**Position Title**

Summer Pate Fellow, R. Goodman’s Research Group – GeoArches

**Project Title**

Researching Coastal Impoundments for Conservation Ecology (RICE)

**About the Project**

R. Goodman’s GeoArches research group in Clemson University’s Department of Forestry and Environmental Conservation integrates archaeological science, historical ecology, and environmental conservation to contextualize rates and trajectories of coastal change. As a summer fellow, you will join the RICE project, which explores how historic tidal impoundments—formerly antebellum rice fields—serve as model systems to investigate coastal resilience, landscape conservation, and cultural heritage through highly interdisciplinary research.

**What You’ll Do**

As a Pate fellow, you will investigate how changing land use and compound flooding have influenced sediment accumulation and carbon storage within historic impoundments at Hobcaw Barony in Georgetown, South Carolina, while also helping to develop chrono-stratigraphic frameworks. Your responsibilities will include:

**1. Fieldwork**

* Collect and describe sediment cores using standard protocols.
* Document site conditions in detail.

**2. Laboratory Analyses**

* Subsample cores for grain-size and elemental analyses.
* Perform flotation to isolate macro-botanical remains.

**3. Research Collaboration**

* Work alongside researchers in archaeology, ecology, and marine science.
* Share findings at team meetings and contribute to initial data interpretation.

**Why It Matters**

By examining historic rice fields, we gain insight into how past human engineering interacts with contemporary ecological processes. This knowledge informs coastal management and conservation decisions, offering potential strategies to mitigate climate-change impacts like sea-level rise.

**Host Institute**

You will be hosted at the **Baruch Institute of Coastal Ecology and Forest Science (BICEFS)** near Georgetown, SC. Part of Clemson University, this institute fosters a dynamic research environment focused on coastal ecosystem studies, with strengths in forest ecology, hydrology, and wildlife management. Fellows benefit from a collaborative atmosphere and ample resources for field and lab work.

**Skills & Experience You’ll Gain**

* **Collaboration:** Engage with an interdisciplinary team of researchers.
* **Foundations in Environmental & Historical Science:** Build knowledge of historical land-use practices, geoarchaeological methods, and ecological field techniques.
* **Project Design & Execution:** Learn best practices for conducting field-based studies, including data organization and interpretation.
* **Technical Research Skills:** Gain hands-on experience with sediment coring, flotation, and geochemical analyses.
* **Critical Thinking:** Enhance analytical and problem-solving abilities by integrating scientific data with historical context.

**Preferred Qualifications**

* Interest in environmental science, ecology, archaeology, or a related field.
* Willingness to work in outdoor settings (heat, humidity, wetlands).
* Strong communication skills and attention to detail.
* Ability to work both independently and collaboratively.
* Previous lab or field experience is beneficial but not required.

**Location & Logistics**

* Activities occur at the Baruch Institute and on Hobcaw Barony.
* Housing is provided at Harris Cottage on the Baruch Institute grounds.