



## POSTDOCTORAL RESEARCH POSITION COMPUTATIONAL NEUROSCIENCE

Through the [SPARC program](#), an NIH-sponsored postdoctoral research position is available in computational neuroscience. The project goal is to develop a new framework for understanding neural control of autonomic organ systems, with a special focus on the lower urinary tract. The postdoc and PI (Zachary Danziger) will lead a consortium of mathematicians and computer scientists (at the Universities of Missouri, Northeastern, Wisconsin-Madison, and US Military Academy) to create a hybrid model that merges traditional biophysics-based differential equations with data-driven artificial neural networks. The long-term goal is to improve neuromodulation therapy for the lower urinary tract and other organ systems. The project combines themes across diverse fields such as mathematics, deep learning, neurophysiology, and neuromodulation, providing a dynamic and collaborative experience and a chance to contribute to the development of a fundamentally new approach for modeling systems physiology. Read more about [the full project here](#).

The lab is committed to facilitating professional development by supporting conference travel, workshops, seminars, writing, and networking. The PI has received FIU's university-level "Award for Excellence in Postdoctoral Scholar Mentoring", has helped postdocs successfully transition to tenure track academic positions, and has a record of research funding for major academic projects. The [Applied Neural Interfaces Lab](#) is a welcoming, collaborative, supportive, and hard-working environment conducive to the success of postdoctoral scholars.

Successful applicants will have a Ph.D. in biomedical engineering, neuroscience, or a related field, with preference given to applicants with experience working with neural data and/or computational models at scales larger than a single cell. Qualified candidates are encouraged to apply directly to the Principal Investigator, Zach Danziger ([Zachary.Danziger@fiu.edu](mailto:Zachary.Danziger@fiu.edu)), with a letter of interest, curriculum vitae, and the names and contact information for three references. Salary will be commensurate with qualifications, laboratory experience, and institutional and NIH guidelines. Feel free to contact the PI by email with any question - we look forward to hearing from you!

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  - ❖ *Florida International University is classified by Carnegie as a R1: Doctoral Universities - Highest Research Activity and [recognized as a Carnegie engaged university](#).*
  - ❖ *FIU is a public research university with colleges and schools that offers 196 bachelor's, master's and doctoral programs in fields such as engineering, computer science, international relations, architecture, law and medicine. FIU emphasizes research as a major component of its mission, and as one of South Florida's anchor institutions, FIU contributes almost \$9 billion each year to the local economy. FIU also supports artistic and cultural engagement through its three museums: [Patricia & Phillip Frost Art Museum](#), the [Wolfsonian-FIU](#), and the [Jewish Museum of Florida-FIU](#). For more information about FIU, visit <http://www.fiu.edu/>.*
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