For more than a decade, researchers in Columbia Mailman has been at the vanguard of efforts to understand and respond to the effects of climate variability and climate change on human health. Our research aims to elucidate the human health impacts of complex changes, including shifts in the global atmosphere, regional ecology, social structures, and human exposures and behaviors. In parallel, we have been leaders in educating the next generation of Climate and Health leaders and practitioners.

More than 30 Columbia Mailman faculty work at the intersection of climate and health with wide-ranging expertise to examine the multifaceted dimensions of climate change and health, such as the impacts of air pollutants on health; climate refugees; infectious disease; justice and governance issues; food systems/security; neurodevelopment; epigenetics; metabolomics; and the economic implications of climate change-related health impacts. Our faculty aim to identify the precise role that climate plays in long-term health trends, and to project future impacts by modeling plausible climate scenarios. With broad and deep expertise across a range of climate and health areas, complemented by the expertise of faculty University-wide who engage with Columbia University’s recently launched Climate School, our faculty are uniquely well-positioned to build interdisciplinary teams that unlock complex new understandings in this important field.

Below are highlights of just a few of Columbia Mailman’s programs on climate and health:

**Climate and Health Program**
The School’s Climate and Health Program launched in 2009 and is the first educational and research program in the country focusing on the interaction of climate and health. The program includes investigators who focus on the local health benefits that can be achieved when actions are taken to reduce greenhouse pollutants, such as CO2, methane, and black carbon. The Program is developing and applying new methods to assess health co-benefits of emerging climate mitigation policies at local, regional, and global scales. Work within the program also includes modeling of infection disease spread, which is inextricably linked to, and affected by, climate conditions.

**Climate and Health Education**
Since 2009, Columbia Mailman has been working to build its own educational programs to train future leaders in the field and also to provide health professions institutions throughout the world with the tools to do the same. Our Climate and Health program currently includes 11 doctoral students in the world’s first doctoral training program in climate and health and 28 MPH students from across academic departments in our climate health certificate program.

**Global Consortium on Climate and Health Education (GCCHE)**
Launched in 2017, the GCCHE was born from a meeting at COP 21 in Paris where Columbia Mailman partnered with the White House to hold a special session to highlight the need for greater investment in educating health professionals globally on the human health threats of climate change. Directed by Dr. Cecilia Sorensen, MD, the GCCHE’s vision is that all health professionals throughout the world – doctors, nurses, and public health leaders and practitioners – will be trained to prevent, reduce, and respond to the health impacts of climate change.