



# NEUROSCIENCE AND PHYSIOLOGY SEMINAR SERIES

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*"From Rigid Electrodes to Living Devices: The Journey of Neural Interfaces in Neurological Therapy"*

Abstract: Affecting nearly 3.4 billion people worldwide, neurological disorders disrupt essential motor and sensory functions. To address these challenges, researchers have developed neural interfacing devices capable of recording and modulating neural activity to restore function and improve outcomes. From electroencephalograms to deep brain stimulators, these technologies enable precise diagnosis and modulation of damaged neural circuits. This seminar will trace their evolution, from early rigid electrodes to emerging biohybrid and optogenetic interfaces that integrate seamlessly with neural tissue, highlighting how advances in material design and bioengineering are reshaping our ability to interact with the nervous system and treat neurological disease.



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**TUESDAY, NOVEMBER 4th | 12:00 PM | LILY 1-117**

