## **ORNL-UVA Travel Grant Program**

UVA's VPR Office is pleased to announce travel grants for students, faculty, and research staff visiting Oak Ridge National Lab (ORNL) to use ORNL's world class user facilities and/or to collaborate with ORNL scientists. The travel grants are intended to facilitate short- and medium-term visits to the Lab, with the goal of establishing long-term collaborations. A short description of these facilities is included below, along with descriptions of ORNL's Graduate Opportunities (GO!) Program and several funding mechanisms that support student research at ORNL.

Travel grants will reimburse up to \$5000 for travel, lodging at the ORNL Guest House (<a href="http://web.ornl.gov/adm/fo/ls/hospitality/guesthouse/">http://web.ornl.gov/adm/fo/ls/hospitality/guesthouse/</a>), and per diem expenses. Graduate students and research staff must apply through their faculty advisor.

# To apply, faculty members should send an email to <a href="https://orange.com/ORNL-UVA@virginia.edu">ORNL-UVA@virginia.edu</a> with:

- Name and title of the traveler
- Department
- Dates of travel
- Estimated travel costs
- Short (no more than 1 paragraph) description of the purpose of travel
- Copy of an email from one of the ORNL user facilities or an ORNL staff scientist regarding your visit

Please be aware of UVA's travel reimbursement policies when planning your travel and estimating your travel expenses:

http://www.procurement.virginia.edu/pagetravelbasics

Grants will be considered and awarded on a rolling basis as long as funds are available. If your travel grant is approved, you will receive instructions for reimbursement of your travel expenses.

#### **ORNL USER FACILITIES**

## **Neutron Sciences**

Proposals for beam time at ORNL's High Flux Isotope Reactor (HFIR) and Spallation Neutron Source (SNS) are accepted twice a year, typically in the spring and fall. Specific information about the call for proposals and about each of the instruments available is included on the ORNL Neutron Sciences web site: http://neutrons.ornl.gov/.

Before submitting a proposal for a specific instrument, please contact the appropriate instrument scientist to make sure your research is feasible for that instrument. A list of instruments can be found here: <a href="http://neutrons.ornl.gov/instruments">http://neutrons.ornl.gov/instruments</a>. No sample proposals are available on the website, but you can ask instrument scientists for sample proposals.

#### **Nanophase Materials Sciences**

Proposals for access to research capabilities at ORNL's Center for Nanophase Materials Sciences (CNMS) for user-initiated nanoscience research are accepted twice a year, typically in the spring and fall. Specific information about the call for proposals and CNMS capabilities can be found here: http://www.cnms.ornl.gov.

Contact information for CNMS scientific staff, organized by research capability area, can be found here: <a href="http://www.cnms.ornl.gov/contact\_us/contact.shtml">http://www.cnms.ornl.gov/contact\_us/contact.shtml</a>. You should contact the appropriate staff member regarding your proposal. You can see a sample proposal here: <a href="http://www.cnms.ornl.gov/user/Model\_User\_Proposal.pdf">http://www.cnms.ornl.gov/user/Model\_User\_Proposal.pdf</a>.

## Oak Ridge Leadership Computing Facility

The resources of the Oak Ridge Leadership Computing Facility (OLCF) are allocated via projects. The type of project request (listed below) will determine the application and review procedure. Approved projects will be granted a project allocation of core-hours for a period of time on one or more OLCF systems.

**INCITE** – The Novel Computational Impact on Theory and Experiment (INCITE) program invites proposals for large-scale, computationally intensive research projects to run at the OLCF. The INCITE program awards sizeable allocations on some of the world's most powerful supercomputers to address grand challenges in science and engineering. There is an annual call for INCITE proposals, typically in April with a June deadline. For more information please visit <a href="http://www.doeleadershipcomputing.org">http://www.doeleadershipcomputing.org</a> or to submit a proposal visit <a href="https://proposals.doeleadershipcomputing.org/allocations/login.do">https://proposals.doeleadershipcomputing.org/allocations/login.do</a>

**ALCC** – The ASCR Leadership Computing Challenge (ALCC) is open to scientists from the research community in national laboratories, academia and industry. The ALCC program allocates computational resources at the OLCF for special situations of interest to the Department with an emphasis on high-risk, high-payoff simulations in areas directly related to the Department's energy mission in areas such as advancing the clean energy agenda and understanding the Earth's climate, for national emergencies, or for broadening the community of researchers capable of using leadership computing resources. Applications are typically due in early February. For more information or to submit a proposal, please visit <a href="http://science.energy.gov/ascr/facilities/accessing-ascr-facilities/alcc">http://science.energy.gov/ascr/facilities/accessing-ascr-facilities/alcc</a>.

**DD** – Director's Discretion (DD) projects are dedicated to leadership computing preparation, INCITE and ALCC scaling, and application performance to maximize scientific application efficiency and productivity on leadership computing platforms. The OLCF Resource Utilization Council, as well as independent referees, review and approve all DD requests. Applications are accepted year round via <a href="http://www.olcf.ornl.gov/support/getting-started/olcf-director-discretion-project-application/">http://www.olcf.ornl.gov/support/getting-started/olcf-director-discretion-project-application/</a>.

# **ORNL GO! PROGRAM**

ORNL has recently established the GO! Program, which is designed to bring PhD students from one of the "ORNL Core Universities" (which includes UVA) to the Lab for a significant part of their graduate program. The intent is for the GO! Program student to act as a "gluon" in a collaboration between the ORNL PI and the faculty advisor. The student will be co-mentored by the faculty advisor and the ORNL scientist, and will spend a significant portion of her/his time at ORNL after qualifying for the PhD. The ORNL collaborator would provide funding to support the student during her/his time at ORNL. Some ORNL funding mechanisms may require completion of course work and qualifying exam. Please contact ORNL-UVA@virginia.edu with any questions.

## FUNDING MECHANISMS THAT SUPPORT STUDENT RESEARCH AT ORNL

Some example funding mechanisms that can support UVA graduate students conducting research in collaboration with ORNL are listed below. All of these mechanisms require substantial interaction and collaboration with an ORNL scientist well in advance of applying for funding. Please contact <a href="mailto:ORNL-UVA@virginia.edu">ORNL-UVA@virginia.edu</a> to learn more about these funding mechanisms.

- 1. Laboratory Directed Research & Development (LDRD) Funds
  ORNL PIs compete for internal R&D funds. A portion of an LDRD award can be used to
  support grad students from UVA and other universities.
  http://www.ornl.gov/connect-with-ornl/for-researchers/laboratory-directed-research-development
- 2. Department of Energy Programmatic Funds ORNL PIs can use their programmatic funds for the DoE to support graduate students, but the research must be directly aligned with the programmatic mission. Thus, this funding mechanism is not as flexible as the LDRD mechanism.
- 3. ORNL Graduate Student Fellowships Students from UVA and other universities can compete for partial or full year funding to conduct research at ORNL. http://www.orau.org/ornl/graduate-students/default.htm
- 4. Department of Energy Office of Science Graduate Student Research Program Students from UVA and other universities can compete for partial or full year funding to conduct research at ORNL and other DoE National Labs. http://science.energy.gov/wdts/scgsr/