

Eligibility

Each year we will recruit 6 students (4 undergraduates and 2 graduates) who must meet the following criteria for the summer program:

- ◆ Undergraduate geoscience students entering junior or senior year or graduate geoscience students
- ◆ Minimum GPA 3.0 (undergraduate) and 3.25 (graduate)
- ◆ Undergraduate students must have completed or currently be enrolled in an introductory geoscience course, such as Physical Geology, Environmental Geology, Earth History, and Natural Hazards
- ◆ Must be a U.S. citizen
- ◆ Women and minorities are strongly encouraged to apply.

Financial Support

All student expenses will be covered, including:

- ◆ Round-trip airfare between U.S. and China
- ◆ Ground transportation in U.S. and China
- ◆ Room and board in China
- ◆ Travel insurance
- ◆ Tuition for taking a two-week Chinese language and culture course in China
- ◆ Weekly stipend of \$500 (\$4,000 for 8 weeks)

Apply for the 2016 Summer Program Online

(June 13 - August 5, 2016)

<http://ires.nsm.uh.edu/apply>

About UH & CUG

University of Houston

The University of Houston (UH) is the third-largest university in Texas with nearly 41,000 students. The Carnegie Foundation classifies UH as a research university with very high research activity. The Department of Earth and Atmospheric Sciences at the University of Houston has a wide range of research programs central to the earth sciences. The Department offers B.S., M.S., and Ph.D. degrees in Geology, Geophysics and Atmospheric Sciences, a B.S. degree in Environmental Sciences, and a B.A. degree in Earth Sciences.



China University of Geosciences

The China University of Geosciences (Wuhan) is a key national university directly under the administration of the Education Ministry of the People's Republic of China. It is located in Wuhan, the capital of Central China's Hubei Province. It is regarded as a top university specialized in geosciences in China and exerts considerable influence within the Chinese mining and oil industry.



U.S.-China Collaboration on Landside Research & Student Training (2016-2018)



Summer Research Opportunities for U.S. Students to Visit China's Three Gorges Area!



Overview

The University of Houston has been awarded a three-year (2016-2018) National Science Foundation (NSF) International Research Experience for Students (IRES) grant to support U.S.-China collaboration on landslide research. This grant will fully fund summer research opportunities for U.S. geoscience majors to conduct landslide studies in collaboration with the China University of Geosciences (CUG) in Wuhan, Hubei Province.

During this program, which will run for eight weeks each summer, students from U.S. will work alongside students and faculty from CUG in the Three Gorges area of China. Field research will consist of using GPS and LiDAR technologies to study and predict landslide.

Opportunities will be available for four undergraduate and two graduate students each year for a total of 18 students. All expenses including travel costs, tuition, and travel insurance will be covered along with a stipend of \$500 per week.



Objectives

The IRES project will provide U.S. students with hands-on field research experience in landslide surveying, mapping, monitoring, and early-warning.

The main research objectives are:

- ◆ Developing a GPS based real-time landslide monitoring and early-warning system at the Huangtupo landslide site
- ◆ Developing a rapid landslide mapping method using high-accuracy GPS and LiDAR integrated technologies
- ◆ Studying the correlation of landslide movements with fluctuation of the water level within the Three Gorges Reservoir.

The methods developed through this project can be modified to serve other regions prone to landslides. The knowledge and skills that students learned from this project will better prepare them for their professional careers.

Program Activities

2016 Summer Program:

8 Weeks, June 13 - August 5, 2016

- ◆ Pre-Departure Preparation at the University of Houston (1 week at UH, U.S.)
- ◆ Activities in China (6 weeks)
 - ◆ Chinese Language and Culture Education (2 weeks at CUG, China)
 - ◆ Field Investigations in the Three Gorges Reservoir Area (4 weeks, China)
- ◆ Program Wrap-Up at the University of Houston (1 week, U.S.)

Faculty & Mentors

Dr. Guoquan Wang, University of Houston,
Email: gwang@uh.edu

Dr. Huiming Tang, China University of Geosciences (Wuhan), Email: tanghm@cug.edu.cn

Dr. Changqian Ma, China University of Geosciences (Wuhan), Email: cqma@cug.edu.cn

Dr. Hanwen Zhou, China University of Geosciences (Wuhan), Email: hwzhou@cug.edu.cn

For more information, please contact:

Dr. Guoquan (Bob) Wang
Department of Earth and Atmospheric Sciences
The National Center for Airborne Laser Mapping (NCALM)
University of Houston, Houston, TX 77204
Tel: 713-743-3324; Fax: 713-743-0512
Email: gwang@uh.edu
<http://www.geosc.uh.edu>
<http://ncalm.cive.uh.edu>