

VANDERBILT

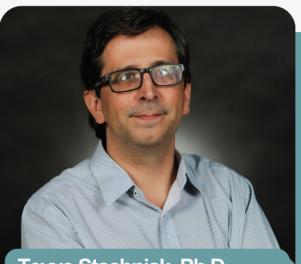
School of Medicine Basic Sciences

Department of Pharmacology

2024-2025 Seminar Series

Transsynaptic activation of mGluR7 by Elfn1; 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, Elfn1. mGluR7/Elfn1 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 Elfn1 have been linked to a range of psychiatric disorders that include epilepsy, autism or ADHD.



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1 April 2025

4:00 PM 1220 MRBIII

Host : Colleen Niswender

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