



NAGT/USGS 2015 Cooperative Summer Field Training Program



The National Association of Geoscience Teachers (NAGT)/U.S. Geological Survey (USGS) Cooperative Summer Field Training Program is the longest continuously running internship program in the earth sciences. Over the past fifty years, over 2,300 students have participated in this program, with many participants proceeding on to distinguished careers with the USGS, with academia, or with industry.

The cooperative program was launched at the Geological Society of America meeting in Kansas City 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 NAGT. Pecora wanted to get the professors’ reactions to an initiative that would provide stronger linkage to academia while providing better summer research assistants for the USGS. Pecora suggested that the USGS would provide support by way of internships for outstanding newly graduated geosciences majors, while NAGT would solicit outstanding student nominations from the directors of the nation’s geosciences field camps. (Field camp, a tradition in the education of a geoscientist, is an intensive course that applies classroom and laboratory training to solving field-based geoscience problems. As employers value the skills and applications developed in the field camp experience, enrollments have shown a remarkable three-fold increase in the past decade.)

Needless to say, ‘Pecora’s Plan,’ as it became known, met with instant approval.



Although some modifications have been made over the years, the NAGT/USGS Cooperative Summer Field Training Program operates today much as it did from the beginning. With active participation and support from the highest levels of both organizations (including the Director of the USGS), a joint committee oversees the program. The program year begins in September with the field camp directors (now numbering over 120) being provided information about the program. Each director has the opportunity to nominate up to three students, based on their camp enrollment. 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 field and laboratory projects. A science review and placement panel then matches candidates by their course work, skills and interests with up to five projects. The listing of candidates and accompanying academic information are sent to USGS scientists for their review. This is followed by candidate interviews and ranking for preferred selection. While the interviews provide useful opportunities for candidates and scientists for determining goodness of fit, the USGS scientist makes the final intern selection.

As interdisciplinary system science is a cornerstone of USGS science, all science disciplines are encouraged, and do take advantage of this program. Students hired through this program have continually received outstanding reviews from scientists and supervisors alike.

Over the years, NAGT has succeeded in identifying top-flight students for the program, and the USGS has succeeded in garnering the interest of competent and enthusiastic supervising mentors. The NAGT/USGS Cooperative Summer Field Training Program continues Pecora’s vision of greater educational involvement and provides a first rate professional experience to students early in their careers. It is a wonderful partnership that influences the career paths of future scientists in positive and exciting ways.

NAGT/USGS 2015 Cooperative Summer Field Training Program Internship Placements

Intern: Stuart Baker
College: Kent State University
Mentor: Erin Berryman
Location: Lakewood, Colorado
Project: Soil respiration following wildfire in ponderosa and lodgepole pine forests of the southern Rocky Mountains

Intern: John Barefoot
College: University of North Carolina
Mentor: Laura Clor
Location: Menlo Park, California
Project: Photogrammetry of active thermal areas at Cascades Volcanoes

Intern: Jeremy Brizendine
College: University of Missouri
Mentor: Marci Robinson
Location: Reston, Virginia
Project: Microfossil indicators of Pliocene paleoenvironments, Bay of Bengal

Intern: Christopher Borjas
College: University of Texas at Arlington
Mentor: Gavin Hayes
Location: Golden, Colorado
Project: Extending and updating global models of three-dimensional subduction zone geometry

Intern: John Brotherton
College: Western State Colorado University
Mentor: James Kuwabara
Location: Menlo Park, California
Project: Benthic processes affecting solute transport through Upper Klamath Lake, Oregon

Intern: Taylor Canada
College: University of Texas at Austin
Mentor: Gerard Butch
Location: Troy, New York
Project: Surface-water and ground-water networks

Intern: Carissa Chambers
College: Sul Ross University
Mentor: Gregory Noe
Location: Reston, Virginia
Project: The effect of floodplain geomorphology on nutrient biogeochemistry and water quality

Intern: Matthew Cheney
College: Cedarville University
Mentor: Jamie Shanley
Location: Montpelier, Vermont
Project: WEBB Program environmental data collection and interpretation

Intern: Jeremy Cordova
College: California State University, Fullerton
Mentor: Walter Mooney
Location: Menlo Park, California
Project: Earthquake hazards in the Central and Eastern U.S.

Intern: Mindi Curran
College: Humboldt State University
Mentor: Erik Beever
Location: Bozeman, Montana
Project: Investigating factors determining the niche of the American pika in the Rocky Talus Slopes: merging ecology, biogeography, climate and geology

Intern: Benjamin Davidson
College: California State University, Long Beach
Mentor: Jeffrey Chaplin
Location: South-Central Pennsylvania
Project: Geochemical processes and pesticides in vulnerable aquifers

Intern: Davis DeFord
College: Northern Illinois University
Mentor: James Vallance and Cynthia Gardner
Location: Vancouver, Washington
Project: A tale of two volcanoes: mapping, stratigraphy, and hazards assessment at Cascade Volcanoes, Glacier Peak, and Mount Shasta

Intern: Shannon Fasola
College: St. Norbert College
Mentor: Lind Gee and David Croker
Location: Menlo Park, California
Project: Field technician

Intern: Tyler Fritz
College: University of Texas at Austin
Mentor: Craig Johnson and Matthew Emmons
Location: Denver, Colorado
Project: Analysis of stable isotopes in geological, hydrological, and biological materials; developing new automated devices and methods

Intern: Shane Fussel
College: University of Florida
Mentor: Jeffrey Chaplin
Location: Pike County, Pennsylvania
Project: Geochemical processes relating to resource extraction

Intern: Ryan Gableman
College: University of Michigan, Ann Arbor
Mentor: Walter Mooney
Location: Menlo Park, California
Project: Earthquake hazards in the Central and Eastern U.S.



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Intern: Leia Gaten-Slahor
College: San Francisco State University
Mentor: John Nimmo
Location: Menlo Park, California
Project: Modeling and measurement of unsaturated zone flow processes

Intern: Joseph George
College: Middle Tennessee State University
Mentor: Rich Sheibley
Location: Tacoma, Washington
Project: Effects of stormwater on the water quality, biota, and habitat of small streams in Puget Sound

Intern: Jennifer Godbout
College: Colgate University
Mentor: Robin Stewart
Location: Menlo Park, California
Project: Investigations into the bioavailability and bioaccumulation of selenium and mercury in the San Francisco Bay Estuary

Intern: Aaron Gross
College: University of North Carolina
Mentor: Kristen Hart
Location: Davie, Florida
Project: Sea turtle movements and habitat-use

Intern: Kristyn Hill
College: University of Nebraska
Mentor: Miriam Jones
Location: Reston, Virginia
Project: The fate of carbon in permafrost soils

Intern: Robert Quinn Hull
College: Oberlin College
Mentor: Denis LeBlanc
Location: Northborough, Massachusetts
Project: Cape Cod toxic substances hydrology field research

Intern: James Ingrassia
College: California State University, Northridge
Mentor: Shane Detweiler
Location: Menlo Park, California
Project: Geological and geophysical studies of the San Andreas Fault System

Intern: Mark Korte-Nahabedian
College: University of California, Santa Barbara
Mentor: Jacob Lowenstern
Location: Menlo Park, California
Project: GIS of gas and heat flux from the Yellowstone volcanic system

Intern: Jordan Kovash
College: Western Washington University
Mentor: Jonathan Stock
Location: Menlo Park, California
Project: Field hydrology of historic landslides to improve storm-driven landslide hazard forecasts in San Francisco Bay area

Intern: Joseph Krienert
College: Southern Illinois University
Mentor: Geneva Chong
Location: Fort Collins, Colorado
Project: Plant phenology monitoring: data analysis and applications to assess habitat

Intern: Larisa LaMere
College: Rice University
Mentor: Isa Woo and Susan De La Cruz
Location: Olympia, Washington
Project: Assessing foodweb connectivity and carbon sequestration within the Nisqually River Delta

Intern: Kristiana Lapo
College: Pacific Lutheran University
Mentor: Katherine Skalak
Location: Reston, Virginia
Project: Hydrologic technician/geologic technician

Intern: Madeline Lewis
College: Indiana University
Mentor: Steve Kirby, Carl Wentworth, Victoria Langenheim
Location: Menlo Park, California
Project: Investigations of Serpentinites and associated rocks along the San Francisco Peninsula

Intern: Leslie Logan
College: University of Wyoming
Mentor: Albert Hofstra
Location: Denver, Colorado
Project: Melt and fluid inclusion analysis in resource investigations

Intern: Evan Martin
College: University of Wyoming
Mentor: Mary Hodges
Location: Idaho Falls, Idaho
Project: Geologic mapping in the southwestern part of the Idaho National Laboratory site

Intern: Joshua Messenger
College: Montana Tech of the University of Montana
Mentor: Perry Jones
Location: Mounds View, Minnesota
Project: Assessing the influence of natural copper-nickel bedrocks on water quality

Intern: Brian Meyers
College: University of Oregon
Mentor: Michael Lisowski
Location: Vancouver, Washington
Project: Geodetic monitoring of Cascade Range Volcanoes and Yellowstone

Intern: Nikolas Midttun
College: University of Washington
Mentor: Katherine Scharer
Location: Pasadena, California
Project: Imagery analysis and fault slip rate studies, Southern California

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Intern: Savannah Miller
College: Clemson University
Mentor: Thomas Imbriotta
Location: Lawrenceville, New Jersey
Project: Fate and transport of biodegrading chlorinated solvent contaminants in fractured rock aquifers

Intern: Katherine Morgan
College: Western Washington University
Mentor: Darcy McPhee
Location: Menlo Park, California
Project: Geophysical investigations related to geothermal, mineral, water resources and other natural hazards

Intern: Aaron Olson
College: Oregon State University
Mentor: Daniel Cain
Location: Menlo Park, California
Project: Ecological impacts of metal mines on stream ecosystems

Intern: Matthew Olson
College: Brigham Young University, Utah
Mentor: Isabelle Cozzarelli
Location: Reston, Virginia
Project: Transport of contaminants in groundwater

Intern: Katherine Pappas
College: University of North Carolina, Wilmington
Mentor: John Lane
Location: Storrs, Connecticut
Project: Applied hydrogeophysics research

Intern: Dolan Paris
College: Humboldt State University
Mentor: Alena Leeds
Location: Denver, Colorado
Project: Utilization of portable seismic instrumentation to assess site response and seismic hazard

Intern: Candice Passehl
College: Fort Lewis College
Mentor: Cal Ruleman and Shannon Mahan
Location: Denver, Colorado
Project: Utilizing Quaternary geochronology to unravel Pleistocene geomorphic histories

Intern: Marcel Peliks
College: University of California, Santa Cruz
Mentor: Benjamin Pauk
Location: Vancouver, Washington
Project: Geophysical instrumentation and monitoring support of Cascade Range Volcanoes

Intern: Daniel Roberts
College: University of Oklahoma
Mentor: Meagan Eagle Gonneea
Location: Woods Hole, Massachusetts
Project: Carbon storage in coastal salt marsh ecosystems after restoration

Intern: Clay Robertson
College: Kansas State University
Mentor: Rich Sheibley
Location: Tacoma, Washington
Project: Effects of stormwater on the water quality, biota, and habitat of small streams in Puget Sound

Intern: Nicole Rocco
College: Oregon State University
Mentor: Amanda Demopoulos
Location: Gainesville, Florida
Project: Characterizing the ecology of deep-sea invertebrate communities associated with Caribbean Seamounts

Intern: Samuel Schoenmann
College: University of Wisconsin, Oshkosh
Mentor: Cliff Hupp and Ed Schenk
Location: Reston, Virginia
Project: Hydrological technician

Intern: Benjamin Stark
College: University of Wisconsin, Madison
Mentor: Rex Baum
Location: Golden, Colorado
Project: Geohydrologic monitoring and characterization of landslide and debris flow source areas

Intern: Bryanna Sudman
College: Minnesota State University
Mentor: Donald Sweetkind
Location: Denver, Colorado
Project: Digital geologic map compilation in the northern Sacramento Valley, the Sierran Foothills, and the California Coast Ranges

Intern: Laura Sugano
College: Illinois State University
Mentor: James Paces and Mark Hudson
Location: Denver, Colorado
Project: Evaluating Pleistocene mid-continent climate, hydrologic, and paleoseismic records using speleothems from caves in Arkansas, Missouri, and Indiana

Intern: Colby Thrash
College: Clemson University
Mentor: Claire Tiedeman
Location: Lawrenceville, New Jersey
Project: Groundwater flow and contaminant transport in fractured-rock aquifers

Intern: Eric Tvinnereim
College: Iowa State University
Mentor: Nancy Simon
Location: Reston, Virginia
Project: Age dating with chiral amino acids

Intern: Scott Walker
College: Colorado State University
Mentor: Gregory Boughton
Location: Cheyenne, Wyoming
Project: Wyoming groundwater-quality monitoring network