



# MMI 291 Seminar Series

Current Theme: Interdisciplinary Research  
Fall Quarter 2020 – CRN 41538



**Friday Seminar – 12:10-1 p.m.**

***“Translational Outcomes Following  
Developmental Exposure to Environmental Risk  
Factors in Neurodevelopmental Disorders”***

## Research / Bio

**Jill L. Silverman** received her PhD from the University of Maryland, Baltimore in 2007 and completed postdoctoral training at the NIMH. She is an associate professor in the Department of Psychiatry and MIND Institute. Dr. Silverman has a broad two decades of experience in genetic/environmental risk of neurodevelopmental disorders. Dr. Silverman has joined the UC Davis Center for Environmental Health Science and collaborates routinely with experts in toxicology, immunology, air quality, etc. Dr. Silverman developed innovative lines of environmental health research on inhalation toxicants. Converging evidence from research on environmental health and epidemiology suggests that air pollutants adversely affect neurodevelopment and neurodegeneration. Multiple epidemiological studies from various urban locations reported strong associations between exposure to air pollution and ASD and Alzheimer's Disease. Preclinical models tested in highly controlled environments are increasingly necessary to study insult of complex, air toxicants on learning and memory, executive function, and motoric development or decline. In 2016, Dr. Silverman received an NIH R21, as sole PI, from the National Institute for Environmental Health Sciences (NIEHS) entitled “Functional Outcomes of Interactions between an ASD-Relevant Gene and Air Pollution” to begin these voluminous studies and this year findings started being published.

## Publications

*Translational outcomes in a full gene deletion of ubiquitin protein ligase E3A rat model of Angelman syndrome*, Berg E.L., Et al. *Translational Psychiatry*, 2020 Jan

*Effects of early life exposure to traffic-related air pollution on brain development in juvenile Sprague-Dawley rats*, Patten K., Et al. *Translational Psychiatry*, 2020 May

Oct.  
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**Jill L. Silverman, PhD**  
Associate Professor  
MIND Institute and Department of  
Psychiatry and Behavioral Science  
UC Davis School Of Medicine

**Oct. 9, 2020  
12:10 – 1 p.m.  
ZOOM Meeting**

Medical Microbiology  
& Immunology  
School of Medicine

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We hope to see you there!