Climate, Security, Health & Resilience

The Ohio State University

Purpose
The Mershon Center for International Security Studies, the Byrd Polar Research Center, and the Center for Resilience at Ohio State have joined forces to launch a collaborative, interdisciplinary initiative called Climate, Security, Health & Resilience (CSHR). This initiative aims to raise awareness and stimulate research regarding the emerging impacts of climate dynamics on human health and well-being; energy, food and water security; international security; population dynamics; and community sustainability and resilience. Traditionally, these domains have been addressed separately in various disciplines, but it is increasingly important for both academics and decision-makers to better understand the systemic linkages among them, and to identify the potential hidden consequences of policy and technology choices. Some of the interdependencies among these five domains are depicted in the figure below.

Principal Topics
CSHR has identified five principal topics, each focusing on specific interdependencies.

1. **Climate and Health**—impacts of climate on human and animal health, spread of disease, animal migration, genetic transformations, epidemics, mass extinctions; early warning/preventive methods.

2. **Climate and Resource Security**—impacts on water, food, and energy security, including fresh water availability, crop adaptations, renewable resources, nutrition and sanitation in developing nations, commodity supply chains, as well as mitigation of associated greenhouse gas emissions.

3. **Climate and International Security**—climate impacts on diplomatic and military conflict resolution, regulation, transboundary environmental problems, governmental instability, and international aid.

4. **Climate and Population Dynamics**—impacts on international migration, social mobility, age and gender structure, fertility and social mobility, as well as methods of climate/population modelling.

5. **Climate and Community Resilience**—responding to climate impacts and the energy-water-food nexus through adaptation, including urban and regional design, land use, transportation, green buildings, smart growth, carbon mitigation, infrastructure resilience, disaster preparedness, community governance, development of adaptive capacity, and open source urbanism.
**Workshops and Conferences**

To investigate the above linkages, CSHR is organizing a series of workshops and conferences at Ohio State during 2014 and 2015, with the following objectives:

- Establish dialogue among a network of interested OSU faculty and graduate students
- Connect the OSU network with prominent researchers from other institutions
- Stimulate creation of fundable, innovative, interdisciplinary research proposals
- Develop relevant scholarly publications based on workshop proceedings.

The first workshop, focusing on Climate Change and Health, will be held in Fall of 2014, followed by a second workshop on Climate Change and Resource Security in Spring of 2015. These initial workshops are intended to bring together a network of OSU scholars to share their current research, identify a research agenda, and lay the foundation for a broader conference that includes nationally and internationally recognized experts from outside of OSU.

To participate in either or both of these workshops, please email your title and abstract (100 words) for your proposed presentation by Friday April 25, 2014 to: **mershoncenter@osu.edu**. We encourage team presentations including faculty and graduate students. In May 2014 we will establish dates and further details for these workshops.

Please address questions about the workshop plans either to **mershoncenter@osu.edu** or to any member of the CSHR Coordinating Team listed below.

**CSHR Funding and Administration**

CSHR was first established through a series of group meetings in the summer and fall of 2013, during which over 25 faculty members engaged in planning discussions about the CSHR objectives, funding and management. In September 2013, the CSHR leadership team submitted a proposal to the Office of Research and received seed funding. The participating Centers have committed enough funding and in-kind support to initiate the first stage workshops. Additional funding is being sought from various colleges and from extramural sponsors.

In order to provide guidance for the overall planning and conduct of the workshops and conferences, and to develop a strategy for continued funding and growth, a CSHR Coordinating Team has been appointed with representation from several colleges across OSU:

- J. Craig Jenkins, Director, Mershon Center for International Security Studies
- Ellen Mosley-Thompson, Director, Byrd Polar Research Center
- Lonnie Thompson, School of Earth Sciences
- Dan Sui, Chair, Department of Geography
- Geoffrey Parker, Department of History
- Kathleen Marriott, Program Director, Public Health Preparedness for Infectious Disease
- Joseph Fiksel, Executive Director, Center for Resilience, College of Engineering

For additional information about CSHR, please contact:

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