

**Regional Symposium**  
**Climate Change, Planetary, and Human Health: Challenges and Opportunities**

<https://eohsi.rutgers.edu/climateplanethealth>

**Friday, October 28, 2022**

Rutgers University – Cook Campus  
 Cook Student Center (CSC), 59 Biel Road, New Brunswick, NJ

**Symposium Program – Overview**

Co-Chairs: Soko Setoguchi and Philip Demokritou

**FINAL 10/18/2022**

<b>8:30 – 9:00 am</b> (30 min)	<b>Check-In / Continental Breakfast</b>
<b>9:00 – 9:15 am</b> (15 min)	<b>Introduction:</b> Soko Setoguchi (Symposium Co-Chair) <b>Opening Remarks:</b> RBHS Chancellor Brian Strom
<b>9:15 – 10:15 am</b> (60 min)	<b>Session 1:</b> Climate Change and Planetary Health: State of Science, Co-Chairs: Marjorie Kaplan, Omowunmi Sadik
<b>10:15 – 10:45 am</b> (30 min)	<b>Introduction:</b> Philip Demokritou (Symposium Co-Chair) <b>Keynote 1:</b> Jason White, Director of the Connecticut Agriculture Experiment Station; Professor, Yale University
<b>10:45 – 11:00 am</b> (15 min)	<b>Coffee Break</b>
<b>11:00 am – 12:00 pm</b> (60 min)	<b>Session 2:</b> Food Safety and Security in a Changing Climate, Co-Chairs: Philip Demokritou, Jonathan Conway
<b>12:00 – 12:20 pm</b> (20 min)	<b>Pick up lunch</b> (provided)
<b>12:20 – 1:15 pm</b> (55 min)	<b>Flash talks – DURING LUNCH</b> <b>Moderator:</b> Soko Setoguchi (Symposium Co-Chair)
<b>1:15 – 2:00 pm</b> (45 min)	<b>Introduction:</b> Philip Demokritou (Symposium Co-Chair) <b>Keynote 2:</b> Shawn M. LaTourette, Commissioner, New Jersey Department of Environmental Protection
<b>2:00 – 3:00 pm</b> (60 min)	<b>Session 3:</b> Health Impacts, Vulnerability, and Disparity, Co-Chairs: Soko Setoguchi, Woo Lee
<b>3:00 – 3:15 pm</b> (15 min)	<b>Coffee Break</b>
<b>3:15 – 4:00 pm</b> (45 min)	<b>Introduction:</b> Yingying Chen <b>Keynote 3:</b> Wendy Nilsen, PhD; National Science Foundation
<b>4:00 – 4:50 pm</b> (50 min)	<b>Session 4:</b> Climate Engineering and Technology, Co-Chairs: Yingying Chen, Muhammad Hajj
<b>4:50 – 5:00 pm</b> (10 min)	<b>Closing remarks</b> Bishr Omary

**Organizing Institutions:** Rutgers University, New Jersey Institute of Technology (NJIT), Princeton University, Stevens Institute of Technology. **Sponsored by:** Rutgers Biomedical and Health Sciences (RBHS) and RWJBarnabas Health Center for Climate Change, Health, and Healthcare; RBHS Environmental and Occupational Health Sciences Institute; Rutgers Climate Institute; Rutgers Office for Research.

## Symposium Program – Detailed Agenda

Co-Chairs: Soko Setoguchi and Philip Demokritou

**FINAL 10/18/2022**

**8:30 – 9:00 am**      **Check-In / Continental Breakfast**  
(30 min)

**9:00 – 9:15 am**      **Introduction:** Soko Setoguchi (Symposium Co-Chair)  
(15 min)              **Opening Remarks:** RBHS Chancellor Brian Strom, MD, MPH

**9:15 – 10:15 am**      **Session 1: Climate Change and Planetary Health: State of Science**  
(60 min)              Session Co-Chairs: Marjorie Kaplan (Rutgers), Omowunmi Sadik (NJIT)

- *Climate Science Globally and Locally*, Alan Robock, PhD, Distinguished Professor, Department of Environmental Sciences, Rutgers University
- *Climate Change Impacts on the Vulnerability of Coastal and Inland Environments to Flooding*, Reza Marsooli, PhD, Assistant Professor, Department of Civil, Environmental and Ocean Engineering, Stevens Institute of Technology
- *Ecosystem Interactions and Resilience*, Michel C. Boufadel, PhD, Distinguished Professor, Civil and Environmental Engineering, New Jersey Institute of Technology

**10:15 – 10:45 am**      **Introduction:** Philip Demokritou (Symposium Co-Chair)  
(30 min)              **Keynote 1:** Jason White, PhD, Director of the Connecticut Agriculture Experiment Station and Professor, School of Public Health, Yale University

**10:45 – 11:00 am**      **Coffee Break**  
(15 min)

**11:00 am – 12:00 pm**      **Session 2: Food Safety and Security in a Changing Climate**  
(60 min)              Session Co-Chairs: Philip Demokritou (Rutgers), Jonathan Conway (Princeton)

- *Food Safety and Security: Challenges and Opportunities in the Era of Climate Change*, Philip Demokritou, PhD, Rutgers University
- *Engineering the Plant Microbiome for Improved Plant Health, Growth, and Resilience*, Jonathan Conway, PhD, Princeton University
- *Enabling Sustainable Agricultural Irrigation and Food Disinfection to Mitigate Climate Change Impacts*, Wen Zhang, PhD, P.E., BCEE, New Jersey Institute of Technology
- *Leveraging Food Systems to Improve the Health of People and the Planet*, Shauna Downs, PhD, MS, Rutgers University
- *Emerging Technologies to Collect Data for Informed Management of Water Resources and Agricultural Practices in the Era of Climate Change*, Marouane Temimi, PhD, Stevens Institute of Technology
- Discussion



**4:00 – 4:50 pm**  
(50 min)

**Session 4: Climate Engineering and Technology**

Co-Chairs: Yingying Chen (Rutgers), Muhammad Hajj (Stevens)

- *Modeling and Simulation Tools*, Muhammad Hajj, PhD, School of Engineering and Science, Stevens Institute of Technology
- *Tools for Assessing Brain Diseases in a Changing Climate*, Johannes Weickenmeier, PhD, School of Engineering and Science, Stevens Institute of Technology
- *Electrofluidic Devices for Health and Environmental Monitoring*, Mehdi Javanmard, PhD, School of Engineering, Rutgers University
- *Interactive AI Agents for Improved Health under Climate Change*, Jorge Ortiz, PhD, School of Engineering, Rutgers University
- *Mobile Healthcare under Climate Change*, Yingying Chen, PhD, School of Engineering, Rutgers University

**4:50 – 5:00 pm**  
(10 min)

**Closing remarks**

Bishr Omary, MD, PhD; Senior Vice Chancellor for Academic Affairs and Research and Henry Rutgers Professor of Biomedical Sciences, Rutgers Biomedical and Health Sciences