



# Frontiers in Environmental Science and Health

Jun 1-7, 2025

Morehouse School of Medicine

## June 1<sup>st</sup> Course Introduction (At Hotel)

- 4:45-5:15 pm *Welcome Remarks and Course Overview*  
Winston Thompson, Ph.D., Morehouse School of Medicine
- 5:15-6:00 pm Dinner (provided)
- 6:00-6:45 pm **Lecture:** *Responsible Conduct in Research and Scientific Ethics*  
Jonathan K. Stiles, Ph.D., Morehouse School of Medicine
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## June 2<sup>nd</sup> Obesity and Health Disparities (All lectures will be held in the Pavilion 171 AB & Labs B244)

- 9:00-9:30 am **Opening Remarks**  
Dr. Rick Kittles, Senior VP for Research, Morehouse School of Medicine
- 9:30-10:15 am **Lecture:** *Dietary Patterns and Assisted Reproduction Outcomes*  
Audrey Gaskins, Sc. D., Emory University
- 10:15-10:45 am Coffee break
- 10:45-12:00 pm **Lecture:** *Developing Strategic Directions for NIEHS to Support the Environmental Health Sciences Community*  
Dr. Rick Woychik, NIH/NIHES
- 12:00-1:00 pm Lunch (provided)
- 1:00-6:00 pm **Lab Session:** Single Cell Multiomics (RNAseq and ATACseq)  
Xin Hu, Ph.D., MSPH, Emory University and 10X Genomics
- 6:00 pm Dinner on own
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## June 3<sup>rd</sup> Air Pollution Impacts on Human Health

**(All lectures will be held in the Pavilion 171 AB & Labs B244)**

- 9:00-9:45 am **Lecture:** *Household Air Pollution and Respiratory Disease: Synthesis of Observational and Experimental Evidence*  
John McCracken, Ph.D., University of Georgia
- 9:45-10:30 am **Lecture:** *In Vitro and In Vivo Techniques to Evaluate Neurotoxicity and Neurological Disease*  
Michael Caudle, Ph.D., Emory University
- 10:30-11:00 am Coffee break
- 11:00-11:45 am **Lecture:** *Mapping the Single-Cell Omics Landscape: New Insights into Exposure and Health*  
Xin Hu, Ph.D., Emory University
- 11:45-1:00 pm Lunch (provided)
- 1:00-3:00 pm **Information/Panel Discussion: DEVELOP Program @ NASA**
- 6:00 pm Dinner on own
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**June 4<sup>th</sup>**

**Exposome**

**(All lectures will be held in the Pavilion 171 AB & Labs B244)**

- 9:00-9:45 am **Lecture:** *Use of High-resolution Metabolomics for the Identification of Metabolic Signals Associated with Ubiquitous Pollutants*  
Dean Jones, Ph.D., Emory University
- 9:45-10:30 am **Lecture:** *Leveraging high resolution mass spectrometry based exposomics for identifying chemical contaminants in environmental samples and human studies*  
Randolph Singh, Ph.D., Columbia University
- 10:30-11:00 am Coffee break
- 11:00-11:45 am **Lecture:** *Exposomics in practice: new approaches to studying neurodegeneration*  
Gary Miller, Ph.D., Columbia University
- 11:45-1:00 pm Lunch (provided)
- 1:00-1:30 pm **Lab Pre-Lecture:** Randolph Singh from NEXUS at Columbia
- 1:30-6:00 pm **Lab Session: Exposomics Data Analysis with Randolph Singh**

6:00 pm Dinner on own

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**June 5<sup>th</sup>**      **Pollution Impacts on Human Health**  
**(All lectures will be held in the Pavilion 171 AB & Labs B244)**

9:00-9:45 am      **Lecture:** *Traffic Pollution, Health, and the Theory of Everything: Molecular Approaches for Characterizing Air Pollution Exposure and Response*  
Jeremy Sarnat, Sc. D., Emory University

9:45-10:30 am      **Lecture:** *Exposures and Cancer Disparities*  
Melissa Davis, Ph.D., Morehouse School of Medicine

10:30-11:00 am      Coffee break

11:00-11:45 am      **Lecture:** *Wastewater based epidemiology (WBE)*  
Erin Lipp, Ph.D., University of Georgia

12:00-1:00 pm      Lunch (provided)

1:00 pm      Free afternoon to explore Atlanta

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**June 6<sup>th</sup>**      **Maternal/Fetal Health and Lifetime Exposure Effects on Human Health**  
**(All lectures will be held in the Pavilion 171 AB & Labs B244)**

9:00-9:45 am      **Lecture:** *Environmental Exposures and Pathways to Adverse Pregnancy and Child Health Outcomes in an Atlanta Birth Cohort*  
Anne Dunlop, MD, Emory University

9:45-10:30 am      Coffee Break

10:30-11:15 am      **Lecture:** *Approaches to study chemical mixture effects in the male gonad*  
Benson Akingbemi, DVM, Ph.D., Auburn University

11:15-12:30 pm      Lunch (provided)

12:30-2:30 pm      **Panel Discussion:** *Career planning and strategies for careers in Environmental Health Science, Mentorship Guidance in Career Development*  
Winston Thompson, Ph.D., Morehouse School of Medicine, Yvonne Maddox, Ph.D., President and CEO TA Thornton Foundation, Gerald Schatten, Ph.D., University of Pittsburgh, and Charles Easley, Ph. D., University of Georgia

6:00-8:00pm      *Closing Ceremony Dinner (provided) at Hotel*  
*Certificate of Participation*

Winston Thompson, Ph.D., Morehouse School of Medicine, Gerald Schatten, Ph.D., University of Pittsburgh, and Charles Easley, Ph.D., University of Georgia

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