

Aiken Endowed Memorial Graduate Research Fellowship



Funding Opportunity and Program Description

The Aiken Endowed Memorial Graduate Fellowship was established to honor George R. Aiken (1951-2016), who made significant contributions to our understanding of aquatic ecosystems during his 40-year career as an organic geochemist with the U.S. Geological Survey. This fellowship aims to support collaborative research for advancements in water and earth science that contribute to the wise and sustainable management of Earth's natural resources within the context of current environmental challenges. The fellowship will provide financial support to University of Colorado Boulder (UCB) graduate students to collaborate with U.S. Geological Survey (USGS) scientists in the Boulder/Denver region. The topics should be specific to the applicant's and USGS scientist's area of research that is within the scope of conducting water and earth science in the public interest.

The Center for Water, Earth Science, and Technology (CWEST) is an educational and scientific partnership between the U.S. Geological Survey (USGS) in the greater Boulder/Denver region, the University of Colorado Boulder (UCB), and the Institute for Arctic and Alpine Research (INSTAAR). The USGS has a long tradition of providing accurate and impartial scientific information to policy-makers and ordinary citizens alike. Congress established the USGS in 1879 and tasked the agency with collecting, analyzing and disseminating the earth-science information needed to understand and manage the nation's natural resources. CWEST formalizes over two decades of growing collaboration between UCB and the USGS. The mission of CWEST is to further the understanding of hydrological sciences and to promote sustainable water resources and environmental management through collaborations across INSTAAR, other UCB units, and the U.S. Geological Survey. CWEST carries out this mission by building capacity and galvanizing community, facilitating collaborations, connecting UCB students with the USGS, and advancing and coordinating hydrologic research across campus.

Award Information

Two fellowships will be awarded for a maximum \$7,000 each. Funds are to be used starting in Fall 2019 for a duration of 1 year.

Eligibility

Eligible applicants are current or incoming UCB graduate students enrolled in a Master of Science or doctorate program in one of the following departments and programs:

- [Atmospheric & Oceanic Sciences](#)
- [Civil, Environmental, and Architectural Engineering](#)

- [Ecology & Evolutionary Biology](#)
- [Environmental Studies](#)
- [Geography](#)
- [Geological Sciences](#)

The applicant's USGS collaborator(s) must be working at a USGS office within the greater Boulder/Denver area.

George Richard Aiken Biography

George R. Aiken was a distinguished organic biogeochemist and long-time researcher with the U.S. Geological Survey's National Research Program. Over a career that spanned forty years, George's research took him from the Dry Valleys in Antarctica to the Yukon River in Alaska, from the Florida Everglades to the Sacramento River Delta. George earned his undergraduate degree in Chemistry at Rutgers University in 1973 and joined the U.S. Geological Survey in 1976 while he was a graduate student at the University of Colorado. He received his M.S. in Analytical Chemistry from UCB in 1979 and completed a Ph.D. in Applied Chemistry with a minor in Geologic Engineering at the Colorado School of Mines in 1991.

George was a national and international leader in the study of dissolved organic matter. His colleagues could always count on him for a good conversation about environmental science; as one of them said, "He never completely shut off his inner scientist." The conversation was even better if it took place over a good pizza. His work influenced many areas of inquiry, including the cycling of mercury in aquatic ecosystems. He was one of the first researchers anywhere to recognize that the methylation of mercury and its bioaccumulation in the aquatic food web was inextricably linked to the presence of dissolved organic carbon.

George believed in the power of collaboration to solve complex environmental problems. He generously shared his enthusiasm and ideas with colleagues and students alike and his generosity helped forge the careers of many young scientists. Over the course of his career with the U.S. Geological Survey, George advised over 20 graduate students and postdoctoral researchers. He sat on numerous thesis committees, served as an editor for peer-reviewed journals, and published 148 peer-reviewed journal articles which have been cited over 11,000 times (and counting). The outstanding quality of his work and his many fruitful collaborations earned him the respect and affection of colleagues around the world and of the many graduate students he employed in his capacity as a National Research Program Project Chief.

As a USGS scientist, George valued scientific integrity above all else. In 2001, he received the Department of Interior's Meritorious Service Award in recognition of his dedication to the USGS and his unwavering commitment to advancing earth science in the public interest. His mission in life was to share his exploration of biogeochemical processes, his passion for environmental science and his commitment to good stewardship of Earth's resources. He was, a friend observed, "a stellar curious being, full of big ideas and questions and light." George lived joyfully on the planet and marveled at its natural wonders every day.

Application and Submission Information

Materials

1. Completed Aiken Endowed Memorial Graduate Fellowship Form
 - a. Download this on our [website](#)
2. Statement of Interest/Personal Philosophy – Explain why you are dedicated to this environmental research and how it contributes to informed and effective resource management within the context of current environmental challenges (1-page maximum)
3. Research Project Description (3-page maximum)
4. Proposed Work Plan (1-page maximum)
5. Deliverables Timeline (1-page maximum)
6. Budget
 - a. List costs within allowable expenses in a detailed budget. Allowable expenses include travel, conference registration, publication costs, research training at the USGS, lab analysis, disposable and consumable lab and field supplies.
7. Budget Justification
 - a. Describe the use and purpose of each budget items.
8. Applicant CV/Resume
9. Graduate Transcript(s)
10. Letters of Support
 - a. From applicant's UCB advisor. They must justify financial need and must indicate other sources of financial support that ensures the well-being of the student applicant.
 - b. From the USGS collaborator, who will also serve as a co-advisor to the project. If the USGS is financially supporting the applicant in any way, then it must be explained.

Funding Limitations

Applicants are limited to request funds within one of the support areas defined below:

- **Scholarship Support** – Aiken award will support tuition and salary up to the equivalent cost of one semester of tuition.
- **Research Support** – Aiken award will support allowable expenses including: travel, conference registration, publication costs, research training at the USGS, lab analysis, disposable and consumable lab and field supplies. CWEST will not fund the purchasing of any small equipment, lab or field instrumentation or capital equipment. If equipment and or instrumentation are necessary for the project, the applicant and their advisor(s) will need to find other sources. If the applicant seeks support for research training at the USGS, both their USGS and UCB advisor need to justify the expense.

Submission

Submit the application materials outlined above in one PDF and save the PDF as *last name.AIKEN.fall2019*. Please provide the materials in the order they are listed above. Email your application package to c-west@colorado.edu.

Application deadline

The application deadline is **June 20th, 2019 at 11:59pm.**

Application Review Information

Members on the CWEST executive, educational, and research committees all serve on the selection committee. Those members who have a conflict of interest with an applicant will not judge that student's application.

Selection Priorities and Criteria

In reviewing applications, the selection committee will consider the following criteria (not inclusive and necessarily in this order):

- The applicant demonstrates a desire and ability to work collaboratively to answer clear, scientifically relevant questions and deliver high-quality research outcomes.
- The applicant demonstrates academic excellence and strong ability to contribute to successful research related to earth sciences.
- The applicant demonstrates a need for Aiken Endowed Memorial Graduate funds for financial support, while their advisor(s) also ensures other sources of financial support.
- The applicant demonstrates reasonable use of Aiken Endowed Memorial Graduate funds for their Masters or PhD research.
- The applicant demonstrates that through the collaboration, the relationship between UCB and U.S. Geological Survey continues to grow.
- The applicant's U.S. Geological Survey project advisor is within the greater Boulder/Denver geographic region.
- The applicant provides all required materials, including 1) Aiken Endowed Memorial Fellowship Form, 2) Statement of Interest, 3) Research Project Description, 4) Work Plan, 5) Deliverables Timeline, 6) Budget, 7) Budget Justification, 8) CV/Resume, 9) Graduate Transcript(s), and 10) Letters of Support.

Further details of selection criteria can be found on the application scoring rubric listed on the last page of this funding opportunity announcement. Requests for more than the maximum allowable \$7K budget will not be considered for funding.

Anticipated Award Announcements Date

Applicants will be notified of their funding status by July 10th, 2019.

Award Administration Information

The award will be administered through CWEST's program manager and its accountant at INSTAAR. All purchases and any contracts with the USGS will be run through these two professionals. Scholarship support entails our accountant to deposit the award funds into the applicant's Bursars account.

Recipients of the award will be required to contribute news article content about their project upon receipt of the award, as well as a report of their findings at the end of the funding period. Award receipts are highly encouraged to participate in CWEST events and activities.

CWEST Contact Information

For questions about this funding opportunity, please contact the CWEST program manager by email at: c-west@colorado.edu or telephone (303)-735-1882. More information can be found on our website at <https://www.colorado.edu/cwest/educationoutreach/student-funding-opportunities>.