

**Summer 2015
Undergraduate Research Opportunities
Mesoscale & Climatological Studies**

Hobart & William Smith Colleges
Summer Research Program
June 8 – July 31, 2015

Deadline for Applications: January 30, 2015
Multiple Student Positions Available



For questions, application, or more information contact:

Professor Nicholas D. Metz
Department of Geoscience
Hobart and William Smith Colleges
(nmetz@hws.edu; (315) 781-3615)

Student positions sponsored by



**Summer 2015 Undergraduate Research Opportunities
June 8 – July 31, 2015**

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**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 lake-effect snowstorms using a variety of meteorological data sets. Accepted students will conduct research investigations in close collaboration with Dr. Neil Laird and Dr. Nicholas Metz (atmospheric science professors) during an 8-week summer program at Hobart & William Smith Colleges (HWS) from June 8 through July 31. Students will receive a summer salary of \$4,000 (\$500 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.

Projects during the summer research program will include an examination of the development and evolution of both intense single-lake lake-effect snow bands and events with multi-lake connections – snow bands extending from over one Great Lake to over another. Projects will use a combination of operational data sets (radar, satellite, surface), Ontario Winter Lake-effect Systems (OWLeS) field project data sets, and computer model simulations. Students will develop or enhance skills related to working with meteorological software and large databases (including the recently collected OWLeS project data sets), statistical analysis techniques, and scientific writing and presentation.

This research is funded by the National Science Foundation and HWS. Students will have the opportunity to interact closely with Dr. Neil Laird and Dr. Nicholas Metz and several visiting researchers during the program, as well as forecasters at National Weather Service forecast offices in Buffalo and Binghamton, NY. 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 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 statement of interest) and a copy of your college transcript to: Dr. Nicholas Metz, Department of Geoscience, Hobart & William Smith Colleges, 300 Pulteney Street, Geneva, NY 14456. **The 2015 application form is available at <http://people.hws.edu/nmetz/>** along with information on past summer research students and their accomplishments. For additional information please contact Dr. Nicholas Metz (nmetz@hws.edu).

Deadline

Completed application materials for these positions must be received by January 30, 2015. Applicants will be notified of decisions by February 20, 2015.

Name: _____

School Address: _____

Home Address: _____

Telephone: (_____) _____

Email: _____

Home Institution: _____

Major: _____ Minor: _____

Expected graduation date: _____ (example, May 2016)

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: (_____) _____

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. Nicholas Metz, Department of Geoscience, Hobart & William Smith Colleges, 300 Pulteney
St., Geneva, NY 14456

For more information email nmetz@hws.edu or call (315) 781-3615

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