



DEPARTMENT OF BIOMEDICAL ENGINEERING

2021 SEMINAR SERIES

CHRISTINE E. SCHMIDT

J. Crayton Pruitt Family Department
of Biomedical Engineering
The University of Florida

04/16/21

[Zoom link HERE](#)

10:30 a.m.

ABSTRACT:

ENGINEERING ADVANCED MATERIALS FOR NEURAL REGENERATION

Damage to peripheral nerve and spinal cord tissue can have a devastating impact on the quality of life for individuals suffering from nerve injuries. Our research broadly encompasses analyzing and designing natural-based and electrically conducting biomaterials that can interface with neurons to stimulate and guide nerves to regenerate. This talk will specifically address our work on natural-based biomaterials for both peripheral nerve and spinal cord applications. To foster peripheral nerve regeneration, we have developed natural acellular tissue grafts that preserve the microarchitecture of the extracellular matrix (ECM) and to eliminate the immune response. For spinal cord injury (SCI) applications, we have engineered injectable biomaterials for less invasive application in crush injuries.

BIOGRAPHY:

Christine E. Schmidt, Ph.D., is the J. Crayton Pruitt Family Professor and Department Chair for the University of Florida Department of Biomedical Engineering. Under her leadership, the department's faculty have grown and diversified to include 52% women and 22% underrepresented minorities. Dr. Schmidt's research is focused on developing new biomaterials and biomaterial composites that can be used to physically guide and stimulate regenerating nerves and the healing of other tissues. She is also active in commercialization and clinical translation efforts. Dr. Schmidt is the current past President for the American Institute for Medical & Biological Engineering (AIMBE), and she is an inductee of the Florida Inventors Hall of Fame.



VISIT US ONLINE
for future lecture details
bme.udel.edu