

Area of Research Emphasis C:

THEORETICAL & COMPUTATIONAL NEUROSCIENCE

The FAU Neuroscience Graduate Program (NGP) links the Colleges of Science, Medicine, Engineering and Computer Science, Education, the Wilkes Honors College, and The Center for Complex Systems to achieve a multidisciplinary research and training experience. NGP students also have the opportunity to pursue research at the Max Planck Florida Institute for Neuroscience and UF Scripps Biomedical Research. Study in Theoretical and Computational Neuroscience incorporates cognitive psychology, complexity science, mathematics, behavioral science, and computer science, allowing NGP students to tackle the most profound questions of brain, mind, and consciousness.

Research in this area involves the use of theoretical and computational techniques to model and evaluate the dynamics of neural networks underlying brain function, and ultimately, behavior. Training focuses on understanding the mechanisms that underlie complex behaviors, from the level of individual neurons and the coordination of neural circuits to human sensation, cognition, consciousness, personality, and dynamic social interactions. Research is supported by modern facilities and technologies in human fMRI brain imaging, fNIRS and EEG, machine learning, in vivo electrophysiology, robotics, brain-machine interfaces, prosthetics, computer simulations and artificial intelligence.







FLORIDA ATLANTIC UNIVERSITY.

STILES-NICHOLSON BRAIN INSTITUTE



Learn more: fau.edu/ibrain/gradneuro

EURO SCIENCE IN THE SUN

NGP students can pursue education and research options on the FAU Boca Raton, Davie and Jupiter campuses. All campuses are located only minutes away from coastal beaches and intracoastal waterways, each teaming with wildlife and providing many opportunities for aquatic adventures. The Everglades National Park, as well as many state parks, nature centers and wildlife refuges offer hours of relaxation amid the beauty of the natural world.

Sophisticated and inexpensive dining and entertainment are within easy reach of FAU students. A free, Wi-Fi enabled shuttle connects the Boca Raton and Jupiter campuses. Step out of class and into all that South Florida offers: stunning beaches, snorkeling, paddleboarding, boating and fishing.

World-class shops and restaurants. Engaging culture and arts. Top-tier Entertainment. You'll quickly see why millions travel here from around the globe—and why so many choose to stay.

