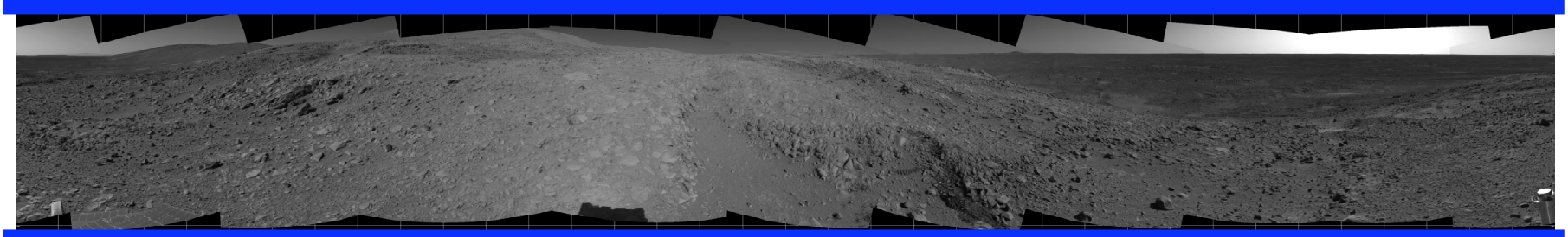
UNDERGRADUATE SUMMER RESEARCH OPPORTUNITIES

NASA Planetary Geology & Geophysics Undergraduate Research Program (PGGURP)

Spirit's view of Columbia Hills, Mars (NASA/JPL)



Space Exploration and the Planetary Geology and Geophysics Program

NASA's current vision for space exploration can be summarized as:

- To improve life here;
- To extend life to there;
- To find life beyond.

Similarly, NASA's mission for reaching these lofty ideals include:

- To understand and protect our home planet,
- To explore the Universe and search for life,
- To inspire the next generation of explorers,

...as only NASA can.

The undergraduate internship program described here directly supports NASA's vision and goals through investigations into the geology of Earth and other planets.

Planetary geology is the study of the origin and evolution of surfaces and interiors of the solid bodies in the solar system, including planets, satellites, comets and asteroids. The term "geology" is used here in its broadest sense to include all elements of the geological sciences.

PGGURP: Purpose and Scope

The Planetary Geology and Geophysics Undergraduate Research Program (PGGURP) was developed to provide undergraduates the opportunity to participate in, and learn from, research in planetary geosciences. The goals of this program are: (1) to provide incentive for the development of future planetary geosciences; (2) to broaden the base of participation of students in planetary geosciences; (3) to introduce students in traditional geoscience disciplines to planetary studies; and (4) to educate students about the interrelationship between sciences objectives, data sets, and instrument requirements.

Research Possibilities

PGGURP provides undergraduates with an excellent opportunity to participate in and consider planetary science research. Participation affords a realistic view of research and a chance for undergraduates to appraise their interest in a particular area of planetary geoscience.

Selected students will work under the direction of a NASA-sponsored Planetary Geology and Geophysics Program Principal Investigator for 8 weeks during the summer months (May through August). Research activities range from participation in theoretical, photogeologic, experimental, laboratory, and/or field studies of processes that occur on other planets or satellites. Typical tasks in which undergraduate researchers may become involved include (but are not limited to): photogeologic and geologic mapping studies of the Moon, Mars, Venus, Mercury and the satellites of the outer planets; laboratory studies of the physical properties of rocks and ice under planetary conditions; impact crater experiments; wind tunnel simulations of aeolian processes on Venus and Mars; and geoscience instrument development.

Internship Locations

Work assignments may include any NASA center, industry, or university where a NASA-sponsored researcher is located. These include: the Jet Propulsion Laboratory; U.S. Geological Survey Astrogeology Branch; and NASA Ames Research Center.

Eligibility

Undergraduates majoring in geology or related sciences, and who have not been previously selected, are eligible for this program. This includes class of 2004 graduates. Preference will be given to U.S. Citizens.

In accordance with federal and state laws, no person in whatever relation with the State University of New York at Buffalo shall be subject to discrimination on the basis of age, religion or creed, color, disability, national origin, race, ethnicity, sex, marital or veteran status. Additionally, Governor's Executive Order 28 and University Board of Trustees Policy prohibit discrimination on the basis of sexual orientation.

Selection

Competition for these awards is keen, and they are limited to a maximum of 12 students. Each application is closely reviewed and discussed by a panel of space scientists. Selection criteria include: academic record, career objectives of the applicant; and letters of recommendation. Successful applicants will be notified immediately following the selection committee meeting in February, 2005, and should be prepared to accept or decline the offer within 2 days so that hosts can be notified, and, if necessary, alternates selected.

Awards

A stipend of $250 per week will be awarded for the duration of participation in the program (for a maximum of 8 weeks), as well as transportation costs from residence to work location and return, and a per diem allowance covering meals and housing.

Application

You may submit an application form online at (http://www.acsu.buffalo.edu/~tgregg/pggurp.html). Email Mrs. Christine Gibbons, project manager, at cmgibbons@adelphia.net or email Dr. Tracy Gregg (tgregg@geology.buffalo.edu) for additional applications or questions concerning the program.

Written requests and questions can be addressed to:

Mrs. Christine Gibbons, Project Manager, PGGURP, Dept. of Geology, 876 Natural Science Complex, University at Buffalo, Buffalo, NY 14260-3050.

All application materials *must* be received by **January 31, 2005**.