### **UC LABORATORY FEES RESEARCH PROGRAM - 2018 FUNDING OPPORTUNITIES**

**DRAFT v. MAR 3, 2017** 

### **Overview of 2018 Funding Opportunities**

The UC Laboratory Fees Research Program sponsors innovative research, fosters new collaborations between UC faculty and national laboratory scientists, and provides unique training opportunities for UC graduate students and postdoctoral fellows. Funded by a portion of the fees the University receives for the management of the Los Alamos (LANL) and Lawrence Livermore (LLNL) National Laboratories, research sponsored by this program targets areas of strategic importance to UC and the UC-managed national labs, and provides an important foundation for enhanced competitiveness for extramural support. This competition cycle, the UC Laboratory Fees Research Program is offering two funding opportunities, outlined below. Interested applicants should review the complete RFP for all requirements and details. Further program information and updates are available at: <a href="http://ucop.edu/research-initiatives/programs/lab-fees/">http://ucop.edu/research-initiatives/programs/lab-fees/</a>.

### I. Targeted UC Multicampus-National Lab Collaborative Research and Training (UC-NL CRT) Awards in one of three key strategic areas (total anticipated investment for <u>all funded</u> awards in this opportunity: up to \$15 million over 3 years)

Proposals in this category must focus on collaborative research and training activities in one of the following three targeted areas identified for high-impact research realized through UC-national lab synergy:

- Climate science
- Cybersecurity
- National security through social sciences

Proposal requirements, detailed in the RFP, include:

- Project leadership constituted by a Lead (Applicant) Principal Investigator from a UC campus, and a Site Lead/Co-Principal Investigator (Co-PI) from each eligible participating collaborating site.
- Research participation by a minimum of four (4) UC campuses and either LANL or LLNL. Additional collaborating sites, as defined in the RFP, are permitted.
- Interdisciplinary, multi-disciplinary and cross-disciplinary research collaboration in one of the three identified targeted research areas among UC and lab investigators with meaningful research training opportunities for UC students (graduate and undergraduate) and post-doctoral fellows from the participating UC campuses.
- Contributions by the collaborating national laboratories that directly contribute to the research execution and outcomes of the collaboration. These may include equipment, space, access to relevant unclassified data, or personnel time that may be covered by other sources of support or directly relevant activities at the lab.
- Total funding request per application may not exceed \$4 million over 3 years, *including indirect costs*, and excluding matching cost contributions from the labs. Additional budget restrictions are detailed in the RFP.

### II. UC-NL In-Residence Graduate Fellowships (2-year awards, with a merit-based Year 3 extension option; Annual fellowship amount is \$60,000; Fellowship includes supplemental travel funding of \$5,200 per award)

UC graduate students in any area of research relevant to the national labs who meet the following criteria (detailed in the RFP) may apply for a fellowship to conduct dissertation research and receive research mentorship *on-site* at LANL or LLNL:

- Enrolled in one of the 10 UC campuses and advanced to candidacy at commencement of award
- Have an identified LLNL or LANL scientist to serve as a mentor and research supervisor at the lab
- Have the proposed research and training approved by their UC faculty advisor
- Must commit to devoting 80% time to the research in the proposed plan and spend a minimum of 6 months/fellowship year in residence at the lab

Proposal requirements, including eligibility, deadlines, instructions, and other information for the **UC-NL In-Residence Graduate Fellowships** are provided in the Request for Proposal on the following pages. Appendices, including program policies, LOI instructions, and FAQs, are attached to this document.



## **UC-National Laboratory In-Residence Graduate Fellowships**

### **Fellowship Overview and Priorities**

The University of California, Los Alamos National Laboratory (LANL), and Lawrence Livermore National Laboratory (LLNL) have a close, long-standing and strategically important collaborative relationship that offers graduate students unique research, training, and career development opportunities. The UC Laboratory Fees Research Program is leveraging that relationship by offering a competitive fellowship award that provides up to three years of support for Ph.D. candidates who wish to conduct thesis research on-site at LANL or LLNL. UC graduate students who have advanced to candidacy are eligible for the two-year in-residence fellowship; successful applicants who wish to extend their fellowship for a third year may request an extension based on progress and merit review. The proposal must include a research plan approved by the UC faculty advisor, and identify a research supervisor at one of the two eligible UC-affiliated national laboratories who will provide mentorship, guidance and oversight during the fellowship period in collaboration with the student's UC academic advisor. Fellows must be advanced to candidacy at the beginning of the award, must devote at least 80% time to the proposed research, and must be in-residence at least 6 months at the national lab during each year the fellowship term. The award will be administered by the student's home UC campus and the student will be the grantee of record.

The UC-National Lab Graduate Fellowship provides the following support:

- An annual award of \$60,000 for two years, with the possibility of an extension for a third year
- An additional \$5,200 (total for the fellowship period) to support project-related travel
- An indirect cost reimbursement of up to 8% (total direct cost basis) to the student's home UC campus

Fellowship funds may be used for stipends, UC tuition and fees, and other dissertation-related expenses consistent with the proposed research. See the FAQs for general guidance on UC tuition and fees for students advanced to candidacy.

The national laboratory (LANL or LLNL) must provide:

- Laboratory scientist who will serve as mentor and research supervisor
- Office space, a computer, access to appropriate research facilities, data sets, or other resources required to complete the proposed research
- A structured mentoring and research oversight plan
- Structured opportunities to learn about the laboratory's research mission and facilities, participate in seminars, lectures, and other laboratory research training activities

#### **Key Dates**

Final RFP release: Thursday, March 23, 2017

Applicant teleconference: Friday, April 28 at noon Pacific Time (register here)
Letters of intent due: Thursday, June 1, 2017 at 12:00 noon Pacific Time

Notification of LOI outcome decision: Friday, June 16, 2017

Full proposals due: Thursday, September 7, 2017 at 12:00 noon Pacific Time

Notification of review outcome: Wednesday, November 29, 2017 (expected)

Graduate Fellowship start date: April 1, 2018

### **Overview of Application and Review Process**

We strongly encourage all applicants to begin the Letter of Intent and application preparation and online submission process early to accommodate any potential delays due to technical issues.

<u>Applicant Teleconference</u>: An informational applicant teleconference will be held on [Date]. Please register on our <u>website</u> for details and call-in information. Participation in the teleconference is strongly recommended.

<u>Letter of Intent (LOI)</u>: Applicants must complete a formal LOI using the template on the proposalCENTRAL website. LOIs will be reviewed for compliance with program requirements, eligibility, and appropriateness of the research project for the

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national labs. No feedback or comments will be provided on the LOI. The LOI submission deadline will be strictly enforced, and no application may move forward without an approved LOI.

<u>Invitation to Submit Full Proposal</u>: LOI approval will grant access to the full application materials on proposalCENTRAL. All proposals must be submitted in accordance with the instructions, templates and guidelines provided, and must conform to the requirements of the final version of the RFP. *It is the applicant's responsibility to check the program website for updates, clarifications, or changes prior to submitting the full proposal.* 

<u>Full Proposal Submission</u>: Full proposals should be submitted through the student's UC campus's Contracts and Grants or Sponsored Projects Office. It is the applicant's responsibility to follow campus rules, procedures and timelines for submitting a proposal. The proposal submission deadline will be strictly enforced.

<u>Proposal Review and Selection</u>: UC Research Initiatives will manage a competitive review and ranking of proposals based on the criteria outlined in this RFP. The multidisciplinary review panel will be composed of researchers selected for their relevant expertise. Applicants should prepare their proposals in language accessible to a general scientific audience.

Final funding decisions and selection are at the discretion of the office of Research and Graduate Studies (RGS) in the UC Office of the President. Decisions may not be appealed, but declined proposals may be submitted to future competitions without prejudice. Awards are contingent of availability of funding.

### **Eligibility and Exclusion**

Applicants must be full-time graduate students enrolled in a doctoral program (Ph.D. degree or equivalent) at one of the 10 UC campuses [Berkeley, Davis, Irvine, Los Angeles, Merced, Riverside, San Diego, San Francisco, Santa Barbara, or Santa Cruz]. Students must be in good academic standing and advanced to candidacy by the fellowship start date, and remain in good standing throughout the fellowship. Applicants must commit a minimum of 80% time on the proposed research and must be in-residence at least 6 months each Fellowship year at either LANL or LLNL. UC Laboratory Fees Research Program funding is limited to research that is unclassified, has no restrictions on publication, and is not restricted by classification or deemed export rules.

### **Award Requirements**

- 1. Research Plan: The applicant must develop a detailed description of the research aims and activities to be conducted during the fellowship term. This plan must describe the expertise, facilities, data, or other resources from the lab that are instrumental in completing the research. The research conducted during the fellowship must fulfill the requirements for a doctoral dissertation as approved by the UC faculty advisor, and the plan must demonstrate the feasibility of completing the degree within the specified timeframe.
- 2. <u>National Laboratory Research and Training Opportunities</u>: The applicant must identify a national laboratory scientist at LLNL or LANL who will serve as the on-site supervisor and mentor for the duration of the fellowship, and who will devote adequate time and effort to ensure the Fellow receives the support necessary to progress to degree. *The national laboratory mentor must be in-residence at the lab during the fellowship period, and may not serve concurrently as the fellow's UC faculty advisor*. The national laboratory must provide space, access to data, facilities, and other resources necessary to complete the proposed research, as well as a structured mentoring and supervision plan to ensure the success of the fellowship project. This plan should include training, education, and professional development opportunities, laboratory orientation, access to seminars, workshops, and other skill development programs, and, where possible, opportunities to interact with other staff members, graduate students, or trainees at the lab. Additional laboratory scientists may provide informal or structured research guidance and mentorship.
- 3. <u>Joint Research Oversight and UC Faculty Advisor Approval</u>: The fellow's research will be jointly supervised during the award term by her or his UC academic advisor and the national laboratory mentor. The UC advisor must document approval of the proposed research plan, and commit to provide collaborative supervision with the national lab mentor of the applicant. Proposals must describe the structure of this collaborative mentorship and any additional benefits from collaboration between the UC and national lab.

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4. <u>Evidence of Advancement to Candidacy and Good Academic Standing</u>: Applicants must provide evidence of good academic standing and documentation from the applicant's UC faculty advisor indicating that the applicant is advanced to candidacy or is on track with every expectation of being advanced to candidacy by April 1, 2018.

### How to Apply: In-Residence Graduate Fellowships

As noted above, the application process is comprised of two mandatory stages: short Letters of Intent and Full Proposals.

### **The required Letter of Intent** includes the following information:

- 1. Applicant name, department of enrollment, and UC campus
- 2. Date of advancement to candidacy (expected date if not yet advanced) and academic status
- 3. Name, title, department, and UC campus affiliation of the graduate student's academic advisor
- 4. Identification of the national laboratory proposed for the in-residence fellowship
- 5. Name, title, unit or laboratory, and national lab affiliation of the proposed national lab mentor
- 6. An abstract (2400 characters / ~350 words) providing a brief description of the proposed scope of research, and identification of the specialized facilities, data, instrumentation, or other unique resources that will be used at the national lab. Avoid jargon and write in a manner accessible to a general scientific audience.
- 7. Disclosure of all other current or anticipated research or fellowship funding from campus or extramural sources

**Full Proposals**: The proposal narrative is limited to 7 single-spaced pages (items #2 and #3 below). The total page limit will be strictly enforced, and general guidelines regarding the length of each section are provided. The proposal must use the provided template, and will include the following sections:

- 1. <u>Abstract</u>: The abstract should be appropriate for a general scientific audience. Avoid discipline-specific jargon or technical terms. The abstract will be publicly available on our website.
- 2. <u>Proposed Research Plan</u> (5 pages): Identify the specific aims, research activities, and scholarly contributions of the proposed research, including the innovative components that will advance scholarship in the proposed field. The plan should be written for a general scientific audience and must include a description of the lab facilities, data, or resources that the applicant will use, and explain the importance of conducting the research at a national lab. A two- to three-year timeline for completing the research during the fellowship period is required and must identify specific milestones to be achieved at six-month intervals that will be used to assess progress. If the applicant would like to be considered for a third-year extension, the proposal should include the proposed scope of work, timeline, and accomplishments for the first two years, and the remaining project activities and goals that would be completed in the third year if awarded. One additional page for literature cited (not included in the 5-page limit) may be included.
- 3. <u>Mentorship and Training Plan</u> (2 pages): The proposal must include a detailed mentorship and training plan developed in consultation with the laboratory mentor and the applicant's UC advisor, describing 1) the specific training and mentorship activities, including any additional training and professional development opportunities the lab will provide to supplement the dissertation research; 2) the resources committed by the lab; and 3) the structure of the oversight plan during the fellowship period, including joint supervision with the UC advisor to ensure progress to degree.
- 4. <u>Additional Required Attachments</u>: 1) Applicant's academic transcript; 2) applicant's curriculum vitae (3-page maximum); 3) lab mentor's curriculum vitae (3-page maximum); 3) identification of any human subject (IRB), animal use, or toxic substance issues and the approach to compliance (1-page template); 4) letter from the applicant's academic advisor nominating the applicant for the fellowship, providing concurrence and approval of the proposed research, and indicating when the student advanced or will advance to candidacy; 5) letter from the proposed national lab supervisor, endorsing the applicant, agreeing to oversee the proposed research, and committing to providing laboratory space, supervision, access to necessary resources, as well as mentorship and training as described in the proposal; and 6) applicant disclosure of all fellowships or other sources of funding received during the applicant's graduate career; and concurrent funding during the proposed fellowship period.



### **Scoring Criteria**

- 1. <u>Research Excellence</u>: The results of the proposed research should make a significant advance in scholarship and provide progress toward degree. The research plan should be appropriate for the level of the applicant, clearly relate to her or his thesis research plan, and be feasible in the proposed timeframe. Relevance of the research to the national laboratory resources and mission must be clearly demonstrated, and endorsed by the national laboratory mentor. The timeline should indicate clear milestones for annual assessment in each proposed fellowship year.
- 2. <u>Qualifications of the Applicant and Quality of Academic Preparation</u>: The applicant's academic record should demonstrate her or his potential to conduct successful research and make significant progress to degree with minimal start-up time, and include evidence of strong, appropriate preparation for the research through both coursework and prior research or training. Important criteria include the degree to which the applicant demonstrates the likelihood of success and academic productivity, and likelihood that the applicant will be advanced to candidacy by or before April 1, 2018.
- 3. <u>Strength of Training, Supervision and Mentorship</u>: The quality and engagement of the laboratory mentorship and UC faculty advisor's support and endorsement of the proposed research and training plan, and level of supervision. The strength of the training and mentorship plan should ensure the student receives adequate time and supervision to progress to degree and has access to all necessary resources. This includes the extent of structured opportunities to engage with lab scientists, other trainees, and with experts and programs in place at the lab for Fellows. A strong plan will also demonstrate collaborative and integrated oversight by both the UC faculty advisor and the laboratory mentor.
- 4. <u>Additional Considerations</u>: 1) Considerations related to human subjects, animal use or toxic substances, and the proposed compliance plan; and 2) concurrent research or fellowship support for the student.

### **Research Program Oversight**

The UC Laboratory Fees Research Program is administered under the auspices of UC Research Initiatives (UCRI) in the Research Grants Program Office (RGPO) at the UC Office of the President. Funded proposals are required to report annual progress and fiscal expenditures. Fellows will be assigned to a UCRI Program Officer who will serve as the program contact.

Awards are contingent on the availability of funding, and compliance with research and reporting requirements. In order to determine whether a third year of fellowship funding is merited, a written assessment of progress and review of the accomplishments and milestones achieved will be required in the third quarter of year 2 (month 21), along with letters from the UC faculty advisor and lab mentor. The final determination will be made by UCRI based on a review of the request.

### **Program Contact Information**

For questions on program scope and priorities, please contact Program Officer Chris Spitzer: UCRI@ucop.edu

For administrative questions regarding the application process, please contact: RGPOGrants@ucop.edu

Technical Questions related to use of proposalCENTRAL: Please email pcsupport@altum.com or call the proposalCENTRAL technical support line 800-875-2562 (Monday – Friday 8:00 AM – 5:00 PM Eastern Time. Please note that from California you must call between 5:00 AM and 2:00 PM).

#### **Laboratory Contact Information**

UC graduate students with questions about the research and training resources available at the laboratories, or who need assistance identifying a mentor in a particular scientific area, should contact the designated Laboratory personnel:

### **Lawrence Livermore National Laboratory**

Annie Kersting, PhD - Deputy University Relations and Science Education, kersting1@llnl.gov, 925-423-3338.

### Los Alamos National Laboratory

Alan Hurd, PhD - Deputy Director, National Security Education Center, <u>aihurd@lanl.gov</u>, 505-667-9531. In-Residence Graduate Fellowships contact: Scott Robbins, <u>srobbins@lanl.gov</u>



### **Attachments**

Appendix 1: Other RGPO Policies and Pre-Award Requirements Appendix 2: Instructions for Submitting a Letter of Intent

Appendix 3: Frequently Asked Questions

Updated Program Announcements, FAQs, RFP clarifications (if any), and information on applicant teleconferences will be posted on the UCRI website. To ensure LOI and proposal submissions meet all program requirements, applicants are strongly encouraged to check the website for any program updates prior to submission: <a href="http://ucop.edu/research-initiatives/programs/lab-fees/application-information.html">http://ucop.edu/research-initiatives/programs/lab-fees/application-information.html</a>

