INL Graduate Fellowship

NUC Quarterly Meeting

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University Partnerships

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University Partnerships: Developing and enabling innovative, collaboration-based programs
INL Graduate Fellowship Program

Designed to identify and recruit exceptional talent in research areas aligned with INL’s strategic agenda; thereby advancing INL’s core capabilities and building leadership strength in mission delivery.

INL and selected universities collaborate to provide mentoring and financial support to outstanding students who plan to enroll in specific graduate degree programs.
Program At A Glance

INL Graduate Fellow
- Provided mentorship by both INL and university through graduate studies
- Provided “stipend” funding throughout Fellowship
- Conduct thesis research at INL

University
- Leads recruiting efforts
- Responsible for tuition and fees (and if possible a stipend) during initial 1-3 years of graduate studies

INL
- Offers a paid 1-3 month internship during first years of graduate school
- Provides ~$60k/year during last two years of PhD, while at INL performing research
- Covers last two years of tuition & fees

Key is identifying research that is of mutually interest to INL and the university
Core Capability Areas of Interest to INL Energy & Security Mission

- Advanced Computer Science, Visualization and Data
- Biological and Bioprocess Engineering
- Applied Materials Science and Engineering
- Chemical and Molecular Science
- Chemical Engineering
- Condensed Matter Physics and Materials Science
- Cyber and Information Sciences
- Decision Science and Analysis
- Environmental Subsurface Sciences
- Large-scale User Facilities/Advanced Instrumentation
- Mechanical Design and Engineering
- Nuclear and Radio Chemistry
- Nuclear Engineering
- Power Systems and Electrical Engineering
- Systems Engineering and Electrical Engineering
First 1-3 Years: INL Graduate Fellows PhD

- Student will be identified through a selective application process (led by the university) as an INL Graduate Fellow
- Student will receive a letter of commitment signed by INL
- Student will receive financial support from the university*
- An INL technical advisor will be identified to partner with the student’s university thesis advisor to guide the research of the INL Graduate Fellow
- Student will begin collaboration with an INL technical advisor
- Student will spend the majority of his or her time at the university taking classes
- Students are strongly encouraged to participate in an INL paid internship

*The amount of university support for tuition and living expenses may vary, but will be documented via a MOU or similar document with INL
Last Two Years: INL Graduate Fellows PhD

- Student is formally hired as a “INL Graduate Fellow”
- Student will spend the majority of his or her time at INL conducting research as outlined in the student’s research plan
- Student will receive a weekly salary from INL, totaling ~$60k/year
- INL will cover tuition and fees*
- The student’s research plan should result in publications that can be attributed to both the university and INL

*FAR clause 31.205-44 imposes a two year maximum for tuition coverage.
Collaboration & Outcomes

Collaboration

INL Graduate Fellow

INL Technical Advisor

University Thesis Advisor

Outcomes – skilled personnel

PhD

Research

Publications

New Discovery
Advantages of Program

• Prestigious funded program
• Increased recruiting opportunities for high caliber students
• Strengthen research collaboration between partner universities in areas of mutual interest
• Potential to develop new Joint Appointments for both university and INL researchers
• Early identification of exceptional students who are aligned with INL’s mission
• Opportunity for collaboration with university technical staff and INL technical staff
• Opportunity for joint publications and intellectual property
• Continuous pipeline of PhD students interning and conducting research at INL
INL Commitment

• INL Technical Advisor assigned to student for entire PhD program
• Paid internship (~2-3 months) provided during year 1 or 2 of studies (Students make ~$27/hour)
• Once an employee of INL, the INL Graduate Fellow will be paid an annual salary of ~$60,000
• Student will have tuition and fees paid the last 2 years
• Funding and support to conduct thesis research at INL
• Access to state of the art labs, facilities and researchers
Proposed University Role

• Lead in identification and recruitment of ideal candidates for INL Graduate Fellowship program
• Identify areas of current (or new) collaboration
• Collaborate with INL technical advisor on graduate research project
• Advisor assists in evaluation and progress of student
• Provide stipend and/or tuition for student during years 1-3 of graduate program
Participating in the INL Graduate Fellowship Program...Things to Consider...

- What university programs align with INL’s core capabilities?
- What university and INL research collaborations are already in place that could be enhanced by the INL Graduate Fellowship program?
- Are there other professors who have an interest in partnering with INL?
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