Summer 2016
Undergraduate Research Opportunities
Mesoscale & Climatological Studies

Hobart & William Smith Colleges
Summer Research Program
June 13– August 5, 2016

Deadline for Applications: January 30, 2016
Multiple Student Positions Available

For questions, application, or more information contact:

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

Student positions sponsored by NSF
Summer 2016 Undergraduate Research Opportunities  
June 13 – August 5, 2016

Mesoscale & Climatological Studies  
Hobart & William Smith Colleges, Geneva, NY
Funds provided by the National Science Foundation

Program Description

Summer research positions are available for undergraduate students to investigate several aspects of mesoscale weather systems using a variety of meteorological data sets. Accepted students will conduct research investigations in close collaboration with Dr. Neil Laird, Dr. Nicholas Metz, and Dr. Eric Hoffman (atmospheric science professors) during an 8-week summer program at Hobart & William Smith Colleges (HWS) from June 13 through August 5. Students will receive a summer salary of $4,400 ($550 per week), free housing on the HWS campus (with kitchen facilities, full utilities, and internet), and reimbursement of travel costs to and from Geneva, NY.

A variety of projects are being planned for student researchers to work independently and in small groups during the summer research program. Projects will use a combination of operational data sets (radar, satellite, surface), Ontario Winter Lake-effect Systems (OWLeS) field project data sets, historical reanalysis data sets, and computer model simulations. Students will develop or enhance skills related to working with meteorological software and large databases, statistical analysis techniques, and scientific writing and presentation. In most cases, students will have opportunities for funded travel to present their research results at upcoming regional or national scientific meetings, such as the AMS Annual Student Conference.

This research is funded by the National Science Foundation and HWS. Students will have the opportunity to interact closely with Dr. Neil Laird, Dr. Nicholas Metz, Dr. Eric Hoffman, and several visiting researchers during the program, as well as forecasters at National Weather Service forecast offices in Buffalo and Binghamton, NY. There will be opportunity to collect atmospheric measurements of local/regional weather conditions and participate in a group trip to the Mt. Washington Observatory. Additionally, several visits are planned to graduate programs in the northeastern United States.

Eligibility

Undergraduate students (first-year through graduating senior) working toward a degree in meteorology, atmospheric sciences, geoscience, physical geography or other related degree program are encouraged to apply. Background coursework in meteorology is essential. Prior experience with meteorological data, radar analysis, weather models, statistical methods, GIS, and established computer skills would be beneficial, but is not necessary. Applicants should have excellent oral and written communication skills and be willing to work both within a group setting and independently.

Application Procedure

Submit the completed application form (including a carefully composed 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 2016 application form is available at http://people.hws.edu/laird/ along with information on past summer research students. For additional information please contact Dr. Neil Laird (laird@hws.edu).

Deadline

Completed application materials for these positions must be received by January 30, 2016. Applicants will be notified of decisions by February 20, 2016.
Application Form: HWS Summer Research Program

Name: _______________________________________
School Address:      Home Address:
______________________________________ ______________________________________
______________________________________ ______________________________________
______________________________________ ______________________________________
Telephone: (_____) ______________________
Email: _________________________________
College/University currently attending: ______________________________________________
Major: ________________________________   Minor: ________________________________
Expected graduation date: ______________________________ (example, May 2018)
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 connect with your 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. No letters of recommendation from mentors are necessary for submission of application.

1. Name: ___________________________________ Phone: (_____) ___________________
   Affiliation: _________________________________________________________________
   Job Title: ________________________________________
   Email: __________________________________________

2. Name: ___________________________________ Phone: (_____) ___________________
   Affiliation: _________________________________________________________________
   Job Title: ________________________________________
   Email: __________________________________________

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 St.,
Geneva, NY 14456

For more information email laird@hws.edu or call (315) 781-3603
Completed applications must be received by January 30, 2016.