

**Hosted by the Forum on Neuroscience and Nervous System Disorders
in collaboration with the Board on Environmental Studies and Toxicology**

Please visit the webpage for the agenda and biosketches: <https://bit.ly/3edp69s>



Workshop Planning Committee

Deborah Cory-Slechta, University of Rochester Medical School, *Co-Chair*

Walter Koroshetz, National Institute of Neurological Disorders and Stroke, *Co-Chair*

Patrick Breysse, Centers for Disease Control and Prevention

Ray Dorsey, University of Rochester Medical School

Carl Hill, Alzheimer's Association

Frances Jensen, University of Pennsylvania Perelman School of Medicine

David Jett, National Institute of Neurological Disorders and Stroke

Cindy Lawler, National Institute of Environmental Health Sciences

Gary Miller, Columbia University Mailman School of Public Health

Trevor Penning, University of Pennsylvania Perelman School of Medicine

Allison Willis, University of Pennsylvania Perelman School of Medicine



Workshop Objectives

- Provide an overview of what is known about neurotoxic exposures and how they lead to neurodevelopmental and neurodegenerative disorders;
- Explore how new technologies and approaches can be harnessed to identify previously-unknown neurotoxic chemicals and better understand the effects on brain health of cumulative exposures and interactions across the life-span; and
- Discuss research gaps and collaborative opportunities between neuroscientists and environmental health scientists.



Workshop Overview

Opening talk

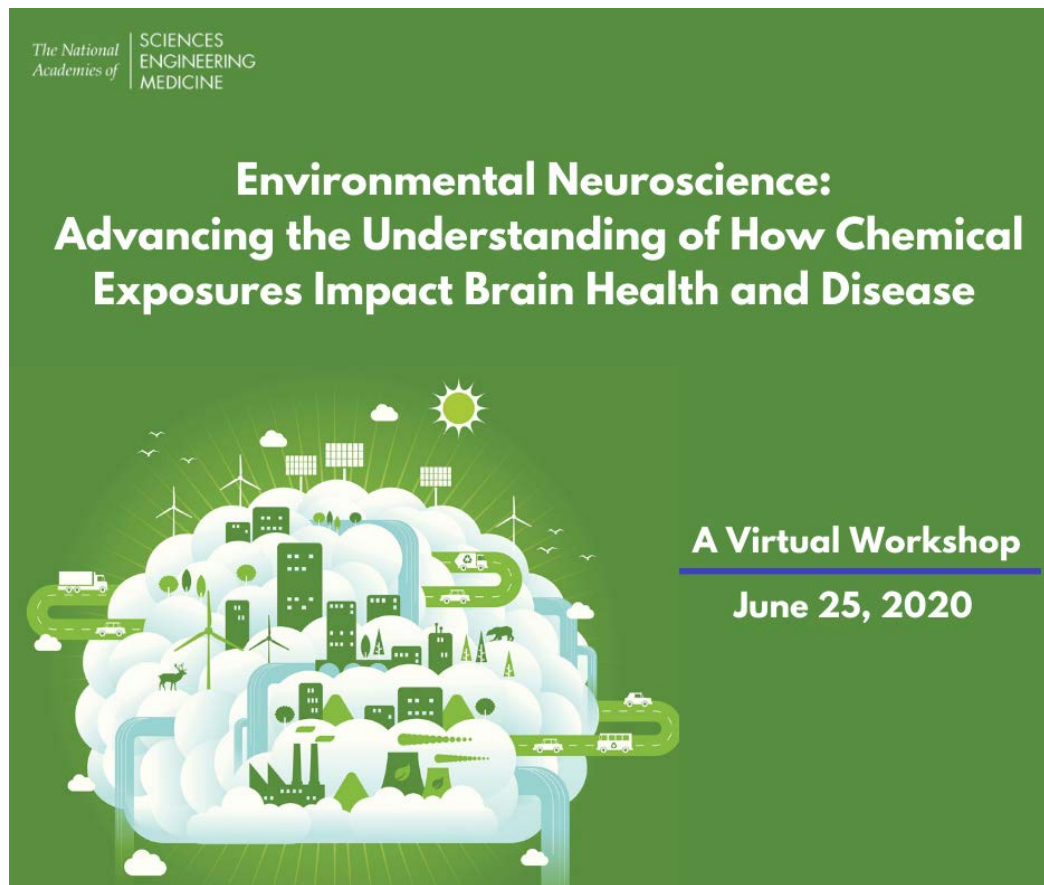
Session I What are the neurotoxins?

Session II Biology of toxicant interaction with
the nervous system

Session III Chemical toxicants as drivers of
abnormal neurodevelopment and
neurodegeneration

Session IV Future directions

Session I: What are the Neurotoxicants?



Session I: What are the Neurotoxicants?

Session overview

Deborah Cory-Slechta, University of Rochester, *Workshop Co-chair and session moderator*

Speakers

Tracey Woodruff, University of California, San Francisco

Gary Miller, Columbia University

Panel Discussion—*The 2 speakers above will be joined by:*

Jennifer McPartland, Environmental Defense Fund

Brenda Eskenazi, University of California, Berkeley





To submit a question, please use the
Q&A feature in the black bar at the
bottom of your screen.



The National
Academies of

SCIENCES
ENGINEERING
MEDICINE

Environmental Neuroscience: Advancing the Understanding of How Chemical Exposures Impact Brain Health and Disease



A Virtual Workshop

June 25, 2020

The workshop is
currently on break and
will reconvene at
12:30pm EDT.

Please visit the webpage for
the agenda and biosketches:
<https://bit.ly/3edp69s>



To submit a question, please use the
Q&A feature in the black bar at the
bottom of your screen.



*The National
Academies of* SCIENCES
ENGINEERING
MEDICINE

Environmental Neuroscience: Advancing the Understanding of How Chemical Exposures Impact Brain Health and Disease



A Virtual Workshop

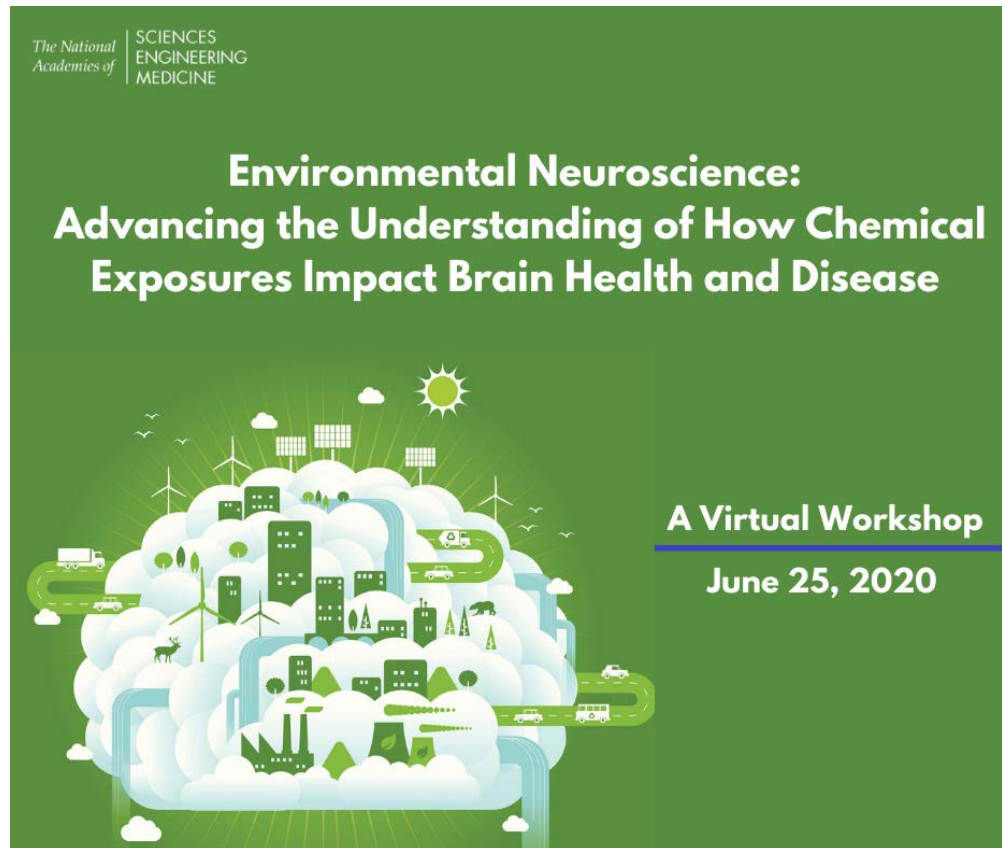
June 25, 2020

The workshop is
currently on break and
will reconvene at
2:30pm EDT.

Please visit the webpage for
the agenda and biosketches:
<https://bit.ly/3edp69s>



Session III: Chemical Toxicants as Drivers of Abnormal Neurodevelopment and Neurodegeneration



Discussion questions:

- What is the level of evidence for chemical toxicants as drivers of abnormal neurodevelopment and neurodegeneration?
- What research is needed to launch prevention efforts: either treatments or policy changes?

Session overview

Walter Koroshetz, NINDS, *Workshop co-chair and session co-moderator*

Allison Willis, University of Pennsylvania, *session co-moderator*

Speakers

David Bellinger, Boston Children's Hospital

Marisa Bartolomei, University of Pennsylvania

Jason Richardson, Florida International University

Beate Ritz, University of California, Los Angeles

Andrew Petkus, University of Southern California

Eva Feldman, University of Michigan





To submit a question, please use the
Q&A feature in the black bar at the
bottom of your screen.



*The National
Academies of* SCIENCES
ENGINEERING
MEDICINE

Environmental Neuroscience: Advancing the Understanding of How Chemical Exposures Impact Brain Health and Disease



A Virtual Workshop

June 25, 2020

The workshop is
currently on break and
will reconvene at
4:45pm EDT.


Please visit the webpage for
the agenda and biosketches:
<https://bit.ly/3edp69s>



Session IV: Future Directions

*The National
Academies of* SCIENCES
ENGINEERING
MEDICINE

Environmental Neuroscience: Advancing the Understanding of How Chemical Exposures Impact Brain Health and Disease



A Virtual Workshop
June 25, 2020

Discussion questions:

- What are the critical research gaps, next steps, and promising areas for future action?
- What opportunities are there for collaboration among neuroscientists and environmental health scientists?

Reflections from the workshop co-chairs

Walter Koroshetz, National Institute for Neurological Disorders and Stroke

Deborah Cory-Slechta, University of Rochester

“Lightening round” remarks

Stanley Barone, Environmental Protection Agency

Ray Dorsey, University of Rochester Medical Center

Carl Hill, Alzheimer’s Association

Devon Payne-Sturges, University of Maryland

Richard Woychik, National Institute of Environmental Health Sciences

