Chemical Engineering Colloquium

April 17, 2024

12–1:00 pm | Goddard Hall, Room 227

Microenvironmental Cues to Enhance Neural Repair Rebecca Kuntz Willits

Chairperson and Professor of Chemical Engineering at Northeastern University

The overarching goal of my research team is to understand how mechanical, chemical, and recent projects to characterize mechanotransduction of neural cells. In this research area, we have focused on the role of bound cues on neural cell response, with particular interest in altering the mechanical environment the cells sense. The outcomes from these projects relate to a fundamental understanding of neural systems and the development of design criteria for neural biomaterials and tissue engineered scaffolds. This talk will focus on how changes in the micro environment alter neural stem cell maintenance and neurogenesis and the development and use of hydro gel scaffolds to manipulate these cellular outcomes. These projects have been supported by the NIH and NSF.

