Summer 2010
Undergraduate Research Opportunities
Mesoscale & Climatological Studies

Hobart & William Smith Colleges
Summer Research Program
June 14 – August 6, 2010

Deadline for Applications: February 12, 2010
Multiple Student Positions Available

For questions, application, or more information contact:

Professor Neil F. Laird
Department of Geoscience
Hobart and William Smith Colleges
(laird@hws.edu; (315) 781-3603; http://people.hws.edu/laird)

Student Positions sponsored by The National Science Foundation
Program Description

Summer research positions are available for undergraduate students to research several aspects of lake-effect snowstorms, summer lake-breeze circulations, and Great Lakes thunderstorms using a variety of meteorological data sets. Accepted students will conduct research investigations in close collaboration with Dr. Neil Laird during an 8-week summer program at Hobart & William Smith Colleges from June 14 through August 6. Students will receive a summer salary of $3,880 ($485 per week), free housing (with kitchen facilities, full utilities, and internet) on the campus of Hobart & William Smith Colleges, and reimbursement of travel costs to and from Geneva, NY.

Research investigations during the summer research program may include the study of: (a) historical lake-effect snowstorms associated with the Great Lakes and several smaller mid-latitude lakes, (b) lake breezes throughout the Great Lakes region and their impact on near shore conditions, and (c) the interaction of severe thunderstorms with over-lake boundary layers in the Great Lakes region. Each project will incorporate a variety of data sets, including climatological surface data, WSR-88D radar data, satellite imagery, meteorological data, and the use of numerous analysis techniques and software. Students will develop or enhance skills related to working with meteorological software and large databases, statistical analysis techniques, and scientific writing and presentation.

This research is funded by the National Science Foundation and Hobart & William Smith Colleges. Students will have the opportunity to interact with several visiting researchers during the program, such as Dr. Eric Hoffman of Plymouth State University and Dr. David Kristovich of the University of Illinois. In most cases, students will have opportunities to present their collaborative research results at subsequent regional or national scientific meetings.

Eligibility

Undergraduate students (first-year through senior) working toward a degree in meteorology, atmospheric sciences, or other related degree program are encouraged to apply. Background coursework in meteorology is essential. Prior experience with meteorological data, statistical methods, and established computer skills are preferred. Applicants should have excellent oral and written communication skills and be willing to work both within a collaborative group setting and independently.

Application Procedure

Submit the completed application form (including statement of interest) and a copy of your college transcript to: Dr. Neil Laird, Department of Geoscience, Hobart & William Smith Colleges, 300 Pulteney Street, Geneva, NY 14456. The 2010 application form is available at http://people.hws.edu/laird along with information on past summer research students and their accomplishments. For additional information please contact Dr. Neil Laird (laird@hws.edu; (315) 781-3603).

Deadline

Completed application materials for these positions must be received by February 12, 2010. Applicants will be notified of decisions by February 26, 2010.
Name: _______________________________________
School Address:      Home Address: ________________________________________ ______________________________________
                                                                 ________________________________________ ______________________________________
                                                                 ________________________________________ ______________________________________
Telephone: (_____) ______________________
Email: _________________________________
Home Institution: ______________________________________________________________
Major: ______________________________________   Minor: __________________________
Expected graduation date: ______________________________ (example, May 2011)
Current undergraduate status (circle one):   First-Year / Sophomore / Junior / Senior

Provide a statement of interest that includes the following items.
   1. Describe your interests in atmospheric science.
   2. How would this research experience benefit your undergraduate education and career goals?
   3. Describe any background you have relevant to this program (science courses, research or work experiences, conference or meeting presentations, etc.)

Provide information for two faculty / research mentors that may be contacted to discuss their interaction with you. Please ask their permission before listing them as a reference.

1. Name: ___________________________________ Phone: (_____) ___________________
   Job Title: __________________________________
   Email: ____________________________________
   Address: ___________________________________
   __________________________________________

2. Name: ___________________________________ Phone: (_____) ___________________
   Job Title: __________________________________
   Email: ____________________________________
   Address: ___________________________________
   __________________________________________

Send this application form (with statement of interest) and a copy of your college transcript to:
Dr. Neil Laird, Department of Geoscience, Hobart & William Smith Colleges, 300 Pulteney Street, Geneva, NY 14456

For more information email laird@hws.edu or call (315) 781-3603
Completed applications must be received by Friday, February 12, 2010.