from diverse backgrounds and areas of expertise to discuss how they currently leverage serology (i.e., the measurement of antibodies, a key biomarker of immunity in blood and plasma) to tackle a diversity of research questions and public health issues. Speakers also provided an overview of the current direction and needs within the field.

**Systems Summit on Clinical Wellbeing**
*Co-sponsored by CHW, Kahneman-Treisman Center for Behavioral Science & Public Policy, the Princeton School of Public and International Affairs, Accreditation Council for Graduate Medical Education, American Medical Association, and Healing Works Foundation*

This event joined thought leaders from various disciplines to catalyze fresh ideas and elevate new perspectives in the pursuit of clinical wellbeing. Designed to be inspirational, informative, and impactful, the summit aimed to foster novel insights through collaborative engagement between experts within and outside traditional clinical medicine backgrounds, including safety net hospitals and other under-resourced clinical environments.
CHW Mini-Conferences
Sponsored by CHW

The following Princeton professors and lecturers presented current research: Amy Borovoy, East Asian Studies; Andy Dobson, Ecology & Evolutionary Biology; Hanna Garth, Anthropology; Adam Goldstein, Sociology and Public Affairs; Katja Guenther, History; Heather Howard, School of Public and International Affairs; Catherine Peña, Neuroscience; Anu Ramaswami, Civil and Environmental Engineering; Sam Trejo, Sociology; and AJ te Velthuis, Molecular Biology.

OTHER EVENTS

Workshop on Childhood Asthma and Public Housing
Sponsored by CHW

Speakers: Janet Currie, Henry Putnam Professor of Economics and Public Affairs, Princeton School of Public and International Affairs, and CHW co-director; Samuel Little, community partner, founding president of the National Alliance of Resident Services in Affordable and Assisted Housing; Dharmil Bhavsa ’26, Princeton University, Department of Molecular Biology; Noah Hughes-Dunn, Howard University, School of Social Work; Irene Park ’26, Princeton University, Department of Molecular Biology; Kyaus Washington, Howard University, School of Social Work

Protest Psychosis: What the Race-Based Overdiagnosis of Schizophrenia in the 1960s Reveals About Today’s Critical Race Theory Wars
Co-sponsored by CHW, the Princeton School of Public and International Affairs, and the Department of History
Speaker: Jonathan Metzl, Frederick B. Rentschler II Professor of Sociology and Medicine, Health, and Society, Vanderbilt University

Do Health Disparities Narrow with Pollution Disparities? Evidence from California
Co-sponsored by CHW, the Center for Policy Research on Energy and the Environment, and the High Meadows Environmental Institute
Speaker: Danae Hernandez-Cortes, assistant professor, Schools for the Future of Innovation in Society and the School of Sustainability, Arizona State University

Social Media, Fake News and Communication during the Pandemic: Covid-19 Lessons and the Need for Recalibrating Future Health Communication
Co-sponsored by CHW and the Fung Global Fellows Program
Speaker: May O. Lwin, professor, Wee Kim Wee School of Communication and Information, Nanyang Technological University, Singapore

Just Me: An Asian American Artist on Disability and Mental Health
Co-sponsored by CHW, the Effron Center for the Study of America, Ida B. Wells JUST Data Lab, Program in Asian American Studies, Keller Center, Office of Disability Services, Lewis Center for the Arts, and the Council on Science and Technology
Speaker: Chanika Svetvilas, artist in residence, Ida B. Wells JUST Data Lab

Empowering Justice: Bridging Energy, Air Quality & Health Equity
Co-sponsored by CHW, the Center for Policy Research on Energy and the Environment, High Meadows Environmental Institute, Andlinger Center for Energy and the Environment, and Office of Sustainability
Speaker: Kelly Crawford, senior advisor for energy and environmental justice, Office of Economic Impact & Diversity, U.S. Department of Energy
Book Talk — We’ve Got You Covered: Rebooting American Health Care
Co-sponsored by CHW, The Griswold Center for Economic Policy Studies, and Industrial Relations Section
Speaker: Amy Finkelstein, John & Jennie S. MacDonald Professor of Economics, Massachusetts Institute of Technology

What is Global Health and Where is it Going?
Co-sponsored by Princeton University Public Lectures, CHW’s Global Health Program, Department of Ecology & Evolutionary Biology, and the Princeton Institute for International and Regional Studies as part of the Walter E. Edge Lecture Series
Speaker: Dr. Atul Gawande, assistant administrator for global health, U.S. Agency for International Development

Wielding the Tools of Environmental Policy: How Regulatory Rulemaking Serves the Climate, Clean Air, and Environmental Justice Agenda
Co-sponsored by CHW, the Center for Policy Research on Energy and the Environment, High Meadows Environmental Institute, Andlinger Center for Energy and the Environment, Office of Sustainability, and Center for the Study of Democratic Politics
Speaker: Joseph Goffman, principal deputy assistant administrator, Office of Air and Radiation, U.S. Environmental Protection Agency

Film Screening and Panel Discussion: “SILENT PANDEMIC”
Co-sponsored by CHW and the High Meadows Environmental Institute
Speakers: Janet Currie, Henry Putnam Professor of Economics and Public Affairs; Simon Levin, James S. McDonnell Distinguished University Professor in Ecology and Evolutionary Biology; Ramanan Laxminarayan, senior research scholar, High Meadows Environmental Institute

**EVENT HIGHLIGHT**

**Conference on Health Equity in Africa**
Co-sponsored by CHW and the Princeton School of Public and International Affairs, with additional support from the Office of Population Research

A joint initiative of Princeton University and the Institute of Global Health Equity Research in Rwanda, this conference invited an esteemed group of African policymakers and researchers to present their ideas on how health research and policy in Africa can be more equitable. Dr. Agnes Binagwaho, a retired professor and former minister of health for Rwanda, provided the keynote address. Participants discussed the need to reconsider how health policies are shaped to better reflect the priority needs of the most disadvantaged populations within countries.

**Science Olympiad Invitational Tournament**
CHW proudly co-sponsored the seventh annual Princeton University Science Olympiad Invitational Tournament, held on February 4, 2023. The tournament is led and organized entirely by Princeton students who are dedicated to providing an innovative and challenging experience. Key events included “Disease Detective,” “Microbe Mission,” and “Anatomy and Physiology,” among others.

This year’s tournament hosted 54 teams and nearly 900 high school students and coaches from around the country. It concluded with an awards ceremony in the Princeton University Chapel.
“Only by working together can we ensure that no one is left behind. Only by working together can we recover better and build a world where everyone thrives in peace, dignity, and equality on a healthy planet.

It is possible, together.”

– Amina J. Mohammed

Deputy Secretary-General of the United Nations and Chair of the United Nations Sustainable Development Group