



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

| Intern: | Jacob Anderson | Intern: | Madelyn Cook | Intern: | Sophia Norenberg |
|------------------------|---|------------------------|---|------------------------|--|
| Field Camp: | University of Oregon | Field Camp: | University of Utah | Field Camp: | University of Washington, Oshkosh |
| Mentor: | Jared Peacock and Jonathan Glen | Mentor: | James Vallance | Mentor: | Carole Johnson |
| Location: Project: | Moffett Field, California | Location: | Cascades Volcano Observatory | Location: | Storrs, Connecticut |
| Project: | Geophysical investigation of Valles Caldera and the Rio Grande Rift, | Project: | Volcanology in the Cascades Range – Explosive eruptions at Mount St. | Project: | Hydrogeophysics |
| | New Mexico | | Helens and Glacier Peak in | Intern: | Zach O'Neal |
| | | | Washington state | Field Camp: | University of Utah |
| Intern: | Kaleb Arnold | | | Mentor: | Denis LeBlanc |
| Field Camp: | Boise State University | Intern: | Nick Cunetta | Location: | Northborough, Massachusetts |
| Mentor: | Andrew Waite | Field Camp: | Western Washington University | Project: | Hydrology and Water Quality of |
| Location: | Courtland, New York | Mentor: | Belle Philibosian | | Cape Cod's Groundwater/Surface- |
| Project: | Surface Water and Ground Water | Location: | Moffett Field, California | | Water System |
| | Data Collection | Project: | Northern California earthquake | Tratorna | Isano Devilson |
| Intern: | Allegra Baird | | geology | Intern: Field Camp: | Jenna Paulsen Wheaton College |
| Field Camp: | University of Michigan | Intern: | Haley Dietz | Mentor: | Matthew Conlon |
| Mentor: | Courtney Creamer | Field Camp: | University of Houston | Location: | New Cumberland, Pennsylvania |
| Location: | Menlo Park | Mentor: | Walter Mooney | Project: | Assessment of Pesticides and |
| Project: | Recovery of hydrologic and | Location: | Menlo Park, California | ÷ | Characterization of Groundwaters in |
| | biogeochemical functioning after | Project: | Studies of earthquakes, volcanoes, | | Pennsylvania's Glaciated Low |
| | wildfire | | landslides, and tsunamis | | Plateau Siliciclastic and Northeastern |
| Intorne | Jonah Pattaa- | Intorre | Crowes Cibbs | | Glaciated Surficial Hydrogeologic |
| Intern: Field Camp: | Jonah Bettger Western Washington University | Intern: Field Camp: | Grayce Gibbs Dartmouth College | | Settings |
| Mentor: | Emily Montgomery-Brown | Mentor: | Jeffrey Mauk and Carma San Juan | Intern: | Claire Pluim |
| Location: | Vancouver, Washington | Location: | Lakewood, Colorado | Field Camp: | University of Texas, Austin |
| Project: | Geodetic monitoring of volcanoes | Project: | USGS Mineral Deposit Database | Mentor: | Jaime Azain |
| - | in the western United States | - | (USMIN) | Location: | David Pilliod |
| _ | | _ | | Project: | Effects of seed predation by harvester |
| Intern: | Katelyn Chambliss | Intern: | Mary Hambrick | | ants on sagebrush steppe restoration |
| Field Camp: Montor: | Southern Illinois University Both Middlaton | Field Camp: Montor: | University of Houston | Intorn | Miriam Primus |
| Mentor: Location: | Beth Middleton Lafayette, Louisiana | Mentor: Location: | Michael Toomey Reston, Virginia | Intern: Field Camp: | Miriam Primus Whitman College |
| Project: | Hurricane induced flooding and | Project: | Historic flood records of the Potomac | Mentor: | Adam Hudson |
| | effects on cypress swamps along the | | River near Washington D.C. | Location: | Denver, Colorado |
| | Mississippi River Alluvial Valley | | č | Project: | Utilizing Quaternary Geochronology |
| _ | - | Intern: | Reid Harris | | to Reconstruct Landscape Evolution |
| Intern: | Rachel Chidlow | Field Camp: | University of Michigan | | in the Western U.S. |
| Field Camp: Montor: | West Virginia University Walter Mooney | Mentor: | Andrew Waite | Intorn | Sierra Rack |
| Mentor: Location: | Menlo Park, California | Location: Project: | Troy, New York Surface Water and Ground Water | Intern: Field Camp: | Sterra Rack Sacramento State University |
| Project: | Earthquake, tsunami and volcano | roject. | Data Collection | Mentor: | Rich Briggs |
| 1.01000 | hazards | | concerton | Location: | Golden, Colorado |
| | | Intern: | Taylor Kuligowski | Project: | Assessment of active faults for |
| Intern: | Forrest Clark | Field Camp: | University of Mami | | seismic hazard models in the Western |
| Field Camp: | Eastern Michigan University | Mentor: | Thomas Cronin and Robert Poirier | | United States |
| Mentor: | Walter Mooney Manla Bark, California | Location: | Reston, Virginia | Intown | Somenthe Terkony |
| Location: Project: | Menlo Park, California Earthquake, tsunami and volcano | Project: | Land Sea Linkages in the Arctic | Intern: Field Camp: | Samantha Tarkany Miami University |
| 110,000 | hazards | Intern: | Rebekah Medley | Mentor: | Jared Peacock and Paul Bedrosian |
| | | College: | University of Texas, Arlington | Location: | Moffett Field, California |
| Intern: | Karimah Comstock | Mentor: | Walter Mooney | Project: | Geophysical investigation of Valles |
| Field Camp: | University of Oregon | Location: | Menlo Park, California | | Caldera and the Rio Grande Rift, |
| Mentor: | Walter Mooney | Project: | Earthquake, tsunami and | | New Mexico |
| Location: | Menlo Park, California | | volcano hazards | Tratorna | Kata Takin |
| Project: | Earthquake, tsunami and volcano hazards | Intern: | Abigail Moore | Intern: Field Camp: | Kate Tobin University of Wisconsin |
| | nuzulus | Field Camp: | University of Dayton | Mentor: | William Stephenson |
| | | Mentor: | Jaime Azain | Location: | Golden, Colorado |
| | | Location: | Lakewood, Colorado | Project: | High-resolution Geophysical |
| | | Project: | Analytical Chemistry | | Investigations of Hazardous Faults |
| | | | | | and Seismic Ground Motions—Data |
| | | | | | for Farthquake Hazard Assessments |

for Earthquake Hazard Assessments

ESA/USGS 2022 Cooperative Summer Fellowship Program Placements

| | - | | |
|-----------|--|-----------------------|---|
| T | Ct-f A | T | I |
| Intern: | Stefan Anthopolous | Intern: | Janiece Jefferson |
| College: | Eckerd College | College: | Saint Edwards University |
| Mentor: | Isabelle Cozzarelli | Mentor: | Noel Pavlovic |
| Location: | Reston, Virginia | Location: | Chesterton, Indiana |
| Project: | Effects of Intentional or Accidental Releases of Oil and | Project: | Developing Visitor Impact Metrics for Great Lakes |
| 1 lojeet. | | 1 lojeet. | |
| | Gas (OG) Wastes in the Environment | | Coastal Dune Landscapes |
| T | | T | A 1' T 1' |
| 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 |
| | Assessing the Climate Change Mitigation Potential of | | Natural Flood and Drought Variability in Lacustine |
| Project: | | Project: | |
| | Wetland Restoration in the Conservation Reserve | | Archives |
| | Program: Measurements, Modeling, and Scaling Changes | | |
| | in Soil Carbon and Greenhouse Gas Fluxes | Intern: | Conor Judge |
| | | College: | Central Michigan University |
| Intern: | Ian Chapman | Mentor: | Sheel Bansal and Jacob Meier |
| | | | |
| College: | Iowa State University | Location: | Jamestown, North Dakota |
| Mentor: | Nicholas Johnson | 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 |
| 9 | tools | | Changes in Soil Carbon and Greenhouse Gas Fluxes |
| | 0015 | | Changes in bon Carbon and Greenhouse Gus Fluxes |
| Intern: | Sarah Costanzo | Intern: | Margaret Kimpling |
| | | | |
| College: | University of California, Davis | College: | Georgia Tech |
| Mentor: | Seth Munson | Mentor: | Kurt Kowalski |
| Location: | Flagstaff, Arizona | Location: | Ann Arbor, Michigan |
| Project: | Enhancing soil health on degraded rangelands in the | Project: | Developing new, sustainable control strategies for an |
| | southwestern U.S. | 0 | invasive wetland grass (Phragmites australis) |
| | | | ······································ |
| Intern: | Kinsey Funk | Intern: | Joann Lam |
| College: | Oregon State University | College: | California State University Fullerton |
| - | | 0 | |
| Mentor: | Jeffrey Chaplin | Mentor: | Craig Snyder |
| Location: | Central Pennsylvania | Location: | Kearneysville, West Virginia |
| Project: | Near real-time water-quality monitoring and | Project: | Brook trout vulnerability to drought: eastern |
| | modeling in York County, Pennsylvania | | component of USGS national integrated |
| | , , , , , , , , , , , , , , , , , , , | | ecohydrological research and monitoring plan |
| Intern: | Rachel Deahl | | <i>y y y y y y y y y y</i> |
| College: | New Jersey Institute of Technology | Intern: | Braedon Lineman |
| Mentor: | Anya Metcalfe | College: | Montana State University |
| | | - | |
| Location: | Flagstaff, Arizona | Mentor: | Kristina Hopkins |
| Project: | Bat foraging ecology in the San Juan River | Location: | Raleigh, North Carolina |
| | | Project: | Understanding the impacts of urbanization on |
| Intern: | Scott Fordham | | streams in the Southeastern USA |
| College: | University of Michigan | | |
| Mentor: | David Pilliod | Intern: | Molly Long |
| | | | |
| Location: | Boise, Idaho | College: | Lawrence University |
| Project: | Effects of seed predation by harvester ants on | Mentor: | Brynne Lazarus |
| | sagebrush steppe restoration | Location: | Boise, Idaho |
| | | Project: | Investigating plant-soil interactions to support |
| Intern: | Priya Gahir | | restoration in sagebrush steppe ecosystems |
| College: | University of Michigan | | |
| Mentor: | Wes Bickford | Intern: | Hieu Ly |
| | | | |
| Location: | Ann Arbor, Michigan | College: | 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 | Project: | Sacramento-San Joaquin Continuous Water Quality |
| | | | Monitoring |
| Intern: | Ezra Grey | | |
| College: | University of Alaska, Southeast | Intern: | Daria Maslyukova |
| Mentor: | Ryan Fosness | College: | George Mason University |
| Location: | Boise, Idaho | Mentor: | Greg Noe |
| | | | |
| Drainet | Kootanai Divar hydraulia davalormant and | | |
| Project: | Kootenai River hydraulic development and | Location: | Reston, Virginia |
| Project: | Kootenai River hydraulic development and simulation | Location: Project: | Stream and wetland ecosystems: measuring changes |
| Project: | | | |

| Intern: College: Mentor: Location: Project: | Nadia Naji California State University, Fullerton Timothy Stryker Reston, Virginia National Land Imaging Strategic Communications | Intern: College: Mentor: Location: Project: | Brand Richter University of North Texas Rebecca Brice and Lesleigh Anderson Denver, Colorado Past Perspectives of Water in the West |
|---|---|---|--|
| Intern: College: Mentor: Location: Project: | Alice Nguyen Saint Edwards University Jeffrey Chaplin Central Pennsylvania Near real-time water-quality monitoring and modeling in York County, Pennsylvania | Intern: Mentor: Location: Project: | Karen Robles Dan Esler Anchorage, Alaska Nearshore marine ecosystem studies in Southcentral Alaska |
| Intern: College: Mentor: Location: Project: | Keegan Nichols Austin College Ralph Grundel Chesterton, Indiana Effects of landscape connectivity on native bee nesting behavior | Intern: College: Mentor: Location: Project: Intern: | Sophie Steppe University of Louisville Matthew Germino Boise, Idaho Science for adaptive management of fire, invasives, and restoration in western landscapes Danielle Studer |
| Intern: College: Mentor: Location: Project: | Gigi Otten University of Minnesota Michael Duniway Moab, Utah Assessing impacts of aridification, drought, and land-use on drylands of the Colorado Plateau | College: Mentor: Location: Project: Intern: | Allegheny College Kathryn Smith Girard, Ohio Estuarine Shoreline Change Jose Torres |
| Intern: College: Mentor: Location: Project: | Devin Rehrig Mississippi State University Kyle McLean Jamestown, North Dakota Linking Grey Tiger Salamander (Ambystoma mavortium diaboli) Lengths to Biomass and Population Structure in Prairie Pothole Wetlands | College: Mentor: Location: Project: Intern: College: Mentor: Location: | Oregon State University Kristen Hart Davie, Florida Burmese Python Movement and Habitat Use Kendalyn Town Central Michigan University Miriam Jones and Deb Willard Reston, Virginia |
| Intern: College: Mentor: Location: Project: | Shannon Reilly University of California, Davis Clint Otto Jamestown, North Dakota Improving pollinator habitat in the Great Plains | Project: Intern: College: Mentor: Location: Project: | Wetlands as carbon sinks: impacts of climate and land-use change on wetland carbon storage Emily Wapman University of California, Santa Barbara Andy Royle Laurel, Maryland Machine Learning and Classification of Box Turtles in a Capture-Recapture Study |

GISCI/USGS 2022 Cooperative Summer Fellowship Program Placements

| Intern: | Michael Hanson | Intern: | Daniel Miranda |
|-----------|--|-----------|--|
| College: | University of Texas | College: | Austin Community College |
| Mentor: | Clint Otto | Mentor: | Amber Wittner |
| Location: | Jamestown, North Dakota | Location: | Moffett Field, California |
| Project: | Improving pollinator habitat in the Great Plains | Project: | Enterprise GIS for the NCGMP Community |
| Intern: | Jacob Melendez | Intern: | John Taylor |
| College: | California State University | College: | Virginia Tech University |
| Mentor: | Jeffrey Mauk | Mentor: | Timothy Stryker |
| Location: | Lakewood, Colorado | Location: | Reston, Virginia |
| Project: | USGS Mine waste inventory | Project: | National Land Imaging Strategic Communications |