

Ph.D. Assistantships, two positions: Fitness, plasticity, and evolution of Arctic grayling in the rapidly warming high north

We are seeking highly motivated candidates for two Ph.D. assistantships in Fisheries at the University of Alaska Fairbanks, College of Fisheries and Ocean Sciences, in affiliation with the International Arctic Research Center and Institute of Arctic Biology. Successful candidates will work closely together as part of our interdisciplinary team investigating how Arctic grayling are responding to rapid climate change in northern Alaska. One student will focus on questions of **trophic interactions and growth**. Another student will focus on the **evolutionary ecology** of grayling through measurement of fitness-related traits such as metabolism and timing of key life history events like spawning and juvenile emergence. Both students will assess contributions of the environment (phenotypic plasticity) and evolution (heritability) to thermal performance through fieldwork along a 300 km latitudinal gradient and through common garden and streamside experiments.

This work on Arctic grayling is closely coordinated with collaborators studying plants, insects, and birds and how species interactions may change in a warming future, contributing to community resilience or collapse. The [Evolving Meta-Ecosystems \(EvoME\) Institute](#) (pronounced E-VOME) is bridging disciplines to address two broad questions: Can organisms 'keep up' with rapid climate change? And does evolution of organisms keep ecosystems connected and productive? Benefits of participation in EvoME include well-supported training and leadership opportunities within a tiered mentoring structure, the ability to participate in synthesis efforts, and networking with a fun and hardworking team of researchers. Field research will be conducted across an array of sites centered around [Toolik Field Station](#).

UAF is committed to building a culturally diverse and inclusive organization. We welcome applicants to bring their unique perspectives and identities through their culture, national origin, ethnicity, race, gender, sexual orientation, veteran status, disability, age, religion and beliefs. Individuals in chronically underrepresented groups in STEM are highly encouraged to apply.

Start Date: Early May 2025 with ability to perform Arctic fieldwork this coming summer is ideal; earlier or later start dates may be possible.

Salary and Benefits: Each student will receive 3 years of Research Assistantship support, including stipend (\$40,528 per year), tuition, and health insurance. We will encourage and assist students in securing additional funding through internal and external graduate fellowships or TA-ships.

Qualifications: A M.S. in fisheries, aquatic ecology, biology, or a related discipline and a record of publication (at least one published or submitted journal manuscript) strongly preferred. Prior experience with Arctic or boreal field research, physiological experiments, and/or strong geospatial and quantitative skills are desirable. A willingness to learn, attention to detail, and a strong work ethic are essential.

Contact: For more information about the project, please email **Erik Schoen** (eschoen@alaska.edu), **Peter Westley** (pwestley@alaska.edu) or **Matt Gilbert** (mjgilbert@alaska.edu). To apply, email 1) cover letter describing your interest in the position, skills, and goals 2) CV or resumé, 3) unofficial transcripts, and 4) contact information for 3 references. For full consideration, apply by December 1, 2024. Applications will be accepted until the positions are filled.

