







SCAND Research Symposium 2023

South Carolina Autism and Neurodevelopmental Disorders Consortium

Riverbanks Zoo & Garden | Columbia, SC
March 3, 2023



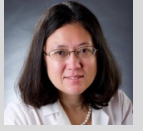
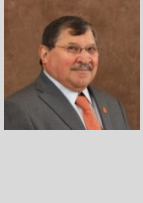

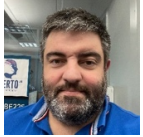

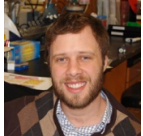

- 9:00 **Coffee and snacks**
- 9:30 **Welcome and background of SCAND**
Jane Roberts, PhD | Carolina Distinguished Professor, Associate Dean for Natural Sciences, Psychology, USC
- 9:45 – 11:15 **Session #1: Quantifying Behavior Across the Translational Spectrum**
Moderator: *Chris Cowan, PhD* | Professor, Neuroscience, MUSC
-  **A model-driven approach to the analysis of ECG as a window into the autonomic nervous system**
Christian O'Reilly, PhD | Assistant Professor, Computer Science and Engineering, USC
-  **Hearing in ASD**
Brent Wilkerson, PhD | Assistant Professor, Otolaryngology – Head and Neck Surgery, MUSC
-  **MUSC Mouse Behavioral Phenotyping Core - a resource for studying NDD- relevant behavior**
Rachel Penrod-Martin, PhD | Assistant Professor, Neuroscience, MUSC
-  **The role of early life stress in feeding behavior**
Estefania Azevedo, PhD | Assistant Professor, Neuroscience, MUSC
-  **Examining repetitive behaviors in a preclinical setting**
Dan Foster, PhD | Assistant Professor, Pharmacology, Physiology and Neuroscience, USC
-  **Evaluating a metabolic intervention in a mouse model of autism**
Linnea Freeman, PhD | Associate Professor, Biology and Neuroscience, Furman University
- 11:15 – 11:30 **Coffee break**



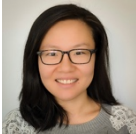
South Carolina Autism and Neurodevelopmental Disorders Consortium (SCAND)

Website: <https://www.scandconsortium.org/>



11:30 – 12:30		<p>Keynote Address: SPARKing Research in Autism <i>Wendy Chung, MD</i> Professor, Pediatrics, Columbia University <i>Introduced by Laura Arnstein Carpenter, PhD</i> Professor, Pediatrics, MUSC</p>
12:30 – 1:45	Lunch and networking	
1:45 – 2:15		<p>Comparative genomics of alcohol use disorders: Translational insights from the Drosophila Model <i>Robert Anholt, PhD</i> Provost's Distinguished Professor, Director of Faculty Excellence, Genetics and Biochemistry, Clemson University <i>Introduced by Steve Skinner, MD</i> Director, Greenwood Genetic Center</p>
2:15 – 3:30	<p><u>Session #2: Impacts of a Genetics First Approach</u> Moderator: <i>Rich Steet, PhD</i> Director of Research, Head of JC Self Research Institute, Greenwood Genetic Center</p>	
		<p>DSCAM overexpression contributes to altered neural development in Down syndrome <i>Kristy Welshans, PhD</i> Assistant Professor, Biological Sciences, USC</p>
		<p>Getting to the omics of neurodevelopmental disorders <i>Stefano Berto, PhD</i> Assistant Professor, Neuroscience, MUSC</p>
		<p>Cross-species habituation in Drosophila and humans: Developing preclinical markers of neurodevelopmental disorders in ASD <i>Caitlin Hudac, PhD</i> Associate Professor, Psychology, USC</p>
		<p>Unraveling neuro-immune mechanisms of brain disease via genetic-first approach <i>Jose Ledo, PhD</i> Assistant Professor, Basic Science, MUSC</p>
3:30 – 3:45	Coffee Break	
3:45 – 4:00	<p><u>Trainee Best Scientific Abstract: Flash Presentations</u> Moderator: <i>Caitlin Hudac, PhD</i> Associate Professor, Psychology, USC</p>	
		<p>DSCAM overexpression contributes to altered neuronal phenotypes in Down syndrome <i>Manasi Agrawal, MS</i> Graduate Student, Biological Sciences, USC</p>





Human-specific genes and their role in modifying brain function and behavior

Teresa Zhao, PhD | Postdoctoral Scholar, Neuroscience, MUSC



Interpretable machine learning for predicting the likelihood of autism from infant ECG recordings

Deepa Tilwani, MTech | Graduate Student, Computer Science, USC

4:00 – 4:30



A Different Brain in Diverse Environments

Jory Fleming, Climate Scientist | Education Specialist, Author of *How to Be Human: An Autistic Man's Guide to Life*

Copies of Jory Fleming's book will be available for sale after his talk, and he will be available to sign copies during the Poster Session. Sales provided by All Good Books.

4:30

Poster session with beverages

This meeting is made possible by generous support from:

Greenwood Genetic Center
 Medical University of South Carolina
 SC SmartState Center for Childhood Neurotherapeutics
 South Carolina Commission on Higher Education
 USC Center for Autism and Neurodevelopment (CAN) Research Center



This meeting is brought to you by the efforts of SCAND Executive Committee Members:

Jessica Bradshaw, USC
 Laura Carpenter, MUSC
 Christopher Cowen, MUSC
 Linnea Freeman, Furman University
 Caitlin Hudac, USC
 Jane Roberts, USC
 Rich Steet, Greenwood Genetic Center
 Jeff Twiss, USC



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