### UNIVERSITY OF RHODE ISLAND Department of Chemistry SEMINAR

3:00 P.M., Monday, November 20, 2023 Room 105 – Beaupre Center

## **Prof. Scott T. Laughlin**

Stony Brook University

# Chemistry for exploring the brain

### HOST

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#### Chemistry for exploring the brain

Prof. Scott T. Laughlin

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**Abstract**: The brains of even simple organisms can do amazing things, but the brain's complexity makes understanding exactly how it works incredibly challenging. My lab focuses on using chemistry to understand the architecture of the brain's functional units called neural circuits. I discuss two projects, one involving the development of chemical tools that enable visualization of astrocytes and neuron-interacting astrocytes in the brains of both mammals and zebrafish, and another that focuses on creating "bioorthogonal" reactions that can be activated in distinct cell types in the brain by exposure to light or an enzyme.