





## **USGS 2022 Cooperative Summer Fellowship Program**



The U.S. Geological Survey (USGS) Cooperative Summer Fellowship Program is the longest continuously running internship program in the Earth sciences. Over the past 57 years, over 2,600 students have participated in this program, with many participants continuing on to distinguished careers with USGS, academia, and industry.

The cooperative program was launched at the Geological Society of America meeting in Kansas City, MO in early fall of 1965 when William "Bill" Pecora, then the newly appointed Director of the USGS, held a meeting with a small group of distinguished professors and officers of the National Association of Geoscience Teachers (NAGT). Pecora suggested that the USGS would provide support through internships for outstanding newly graduated geoscience majors, while NAGT would solicit outstanding student nominations from the directors of the nation's geoscience field camps. In this way, students with excellent training in skills needed at USGS could take their next professional step with an internship putting those skills into practice.

In recent years the USGS has expanded our partnerships in this program to include the Ecological Society of America (ESA) and the GIS Certification Institute (GISCI) to support our scientists in geography and biological sciences.

Although some modifications have been made over time, the USGS Cooperative Summer Fellowship Program operates today much as it did in the beginning. With active participation and support from the highest levels of all organizations (including the Director of the USGS), a joint committee oversees the program. The program year begins in September when field camp directors (now numbering over 120), ESA, and GISCI are provided nomination information. NAGT and ESA solicit nominations of exceptionally qualified students for their affiliated field training programs. GISCI submits a list of students with appropriate GIS certifications for consideration. Nominated students apply by sending a resume, letter of interest, and transcripts to the USGS. At the same time, USGS scientists interested in working with an intern submit a proposal about their research projects. A science panel then reviews and matches candidates by their course work, skills, and interests with up to five projects. Interviews and selections proceed from there. The program endeavors to place as many of the nominated students as possible. In the last several years, between 68 and 95 percent of the nominated students who applied and stayed connected through the interviews have been placed in internships.

Interdisciplinary science training is a cornerstone of the USGS mission, and as such, all science disciplines are encouraged to take advantage of the intern program. Former student interns continually receive outstanding reviews from both scientists and supervisors.

The Program continues Pecora's vision of greater educational involvement, providing a first-rate professional experience to students early in their careers. The program today is a multidisciplinary collaboration that influences the career paths of future scientists in positive and exciting ways.

Geology and ecology field course directors can participate through our partnerships with the <u>NAGT</u> or <u>ESA</u>. Please visit the appropriate websites for additional information on how to nominate students. Nominations are due in early fall.

## **NAGT/USGS 2022 Cooperative Summer Fellowship Program Placements**

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Intern: Field Camp: Mentor: Location: Project:	Jacob Anderson University of Oregon Jared Peacock and Jonathan Glen Moffett Field, California Geophysical investigation of Valles Caldera and the Rio Grande Rift, New Mexico	Intern: Field Camp: Mentor: Location: Project:	Madelyn Cook University of Utah James Vallance Cascades Volcano Observatory Volcanology in the Cascades Range – Explosive eruptions at Mount St. Helens and Glacier Peak in Washington state	Intern: Field Camp: Mentor: Location: Project:	Zach O'Neal University of Utah Denis LeBlanc Northborough, Massachusetts Hydrology and Water Quality of Cape Cod's Groundwater/Surface- Water System
Intern: Field Camp: Mentor: Location: Project:	Kaleb Arnold Boise State University Andrew Waite Courtland, New York Surface Water and Ground Water Data Collection	Intern: Field Camp: Mentor: Location: Project:	Nick Cunetta Western Washington University Belle Philibosian Moffett Field, California Northern California earthquake geology	Intern: Field Camp: Mentor: Location: Project:	Jenna Paulsen Wheaton College Matthew Conlon New Cumberland, Pennsylvania Assessment of Pesticides and Characterization of Groundwaters in Pennsylvania's Glaciated Low
Intern: Field Camp: Mentor: Location: Project:	Allegra Baird University of Michigan Courtney Creamer Menlo Park Recovery of hydrologic and biogeochemical functioning after wildfire	Intern: Field Camp: Mentor: Location: Project:	Haley Dietz University of Houston Walter Mooney Menlo Park, California Studies of earthquakes, volcanoes, landslides, and tsunamis	Intern: Field Camp: Mentor:	Plateau Siliciclastic and Northeastern Glaciated Surficial Hydrogeologic Settings Claire Pluim University of Texas, Austin Jaime Azain
Intern: Field Camp: Mentor: Location: Project:	Jonah Bettger Western Washington University Emily Montgomery-Brown Vancouver, Washington Geodetic monitoring of volcanoes in the western United States	Intern: Field Camp: Mentor: Location: Project:	Grayce Gibbs Dartmouth College Jeffrey Mauk and Carma San Juan Lakewood, Colorado USGS Mineral Deposit Database (USMIN)	Location: Project: Intern: Field Camp:	David Pilliod Effects of seed predation by harvester ants on sagebrush steppe restoration Miriam Primus Whitman College
Intern: Field Camp: Mentor: Location: Project:	Katelyn Chambliss Southern Illinois University Beth Middleton Lafayette, Louisiana Hurricane induced flooding and effects on cypress swamps along	Intern: Field Camp: Mentor: Location: Project:	Mary Hambrick University of Houston Michael Toomey Reston, Virginia Historic flood records of the Potomac River near Washington	Mentor: Location: Project:	Adam Hudson Denver, Colorado Utilizing Quaternary Geochronology to Reconstruct Landscape Evolution in the Western U.S.
Intern: Field Camp: Mentor: Location:	the Mississippi River Alluvial Valley  Rachel Chidlow West Virginia University Walter Mooney Menlo Park, California	Intern: Field Camp: Mentor: Location: Project:	D.C.  Reid Harris University of Michigan Andrew Waite Troy, New York Surface Water and Ground Water	Intern: Field Camp: Mentor: Location: Project:	Sierra Rack Sacramento State University Rich Briggs Golden, Colorado Assessment of active faults for seismic hazard models in the Western United States
Intern: Field Camp: Mentor: Location: Project:	Earthquake, tsunami and volcano hazards  Forrest Clark Eastern Michigan University Walter Mooney Menlo Park, California Earthquake, tsunami and volcano	Intern: Field Camp: Mentor: Location: Project:	Data Collection  Taylor Kuligowski University of Mami Thomas Cronin and Robert Poirier Reston, Virginia Land Sea Linkages in the Arctic	Intern: Field Camp: Mentor: Location: Project:	Samantha Tarkany Miami University Jared Peacock and Paul Bedrosian Moffett Field, California Geophysical investigation of Valles Caldera and the Rio Grande Rift, New Mexico
Intern: Field Camp: Mentor: Location: Project:	hazards  Karimah Comstock University of Oregon Walter Mooney Menlo Park, California Earthquake, tsunami and volcano hazards	Intern: Field Camp: Mentor: Location: Project: Intern: Field Camp:	Abigail Moore University of Dayton Jaime Azain Lakewood, Colorado Analytical Chemistry  Sophia Norenberg University of Washington,	Intern: Field Camp: Mentor: Location: Project:	Kate Tobin University of Wisconsin William Stephenson Golden, Colorado High-resolution Geophysical Investigations of Hazardous Faults and Seismic Ground Motions—
		Mentor: Location: Project:	Oshkosh Carole Johnson Storrs, Connecticut Hydrogeophysics		Data for Earthquake Hazard Assessments

Hydrogeophysics

**Project:** 

## ESA/USGS 2022 Cooperative Summer Fellowship Program Placements

**Intern:** Stefan Anthopolous Intern: Janiece Jefferson College: Eckerd College College: Saint Edwards University Isabelle Cozzarelli Mentor: Mentor: Noel Pavlovic

Reston, Virginia **Location:** Location: Chesterton, Indiana Effects of Intentional or Accidental Releases of Oil and Developing Visitor Impact Metrics for Great Lakes **Project: Project:** 

Gas (OG) Wastes in the Environment Coastal Dune Landscapes

Intern: Ashley Bartling Intern: Amelia Jelic

College: California State Polytechnic University, Pomona College: University of Michigan, Ann Arbor Mentor: Sheel Bansal and Jacob Meier Mentor: Jessica Rodysill

**Location:** Jamestown, North Dakota **Location:** Reston, Virginia

**Project:** Assessing the Climate Change Mitigation Potential of **Project:** Natural Flood and Drought Variability in Lacustine Archives

Wetland Restoration in the Conservation Reserve

Program: Measurements, Modeling, and Scaling Changes

in Soil Carbon and Greenhouse Gas Fluxes Intern: Conor Judge College: Central Michigan University

Mentor: Sheel Bansal and Jacob Meier **Intern:** Ian Chapman College: Jamestown, North Dakota Iowa State University **Location:** 

Nicholas Johnson Mentor: **Project:** Assessing the Climate Change Mitigation Potential **Location:** Millersburg, Michigan of Wetland Restoration in the Conservation Reserve

**Project:** Deploy and evaluate innovative sea lamprey control Program: Measurements, Modeling, and Scaling Changes in Soil Carbon and Greenhouse Gas Fluxes tools

Intern: Sarah Costanzo Intern: Margaret Kimpling College: University of California, Davis College: Georgia Tech

Mentor: Seth Munson Mentor: Kurt Kowalski **Location: Location:** Ann Arbor, Michigan Flagstaff, Arizona

Enhancing soil health on degraded rangelands in the Developing new, sustainable control strategies for an **Project: Project:** 

southwestern U.S. invasive wetland grass (Phragmites australis)

Intern: Intern: Kinsey Funk Joann Lam

Oregon State University College: College: California State University Fullerton Jeffrey Chaplin Mentor: Mentor:

Craig Snyder Location: Central Pennsylvania Location: Kearneysville, West Virginia

Near real-time water-quality monitoring and Brook trout vulnerability to drought; eastern **Project: Project:** 

modeling in York County, Pennsylvania component of USGS national integrated ecohydrological research and monitoring plan

Intern: Rachel Deahl

Scott Fordham

Priya Gahir

Intern:

**Intern:** 

New Jersey Institute of Technology College: Intern: Braedon Lineman Mentor: College: Anya Metcalfe Montana State University

**Location:** Flagstaff, Arizona Mentor: Kristina Hopkins **Location: Project:** Bat foraging ecology in the San Juan River Raleigh, North Carolina

**Project:** Understanding the impacts of urbanization on

College: University of Michigan Mentor: David Pilliod Intern: Molly Long

Lawrence University **Location:** Boise, Idaho College: Effects of seed predation by harvester ants on Mentor: Brynne Lazarus **Project:** 

sagebrush steppe restoration **Location:** Boise, Idaho **Project:** Investigating plant-soil interactions to support

University of Michigan College:

Mentor: Wes Bickford Intern: Hieu Ly Ann Arbor, Michigan College: Location:

Oregon State University **Project:** Taking advantage of high water levels in the Great Mentor: Brian Bergamaschi

Lakes to improve management of a persistent **Location:** Sacramento, California

invasive wetland grass Sacramento-San Joaquin Continuous Water Quality **Project:** Monitoring

Intern: Ezra Grey University of Arkansas, Southeast College: Intern: Daria Maslyukova

Mentor: Ryan Fossness College: George Mason University **Location:** Boise, Idaho Mentor: Greg Noe **Project:** Kootenai River hydraulic development and **Location:** Reston, Virginia

simulation **Project:** Stream and wetland ecosystems: measuring changes

in functions due to management and climate change

streams in the Southeastern USA

restoration in sagebrush steppe ecosystems

Intern: Nadia Naji Intern:

College: California State University, Fullerton College: University of North Texas

Mentor: Timothy Stryker Mentor: Rebecca Brice and Lesleigh Anderson

**Location:** Reston, Virginia **Location:** Denver, Colorado

**Project:** National Land Imaging Strategic Communications **Project:** Past Perspectives of Water in the West

Intern: Alice Nguyen

**Location:** 

Intern: Karen Robles College: Saint Edwards University Mentor: Dan Esler Mentor: Jeffrey Chaplin **Location:** Anchorage, Alaska

**Project:** Near real-time water-quality monitoring and

Central Pennsylvania

modeling in York County, Pennsylvania

College: University of Louisville Intern: Keegan Nichols College: Austin College Mentor: Matthew Germino Mentor: Ralph Grundel Location: Boise, Idaho Location: Chesterton, Indiana

Effects of landscape connectivity on native bee **Project:** 

nesting behavior

Intern: Gigi Otten

College: University of Minnesota Mentor: Mentor: Michael Duniway **Location:** Girard, Ohio **Location:** Moab, Utah

**Project:** Assessing impacts of aridification, drought, and

land-use on drylands of the Colorado Plateau

Intern: Devin Rehrig

College: Mississippi State University

Mentor: Kyle McLean

**Location:** Jamestown, North Dakota

**Project:** Linking Grey Tiger Salamander (Ambystoma

> mavortium diaboli) Lengths to Biomass and Population Structure in Prairie Pothole Wetlands Mentor:

Intern: Shannon Reilly

College: University of California, Davis

Mentor: Clint Otto

**Location:** Jamestown, North Dakota

**Project:** Improving pollinator habitat in the Great Plains Intern: Sophie Steppe

Alaska

**Project:** 

**Brand Richter** 

**Project:** Science for adaptive management of fire, invasives,

and restoration in western landscapes

Nearshore marine ecosystem studies in Southcentral

Intern: Danielle Studer College: Allegheny College Kathryn Smith

**Project:** Estuarine Shoreline Change

Intern: Jose Torres

Oregon State University College:

Mentor: Kristen Hart **Location:** Davie, Florida

Burmese Python Movement and Habitat Use **Project:** 

Intern: Kendalyn Town

College: Central Michigan University Miriam Jones and Deb Willard

**Location:** Reston, Virginia

**Project:** Wetlands as carbon sinks: impacts of climate and

land-use change on wetland carbon storage

Intern: Emily Wapman

College: University of California, Santa Barbara

Mentor: Andy Royle Location: Laurel, Maryland

**Project:** Machine Learning and Classification of Box Turtles

in a Capture-Recapture Study

## **GISCI/USGS 2022 Cooperative Summer Fellowship Program Placements**

Intern: Michael Hanson College: University of Texas

Mentor: Clint Otto

**Location:** Jamestown, North Dakota

**Project:** Improving pollinator habitat in the Great Plains

Intern: Rebekah Medley

College: University of Texas, Arlington

Mentor: Walter Mooney Menlo Park, California **Location:** 

Project: Earthquake, tsunami and volcano hazards

Intern: Jacob Melendez

College: California State University

Mentor: Jeffrey Mauk Location: Lakewood, Colorado **Project:** USGS Mine waste inventory Mentor: Amber Wittner **Location:** Moffett Field, California

**Project:** Enterprise GIS for the NCGMP Community

Intern: John Taylor

Intern:

College:

College: Virginia Tech University Mentor: Timothy Stryker

Daniel Miranda

University of Maryland

Reston, Virginia **Location:** 

**Project:** National Land Imaging Strategic Communications