



Via Zoom and in person in DeGrace 312
Lecture open to University and Affiliates

Department of Biology Seminar Series Presents:

"Mechanoregulation during neurogenesis and cancer: an ancient molecule controlling stem cell differentiation and motility"

Chrystian Alves, PhD

Assistant Professor

Department of Neuroscience

Icahn School of Medicine



Meeting ID 931 2408 6897

Passcode 586645

"Plexins are known as axon guidance receptors. However, Plexins originated in unicellular organisms greater than 600 million years ago. Dr. Junqueira Alves' research aims to understand the fundamental role of Plexins during neurogenesis and cancer migration. Using cerebral organoids, he found that Plexin-B2-deficient neuroprogenitors undergo spontaneous neurogenesis. In cancer cells, Plexin-B2 is critical to promote invasiveness. Currently, he is developing novel strategies to accelerate the differentiation of stem cells by nuclear mechanics. He is also exploring the role of plasma membrane and nucleus mechanoregulation for cancer migration. His research has the potential to accelerate the generation of neurons for disease modeling and discover new mechanisms of cancer migration for drug development."

Thursday October 26, 4pm