NASA TO MENTOR STUDENTS IN EARTH SCIENCE RESEARCH

Monitoring the West Nile Virus and assessing the danger of wildfire fuel are just two of many projects that demonstrate the use of NASA Earth Science research to benefit communities. The Western Governors' Association joins NASA in announcing the selection of six university students who will explore these and other topics this summer at NASA's Ames Research Center in California's Silicon Valley via the NASA DEVELOP Program.

"DEVELOP provides workforce development, outreach to communities, and enables students to apply science to real-world problems," said Mike Ruiz, DEVELOP national program manager at NASA's Langley Research Center, Hampton, Va.

Selected for the Earth Science internships are:
• Emily Clary, University of New Mexico, who is pursuing a master of science in geography
• Jeremiah Knoche, Oregon State University, master of science, geography
• Douglas Gibbons, Utah State University, master of science, bioregional planning
• Jenna Ames, Utah State University, bachelor's degree, business management
• Alex Hogel, University of Utah, bachelor of science, geography
• Elizabeth Baliff, Utah State University, bachelor of science, geography

The students will begin their research assignments at NASA Ames on June 9 and work for a period of 10 weeks.

-more-
One student study will involve the Pyramid Lake Paiute tribe reservation in Nevada. The primary objectives of this project are to use remote sensing and ground-based methods to map and monitor invasive and noxious plant species that are rapidly encroaching upon the Northern Nevada territory. Remote sensing is the use of satellite and aerial images to monitor and investigate environmental, health, agricultural and other issues. The project also includes organizing new and existing data to create a database of information on wildfire fuel on the reservation.

"NASA will benefit by getting students to work on our projects, and the program will create liaisons between a tribal government in Nevada and local county governments in California," said Jay Skiles, the Ames DEVELOP director.

Students will also study the habitat in Monterey County, Calif., where West Nile Virus disease carriers live. These carriers – called vectors – include some kinds of birds and mosquitoes. The virus can cause a version of the sometimes-fatal disease, encephalitis, that results in inflammation of the brain and spinal cord.

The primary objective of this project is to identify potential mosquito habitats and conduct an assessment to determine if high-risk human populations (persons more than 55 years of age) live near those habitats in Monterey County. The resulting data will be a part of the health monitoring and surveillance system of the county and provide critical support to community decision makers to prepare them to make swift and effective response to the spread of the virus.

"The selected students will lead the investigations, and they will apply NASA technology to local problems," said Cynthia Schmidt, DEVELOP coordinator at NASA Ames. Student teams use NASA and other scientific information and technology to research state and local issues. Students convert their research into 3-D computer-generated visualizations to help the public better understand how NASA technology can be applied to community concerns.

"Our program will prepare students for positions in science and technology fields," said Skiles. "This summer, the students will expand their working knowledge of Earth Science research using remote sensing, image interpretation and geographic information systems," he added.

DEVELOP, headquartered at NASA Langley Research Center in Hampton, Va., began in 1998 and supports the Applications Division of NASA’s Earth Science Enterprise. This year DEVELOP is expanding to NASA's field centers in Mississippi and California.

The Western Governors’ Association is an independent, nonprofit organization representing the governors of 18 states, American Samoa, Guam and the Northern Mariana Islands. The association identifies and addresses key policy and governance issues in natural resources, the environment, human services, economic development, international relations and public management.

-end-