

National Park Service
U.S. Department of the Interior

Murie Science and Learning Center
Denali National Park and Preserve



2012-2013 Researcher-in-Residence Program *Application Instructions and Guidelines*

Applications due March 10, 2012



Denali researcher Rob Burrows monitors glacier motion and mass balance on the Traleika Glacier

**A program of the Murie Science and Learning Center and
Denali National Park and Preserve**

*The goal of the Researcher-in-Residence program
is to support accomplished scientists in conducting and sharing research
about the natural and cultural resources at Denali National Park and Preserve.*

Background

Research is an important tool used by the National Park Service (NPS) to meet its responsibilities for the stewardship of the park's natural, cultural, and subsistence resources, and for providing quality visitor experiences.

To encourage scientific and scholarly research that fills gaps in the ecological or cultural understanding of park resources, and to provide park staff with the opportunity to interact with and learn from accomplished non-park scientists, the Murie Science and Learning Center (MSLC) has obtained funding to host two Researchers-in-Residence in Denali National Park and Preserve. Research can also extend to the [other seven northern Alaska parks](#) served by the MSLC. Unlike Denali's annual [Research Fellowship Programs](#), which are mainly intended for graduate students, this is a one-time funding opportunity available only for 2012 and 2013.

Each Researcher-in-Residence will spend a month or more conducting self-directed research and sharing his/her expertise with park staff and visitors. Up to \$10,000 is available per individual for research projects, and an additional \$8,000 may be available for the subsequent creation of educational outreach products. Research is to be conducted in 2012 or 2013, or a timeframe that spans parts of both years.

Eligibility

The Researcher-in-Residence program is designed to provide funding for tenure-track faculty, but may also be appropriate for state and federal agency scientists or private-sector researchers. Funds may be used for a variety of purposes including salary support; room, board, and travel directly associated with fieldwork; supplies; and analytical costs. Office space at the Murie Science and Learning Center (Denali) will be provided. Housing may be available at no cost, depending on the timeframe of the request. Applicants from home institutions with a current NPS [Cooperative Ecosystem Studies Unit](#) (CESU) affiliation may be prioritized for logistical reasons associated with money transfer.

[Research projects relevant to park managers](#) and to Denali's Resource Stewardship Strategy (RSS) will be given preference. Discussions with park staff about your project are encouraged to maximize its value to managers. Sierra McLane (Sierra_McLane@nps.gov 907.683.6436) or Lucy Tyrrell (Lucy_Tyrrell@nps.gov 907.683.6352) can direct you to appropriate park resource staff. Applicants should demonstrate the ability to communicate effectively to both professional and general audiences.

Project Requirements

As Researcher-in-Residence, you will be work with the project coordinator to craft the parameters of your research and educational outreach initiatives. Both researchers will participate in educational outreach activities in addition to their field research, including presenting a talk to a general audience at the Murie Science and Learning Center, presenting a brown-bag lunch seminar to park staff, interacting with park researchers within similar academic fields, and creating a poster or fact sheet for the park. Researchers interested in applying for the additional \$8,000 earmarked for the creation of outreach products will confer with Sierra to select an appropriate project.

Researchers need to apply separately for a [Research and Collecting Permit](#). **The application for the research and collecting permit must be submitted at least two months prior to the anticipated start of the project in the park.** Prior to issuing a permit, park staff review projects for compliance with wilderness and park policies and administrative concerns. Please consult with Lucy_Tyrrell@nps.gov (907)683-6352 with questions about Research and Collecting Permits.

How to Apply

Please submit a cover letter indicating your project idea and timing availability, as well as your curriculum vitae, to Sierra McLane, Murie Science and Learning Center Coordinator: Sierra_McLane@nps.gov. Please call Sierra at 907.683.6436 for more information. Applications are due March 10, 2012.

Overview of the Denali Ecosystem

Ecosystems in Denali National Park and Preserve range from lowland boreal forests and riverine systems to sub-alpine scrub vegetation, alpine tundra, and high alpine snowfields and glaciers. Denali has more than 750 species of vascular plants, 39 species of mammals, including grizzly and black bear, caribou, moose, wolf, Dall's sheep, wolverine, lynx, and red fox, 165 species of birds, 15 species of fish, and one species of amphibian.

Denali offers vast, relatively unmodified landscapes in which to study such topics as glaciers, rivers, air quality, fire effects, visitor experiences, subsistence harvests, cultural history, traditional and ecological knowledge, and the effects of climate change on physical and biological resources and on landscapes.

Denali has several hundred layers or themes in its extensive Geographic Information System (GIS) database (e.g., hydrology, elevation, soils, and landcover) that can be used to build composite information about potential study sites or to model habitat suitability. For assistance with GIS needs, please contact Jon_Paynter@nps.gov.

A list of research desired or needed by Denali managers, including topics with existing data to utilize, is posted at <http://www.nps.gov/dena/naturescience/research.htm>. Also posted on the website is information about Denali's Resource Stewardship Strategy (RSS), including a list of the 19 strategies and 99 projects that provide the focus for the research, resource, and science education programs at Denali for the next two decades (2008-2027). Discussions with park staff about your project are encouraged to maximize its value to managers. Contact Lucy_Tyrrell@nps.gov for the appropriate staff person to contact.

Special Research Considerations

Denali is primarily a pristine wilderness park. Its six million acres provide outstanding research opportunities in landscape settings. Researchers have responsibilities to adhere to laws protecting wilderness, follow Leave-No-Trace guidelines, and consider wilderness values in making minimal impacts in all aspects of research.

Travel in Denali must be planned in advance. Backcountry travel may be arduous and time-consuming. Projects that do not require helicopter access or numerous special private-vehicle travel permits on the Denali Park Road are favored. Shuttle buses travel along the 90-mile Park Road from mid-May to mid-September, providing researcher access to sites along the road corridor. **Requests for park housing, campgrounds, or backcountry camping permits, as well as any other special requests, should be incorporated into the proposal.** More information for prospective researchers is found at <http://science.nature.nps.gov/research>. Researchers-in-Residence will be able to use Murie Science and Learning Center facilities (e.g., wireless service, computer access, work space, and storage). Please include these requests in the proposal/study plan for the project.