



BOOST



The Department of State's BOOST program aims to enable young scientists to more effectively conduct the high level research that will ultimately improve quality of life, enhance science-based decision making, and facilitate economic growth.



BOOST projects strengthen local research outcomes and empower connections with the global scientific community, increasing the impact that scientific research plays in society.



The University of Georgia

WESTERN MICHIGAN UNIVERSITY



For More Information on the BOOST Training Program please contact:

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Building Opportunity Out of Science and Technology (BOOST)

Preparing Young Scientists for Water-Resource Studies in Egypt and Morocco



Funded through the Office of Science and Technology Cooperation, Bureau of Oceans and International Environmental and Scientific Affairs (OES), U.S. Department of State

Project Managers:

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Preparing Young Scientists for Water-Resource Studies in Egypt and Morocco



Ourika Valley village depends on the availability of fresh water resources in Morocco. (near Moroccan field site)

Collaborators:

Egypt:

- ◆ Dr. Omer Cherif, National Authority for Remote Sensing and Space Sciences
- ◆ Dr. Hossam Elewa, National Authority for Remote Sensing and Space Sciences
- ◆ Dr. Hassan Garamoon, Ain Shams University

Morocco:

- ◆ Dr. Lahcen Benaabidate, Faculty of Sciences and Technology Fès.
- ◆ Dr. Ahmed Fekri, Faculty of Sciences Ben M'sik
- ◆ Dr. Nour-Eddine Laftouhi, Faculty of Sciences Semlalia

USA:

- ◆ Dr. Carol Hanley, University of Kentucky

Participants:

- ◆ Six graduate students each from Egypt and Morocco

Project Overview:

Access to adequate fresh water is essential for health and sustainable development. Across much of the world, particularly in water-scarce regions such as the Middle East and North Africa, population growth and water usage have contributed to water stress through withdrawals in excess of annual renewable supplies. Competition for water resources poses the risk of conflict. To address these challenges, students will learn how to acquire hydrologic data, process and interpret those data, and communicate their findings to technical and non-technical audiences.

Activities

- Virtual and hands-on GIS, remote sensing, and hydrologic modeling coursework
- Professional skills development training
- Water research field work
- Presentations to scientific and public audiences



Installation of hydrologic field equipment in Egypt.

Tentative program schedule:

- ◆ **March–April 2012:** Online course on remote sensing, GIS, and hydrologic modeling
- ◆ **May–June 2012:** Workshop on remote sensing, GIS, and hydrologic modeling at the University of Georgia; Exercise in collecting hydrologic data at field sites.
- ◆ **September–December 2012:** Weekly course on professional practice in Earth sciences focused on oral and written presentation skills, partnership building, and peer mentoring and instruction (streamed live with students from Egypt, Morocco, and the USA).
- ◆ **November 4-9, 2012:** Participation in topical session, “Building Capacity for Hydrologic Science in Water-Stressed Regions of the World,” at the Geological Society of America Annual Meeting, Charlotte, NC.
- ◆ **January–May 2013:** Training other university students in hydrologic sciences and visiting high schools to discuss careers in science.
- ◆ **June 2013:** Presentation of research findings to local residents and government agencies.



Diminishing water resources in Wadi Ferrain in the Sinai Peninsula of Egypt (near Egyptian field site)