



University of Georgia Center for Applied Isotope Studies Graduate Research Assistantships

University of Georgia Center for Applied Isotope Studies: CAIS is a dynamic, cutting-edge analytical testing facility that offers specialized services in radiocarbon dating, stable and radiogenic isotope analysis, and elemental analysis. CAIS is a hub for interdisciplinary research, serving both the UGA research community and a diverse range of external clients including academic institutions, government agencies, and private companies worldwide. Our team of expert scientists brings deep knowledge across a wide array of fields, including physical chemistry, food science, geology, marine science, physics, archaeology, ecology, and biology.

Graduate Assistantships at CAIS: Graduate Research Assistants (GRA) will work in one of several service labs (see position descriptions below). GRAs will be given the opportunity to personalize their experience through collaboration and communication with their direct supervisor, including professional development and/or collaborative research opportunities.

Assistantships are for the academic year (August–May), with optional summer (June–July) assistantships. Assistantships are renewable for up to four years, pending funding and quality of performance. An offer letter will be signed and renewed at the start of each academic year. *Priority will be given to applicants requesting multiple years of support (2+ years).*

Assistantships are 50% full-time equivalent (FTE) with a work commitment of 20 hours per week. The assistantship will provide a monthly stipend consistent with the established rates for the Office of Research for the appointment period, currently set at \$2,480.83 per month for MA/MS students and \$2,682.33 per month for PhD students for FY25. *GRAs are eligible for a departmental conference travel award of up to \$500 per academic year.* GRAs pay reduced tuition of \$25 per semester, and are eligible for the Mandatory Student Health Insurance Plan with UGA contribution.

To apply for a Graduate Assistantship at CAIS: The GRA must meet the requirements for acceptance into the Graduate School at the University of Georgia and must be duly enrolled as a full-time Masters or PhD student (12 credit hours) upon employment. Attention to detail and good communication skills are required. An understanding of general chemistry principles and direct laboratory experience in benchtop chemistry skills or analytical instrumentation is preferred for most vacancies.

The application package includes: (1) a current CV, (2) an unofficial transcript, (3) a letter of interest prepared by the student, and (4) a brief letter of support from the student's academic advisor. The letter of interest should include a statement of the student's preference(s) for lab placement (see list of vacancies below), detail their reasons for pursuing an assistantship at CAIS, and address how their experience and education align with the unit's research and service missions. Additionally, the letter should specify the applicant's expected graduation timeline and indicate whether they are requesting support for one year or multiple years. The application package should be sent as a single PDF to CAIS Director Dr. Carla Hadden (hadden@uga.edu).

Deadline: Applications are due **March 1st** for the following academic year.



CAIS GRA Vacancies for 2025-2026 Academic Year

1. Natural Products Lab

The GRA will be responsible for preparing samples of food, flavoring, and biobased products for authenticity testing. The Natural Products Lab is accredited to the ISO/IEC 17025:2017 standard. The GRA will gain experience with high-vacuum processing lines, hand-held torch, and microbalances in performance of their duties. Depending on the needs of the lab and interests of the student, GRAs may be cross-trained on the operation of isotope ratio mass spectrometers and associated peripherals (dual-inlet, GC/MS, EA, and TC/EA).

2. Plasma Chemistry Lab

The GRA will gain experience in a variety of techniques for preparing samples for elemental or Sr and Pb isotopic analyses of environmental, biological, geological, and archaeological materials using inductively coupled plasma (ICP) technology. GRAs will routinely use wet chemistry skills including pipetting, acid digestion, dilution, element separation by column chemistry, and equipment such as microbalances and lyophilizers in the performance of their duties. Depending on the needs of the lab and interests of the student, GRAs will be trained on the operation of one or more instruments: ICP-OES, ICP-MS, MC-ICP-MS, and/or direct mercury analyzer.

3. Radiocarbon Dating Lab

The GRA will gain experience in a variety of techniques for preparing samples such as bone, shell, charcoal, wood, and sediments for radiocarbon dating, for research applications in archaeology, art history, ecology, forensics, geography, geology, and marine sciences, among others. The GRA will routinely use wet chemistry skills including solution preparation and acid-base chemistry and equipment such as microbalances in the performance of their duties.

4. Stable Isotope Lab

The GRA will gain experience in a variety of techniques for preparing samples for light stable isotope analysis (C,N,O). Sample types include plant and animal tissue, sediment, carbonate, and water, for research applications in ecology, geography, geology, archaeology, and marine sciences. GRAs will routinely use wet chemistry skills including pipetting, dilutions, and acidification, and equipment such as microbalances and freeze dryers in the performance of their duties. Depending on the needs of the lab and interests of the student, GRAs may be cross-trained on sample preparation for compound-specific stable isotope analysis and/or the operation of stable isotope ratio mass spectrometers.

5. Archaeological Sample Archive

The GRA will gain experience in museum collections management, assisting in the organization, cataloging, and transferring of archaeological samples analyzed by CAIS. This position provides hands-on experience in collection care, data management, and curatorial practices, supporting ongoing research and museum projects.