

**Gene-Brain-Behavior Interactions in Neurodevelopmental Disorders:  
Towards an Integration of Perspectives on Disease Mechanisms**  
*T32 Postdoc (Virtual) Seminar Series*

University of North Carolina at Chapel Hill  
Carolina Institute for Developmental Disabilities  
**FALL 2021 and SPRING 2022 Syllabus**

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| <b>PURPOSE</b>   |  |
| This seminar examines the topics of genetics, neuroanatomy, physiology, and behavioral development to provide a broad-based and integrated background to understand the etiology and potential mechanism underlying neurodevelopmental disorder. |  |
| <b>COURSE DIRECTORS</b>  | <b>MEETING TIMES</b>   |
| Joe Piven, MD and Ben Philpot, PhD   | Wednesdays, 9:00 am – 10:30 am via Zoom  |
| <i>Coordinators: Kelly Caravella, PhD., Dea Garic, PhD., Meredith Gruhn, PhD.,<br/>Dewran Kocak, PhD., Tehila Nugiel, PhD., and Catheryn Wilson, PhD.</i>  |  |
| Sept 8, 2021   | <b>Laura Ornelas, PhD</b><br>Post-Doc Trainee, Alcohol Studies Center<br><i>Structural and Functional Neuroanatomy</i>                               |
| Sept 15 2021   | <b>Graham Diering, PhD</b><br>Assistant Professor, Cell Biology and Physiology<br><i>Neurobiology of Sleep in NDDs</i>                               |
| Oct 13, 2021   | <b>Jessica Kinard, PhD</b><br>Research Associate, Carolina Institute for Developmental Disabilities (CIDD)<br><i>Language Development</i>            |
| Oct 27, 2021   | <b>Jason Stein, PhD</b><br>Assistant Professor, Genetics<br><i>Genetic Influences on Cortical Development</i>  |
| Nov 3, 2021  | <b>Gabriel Dichter, PhD</b><br>Professor, Psychiatry-CIDD<br>Adjunct Professor, Psychology and Neuroscience<br><i>Translational Research Methods</i> |
| Nov 10, 2021   | <b>Eva Anton, PhD</b><br>Professor, Cell Biology and Physiology<br><i>Early Neurodevelopment</i>   |

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| Nov 17, 2021 | <p><b>Jose Rodríguez-Romaguera, PhD</b><br/> Assistant Professor, Psychiatry and Neuroscience<br/> <i>Arousal Response in Mood Disorders</i></p>   |
| Feb 9, 2022  | <p><b>Cindy Lawler, PhD</b><br/> National Institute of Environmental Health Sciences<br/> Chief, Genes, Environment, and Health Branch (GEH)<br/> <i>Environmental/Non-Genetic Influence on NDD</i></p>                        |
| Mar 2, 2022  | <p><b>Jessica Cohen, PhD</b><br/> Associate Professor, Psychology and Neuroscience<br/> <i>Brain Network Organization in ADHD</i></p>  |
| Mar 23, 2022 | <p><b>Rebecca Santelli, PhD</b><br/> Adjunct Associate Professor, Psychiatry<br/> <i>Genes, Microbes, and Infant Brain</i></p>   |
| Mar 30, 2022 | <p><b>Bryan Roth, MD, PhD</b><br/> Distinguished Professor, Pharmacology<br/> Research Professor, Psychiatry<br/> Professor, SOP-CBMC<br/> <i>New Chemical and Synthetic Neurobiology Technologies</i></p>                     |
| Apr 6, 2022  | <p><b>Jessica Dykstra Steinbrenner, PhD</b><br/> Advanced Research Scientist, Health Sciences - SPHS<br/> Fellow, FPG Child Development Institute<br/> <i>Measuring and Supporting Engagement in Naturalistic Settings</i></p> |
| Apr 20, 2022 | <p><b>Mark Zylka, PhD</b><br/> Distinguished Professor, Cell Biology and Physiology<br/> Director, Neuroscience<br/> <i>Development of a CRISPR/Cas9 gene therapy for Angelman syndrome</i></p>                                |
| Apr 27, 2022 | <p><b>Scott Parnell, PhD</b><br/> Assistant Professor, Cell Biology and Physiology<br/> <i>FAS Genetics</i></p>  |