

SPACE EDUCATION AND OUTREACH SYMPOSIUM (E1)
Enabling the Future - Developing the Space Workforce (5)

Author: Mr. Jamie Favors
NASA DEVELOP National Program, United States

Mrs. Lauren Childs-Gleason
NASA DEVELOP National Program, United States

Dr. Kenton Ross
NASA, United States

Mrs. Karen Allsbrook
NASA DEVELOP National Program, United States

Ms. Beth Brumbaugh
NASA DEVELOP National Program, United States

Mrs. Lindsay Rogers
NASA, United States

Mr. Mike Ruiz
NASA, United States

NASA'S DEVELOP NATIONAL PROGRAM: BUILDING CAPACITY IN DECISION MAKERS AND
EMERGING PROFESSIONALS THROUGH NASA EARTH OBSERVATIONS

Abstract

The NASA DEVELOP National Program is an applied research capacity building program. Participants conduct rapid, 10-week projects that demonstrate the practical application of NASA Earth observing resources for environmental management and policy decision making. DEVELOP facilitates dual-capacity building in both the program's participants as well as in the local, state, regional, federal, and international end-user groups that benefit from project results. Competitively selected teams of students, recent graduates, early career professionals and transitioning career professionals take ownership of project proposal outlining basic application concepts and have ten weeks to conduct the needed research, engage end-users and partners, demonstrate sustainable solutions, finalize and document project results, and transfer their methods to end-users. In this high pressure, results-driven environment emerging applied science professionals build strong networks, hone effective scientific and communication skills, and learn how to work as part of a multidisciplinary team to achieve difficult objectives.

The DEVELOP approach to workforce development has a variety of advantages over classic apprenticeship-style internships. Foremost is the experiential learning of engaging with real-world environmental community concerns as a primary actor instead of as an observer or minor player. DEVELOP participants gain experience that fosters service to others, promoting a balance of leadership and teamwork in order to successfully address community needs. The program also advances understanding of Earth science data and technology applications amongst participants and partner organizations to cultivate skills in managing research schedules, risks and resources to best optimize outcomes. With the competitive nature and growing societal role of science and technology in today's global community, DEVELOP fosters collaboration and advances environmental understanding by promoting and improving the ability of the future geoscience workforce to recognize, understand, and address environmental issues on Earth by the innovative utilization of scientific resources in space.

Annually, over 350 participants at DEVELOP conduct approximately 80 projects partnering with

over 100 end-user organizations. Since 1998, DEVELOP has had more than 3,000 participants who have conducted nearly 500 applied NASA Earth science projects for societal benefit.