Overview of 2017 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: http://ucop.edu/research-initiatives/programs/lab-fees/.

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 all funded awards in this opportunity: up to $12.5 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:

- Biological applications of advanced computing
- High energy density science
- Mesoscale materials science

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 graduate students and post-doctoral fellows from the participating UC campuses.
- In-kind and cash (out-of-pocket) cost sharing 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 $5 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)

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 9 months/fellowship year in residence at the lab

Proposal requirements, including eligibility, deadlines, instructions, and other information for the Targeted UC Multicampus-National Lab Collaborative Research and Training Awards are provided in the Request for Proposal on the following pages. Appendices, including program policies, LOI instructions, and FAQs, are attached to this document.
Award Overview and Priorities
This targeted one-time opportunity is intended to spur novel collaborations in topics of strategic scientific and national security importance that will position UC and its national laboratory partners as leaders in three critical emerging areas: 1) biological applications of advanced computing; 2) high energy density science; and 3) mesoscale materials science.

Proposed collaborations are expected to engage UC faculty and national laboratory scientists from multiple disciplines and areas with expertise relevant to the specific topic, propose cutting edge and collaborative approaches that generate new knowledge and take advantage of the unique capacities and facilities available through the collaborating institutions, provide meaningful training and research engagement for UC graduate students and post-doctoral fellows, and enhance UC’s systemwide competitiveness for extramural support in one of three identified areas of strategic importance.

Proposals may be submitted by eligible Principal Investigators (PIs) from the University of California only. Proposals must minimally include participation or collaborators from at least three additional UC campuses and either Los Alamos or Lawrence Livermore National Lab, each with a designated site lead, as detailed in the eligibility criteria. Participation beyond the minimum requirements, such as by more UC campuses, both labs, or by Lawrence Berkeley National Lab, is encouraged where it enhances the research outcomes and impact of the proposed activities.

Proposals may request a maximum of 3 years of funding and $5 million, including indirect costs. Any single annual budget may not exceed $2 million, and proposals requesting no more than $1.25 million annually ($3.75 million over 3 years) are strongly encouraged. These budget amounts do not include in-kind and cash cost-sharing by the national laboratories for space, equipment use, data, or personnel time. National laboratory cost-sharing contributions are required and must be detailed in the proposal. Funding from the UC Laboratory Fees Research Program is intended to support UC faculty, graduate students, post-doctoral fellows, or their UC-National Laboratory scientific collaborators and their joint collaborative research activities. Research collaborators or partners from outside the UC system must identify the funding from other sources that they will contribute to the project to support their participation.

Research and training activities must be in one of the three targeted areas defined below, and are encouraged to integrate meaningful components that aim to understand the societal and economic impacts or policy implications of technological advances in these specific topical areas. Collaborators are encouraged to consider multidisciplinary approaches and interdisciplinary research activities within each targeted area.

Biological applications of advanced computing: Research aimed at improving biological understanding, human health, and biosecurity by the application of computational simulation, big data analysis, and sensor and measurement technologies.

High energy density science: Research aimed at advancing the study of matter at extremes of temperature, pressure, and density through experimental, computational, and theoretical approaches.

Mesoscale materials science: Research aimed at advancing understanding of the properties and behavior of materials at scales between atomic granularity and the continuum scale of bulk materials to accelerate materials discovery and predictive design.

Key Dates
Final RFP release: Thursday, April 14, 2016
Applicant teleconference: Friday, April 29, 2016, at 12:00 noon Pacific Time (register here)
Letters of intent due: Thursday, June 2, 2016 at 12:00 noon Pacific Time
Notification of LOI outcome decision: Friday, June 17, 2016
Full proposals due: Thursday, August 4, 2016 at 12:00 noon Pacific Time
Notification of review outcome: Friday, January 20, 2017
Award start date: Wednesday, March 1, 2017
Overview of Application and Review Process

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

Applicant Teleconference: An informational applicant teleconference will be held on April 29, 2016. Please register on our website for details and call-in information. Participation in the teleconference is strongly encouraged.

Letter of Intent (LOI): Applicants must submit a complete LOI using the template on the proposalCENTRAL website. LOIs will be reviewed for compliance with program requirements, eligibility, and alignment with the program goals and priorities. 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.

Invitation to Submit Full Proposal: 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 and must conform to the requirements of the final version of the RFP. It is the applicants’ responsibility to check the program website for updates, clarifications, or changes prior to submitting the full proposal.

Full Proposal Submission: Full proposals should be submitted through the host campus Contracts and Grants or Sponsored Project Office as appropriate. It is the PI’s responsibility to follow campus rules, procedures, and timelines for submitting a proposal and to confirm that all collaborators have obtained institutional approval, if required, from the collaborating campuses and laboratory Strategic Partnership Projects office, in advance of proposal submission. The proposal submission deadline will be strictly enforced.

Proposal Review and Selection: UC Research Initiatives will manage a competitive peer review, scoring, and ranking of proposals based on the criteria and requirements outlined in this RFP. Reviewers will be selected for their subject matter expertise, and the multidisciplinary panels will be composed of faculty and researchers drawn from both inside and outside of UC. Applicants should prepare their proposals in language accessible to a general scientific audience. Panel composition will be determined based on the application pool. Depending on the programmatic review and initial review process, some applicants may be invited to revise and resubmit proposals for further funding consideration.

Final funding decisions and selection are at the discretion of the Office of Research and Graduate Studies in the UC Office of the President. Decisions may not be appealed, but declined proposals may be submitted to future competitions without prejudice. Selected proposals have an award start date of March 1, 2017. Awards are contingent on availability of funding.

Institutional and Investigator Eligibility and Exclusion Criteria

Eligible Institutions and Systemwide Collaboration: The host institution submitting the proposal on behalf of the collaboration must be one of the 10 UC campuses [Berkeley, Davis, Irvine, Los Angeles, Merced, Riverside, San Diego, San Francisco, Santa Barbara, or Santa Cruz]. To take advantage of the distributed expertise and resources of the UC system, a minimum of three additional UC campuses and either Los Alamos National Laboratory (LANL) or Lawrence Livermore National Laboratory (LLNL) must actively collaborate in the proposed activities. Additional collaborating institutions may include more UC campuses and medical centers, both LANL and LLNL, Lawrence Berkeley National Laboratory, the UC Division of Agriculture and Natural Resources, and/or the UC Hastings School of Law, as appropriate to the research.

Exclusions: Research collaborators or partners from outside the UC system, if included in the proposal, must identify the funding from other sources that they will contribute to the project to support their participation in the proposed collaboration. The UC Office of the President may not participate in the proposal, and funding may not support activities at the UC Office of the President.

Eligible Principal Investigators: The proposal must be submitted by a UC faculty member who holds Principal Investigator status at the host UC campus (defined above). The Applicant PI is the designated Principal Investigator (PI) for the award. Each collaborating institution (UC campus or national lab) must identify one (and only one) site lead/Co-Principal Investigator. All Co-PIs must hold PI status at their respective institutions. For guidelines on UC PI status, contact your campus Office of Sponsored Research or refer to Section 1-530 of the UC Contracts and Grants Manual. Eligibility for PI status at the national laboratories must be confirmed by the laboratory Strategic Partnership Projects office.
Proposals may include additional scientists and collaborators as key personnel if they contribute substantively to the proposed research. Additional key personnel at each site must be designated as Co-Investigators (Co-Is), or other appropriate titles consistent with their status and contributions (e.g., post-doctoral fellow, scientist, etc.).

**Exclusions:** PIs, Co-PIs, and Co-Is from the University of California may participate in only one proposal for the 2017 UC-NL CRT. Academic personnel whose primary role is in university-wide, campus, or school administration above the level of Dean, or individuals whose primary role is national laboratory leadership or administration, may not serve as PIs, co-PIs, Co-Is, or key personnel on any UC-NL CRT proposal.

**UC-NL CRT Award Requirements and Exclusions**

**Research Scope and Content Requirements:** UC Laboratory Fees Research Program funding is limited to research that has no restrictions on publications, and is not restricted by classification or deemed export rules. All publications resulting from the funded research must comply with the University of California Open Access policy. For this targeted opportunity, UC Multicampus-National Lab Collaborative Research and Training (UC-NL CRT) Award, all proposed research and training activities must be in one of the three targeted topical areas defined in this RFP.

**New Activities Requirement:** The intent of this targeted opportunity is to fund new collaborative research endeavors that will position the UC as a leader in the three identified topical areas and advance the labs’ strategic missions. Proposals may not request funds to continue existing research activities, provide core institutional support, or extend funding for existing projects that receive other systemwide (UCOP) support.

Collaborations that intend to utilize the infrastructure of existing institutes, programs, or specialized facilities must clearly articulate the relationship of this collaboration and project to those existing resources and infrastructure, indicating both the potential to leverage those resources and the unique contribution of this new effort.

Existing collaborations may propose to initiate new research directions provided they articulate a compelling justification regarding the unique contribution of the proposed new activities beyond existing work and support. All applicants must disclose all current and anticipated UCOP systemwide research funding, as well as all other sources of support.

**Award Term and Funding Request:** UC-NL CRT proposals may request up to three years of support. The maximum funding request is $5 million (including indirect costs) for the entire award term. The maximum allowable annual budget request is $2 million, but applicants are strongly encouraged to limit requests for the UC-NL CRT awards to no more than $1.25 million per year (including indirect costs). Total annual project costs in excess of this amount may be covered by other sources of support or matching contributions (see “National Laboratory Cost-Sharing” below).

Total budgets must be well-justified in relation to the proposed activities and potential impact of the proposal. Research and training support for UC graduate students and postdoctoral fellows is strongly encouraged, and proposed budgets, in general, should seek to efficiently use resources to maximize research outcomes and minimize administrative costs. An itemized budget and justification is required in the full proposal.

**Allowable and Non-allowable costs:** The proposal template will include instructions on allowable and non-allowable costs. Both UC campuses and the national laboratories may charge their approved indirect cost rate (MTDC basis) to the award. As general guidance, please be aware that funds provided by this award may not cover any classified research activities, patient care costs, clinical trials, patent execution costs, fundraising costs, equipment maintenance, or subawards to non-UC-affiliated entities. Equipment purchases by the national laboratories are not allowed. Equipment purchases by UC may be requested if a compelling justification is provided, and use of and access to the equipment is made available across the UC system.

**National Laboratory Cost-Sharing:** Recognizing that the national laboratories have unique resources, facilities, data, and other research infrastructure that will ensure both mutual benefit and successful outcomes, UC-NL CRT proposals are expected to identify specific cost-sharing contributions and facility access that each participating national laboratory will make to the collaborative endeavor. Cost-sharing may include in-kind and/or cash (out-of-pocket cost) contributions for space, equipment or facilities use, data, or personnel time that may be covered by other sources of support or directly
relevant activities at the lab. National laboratory cash and in-kind contributions must be affirmed in the LOI, and full proposals must include a letter of commitment from each of the participating labs verifying specific laboratory cost-sharing to supplement the funding provided by the UC Laboratory Fees Research Program.

**Collaborative Research and Training Plan Components**

UC-National Laboratory Collaborative Research and Training Awards must include specific aims and activities that align with the goals of this targeted opportunity, as outlined below:

**Collaborative Research Innovation**: Interdisciplinary, multidisciplinary, or cross-disciplinary research endeavors that advance knowledge, identify new theoretical or methodological approaches, or combine distinct approaches (such as theory, modeling, simulation, experiment, or application, as appropriate to the research area) in one of three strategic areas: biological applications of advanced computing, high density energy science, or mesoscale material science. The proposal must clearly describe the distinct aims and potential for scholarly impact of the proposed research activities, and must utilize and effectively integrate the research strengths, specialized facilities, data, equipment, or expertise of multiple institutions within the collaboration.

*In addition to the basic and applied core research innovations of the collaboration, the research team is encouraged to integrate research opportunities and collaborators whose expertise can be utilized to study the societal and economic impacts or policy implications of breakthroughs and technological advances in the specific research topical area.*

**Graduate Student Training and Support**: Proposals must clearly articulate the opportunities for UC graduate students to meaningfully engage in the research endeavor, gain professional experience, obtain research support, and make appropriate progress toward degree. Graduate students may be integrated into the core research activities through extended research visits at a Laboratory, exchanges with other campuses, co-supervision by UC campus faculty and national lab personnel, summer internships, opportunities to present research findings at scientific meetings, or other activities that support their academic advancement.

**Career Development and Mentorship Opportunities for Postdoctoral Fellows and Early Career Faculty and Lab Scientists**: Project personnel and activities should be structured to stimulate collaboration across career stages, spanning postdoctoral fellows, early, mid-career, and senior faculty and scientists. This component may include opportunities for shared scientific leadership, mentoring and training for postdoctoral fellows and early career faculty and scientists, access to specialized facilities, data sets, equipment, and other mentorship and collaborative opportunities suitable to the research scope. It may also include structured opportunities for laboratory scientists to make extended research and teaching visits to UC campuses, or UC faculty to spend an extended period at a national laboratory, engaged in activities related to the research topic.

**Seminars and Cross-Disciplinary Collaborative Exchange**: The proposal should include a specific plan for periodic meetings of the faculty, scientists, postdoctoral fellows, and graduate students from the multiple participating institutions to share findings, explore new collaborative avenues, develop skills, visit facilities or demonstrate unique capabilities or methodologies that may inform or advance new directions, and plan for ongoing collaboration beyond the award period.

**Optional Component - Undergraduate research training internships to diversify the research pipeline**: Internship opportunities for upper division undergraduates with research interests in areas related to the topics and methods of the UC-NL CRT proposal are encouraged where appropriate. Support for these activities may include student stipends to undertake summer or short-term research training internships at one of the collaborating national labs, or to other UC campuses engaged in the collaboration.

As an added incentive to foster a diverse professional pipeline for both UC and the national labs, the UC PI or UC Co-PIs funded by the UC-NL CRT are encouraged to develop proposals for the UC-HBCU Initiative that integrate undergraduate and masters students in the training opportunities of the collaboration. The **UC-HBCU Initiative** is a faculty grant program that provides funding for one to three years for UC faculty to develop research and training opportunities for students from Historically Black Colleges and Universities to spend at least one summer at UC. For information regarding the UC-HBCU Initiative and its funding opportunity, please see [http://www.ucop.edu/uc-hbcu-initiative/](http://www.ucop.edu/uc-hbcu-initiative/).
How to Apply: UC-NL CRT Application Materials

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. Proposal title
2. Host institution that will submit the proposal on behalf of the collaboration (the host institution must be the UC lead PI’s institutional affiliation/home campus)
3. Applicant PI name, title, department, and institutional affiliation
4. Co-Principal Investigator (Co-PI/site lead) names, title, department, and institutional affiliation for each collaborating UC campus, national lab, and other UC research entity that will have a significant role in the research
5. An abstract (2400 characters / ~350 words) providing a brief description of the proposed scope of research, structure of the collaboration, expected impact on scholarship, and any specialized facilities or resources at each participating institution. The abstract should be written to address a general scientific audience.
6. Estimated total budget requested for the award term (may be up to 3 years)
7. Disclosure of current or past Lab Fees Research Program funding

Full Proposals: The proposal narrative is limited to 12 single-spaced pages (items #2-6 below). The total page limit will be strictly enforced, and guidelines regarding the expected length of each section are provided. The proposal must use the provided template, and will include the following sections:

1. Abstract (2400 characters / ~350 words): The abstract should be appropriate for a general scientific audience. Avoid discipline-specific jargon or technical terms. The abstract may be published to our website or shared publically.

2. Proposed Research Activities and Scholarly Contributions (~7 pages): Identify the specific aims, research activities, and scholarly contributions of the proposed research, including the innovative components that will advance scholarship in the fields targeted by this funding opportunity. The proposal narrative must provide a specific description of the multi-disciplinary, interdisciplinary or cross-disciplinary approaches, teams, techniques and methods that will be undertaken and how these will be integrated into the larger collaborative effort, and lead to scientific outcomes or success. Identify the expected research outcomes and importance. Identify the extent (if any) to which research related to the economic or societal impacts or policy implications of the core scientific research will constitute part of the overall research endeavor.

3. Research Team, Collaboration Structure and Mutual Benefit (~2 pages): Identify the project leadership, collaborating institutions, faculty and laboratory scientists, their expertise and the unique facilities, resources or infrastructure that will be brought to bear on the research problem. Describe the organizational mechanisms and collaborative approaches that will ensure genuine multi-institution engagement and mutual UC and national laboratory benefit. This section should include: 1) the leadership structure of the collaboration; 2) how the unique strengths and facilities of the collaboration will form a cohesive research endeavor; 3) identify the specific contributions that each of the collaborating national labs will make to the collaboration in terms of access to facilities, resources, data, equipment or expert personnel (contributions by the national labs that are made as in-kind or cash expenditures will be itemized in a separate section); and 4) how the collaboration will position UC as a national leader and provide a competitive advantage for extramural support.

4. Graduate Student Training Opportunities (~1 page): Describe how graduate students will be integrated into the research effort, and how the collaboration will support the students’ scientific training, professional development, and advancement to degree. Describe any additional educational benefits of the collaboration provided to the UC system. In this section, describe any undergraduate training or internship opportunities that may be integrated into the project.

5. Career Development and Mentorship for Postdoctoral Fellows and Early Career Faculty and Scientists (~1 page): Describe the role of early career UC faculty and lab researchers and any associated mentoring from senior faculty and researchers.

6. Timeframe, Milestones, and Evaluation Metrics (~1 page): Identify the research and training timeline, benchmarks and milestones, and methods used to evaluate the effectiveness of the collaboration. Include specific outcome metrics, and the plan to transition to other extramural sources of support for ongoing research beyond the award period.
7. **Itemized Budget and Justification**: Provide a detailed budget, by project year, using the Excel template provided in proposalCENTRAL. In addition, a budget justification of up to 3 pages is required to describe significant project expenditures. The total amount requested in the budget template must match the request in the proposal cover sheet. If these figures do not match, the maximum award amount will be the lower of the two.

8. **National Laboratory Cost-sharing**: Calculation of the in-kind and cash (out-of-pocket expenditure) contributions each of the collaborating national labs will make to the UC-NL CRT. This section should include only those costs and contributions not covered by the budget request to the UC Laboratory Fees Research Program, and must align with activities described in the narrative description of the proposal. A commitment to provide these resources must be included in the letters provided by the collaborating national laboratories (see attachments below). Each participating laboratory must include its own calculation and the commitment letter.

9. **Additional Attachments**: The attachments must include the following applicable materials: 1) literature cited (2-page limit); 2) identification of any human subject (IRB), animal use, or toxic substance issues and the approach to compliance (1 page template); 3) disclosure of all current or anticipated sources of research funds; 4) curriculum vitae for the PI and Co-PIs/site leads are required (2-page limit per CV); CVs for Co-Investigators and other key personnel who contribute substantially to the research should be included only if they will be funded directly by the UC-NL CRT award; and 5) a letter of commitment from each participating national lab to provide the in-kind and cash contributions outlined in the proposal, if awarded. Optional: Up to two additional one-page letters of support may be included. Longer or additional letters not mentioned here will not be accepted.

**Scoring Criteria**

**Reviewers will be asked to assess the following criteria in the scoring and ranking of the proposals:**

1. **Research Excellence and Innovation**: Highest quality, compelling research that has the potential to strengthen the capabilities of the UC system and significantly advance cutting-edge science in one of the three areas targeted in this cycle. Excellence includes the likely impact on key problems in the research area, and the feasibility and likelihood for achieving the proposed outcomes in the award period. Consideration will also be given to the breadth and depth of the proposed approaches and appropriate integration of interdisciplinary, multidisciplinary, or cross-disciplinary approaches.

2. **Strength of the Collaboration and Mutual UC-National Lab Benefit**: Proposed activities must mutually benefit UC and the labs, leveraging the strengths of each. The impact and benefits of the proposed project may be demonstrated by engagement of researchers from multiple UC institutions and labs and the formation of new research collaborations between UC and lab researchers. Genuine UC engagement across the collaborating campuses and with the national labs must be demonstrated. Other considerations include assessment of the resources, including financial and in-kind contributions, by the labs to support the collaboration and research infrastructure, as well as the likelihood that this funding will position UC faculty as national leaders and enhance competitiveness for extramural support.

3. **Quality of Graduate Student Training and Support**: Extent and quality of opportunities for meaningful engagement by graduate students, as demonstrated by graduate student support, participation in key research activities, potential for interchange between other students and collaboration members, and training opportunities.

4. **Quality of the Career Development and Mentoring Program**: Extent and quality of opportunities for meaningful collaborative engagement among faculty across career stages, as well as structured mentorship and professional development activities that help position junior UC faculty and lab researchers as leaders in their fields.

5. **Supplemental/Optional Components**: The quality and extent to which the policy implications and societal and economic impacts of the research have been integrated into the project. The quality and extent to which undergraduate internship and educational opportunities have been integrated into the proposal.

6. **Additional Considerations Include**: 1) Appropriateness of the budget to achieve the proposed aims during the award period, and the efficient use of funds to support research and training; 2) minimization of administrative costs; 3) the extent and appropriateness of cost-sharing commitments by national laboratory collaborators; 4) likelihood that the
collaboration will successfully leverage the award and transition to extramural sources by the end of the award period; and
5) considerations or concerns related to human subjects, animal use or toxic substances.

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 at the UC Office of the President. Funded proposals are required to report annual progress
and fiscal expenditures. Funded proposals will be assigned to a UCRI Program Officer who will serve as the primary
program contact.

Awards are contingent on available funding and compliance with research and reporting requirements. Please see
Appendix 1 for RGPO compliance requirements. Please also refer to “Frequently Asked Questions” in Appendix 3.

Program Contact Information
For questions on program rules, funding priorities, or scope of proposals, please contact Chris Spitzer, Program Officer at
UCRI@ucop.edu

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

Information regarding the UC-HBCU Initiative is available at:  http://www.ucop.edu/uc-hbcu-initiative/.

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 faculty with questions about the process or approach to forming collaborations with the national labs in the targeted
areas, or national laboratory Points of Contact identified below:

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, ajhurd@lanl.gov, 505-667-9531.
  Collaborative Research and Training Awards contact: Carolyn Bossert, cbossert@lanl.gov

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, updated 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, PIs and their
collaborators are strongly encouraged to check the website for any program updates prior to submission:
http://ucop.edu/research-initiatives/programs/lab-fees/application-information.html
Appendix 1: Other RGPO Policies and Pre-Award Requirements

The following relevant policies and requirements for awards made by the UCOP Research Grants Program Office (RGPO) apply to all proposals nominated for funding. These requirements are outlined in the formal “pre-funding” notification that will be sent to applicants nominated for funding by the peer review and ranking process, and this appendix may not include all pre-award requirements.

Human Material and Animal Subjects:
Approvals for use of human subjects and material, animals, and toxic substances are not required at the time of application. When such approvals are applicable to the research, applicants must apply to the appropriate board or committee as soon as possible in order to expedite the start of the research, and you must do so within 30 days of notification that an award has been offered. Applicants may formally request an extension of this deadline if justified by specific circumstances of the research. All reasonable efforts must be made to obtain appropriate approvals in a timely fashion. Projects that do not obtain the necessary approvals in a timely manner may have their funding reduced or withdrawn.

For multicampus collaborations, if your research requires IRB approval, we encourage you use the UC IRB Reliance Registry to streamline your approval process. Please note that each study location is still responsible for obtaining other applicable ancillary approvals such as Conflict of Interest, Radiation Safety, etc. Contact your Campus IRB Reliance Coordinator for more information about the UC IRB reliance process.

Publications Acknowledgement and Open Access:
All scientific publications and other products from a RGPO-funded research project must acknowledge the funding support from UC Office of the President, with reference to the specific UC Research Initiatives (UCRI) funding program and the assigned grant ID number.

RGPO is committed to disseminating research as widely as possible to promote the public benefit. All publications based on funding received from RGPO are subject to the University’s Open Access Policy. To assist the RGPO in disseminating and archiving the articles, the grantee institution and all researchers on the grant will deposit an electronic copy of all publications in eScholarship, UC’s open access repository promptly after publication. Notwithstanding the above, this policy does not in any way prescribe or limit the venue of publication.

Deposition of Equipment and Supplies at the End of the Grant
Equipment purchases made by projects funded by any UCRI program must be made by UC campuses and are the property of the UC Regents. Special permission must be sought to purchase equipment for a non-UC campus or entity. In the event it is approved, the disposition of the equipment must follow RGPO rules.

Other Requirements
Upon request, awardees must supply the following information or documents:
1. Verification of appointment and Principal Investigator status from an appropriate institutional official.
2. Detailed budgets and justifications for any subcontract(s).
3. IRB, IACUC or applications or approvals pertaining to the award.
4. Resolution of any scientific overlap issues with other grants or pending applications.
5. Resolution of any proposal review panel recommendations.

All grant recipients must abide by other applicable pre- and post-award requirements pertaining related to Cost Share, Indirect Cost Rates, Monitoring & Payment of Subcontracts, Conflict of Interest, Disclosure of Violations, Return of Interest, Equipment and Residual Supplies, Records Retention, Open Access, and Reporting.
Appendix 2:
University of California Research Initiatives
UC Multicampus-National Lab Collaborative Research and Training (UC-NLCRT)

Letter of Intent Submission Instructions for 2017 Awards

The University of California (UC) Office of the President is pleased to provide applicant instructions for submission of a Letter of Intent (LOI) to the UC Multicampus-National Lab Collaborative Research and Training (UC-NLCRT) Awards announced on April 14, 2016. Submission and approval of an LOI is required to submit a full proposal to this Request for Proposals (RFP). LOIs must be submitted electronically by June 2, 2016 before 12:00 noon Pacific Time in the proposalCENTRAL (pC) system. We encourage early submission of LOIs. Please note: LOIs will not be accepted after the deadline.

OVERVIEW OF ONLINE LOI SUBMISSION PROCESS

The LOI must be submitted using the online system at https://proposalCENTRAL.altum.com/. Applicants may submit LOIs via anytime between April 14 and June 2, 2016. The LOI submission must be completed (not merely initiated) by the 12:00 noon PT deadline. Therefore, plan ahead in preparing your submission, and allow a minimum of two hours to receive confirmation of your successful submission by the deadline.

Step 1: Applicant Registration with proposalCENTRAL

Lead Principal Investigators (PIs) must register as users of pC to submit an LOI and complete a proposal https://proposalCENTRAL.altum.com/.

Registered Users: Applicants who have already registered with pC should enter their user name and password under “Applicant Login” and click the Login button on the pC homepage.

New users: Applicants who are not registered users of pC should click the Register button under “First Time Users” and follow the instructions. Every applicant must first select his/her institution. All UC campuses have confirmed institution profiles in pC under “Regents of the
University of California.” Click the **Search Registered Institutions** tab to locate your institution on the pC system. (For example: If you are searching for "University of California, Los Angeles", you can enter ‘Los Angeles’ or use ‘UCLA’ as search terms.) Please complete all required sections, which are marked with an asterisk. Below is a list of UC campuses and their corresponding profile names in pC. When selecting your institution, please look in the “Institution Status” column to ensure that you are selecting the correct institution profile.

<table>
<thead>
<tr>
<th>Campus</th>
<th>pC Profile Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>UCB</td>
<td>The Regents of the University of California, Berkeley</td>
</tr>
<tr>
<td>UCD</td>
<td>The Regents of the University of California (University of California Davis)</td>
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<td>UCI</td>
<td>The Regents of the University of California (Irvine)</td>
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<tr>
<td>UCLA</td>
<td>The Regents of the University of California, Los Angeles</td>
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<td>UCM</td>
<td>The Regents of the University of California, Merced</td>
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<td>UCR</td>
<td>The Regents of the University of California, Riverside (UCR)</td>
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<td>UCSB</td>
<td>The Regents of the University of California, Santa Barbara</td>
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<td>UCSC</td>
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<tr>
<td>UCSF</td>
<td>The Regents of the University of California, San Francisco (Contracts &amp; Grants)</td>
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</tbody>
</table>

**Step 2: LOI Submission**

A. To prepare an LOI, log in to pC and select the “**Grant Opportunities**” tab. You can either use the menu bar in the center to select “UC Lab Fees Research Program” and then click on “**Filter list by GrantMaker,**” or scroll down the list until you see “**UC Lab Fees Research Program.**”

B. Locate “**LFRP – Collaborative Research and Training Award,**” and on the right, click the **Apply Now** link to begin the LOI submission process. For more information about the requirements for the LOI or other RFP terms and conditions, please reference the most recent RFP document posted on the UC Laboratory Fees Research Program website.

For technical assistance with pC, please email pcsupport@altum.com or call 800-875-2562 (Toll-free U.S. and Canada) or +1-703-964-5840 (Direct Dial International). pC customer support is available Monday – Friday from 8:30am - 5:00pm (EST).
STEP BY STEP: KEY SECTIONS FOR LOI SUBMISSION

Additional details for each section of the online LOI submission form are provided below. Please note: the numbered sections listed below directly correspond to the numbered LOI sections in the left hand column of the LOI page on the pC website. To view the LOI page, please select **Apply Now** or, if you have already started the LOI submission process and would like to make changes or complete your submission, you may select **Edit** under the “Manage Proposals” tab.

Section 1: Title Page

This section must be completed first. Upon completion of Section 1, the remaining sections listed below (2-8) may be completed in any order and do not need to be completed in one session. Note: please be sure to save your work after each entry.

Project Title: Please enter the project title here. Do not exceed 60 characters. No special characters are allowed.

Choose targets research area:
- Using the available radio buttons, please indicate your proposal’s targeted research area. A response to this question is required. The available choices are:
  - Biological applications of advanced computing
  - High energy density science
  - Mesoscale materials science
**Estimated Budget**
- In the textbox provided, enter the estimated total amount requested. This amount is required and is an estimate only. Do not include any funds or in-kind support associated with laboratory cost-sharing in this request. The actual budget amount may be revised at the full proposal stage.

**Lab Fees Program Status:**
- Provide a response (Yes/No) to the question “Do you, the lead PI, or any of the site leads for this proposal have current or past funding from the UC Lab Fees Research Program?” A response is required.
- If you select “Yes,” please enter the award year(s) and the award amount(s) in the available textboxes.

**Affirmation Statements:**
- You must read, and click the “Yes” button to agree to each of the following affirmation statements:
  - I affirm, in consultation with my collaborators, that the proposed research has no restrictions on publications, and is not restricted by classification or deemed export rules.
  - I acknowledge, in consultation with my collaborators, that cost-sharing by LANL or LLNL is a requirement of this program, and these cost-sharing commitments must be described in the full proposal.
  - I affirm as lead PI that I am participating in only one Lab Fees proposal this competition cycle.
  - I affirm that I have verified that all UC collaborators identified in this proposal are participating in only one Lab Fees proposal this competition cycle.

**Section 2: Download Templates and Instructions**
This section includes downloadable LOI submission instructions.

**Section 3: Enable Other Users to Access this Proposal**
This section allows applicants to designate others to access the LOI to assist with writing or submission.

**Section 4: Applicant PI**
** Applicant Profile:** This section requires the identification of the Lead PI; all relevant information will be populated from the Lead PI’s profile. To update any information about the Applicant PI, click on “Edit Professional Profile”.

**Section 5: Applicant Institution**
See information about how to select your Applicant Institution in the “Step 1: Applicant Registration with pC” section above.

**Section 6: Site Lead – Each Collaborating Campus/Institution**
Provide the name and contact information for one (and only one) site lead/co-PI for each collaborating site. The proposal requires a minimum of one site lead/co-PI from either LANL or LLNL, and a minimum of three site leads from three UC campuses (not including the host UC campus). Additional national labs or UC campuses may be included in the proposal, and one site lead/Co-PI from each site must be named.

**Section 7: Abstract, Disciplines, & Institutions**
Abstract: In the text box provided, briefly describe the proposed research scope and activities, scholarly contributions and expected outcomes in non-scientific terms appropriate for a general audience. This summary description is limited to 2,400 characters including spaces (approximately 350 words). Information must be entered as text only. (Scientific notations, special characters, fonts, and other rich-text formatting cannot be saved or displayed. The text will automatically wrap: Carriage returns should be used for the start of a new paragraph but should NOT be used at the end of each line.) The summary is non-confidential, and may be published or circulated by the program.

Disciplines: Using the multi-select list, please identify the disciplines that will make a substantial contribution to the research effort. You may choose as any disciplines as are applicable. The available disciplines are:
1. Anthropology or Sociology
2. Astronomy and Space Sciences
3. Biology
4. Biophysics
5. Bioengineering and Biofuels
6. Chemistry and Materials Science
7. Computer Science
8. Earth Sciences
9. Economics
10. Energy
11. Engineering
12. Environmental Sciences
13. Mathematics
14. Policy and Security Studies
15. Physics
16. Public Health and Health Sciences
17. Social Studies of Science and Technology
18. Statistics

UC campuses and collaborating sites: Using the multi-select list, please identify all collaborating institutions. The available institutions are:

- Campus - UC Berkeley
- Campus - UC Davis
- Campus - UC Irvine
- Campus - UC Los Angeles
- Campus - UC Merced
- Campus - UC Riverside
- Campus - UC San Diego
- Campus - UC San Francisco
- Campus - UC Santa Barbara
- Campus - UC Santa Cruz
- Division of Agriculture and Natural Resources
- Hastings School of Law
- Lab - Lawrence Berkeley
- Lab - Lawrence Livermore
- Lab - Los Alamos
- Other UC Research Institution(s)

Section 8: Reviewer Recommendations
UC Research Initiatives will constitute the panels, assign reviewers, and make final
determinations regarding panel composition. You may suggest qualified individuals for our
consideration who could provide reviews of your full proposal without conflicts of interest.
Please list the name, address, email address and telephone number of reviewers. In addition,
you may identify scientific peers who you do not want to review your proposal.

All requests to include or exclude reviewers will remain confidential. To add a reviewer for
inclusion/exclusion, click on “Add New Entry.” A pop-up box will appear for you to enter the
reviewer's contact information. Under the pull-down menu, select “include” or “exclude” reviewer
from review. If you choose to “exclude” a reviewer, you MUST type in an explanation in the text
area

Section 9: Validate
Section 9 enables applicants to verify that the LOI is ready for submission. The system will
notify applicants of any outstanding information required to complete the submission process.

Section 10: View PDF
This section allows you to view or download a PDF of your LOI submission. Please note that a
signed signature page is NOT required as part of the LOI submission. This section is made
available so applicants may print or download their LOI submission. Click on the “Print
Signature Pages and Attached PDF files” button to view, print, or download the completed LOI.
A signed signature page will be required at the full application stage, should the LOI be
approved for full application submission.

Section 11: Submit
Click the “Submit” button to submit your LOI to the program. Following the submission of an
LOI to pC, applicants will receive an e-mail message confirming receipt of the application. If you
do not receive this confirmation within 2 hours, please contact pC tech support.

Should you have any questions regarding your application, please contact:

- UC Research Initiatives at UCRI@ucop.edu regarding program content and eligibility.
- Research Grants Program Office at RGPOGrants@ucop.edu or by phone at 510-987-
  9386 regarding application and pre/post-award procedures.
- Technical questions regarding proposalCentral submission should be directed to their
customer support at 800-875-2562 or pcsupport@altum.com. Please note their hours
are 8:30am – 5pm ET/ 5:30am – 2pm PT.

For the most up-to-date application and review cycle information refer to the following website:
http://ucop.edu/research-initiatives/programs/lab-fees/index.html
Appendix 3:
2017 UC Laboratory Fees Research Program
Targeted UC-NL Collaborative Research and Training Awards
Frequently Asked Questions (FAQs)
Version Dated: April 14, 2016

Please refer to the 2017 Request For Proposals for program requirements
This document is a supplement to the 2017 UC Laboratory Fees Research Program Request for Proposals (RFP), and is intended to provide additional guidance to applicants. Based on questions we receive, it may be updated periodically. Applicants are responsible for checking the UC Research Initiatives (UCRI) website for updates.

How to Apply:
All application materials must be submitted online via proposalCENTRAL. On the proposalCENTRAL home page (https://proposalcentral.altum.com/default.asp), log in to your account (or create one if you are a new user), click “Create New Proposal”, and then select “LFRP – Collaborative Research and Training Award” as appropriate. Applicants are required to submit an LOI as the first step in the application process. The full proposal materials are available only after approval of the LOI. Additional instructions regarding LOI submissions are available in Appendix 2 of the RFP dated April 14, 2016.

Required Letters of Intent (LOIs) are due Thursday, June 2, 2016 at 12:00 noon Pacific Time
Full Collaborative Award Proposals are due Thursday, August 4, 2016 at 12:00 noon Pacific Time
(Please note that deadlines appear as 3:00 PM Eastern Time in proposalCENTRAL)

Eligibility and Collaborative Structure

1. Who can submit a proposal for this funding opportunity?
Aside from the exceptions noted below, any academic appointee who holds Principal Investigator (PI) status at one of the 10 UC campuses [Berkeley, Davis, Irvine, Los Angeles, Merced, Riverside, San Diego, San Francisco, Santa Barbara or Santa Cruz] is eligible to submit a proposal on behalf of the collaborative team. For guidelines on PI status, contact your UC campus Office of Research, or refer to Section 1-530 of the UC Contracts and Grants Manual.

Exceptions: Academic personnel whose primary role is in university-wide, campus, school administration above the level of Dean, or individuals whose primary role is national laboratory leadership or administration, are not eligible to serve as PIs, Co-PIs, or other grant Key Personnel.

2. I am a national lab scientist with an adjunct appointment at UC. Can I serve as the lead PI and submit a proposal?
A national laboratory scientist who holds an adjunct appointment at a UC campus may submit a proposal as the UC Principal Investigator through that campus with the permission of the campus administration, provided the individual has PI status at the host campus. In this case, you would designate yourself as “UC faculty” in relation to the entire funding opportunity, and the RFP rules for UC faculty apply. Relevant rules include participation in only one proposal submission, and other rules in the RFP related to the UC appointment. You may not submit one proposal as a UC faculty member and be included as a lab collaborator on a different proposal. These rules apply to all national laboratory scientists.
3. **How many collaborators are required for a proposal?**
   Each proposal must include a minimum of four collaborating UC campuses (including the host campus), and either Lawrence Livermore National Laboratory or Los Alamos National Laboratory. Proposals may also include both national labs, additional UC campuses, or other UC systemwide research entities. Examples of other systemwide collaborators include researchers from Lawrence Berkeley National Laboratory, the Division of Agriculture and Natural Resources, any of the five UC medical centers, and Hastings School of Law. Each collaborating site must identify one and only one Co-PI (site lead) with PI status at their home institution. Additional collaborators who make significant contributions to the research may be identified as Co-Investigators, or other appropriate project titles.

4. **Can I participate in more than one proposal?**
   Any individual from the University of California identified as proposal Key Personnel (PI, Co-PI or Co-I) may participate in one and only one proposal. National laboratory scientists may participate in more than one proposal if their expertise is directly relevant to more than one proposal, and they are making substantive research contributions to each proposal. Please note Question 2 above: an individual cannot submit one proposal as a UC faculty member and be included as a lab collaborator on a different proposal.

5. **Can our proposal team include collaborators from outside the UC system?**
   The intent of this funding opportunity is to foster research collaboration and training opportunities between the University of California and Lawrence Livermore and Los Alamos National Laboratories. If research collaborators from other institutions are proposed, the specific unique contributions they would make to the research plan and expected outcomes must be clearly articulated, and the application must identify the funding from other sources they will contribute to the project to support their participation in the proposed collaboration. These funding contributions must be outlined in “cost-sharing” documentation, similar to what is required by the participating national laboratories.

**Funding Requirements**

6. **Can national laboratory personnel charge their time on the project to the UC-NL CRT Award?**
   Except as explicitly noted in the budget rules outlined in the RFP, Application Instructions, and Application budget template, the allowable and non-allowable project costs are the same for the UC-managed national laboratories and laboratory personnel as for the UC campuses and researchers. All costs must be reasonable and well-justified by the project plan. However, in order to ensure that the overall goals of the program to strengthen UC research capacity in the identified strategic areas, and to train UC graduate students and post-doctoral fellows for ongoing partnership with the national laboratories, the PIs and collaborating partners are strongly encouraged to undertake research activities the UC campuses and to support UC faculty, post-docs and students wherever possible. Contributions by the laboratory for personnel time, equipment, space, and access to data made through the cost-sharing component are strongly encouraged.

7. **The RFP discusses required cost-sharing by the participating national laboratories. How much cost sharing is required?**
   Cost-sharing is required by each of the national laboratories participating in the project, and should realistically represent genuine contributions to the outcomes and success of the project as described in the proposal. Cost-sharing may include both cash expenditures incurred by the lab, as
well as in-kind contributions directly relevant to the project goals and expected outcomes. Cash and in-kind cost-sharing may cover use of or access to equipment, space, relevant data, personnel time, and other research needs, and must be made by each of the participating national laboratories. These cost-sharing contributions should be detailed in the cost-sharing template provided (and not itemized in the budget request to the Lab Fees Research Program), per the application instructions. The total dollar amount or percentage of cost-sharing is not specified, but should genuinely represent the laboratories commitment and contributions to the project. This commitment is a consideration in the review and selection, and the commitment must be verified by an accompanying letter from the laboratory.

8. Can indirect costs be charged to this award? If so, what is the allowable indirect rate?
Yes, both UC campuses and the national laboratories may charge their approved indirect cost rate to the award in accordance with the budget rules. The national laboratories should charge their lowest allowable rate, and confirm the appropriate rate with their Strategic Partnership Offices. The total allowable award size of $5 million over 3 years, and no more than $2 million in any single year, must include the indirect costs.

Proposal Submission and Application Guidelines

9. Does the Letter of Intent need to be submitted through the campus Sponsored Projects or Contracts & Grants Office?
No. The lead UC PI may submit the LOI directly, and a signature from an institutional signing official is not required for LOI submission. However, PIs are expected to confer with both the UC and national laboratory site leads/Co-PIs to ensure that their local institutions are apprised of (and approve, if required) the LOI, and submission of the LOI on behalf of the team denotes that any such required approvals have been obtained. Full proposals must be submitted through the host campus C&G or SPO, and this submission denotes that approval from the collaborating institutional partners has been obtained.

10. We missed the deadline to submit an LOI, can we still submit a full proposal without the LOI?
No. Unfortunately, we are unable to accept LOIs after the deadline, and only applicants who are invited to submit a proposal based on their LOI may proceed to the full proposal stage.

11. How will LOIs be reviewed?
LOIs will be evaluated for responsiveness to the RFP in three areas: 1) compliance with program requirements; 2) eligibility; and 3) alignment with the program goals and priorities.

12. My LOI was accepted, and our team received an invitation to submit a full proposal. Is the LOI binding or can we make changes?
The LOI must fairly present your proposed collaboration and activities, research topic and approximate total budget, and full proposals should fall within the scope of the original LOI. Updates, refinements and adjustments may be made to the proposed scope, abstract, and activities when the full proposal is submitted, and additional eligible collaborators or eligible institutions may be added. Once the LOI is approved, the host campus and lead PI cannot be changed in the full proposal. Note: Compliance with the eligibility criteria will be reviewed again at the full proposal stage, and only eligible proposals will be forwarded for review.
13. **Do we need to submit any documentation from the national labs as part of the application?**

It is expected that the Strategic Partnership Projects office (or WFO) from each participating national laboratory will review the proposed budget and cost-sharing commitments included in the proposal. The contacts for Los Alamos and Livermore National Laboratories is provided in the RFP on pg 7, and we strongly recommended that each project lead communicate with those individuals at the early stage of proposal planning. For the proposal submission itself, each proposal must include a letter from each participating national laboratory affirming the cost-sharing commitments the laboratory will make if the proposal is awarded, and this letter must be signed by the designated laboratory official.

**Research Scope and Proposal Components**

14. **How do I know if my research topic is eligible?**

The proposed research must significantly advance research in one of the three areas targeted by this funding opportunity: biological applications of advanced computing, high energy density science, mesoscale materials science. Research teams are encouraged to consider the social, economic and policy implications of the research as part of the larger project scope. Topics and projects that do not clearly fall within the three targeted areas as described in the RFP are not eligible for a UC-NL CRT in this round of competition. The review panels will consist of experts drawn who will assess the strength and alignment of the proposed research with the Lab Fees Research Program goals.

15. **Are components related to social science or economics required?**

No, this is not a requirement. However, proposals are encouraged to include research opportunities or collaborators whose expertise can be used to study the societal, policy, or economic impacts of the specific research topical area.