

## **PhD Assistantship: Geospatial Analysis in Ecological Seagrass Research**

Position: PhD in Integrative Biology

Topic: Ecological Drivers of Seagrass Decline

Location: The position will be located at Florida Atlantic University in Dr. Koch's lab, Boca Raton, FL, collaborating with Dr. Fernandes' Lab, Davie, FL

Web: <https://biology.fau.edu/directory/koch-rose/index.php> and <https://moreirafernandeslab.weebly.com>

The Koch lab at Florida Atlantic University is seeking a PhD candidate for Fall, 2025 to conduct geospatial research on the relationship between stressors and seagrass health in coastal estuaries of southeast Florida, specifically Indian River Lagoon and Florida Bay. The PhD candidate will be part of a research team working on a project entitled "Managing seagrass ecosystems in South Florida: Identifying and modeling mechanisms and climate impacts triggering seagrass loss and effects on water quality and seagrass restoration". The student will work closely with a Postdoc and another PhD student on the project to incorporate microbial, biogeochemical and plant stressor indices from spatial datasets into a seagrass ecosystem model. The student will have the ability to develop their own research project in association with the larger program and will be supported on a 3-year EPA grant with a start date of June 1, 2025, and subsequently by internal awards and/or teaching assistantships.

### Duties:

- Conducting spatial analyses of parameters across multiple sites
- Spatial regression analysis to identify drivers of seagrass decline
- Analyses of datasets and generation of publication-quality manuscripts
- Collaborate with lab members on the broader project
- Present findings at national/international conferences

### Qualifications:

- Master's degree in an ecological field with an emphasis on GIS spatial analyses

### Desirable skills:

- Strong skills in GIS analyses and experience working with large datasets
- Spatial Statistics in GIS and Visualization
- Strong analytical and coding skills in R
- English communication skills, both oral and written, and ability to work collegially

Application: Interested candidates should send a cover letter stating their interest in the position and available start date, CV, transcripts, thesis, as well as 2 references, to Dr. Marguerite Koch ([mkoch@fau.edu](mailto:mkoch@fau.edu)) and Dr. Vanessa Fernandes ([vfernandes@fau.edu](mailto:vfernandes@fau.edu)). Selected candidate will be requested to immediately apply to FAU's Integrative Biology PhD Program for Fall 2025.