



**VANDERBILT**  
School of Medicine Basic Sciences  
Department of Pharmacology

## 2024- 2025 Seminar Series

### *Transsynaptic activation of mGluR7 by Efn1; consequences for pharmacology and psychiatric risk*

Presynaptic GPCRs (g protein coupled receptors) can regulate neural communication by altering synaptic release probability. Excitatory synapses onto somatostatin interneurons stereotypically express synaptic facilitation, produced by the constitutive activation of presynaptic mGluR7 by the synaptic adhesion molecule, Efn1. mGluR7/Efn1 interactions create some irregular pharmacological properties for this synapse, and the loss of this interaction can have dramatic consequences for circuit function and subsequently for psychiatric risk. mGluR7 and Efn1 have been linked to a range of psychiatric disorders that include epilepsy, autism or ADHD.



**Teveye Stachniak, Ph.D.**  
Assistant Professor of  
BioMedical Sciences  
Memorial University of  
Newfoundland

**1 April 2025**

4:00 PM

1220 MRBIII

Host : Colleen Niswender

**Sponsor:**  
**Lamson Memorial Lectureship**