

MSNseminars

presents

# "Neuromodulation of auditory processing during behavioral engagement"

*At 12pm post docs and students are encouraged to come to lunch to chat with our speaker and enjoy a **FREE PIZZA** lunch in Icahn 10-84.*

**Friday, June 24th, 4pm**

**Location: Hess 9-101**

Everyone is invited to stay after the talk to join us for a WINE & CHEESE reception on Hess 9th floor from 5-7pm.



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Behavioral and social context changes how we perceive the world. Context affects sensory processing in the auditory cortex by activation of various neuromodulatory systems, which are recruited by distinct conditions and have different effects on target circuits. Here I describe my approach towards understanding how neuromodulation enhances sensory processing to improve behavior. I have designed acoustic behavioral tasks for adult rats, to perform psychophysical testing in conjunction with changes in behavioral engagement level, or with stimulation of neuromodulatory centers. Neural responses are dramatically altered by behavioral context and attentional modulators such as acetylcholine and noradrenaline. I will also discuss future work moving from single animals into multiple animals to assess how social context might affect sensory processing, including clinical trials I will be conducting examining potential therapeutic effects of neuromodulation for improving social cognition.



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