FIU Engineering & Computing
Biomedical Engineering

Wallace H. Coulter Foundation
Biomedical Engineering Seminar Series

TATIANA SEGURA, PHD received her BS degree in Bioengineering from the University of California Berkeley and her doctorate in Chemical Engineering from Northwestern University working with Lonnie Shea. She joined Jeffrey A. Hubbell's laboratory for her postdoctoral work. In 2006 she joined the Chemical and Biomolecular Engineering Department at University of California Los Angeles as a tenure track Assistant Professor, a position she secured in 2004 before begining her postdoctoral appointment. In 2012 she received tenure and was promoted to Associate Professor. In 2016 she was promoted to the title of Professor. She joined the Duke faculty in 2018. Segura has received numerous awards and distinctions during her career, including the 2020 Acta Biomaterialia Silver Medal, a CAREER Award from the National Science Foundation, an Outstanding Young Investigator Award from the American Society of Gene and Cell Therapy and a National Scientist Development Grant from the American Heart Association. She was also named a Fellow of the American Institute for Medical and Biological Engineers (AIMBE) in 2017. Prof. Segura has published over 100 peer reviewed papers and reviews and has over 7,000 citations. Her laboratory has been continuously funded since 2008 with several grants from the National Institutes of Health (NIH). She currently serves as a permanent member of the Gene and Drug Delivery Study section at NIH.

DR. TATIANA SEGURA

Professor of Biomedical Engineering, Neurology and Dermatology
Duke University

BIOMATERIALS TO UNLOCK THE REGENERATIVE CAPACITY OF TISSUES

ABSTRACT: Injectable materials that can conform to the shape of a desired space are used in a variety of fields including medicine. The ability to fill a tissue defect with an injectable material can be used for example to deliver drugs, augment tissue volume, or promote repair of an injury. This talk will explore the development of injectable materials that are based on assembled particle building blocks, for tissue repair. We find that using microparticle building blocks to build the scaffold generates a porous network by the space left behind between adjacent building blocks. Due to the injectability of this microporous material we have explored its wide applicability to tissue repair applications ranging from skin to brain wounds. In this talk, I will describe how MAP scaffolds can modulate the wound healing immune response and lead to regenerative wound healing.

FRIDAY, MARCH 26 / 11:30AM ET / VIA ZOOM

Event Registration https://bme.fiu.edu/latinx

Wallace H. Coulter Foundation

Through the generous support of the Wallace H. Coulter Foundation, the Department of Biomedical Engineering facilitates weekly lectures each year during academic terms. Experts in all areas of Biomedical Engineering are invited to provide a research seminar and to meet with faculty and students to discuss the latest developments and research in Biomedical Engineering.

Friday, March 26, 2021
11:30 AM ET | https://bme.fiu.edu/latinx