

USGS-GMU Spring 2022 Internship

USGS Fish and Wildlife Adaptation Program

The department of Environmental Science and Policy offers undergraduate and graduate fellowships in the Fish and Wildlife Adaptation Program with the US Geological Survey's National Climate Adaptation Science Center (NCASC). In this program, fellows learn to develop policy-informing products to manage the impacts of climate change on fish and/or wildlife resources. This program provides fellows with the opportunity to acquire professional experience outside of academia, while simultaneously advancing in their degree program.

Currently, NCASC is offering several fellowship opportunity for calendar year 2022, for which both undergraduate and graduate student applications are being considered:

National Synthesis of Species Responses to Climate Change (Range Shifts):

This fellowship will assist in analysis and visualization of documented effects of climate change on fish and wildlife, with an emphasis on range shifts. As part of an effort to assess the body of evidence about range shifts in response to climate change, this project will involve working with USGS staff to analyze data from a systematic literature review of peer-reviewed articles on species' range shift in response to climate change in terrestrial, freshwater, and marine ecosystems, and participate in a structured meta-analysis and publication process. In particular, the fellow will assist in data analysis, database management, and data visualization.

Synthesis of climate change impacts to inland fish (FiCli): This fellowship will assist NCASC fish biologists and a team of research scientists in developing a database of scientific studies on climate change and inland fish (FiCli – pronounced “ficlee”). This project will include systematic literature searches, compiling tabular data, and biological analysis and contributes to a global study on climate change and inland fish. It provides an opportunity to learn about a wide diversity of fish responses to climate change, and expand a fellow's professional network.

Synthesis of global river fisheries literature: This fellowship will assist NCASC fish biologists and a team of research scientists in developing a database of river fisheries. This project will include systematic literature searches, compiling tabular and geospatial data, and complex biological analysis. The fellow will have the opportunity to contribute to building a model of river fish biomass at a global scale, learn about a wide diversity of fisheries, and expand his/her fisheries professional network internationally.

Skillsets:

- These fellowships will require strong skills in reading and interpreting scientific publications; experience with statistical analysis; data management; and the ability to work independently.

- Experience with GIS is a plus.
- Experience with R, Rshiny, and/or Tableau is a plus.

Compensation:

- Undergraduates are eligible for a \$7,500 stipend
- Graduate students are eligible for a \$10,000 stipend; an additional independent research project will be part of a graduate student internship.
- This fellowship can be applied to an Internship (EVPP 894) and fulfill program requirements.
- For graduate students: an additional independent research component will be developed in coordination with NCASC supervisor.

Program Obligations:

The fellowship lasts a calendar year (Jan-Dec, comprising spring, summer, and fall semesters).

During the spring and fall semesters (Jan-May; August-Dec), fellows work part time (10 hrs/wk). During the summer semester (June-August), fellows work full-time (40 hrs/week). Semester/summer hours follow GMU academic calendar.

Note: all work is currently being conducted remotely due to COVID.

Eligibility:

Active student in the Environmental Science and Policy program (or related majors)

Application material:

- Letter of interest
- Current resume
- (Un)official transcripts

Application Submissions and Contact

Dr. Younsung Kim (Environmental Science and Policy) via ykih@gmu.edu

Application Deadline:

December 6, Monday, 11:59 pm (EST)