



## The Department of Pharmacology

Proudly Presents the Seminar Series:

### *Frontiers in Pharmacology*

#### **“Cortical circuits for predicting the future”**

We constantly make predictions, ranging from whether it will rain today to who will be the next president. But some of the most important predictions that we make are much less obvious, such as what my voice will sound like when I speak or what the next note will sound like when I strike a key on the piano. This ability to predict the acoustic consequences of our actions is vital for learning and maintaining complex behaviors such as speech. It is also important for ignoring many of the irrelevant sounds that we make, such as the sound of one's own footsteps. Our work combines in vivo approaches for monitoring and manipulating brain activity in mice that are behaving in acoustic augmented reality. We use these techniques to understand the brain circuits that recognize, learn and predict self-generated sounds.

### **David Schneider, PhD**

Assistant Professor  
Center for Neural Science,  
New York University

**Tuesday, Dec. 4, 2018**

**4:00 pm**

**GBSF 1005**

*Light refreshments will be served.*

*Host : Crystal Ripplinger*

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