

# SEMINAR SERIES PRESENTATION

sponsored by the Department of Translational Medicine & Physiology and Sleep & Performance Research Center

**THURSDAY,  
OCTOBER 13, 2022**

NOON – 1:00 p.m. PST  
SAC 20

"The stuff that dreams are made of: developmental sleep disruption as a risk factor for autism spectrum disorder"

[CLICK TO WATCH LIVE ON ZOOM](#)  
Meeting ID: 985 5261 3989

FOR MORE INFORMATION CONTACT:

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**GRAHAM DIERING, PhD**

Graham Diering, PhD is an assistant professor of Cell Biology and Physiology at the University of North Carolina Chapel Hill. Dr. Diering completed his BSc and PhD in Biochemistry from the University of British Columbia, and then went on to complete a postdoc in Neuroscience at Johns Hopkins University. The Diering lab is interested in understanding the molecular basis for the benefits of sleep, focusing in particular on understanding how neuronal synapses are modified during sleep. The lab's research is revealing that sleep drives completely distinct modifications of synapses in developing and adult animals, suggesting that sleep disruption will have unique consequences during development vs. adulthood. Indeed, the lab has recently shown that developmental sleep disruption interacts with underlying genetic vulnerability to drive lasting and sex-specific changes in behavior in an autism mouse model. Using proteomics methodology, the lab is now seeking to identify the molecule basis for the vulnerability to developmental sleep disruption. Preliminary data show that the immature synapse is uniquely vulnerable to the effects of sleep loss. Therefore, sleep during development may be an important vulnerability and treatment opportunity in autism spectrum disorder.

Please visit Dr. Diering's Lab website [here](#).



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