11TH ANNUAL

Global Health Symposium

March 25-28, 2024

Sponsored by

Office of Global Health

Office of Faculty Affairs
### Events at a Glance

All events will be held from noon to 1 p.m. each day.

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| **Monday, March 25** | Armour Academic Center (AAC) 539 and Virtual | Climate Change in Our Backyard: A Global Challenge Impacting Health at the Local Level | Elena Grossman, MPH  
Community Benefits Program Manager at GTI Energy |
| **Tuesday, March 26** | AAC 540 and Virtual | Climate Change Impacts on Human Health in Vulnerable Communities | Amruta Nori-Sarma, PhD, MPH  
Assistant Professor, Boston University School of Public Health  
Department of Environmental Health |
| **Wednesday, March 27** | Remote Only | Climate Change - an Ecological and Global Health Equity Crisis | Gaurab Basu, MD, MPH  
Director of Education and Policy, Harvard Chan C-CHANGE  
Assistant Professor, Harvard Medical School |
| **Thursday, March 28** | AAC 539 and Virtual | A Prescription for Climate Awareness: Effective Communication Strategies for Health Professionals | Heide Cygan, DNP, RN, PHNA-BC  
Associate Professor, Department of Community, Systems and Mental Health  
RUSH College of Nursing |
Dear Students, Faculty and Staff:

On behalf of the Office of Global Health at RUSH, welcome to the 11th annual Global Health Symposium.

It’s nearly impossible to turn on the news these days without hearing about the negative impacts of climate change – from polar bear numbers dwindling due to melting ice caps to “From NYC to Miami, Major Cities Along the East Coast are Sinking,” published this month in the New York Times. The headlines can certainly sound alarmist, resulting in either paralyzing anxiety or laissez-faire apathy. As humans living on this planet, our fate is intimately tied to our environment. We are entering the age of “Planetary Health,” understanding how the health of human civilization depends on natural systems and finding ways through science, advocacy, public health and personal health to survive and thrive in spite of climate changes.

Historically, as with most geopolitical crises, socioeconomic disparities result in the most vulnerable members of our communities bearing the greatest burden of morbidity and mortality. The same is true of climate change. Our speakers this week will help us better understand the many ways that climate change can affect health and how these changes harm at risk communities. We will learn how we as scientists and care providers can work toward minimizing the impact of climate change as well as advocating for policies that preserve and enhance planetary health.

We are excited to have a knowledgeable and experienced panel of speakers who will focus on the impact of climate change in Chicago, nationally and globally. We are grateful for their participation and grateful that you have chosen to join us. We hope that the knowledge you have gained inspires you to action and on-going engagement with this important topic.

Gratefully,

Stephanie Crane, MD
Director, Office of Global Health, RUSH University
Global Health Symposium
Monday, March 25, 2024
Noon to 1 p.m., AAC 539

Climate Change in Our Backyard: A Global Challenge Impacting Health at the Local Level
Elena Grossman, MPH
Community Benefits Program Manager at GTI Energy

Synopsis
Think globally, act locally is an old expression used in various contexts that is still relevant. Climate change is a global threat impacting multiple sectors at the local level such as agriculture, transportation, manufacturing, the economy as well as health. Through increased frequency and severity of extreme weather events, worsening air quality, sea-level rise, and food and water insecurity, it is increasing the risk of or exacerbating heat-related illness, vector-borne diseases, water-borne diseases, flood-related injuries and deaths, respiratory and mental health conditions, and malnutrition. People and communities that are historically underinvested, have the least power, and have little access to resources, are at a greater risk of climate threats, even though they often contribute the least to climate change. Throughout the world, these impacts present themselves differently at the local level where the action happens to address climate change. Nature-based solutions and the built environment, grey infrastructure, social infrastructure, public health and other systems, and local and state policies are all strategies with co-benefits of reducing the public health impact from climate change, improving other public health concerns, contributing to mitigating climate change itself, and when done intentionally, addressing equity. As in all public health practice work, not all strategies are a perfect match for every community and community input is critical. Please join me as I walk through how climate change is a threat to our health, how it exacerbates inequities, and what we are doing here in Illinois and the Chicagoland area to mitigate these impacts.

Biography
Elena Grossman is the community benefits program manager at GTI Energy and has been working in the area of climate change, health and equity for over 10 years. She is also a lecturer for Yale University’s Climate Change and Health Certificate program. Previously, she was a senior research specialist at the University of Illinois at Chicago School of Public Health and served as the program director of the Climate and Health Institute, which is intended to prepare future public health professionals to better address the public health impacts from climate change and increase knowledge and awareness among civic leaders, public health professionals, and community members on climate change, its public health impacts, and its disproportionate impact on environmental justice communities. Grossman was also part of the UIC Community Research on Climate and Urban Science (CROCUS) team with an emphasis on the community engagement component. She served as the program director for the Building Resilience Against Climate Effects in Illinois (BRACE-Illinois) Project, a partnership between the UIC School of Public Health and the Illinois Department of Public Health to help prepare Illinois for the health effects from climate change. Grossman was a Peace Corps volunteer in Guatemala, received her Bachelor of Arts from Franklin and Marshall College, and Master’s in Public Health from UIC School of Public Health.

Global Health Symposium
Tuesday, March 26, 2024
Noon to 1 p.m., AAC 540

Climate Change Impacts on Human Health in Vulnerable Communities
Amruta Nori-Sarma, PhD, MPH
Assistant Professor, Boston University School of Public Health
Department of Environmental Health

Synopsis
A growing body of evidence supports the relationship between anthropogenic climate change, extreme weather events, and a host of adverse physical and mental health impacts. This symposium will discuss the relationship between extreme heat exposure and a variety of physical and mental health endpoints, demonstrating examples that leverage both primary data collection of registries in LMICs as well as secondary analysis of health record data across the US. Further discussion will focus on the challenges that public health practitioners may face in low-resource settings, where data limitations on both exposures and health outcomes may hamper our ability to conduct epidemiologic analyses to understand the relationship between climate exposures and health endpoints of interest, as well as the opportunities that may exist to leverage local data resources in these settings. In this effort, collaboration between researchers, clinicians, and government agencies to implement early warning systems intended to better shield vulnerable populations from the health effects of adverse exposures will be crucial, as well as work to evaluate whether or not these action plans are truly benefiting the most vulnerable. Opportunities for future research at the intersection of climate change and mental health will be highlighted, focused on a case study intervention among most vulnerable persons in the Boston area and collaborations with community stakeholders.

Biography
Amruta Nori-Sarma is an assistant professor in the Environmental Health Department at Boston University School of Public Health, where she studies the relationship between environmental exposures associated with climate change and health outcomes in vulnerable communities. Her previous work has examined the impact of heat waves and air pollution on health in vulnerable communities in India, South-Korea, and across the US. Her current research aims to understand the impacts of interrelated extreme weather events on mental health across the US utilizing large claims datasets. She also has an interest in evaluating the success of policies put in place to reduce the health impacts of climate change.
Climate Change - an Ecological and Global Health Equity Crisis

Gaurab Basu, MD, MPH
Assistant Professor, Harvard Medical School

Synopsis

In 2023, the planet experienced extraordinary levels of heating that has left climate scientists surprised and concerned. The Paris Agreement, signed in 2015, called for urgent decarbonization by 2030 and the end of human made greenhouse gas emissions by 2050. However, efforts to urgently end the use of fossil fuels have been stymied by a lack of political will and the influence of the fossil fuel industry. Climate change is fundamentally a global health equity crisis. Climate change and the burning of fossil fuels impacts health through eight mechanisms: extreme weather, infectious diseases, food security, water scarcity, heat, air pollution, mental health, and forced migration. In this lecture, Gaurab Basu, MD, MPH, will review studies that explain the interaction of climate change and health equity, and describe how the global south is disproportionately impacted. He will make the argument that health professionals are well positioned to be climate advocates because of our ability to humanize the crisis and explain the stakes. He will review ways that health professionals can become change makers to mitigate the planetary crisis, and pathways forward for a health equitable world.

Biography


Basu has developed and evaluated numerous innovative health equity curricular programs. He is the faculty director of the HMS Climate Change, Environment and Health curricular theme; co-founded the Cambridge Health Alliance Center for Health Equity Education and Advocacy; co-directed the HMS social medicine curriculum; and co-directs the Climate Health Organizing Fellowship. Basu serves on the Harvard University Salata Institute for Climate and Sustainability Standing Committee on Climate Education.

In 2021, Basu was named to the Grist 50 list of national climate leaders. In 2018, the Robert Wood Johnson Foundation selected him to their Culture of Health Leadership fellowship. Basu advises the Massachusetts Governor’s Executive Office of Energy and Environmental Affairs as a member of the Implementation Advisory Committee and the Climate Science Advisory Panel. He is a part of the city of Cambridge Mayor’s Climate Crisis Working Group and its Net-Zero Climate Task Force.

In 2021, Basu graduated magna cum laude from Brown University, with a bachelor of arts in international relations. He received his medical degree from the Larner College of Medicine at the University of Vermont. He completed his internal medicine residency training at Cambridge Health Alliance/Harvard Medical School.

Climate Change - an Ecological and Global Health Equity Crisis

A Prescription for Climate Awareness: Effective Communication Strategies for Health Professionals

Heide Cygan, DNP, RN, PHNA-BC
Associate Professor, Department of Community, Systems and Mental Health
RUSH College of Nursing

Synopsis

Climate change is an established threat to human health, with the health and financial impacts evident across the globe. Between 2030 and 2050, it is estimated that climate change will cause 250,000 excess deaths per year due to malnutrition, infectious disease and heat stress (World Health Organization, 2021). There is a moral obligation for health professionals to understand and address the impact of climate change on human health. Health professionals are often the first to see the adverse effects of climate change on health. In a 2021 review, Durpaz et al. found that despite increasing efforts of health professionals to address climate change and related health risks, literature supporting such efforts is minimal. In contrast, a growing number of physicians and nurses have called for more robust education on the implications of climate change for human health (Wellbury et al., 2018; Solomon et al., 2019; Poindexter, 2023; Cygan et al., 2023). There remains a gap between the needs of patients related to climate change and the ability of health professional to meet those needs. The first step is to raise awareness about the global and local impact of climate change on human health. This presentation will equip health professionals with communication strategies and practical tools to effectively convey the urgency of climate change's impact on health and engage patients in meaningful dialogue to promote climate resilience.

Synopsis References


Poindexter, K. (2023). Global code red: Nursing education’s call to climate change. Nursing Education Perspectives, 44(2), 73-74. DOI: 10.1097/01.NEP.0000000000001003


Biography

Heide Cygan, DNP, RN, PHNA-BC is an associate professor at RUSH University College of Nursing, in the Department of Community, Systems and Mental Health, where she teaches public health nursing to graduate and doctoral students. As a board certified advanced public health nurse, a main tenant of Cygan’s practice is understanding the reciprocal relationship between humans and their environment. Much of her current scholarship is dedicated to advancing planetary health through nurses and other health professionals. She specifically focuses on innovative teaching strategies that develop nursing students as planetary health leaders. Cygan earned her Bachelors of Science in Nursing from the University of Michigan and her Doctorate of Nursing Practice in Advanced Public Health Nursing from the University of Illinois at Chicago.
RUSH University believes that every person in every community deserves access to public and personal health services and is committed to eliminating health disparities at home and abroad. The Office of Global Health is proud to provide opportunities for students, residents, fellows, faculty and staff to serve and learn in partnership with global communities in pursuit of this goal.

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All photos were taken with consent of the patients/individuals.