UNIVERSITY OF CALIFORNIA
RESEARCH INITIATIVES

UC National Laboratory Fees Research Program Request for Proposals

Targeted UC Multicampus-National Laboratory Collaborative Research and Training Awards

Program Overview and Priorities

The UC National Laboratory Fees Research Program (LFRP) 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 Lawrence Livermore (LLNL) and Los Alamos (LANL) National Laboratories, research sponsored by this program targets areas of strategic importance to UC and the national laboratories, and provides an important foundation for enhanced competitiveness for extramural support.

Further program information is available at: http://ucop.edu/research-initiatives/programs/lab-fees/.

Award Overview and Priorities

Research Advancing Microelectronics: This targeted opportunity is intended to spur novel collaborations in topics of strategic scientific and national security importance that will position UC as a leader in critical areas of research in materials, devices, and computing that address key challenges in microelectronics, including increasing demands on performance and memory, the need for energy efficiency and environmental sustainability, and the cultivation of a talent pipeline. The workshop paper from the 2024 LFRP Workshop on Research Advancing Microelectronics highlights some priorities for consideration in which UC-national lab collaborations can leverage the complementary strengths of UC and the national labs and advance the field; applicants are encouraged to refer to this report, regardless of attendance at the workshop.

Proposed collaborations are expected to engage UC faculty and national laboratory scientists from multiple disciplines and areas with expertise relevant to the specific topic, bring in early career faculty and new national laboratory scientists into partnerships, and commit to long-term engagement between UC and the national labs that will extend beyond the award period. Proposals should support 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 students and post-doctoral scholars, particularly at the national laboratories, and enhance UC's system-wide competitiveness for extramural support in the identified area of strategic importance. The collaborating national laboratories must make additional contributions that directly support the research execution and outcomes of the collaboration, which may include expertise, personnel time, equipment, space, and/or access to relevant unclassified data at the national laboratory. Proposals that involve faculty, students, postdocs and other trainees historically underrepresented in the identified fields are particularly encouraged.

Proposals may be submitted only by eligible Principal Investigators (PIs) from the University of California. In addition to the Applicant PI, proposals must include one Co-PI each from at least two additional UC campuses *and* either Lawrence Livermore or Los Alamos National Laboratory, as detailed in the eligibility criteria. Participation beyond the minimum requirements of three UC campuses and one national lab – such as by four or more UC campuses, both LLNL and LANL, or by Lawrence Berkeley National Laboratory (LBNL) – is encouraged where it enhances the research outcomes and impact of the proposed activities.

Proposals may request 3 years of funding and a maximum of $4 million, including indirect costs. Any single annual budget may not exceed $2 million. These budget amounts do not include project contributions by the national laboratories of space, equipment use, data, or leveraged personnel. Funding from the UC National Laboratory Fees Research Program is intended to support UC faculty, students, post-doctoral scholars, 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.

Key Dates

Final RFP release:	Tuesday, April 2, 2024
Applicant webinar:	Tuesday, April 16, 2024 at 10:00 a.m. Pacific Time [register here]
Letters of Intent due:	**Thursday, May 23, 2024 at 12:00 noon Pacific Time**
Notification of LOI outcome decision:	Thursday, June 6, 2024
Full proposals due:	**Thursday, August 1, 2024 at 12:00 noon Pacific Time**
Notification of review outcome:	Wednesday, December 4, 2024 (expected)
Award start date:	March 1, 2025

Overview of Application and Review Process

We strongly encourage all applicants to begin the Letter of Intent, application preparation, and online submission process early in case technical issues are encountered.

Applicant Webinar: An informational applicant webinar will be held on Tuesday, April 16, at 10 a.m. Please see our website for details and registration information. Attendance is strongly encouraged.

Letter of Intent (LOI): Applicants must submit a complete LOI using the online SmartSimple application system. 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 in SmartSimple. 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 Applicant PI's campus Contracts and Grants or Sponsored Projects Office. It is the Applicant PI's responsibility to follow campus rules, procedures, and timelines for submitting a multi-institution proposal, and to coordinate proposal development and submission with the UC campus and National Laboratory Co-PIs. 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. Proposals will be reviewed in multi-disciplinary panels comprised of reviewers selected for their subject matter expertise. Panel composition and review assignments are made to ensure a fair and balanced review and to address conflicts of interest. Applicants should prepare their proposals in language accessible to a general scientific audience. Depending on the review outcome and panel recommendations, some applicants may be invited to revise and resubmit proposals for further funding consideration.

Final selection and funding decisions are at the discretion of the UC Office of the President (UCOP), Research & Innovation. Decisions may not be appealed, but declined proposals may be submitted (if eligible) to future competitions without prejudice. Selected proposals have an award start date of March 1, 2025. Awards are contingent on availability of funding.

Institutional and Investigator Eligibility and Exclusion Criteria

Eligible Institutions and Systemwide Collaboration: The applicant 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 two *additional* UC campuses and *either* Lawrence Livermore National Laboratory (LANL) *or* Los Alamos National Laboratory (LLNL) must actively collaborate in the proposed activities. Additional UC-affiliated collaborating institutions are encouraged, and may include more UC campuses, both LLNL *and* LANL, Lawrence Berkeley National Laboratory, or other UC research entities (see attached FAQs for additional guidance).

> *Note*: Each collaborating UC campus or other eligible UC research location will be designated as a "subcontractor" to the applicant UC campus. Each collaborating UC national laboratory will directly contract with the UC Office of the President and complete a separate prime budget and institutional approval form from the national laboratory Strategic Partnership Projects office.

Exclusions: Research 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 and its personnel may not participate in any 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 applicant UC campus. The Applicant PI is the designated Principal Investigator (PI) for the award. Each collaborating institution (UC campus or national laboratory) must identify one (and only one) 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. Individuals with joint or shared appointments at multiple locations must apply through the location of their primary appointment. For individuals with multi-location appointments (MLAs), their primary appointment is typically the location through which they receive their salary and benefits. Individuals with joint or shared appointments at a UC campus and a national laboratory are encouraged to consult with their campus Office of Research and the national lab contact listed in the RFP prior to submitting their LOI.

Proposals may include additional key personnel at any of the eligible collaborating institutions if they contribute substantively to the proposed research. Additional key personnel at each site must be designated as Co-Investigators (Co-Is), named trainees, or other allowable roles consistent with their status and contributions. Proposals that involve faculty, students, postdocs and other trainees historically underrepresented in the identified fields are encouraged.

Exclusions:

- UC PIs, Co-PIs, and Co-Is may participate in *only one* proposal in the 2025 UC-NL CRT award cycle.
- A UC PI, Co-PI, or Co-I on any current UC National Laboratory Fees Research Program award that would overlap with the award period of this competition is ineligible to participate in a proposal.
- A UC PI or Co-PI on any current UC Multicampus Research Program and Initiatives (MRPI) award that would overlap with the award period of this competition is ineligible to serve as a PI or Co-PI in a proposal or resulting award, and their inclusion in other roles (e.g., Co-I, etc.) must be in a topical research area clearly distinct from their MRPI funding.
- 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, or Co-Is on any UC-NL CRT proposal.

UC-NL CRT Award Requirements

Research Scope and Content Requirements: UC National 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. All proposed research and training activities must be in *the targeted topical area* defined in this RFP.

Collaborative Research Innovation: The intent of this funding opportunity is to fund 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, application, or others as appropriate to the research area) in the identified targeted research area. 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. Proposed activities should comply with the research scope and new activities requirements outlined in this RFP.

Collaborative Team Composition: The intent of this funding opportunity is to fund *new* collaborations between UC and the national labs. Project personnel and activities should engage diverse teams and be structured to stimulate collaboration across career stages, disciplines and perspectives, spanning postdoctoral scholars, early, mid-career, and senior faculty, and laboratory scientists. The proposal should include leadership opportunities for early career faculty and new national laboratory scientists, including serving in the PI and/or co-PI roles in the collaboration. Teams should showcase the complementary strengths of the collaboration, and articulate a plan for long-term engagement between the UC and national lab researchers which will extend beyond the award period.

Career Development and Mentorship Opportunities for Postdoctoral Scholars and Early Career Faculty and National Laboratory Scientists: This component may include opportunities for shared scientific leadership, mentoring, and training for postdoctoral scholars, early career faculty, and laboratory scientists, access to specialized facilities, data sets, equipment, and other mentorship and collaborative opportunities suitable to the research scope. It should also include structured opportunities for laboratory scientists to make extended research and teaching visits to UC campuses, and UC faculty and postdoctoral scholars to spend an extended period at a national laboratory engaged in activities related to the research topic. Meaningful inclusion of faculty, postdocs, and scientists historically underrepresented in the relevant fields in mentorship opportunities will be considered in the evaluation of this component.

UC Student Training and Support: Proposals must clearly articulate the opportunities for UC students (graduate and, where feasible, undergraduate) to meaningfully engage in the research endeavor, gain professional experience, obtain research support, and make appropriate progress toward degree completion. Graduate students should be integrated into the core research activities through exchanges with other campuses, co-supervision by UC campus faculty and national laboratory personnel, summer internships, opportunities to present research findings at scientific meetings, or other activities that support their academic advancement and career development. Internship and research training opportunities for UC undergraduates are encouraged where appropriate, and support for these activities may include student stipends to undertake summer or short-term research training. Proposals should articulate concrete opportunities for graduate students (and, if appropriate, undergraduates) to engage in research activities at the national laboratory. Proposals that seek to involve trainees historically underrepresented in the identified fields are encouraged, and evidence of these efforts will be considered in the evaluation of this component.

> *Optional: To foster a diverse professional pipeline for both UC and the national laboratories, the UC PI or UC Co-PIs funded by the UC-NL CRT are encouraged to develop proposals for the UC-HBCU Initiative or the UC-HSI Doctoral Diversity Initiative. The UC-HBCU and UC-HSI initiatives offer competitive grant awards to UC faculty to develop a next generation of scholars historically underrepresented in research. The UC-HBCU Initiative 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. The UC-HSI initiative supports short-term and long-term programs/projects to enhance and expand pathways to the professoriate for underrepresented students from California Hispanic Serving Institutions (HSIs), with a goal to increase faculty diversity and inclusion at UC. For information regarding these opportunities please see: https://www.ucop.edu/graduate-studies/initiatives-outreach*

Award Term and Funding Request: UC-NL CRT proposals may request three years of support. The maximum funding request is $4 million (including indirect costs) for a three-year award term. The maximum allowable annual budget request is $2 million. Total annual project costs in excess of the allowable maximum may be covered by other sources of support or contributions (see "National Laboratory Contributions" below).

Total budgets must be well-justified in relation to the proposed activities and potential impact of the proposal. Funding should prioritize research and training support for UC students and postdoctoral scholars, particularly support for activities that advance graduate students to degree. Proposed budgets should seek to efficiently use resources to maximize research outcomes and minimize administrative costs. An itemized budget and justification for each collaborating institution is required in the full proposal.

> *Allowable and Non-Allowable Costs*: The full application instructions 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 or for national user facilities are not allowed. Equipment purchases by UC campuses may be requested if a compelling justification is provided, and use of and access to the equipment is made available across the UC system. Equipment must permanently reside at a UC campus location and may not be purchased for permanent installation at a non-UC location.

National Laboratory Contributions: Recognizing that the national laboratories have unique resources, facilities, expertise, data, and other research infrastructure that will ensure both mutual benefit and successful outcomes, UC-NL CRT proposals are expected to identify specific contributions and facility access that each participating national laboratory will make to the collaborative endeavor. Contributions may include space, equipment or facilities use, data, or expertise that may be covered by other sources of support or directly relevant activities at the lab. The participating national laboratories describe the specific laboratory contributions to the proposed research on the "project contributions" tab of the application.

Commitment to Sustain UC – National Laboratory Collaborations: Collaborations should demonstrate a commitment to deep, sustained engagement between UC and the national labs that will extend beyond the award period. The proposal should include a specific plan for periodic meetings of the faculty, scientists, postdoctoral scholars, 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.

How to Apply: UC-NL CRT Application Materials

The application process is comprised of two mandatory stages: Letters of Intent (LOI) and Full Proposals.

Required Letter of Intent (LOI)

The required LOI includes the following information:

1. Identification of the Applicant PI and Applicant Institution. Applicant PI information includes: name, academic title and appointment type; departmental affiliation; and biosketch/CV uploaded to the Project Personnel table.
2. Identification of each Co-PI and their corresponding UC campus, location, or national laboratory (one and only one Co-PI per site). Each Co-PI **must submit a** "Co-PI Letter of Intent Eligibility Form [download]", available in SmartSimple. The completed and signed form must be attached to the Co-PI's biosketch/CV and uploaded to the Project Personnel table.
3. 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.
4. Estimated total budget requested for the award term (3 years)
5. Disclosure of current or past LFRP or UC Multicampus Research Programs and Initiatives (MRPI) funding

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. Only applicants who are invited to submit a proposal based on their LOI may proceed to the full proposal. Once the LOI is approved, the applicant UC campus and Applicant PI cannot be changed in the full proposal. Updates, refinements and adjustments may be made to the proposed scope, abstract, and activities when the full proposal is submitted, and additional eligible institutions and Co-Investigators may be added to the full application.

Full Proposals

The **Full Proposal** includes a research plan limited to 12 single-spaced pages (items #3-7 below), excluding literature cited. 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 templates, and will include the following sections:

1. Abstract (2400 characters / ~350 words): The abstract should be written to address a general scientific audience. Avoid discipline-specific jargon or technical terms. The abstract will be made publicly available on the program website.

2. Project Personnel Table (updated): Please update the Project Personnel Table from the LOI to include any additional named Project Personnel (Co-Is, trainees, etc.), and attach a CV/biosketch for personnel in each of the following roles: Applicant PI, Co-PI (one per collaborating institution), Co-I. If a new location is added in the full proposal, the identified Co-PI must attach the "Co-PI Letter of Intent Eligibility Form [download]" to their CV. Each CV should be limited to 2 pages per person, excluding Other Support. Other support (disclosure of all current or anticipated sources of research funds) should be appended to the CV. Please review the full application instructions for information on completing this table.

3. 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. Provide a specific description of the multi-disciplinary, interdisciplinary or cross-disciplinary approaches, techniques and methods that will be undertaken, and how these will be integrated into the team's larger collaborative effort and lead to successful outcomes. Identify the significance of these outcomes.

4. Research Team, Collaboration Structure and Mutual Benefit (~2 pages): Identify the project leadership, collaborating institutions, faculty, and national laboratory scientists, and their unique expertise 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 campus 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) the specific contributions that the collaborating national laboratory scientists will make to the collaboration in terms of expertise, in addition to access to facilities, resources, data, or equipment; and 4) how the collaboration will sustain beyond the award period, provide a competitive advantage for extramural support, and position UC as a national leader in the field.

5. Career Development and Mentorship for Postdoctoral Scholars and Early Career Faculty and Scientists (~1 page):

Describe the role of early career UC faculty and laboratory researchers in the research endeavor and collaboration, opportunities for them to have leadership roles in the collaboration, efforts to engage diverse participation, including individuals historically underrepresented in the field, and the associated mentoring from senior faculty and scientists they will receive. Describe the structure of the opportunities that UC researchers will have to directly engage at the national laboratory with the available expertise and resources.

6. Student Research Training Opportunities (~1 page): Describe how graduate students and undergraduate 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 the specific opportunities for students to engage directly with national lab facilities, resources, and personnel. Outline efforts to engage students from diverse backgrounds and perspectives historically underreprented in the field in the research and training opportunities. Describe any additional educational benefits of the collaboration provided to the UC system.

7. 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.

8. Itemized Budget and Justification: Provide a detailed budget, by project year, using the budget interface in SmartSimple. Budget entries should be accompanied by brief line-item justifications in relation to the proposed activities. Carefully review the Allowable and Non-Allowable Costs above and the detailed guidelines and instructions provided with the full application instructions.

9. National Laboratory Contributions: Each collaborating laboratory must complete the "project contributions" tab in the SmartSimple interface. This section should include only those contributions *not* covered by the budget request to the UC National Laboratory Fees Research Program, and must align with activities described in the research plan. A commitment to provide these resources must also be included in the commitment letters from the collaborating laboratories (see attachments below). Each participating laboratory must verify its own contributions and the commitment letter.

10. Additional Proposal Requirements: In addition to the research plan template, full proposals must include the following: 1) identification of any human subject (IRB), animal use, or biohazard issues and the approach to compliance (1-page template); 2) a letter of commitment from each participating national laboratory to provide the contributions outlined in the proposal, if awarded. *Optional*: Up to two additional one-page letters of commitment may be included. Longer or additional letters will not be accepted. No additional attachments beyond those listed here are allowed.

Scoring Criteria

Reviewers will use the following criteria in the scoring and ranking of the proposals:

1. Research Excellence and Innovation (50%): Highest quality, compelling research that has the potential to strengthen the capabilities of the UC system and significantly advance cutting-edge scholarship in the area targeted in this RFP. 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 Laboratory Benefit (20%): Proposed activities must mutually benefit UC and the national laboratories, 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 national laboratories and the formation of new research collaborations between UC campus and laboratory researchers. Genuine engagement across the collaborating campuses and with the national laboratories must be demonstrated, as well as a plan to sustain the collaboration beyond the award period. Other considerations include assessment of the resources, including leveraged project contributions, by the national laboratories to support the collaboration and research infrastructure, as well as the likelihood that this funding will position UC faculty and laboratory scientists as national leaders and enhance competitiveness for extramural support. Proposals that include enhanced research outcomes through the inclusion of additional UC campuses beyond the minimum program requirements are encouraged.

3. Quality of the Career Development and Mentoring Program (15%): Extent and quality of opportunities for meaningful collaborative engagement among researchers across career stages and locations, evidence of efforts to involve diverse and historically underrepresented post-doctoral fellows and early career faculty to enhance research outcomes, as well as structured mentorship and professional development activities – including activities at the national labs -- that help position early career UC faculty and lab researchers as leaders in their fields.

4. Quality of Student Training and Support (15%): Extent and quality of opportunities for meaningful engagement by graduate and undergraduate students, as demonstrated by student support, participation in key research activities, potential for interchange between other students and collaboration members, specific opportunities to access facilities, resources, and expertise at the national labs, and efforts to engage and support trainees historically underrepresented in the relevant fields.

5. Additional Considerations Include (unscored): 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 commitments by national laboratories; 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 biohazards.

Research Program Oversight

The UC National 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 as well as a project outcomes report after the conclusion of the award period. 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.

Program Contact Information

For questions on program rules, funding priorities, or scope of proposals, please contact UCRI@ucop.edu.

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

Information regarding the UC-HBCU and UC-HSI Initiatives available at: https://www.ucop.edu/graduate-studies/initiatives-outreach.

Laboratory Contacts and Resources

UC faculty with questions about the process or approach to forming collaborations with the national laboratories in the targeted area are encouraged to contact the national laboratory Points of Contact identified below and consult the suggested resources:

Lawrence Livermore National Laboratory
Eric Schwegler, PhD – Director, Academic Engagement Office & Science Education, schwegler1@llnl.gov
LLNL Resources: Center for Micro- and Nanotechnology (CMNT)

Los Alamos National Laboratory
Heather H. Erpenbeck, PhD – University Collaborations Office Leader, hawk14@lanl.gov
LANL Resources: Center for Integrated Nanotechnologies

Lawrence Berkeley National Laboratory
Kristin Balder-Froid - Head, Strategic Development, Laboratory Directorate, khbalder-froid@lbl.gov
LBNL Resources: Microelectronics and Beyond

Attachments

Appendix 1: Frequently Asked Questions
Appendix 2: Instructions for Submitting a Letter of Intent
Appendix 3: Other RGPO Policies and Pre-Award Requirements

Updated Program Announcements, updated FAQs, RFP clarifications (if any), and information on applicant webinars 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: https://ucop.edu/research-initiatives/programs/lab-fees/crt-awards.html

Appendix 1:

2025 UC National Laboratory Fees Research Program

UC-NL Collaborative Research and Training Awards

Frequently Asked Questions (FAQs)

Version Dated: April 2, 2024

Please refer to the 2025 Request For Proposals (RFP) for program requirements

This document is a supplement to the 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 program website for updates.

How to Apply:

All application materials must be submitted online via SmartSimple. 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.

Required Letters of Intent (LOIs) are due Thursday, May 23, 2024 at 12:00 noon Pacific Time
UC-NL CRT Full Applications are due Thursday, August 1, 2024 at 12:00 noon Pacific Time

Eligibility and Collaborative Structure

1. **I am a national laboratory scientist with an adjunct appointment at UC. Can I serve as the Applicant PI and submit a proposal?**
   If the adjunct appointment at UC is their primary appointment, and the individual has PI status at the UC campus, then the national laboratory scientist may submit a proposal as the UC PI with the permission of the campus administration. For individuals with multi-location appointments (MLAs), their primary appointment is typically the location through which they receive their salary and benefits.

2. **I have a 50-50 joint appointment between a UC campus and a national lab. Which institution should I apply through?**
   The intent of the LFRP is to create and sustain new collaborations between UC and the national labs. You should consult with both your campus Office of Research and the national lab contact listed in the RFP for additional guidance for this specific category of joint appointment.

3. **Can I participate in more than one Letter of Intent or 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 FAQ #1 above: an individual cannot submit one proposal as a UC faculty member and be included as a national laboratory participant on a different proposal, due to the requirements for individuals with a joint UC-national laboratory appointment.

4. **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 non-UC 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 project contributions must be outlined in the "project contributions" tab in SmartSimple, similar to what is required by the participating national laboratories.

5. **How do I know if my research topic is eligible?**
   The proposed research must significantly advance research in the area targeted by this funding opportunity listed in the RFP. Topics and projects that do not clearly fall within the targeted area as described in the RFP are not eligible for a UC-NL CRT in this round of competition. Applicants are encouraged to refer to the LFRP Workshop Advancing Research in Microelectronics report for more information on some research priorities which can leverage the complementary strengths of UC and the national labs and advance the field. The review panel will consist of experts who will assess the strength and alignment of the proposed research with the UC National Laboratory Fees Research Program goals.

Allowable Costs and Budget Structure

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 and allowable costs document, 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. In order to ensure the overall goals of the program to strengthen UC research capacity and to train UC graduate students and post-doctoral fellows, collaborations are strongly encouraged to support UC faculty, post-docs, and students wherever possible.

7. **The RFP discusses required contributions by the participating national laboratories. How much is required?**
   Project contributions are required by each of the national laboratories participating in the project, and should realistically represent direct support of the outcomes and success of the project as described in the proposal. Contributions may include use of or access to equipment, space, relevant data, expertise, and other research infrastructure, and must be made by each of the participating national laboratories. These contributions should be detailed in the provided "project contributions" tab (and not itemized in the budget request). The total dollar equivalent or percentage of contributions is not specified, but should genuinely represent the laboratories specific commitment 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 authorizing individual at 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 award amount includes the indirect costs.

9. **What is the funding structure for these awards?**
   For projects awarded in the 2025 cycle, the applicant UC campus will receive the funds for all UC campus collaborators and will allocate (redistribute) the "subcontractor" funds to each UC campus in accordance with the final approved budget or project plan. The applicant campus will manage any approved budget adjustments between campuses that occur during the project execution. The applicant campus is responsible for annual fiscal reporting to our office, which will include information on the award line item expenditures and any carry-forward balances at all the UC locations.

   Regarding the portions of the final approved award budgets that will be paid to the national labs, the UC National Laboratory Fees Research Program will separately enter into agreements with each national lab. Each national lab will enter a separate budget into the SmartSimple interface and will be required to upload an institutional approval form. We will follow the same contracting and payment processes with each of the three national labs as we have used in the past. Once the awards are identified, we will communicate directly with each lab regarding the agreements. Each national lab will separately submit annual fiscal reports.

   Each project will submit one consolidated annual scientific progress report, which will be coordinated by the applicant campus and should include the contributions and outcomes made by all the collaborators (both UC and national laboratories).

10. **How do I include costs for research activities at the national user facilities into our proposal budget?**
    To take advantage of the unique research opportunities at national user facilities related to the thematic priorities of this RFP, applicants may propose research activities at the national user facilities. Allowable costs include user fees and direct cost charges for access to the user facilities. These should be included in "supplies and other expenses" on the budget interface. No funds may be requested to purchase equipment at or by the national user facilities, or for equipment that would be permanently installed at a national user facilities. Portable equipment, if required to achieve the project aims and not otherwise available at the national labs or user facilities, may be purchased by a UC campus, and must be made accessible to project participants from any participating project location. Upon completion of the project, the equipment must be returned to the UC location that purchased the equipment and made available for use across the UC system for future research. Please see the budget rules related to equipment purchases in the full application instructions and budget guidelines for more information.

Proposal Submission and Application Guidelines

11. **Does the Letter of Intent need to be submitted through the campus Sponsored Projects or Contracts & Grants Office?**
    No. Unlike full proposals, LOIs do not need to be submitted through the C&G/SPO. 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 Co-PIs

to ensure that their local institutions are apprised of (and approve, if required) the LOI. The LOI requires the completion and submission of a Co-PI Eligibility Form for each Co-PI.

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. Once the LOI is approved, the applicant UC campus and Applicant PI cannot be changed in the full proposal. Updates, refinements and adjustments may be made to the proposed scope, abstract, and activities when the full proposal is submitted, and additional eligible institutions and Co-Investigators may be added to the full application. Note: It is the Applicant PI's responsibility to ensure any newly added collaborators to the full proposal meet the eligibility criteria. 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?**
    The Strategic Partnership Projects office (or WFO) from each participating national laboratory must review the proposed budget and commitments included in the proposal, and the institutional signing official must submit an approval form with the application. In addition, each proposal must include a letter from each participating national laboratory affirming the specific commitments the laboratory will make if the proposal is awarded, and this letter must be signed by the designated laboratory official. Designated contacts for the national labs are provided in the RFP and we strongly recommend that each Applicant PI and the national lab Co-PI on the proposal communicate with those individuals at the early stage of proposal planning.

Appendix 2:

UC National Laboratory Fees Research Program

Letter of Intent Submission Instructions

Collaborative Research and Training Awards

Version Dated: April 2, 2024

Please refer to the Request for Proposals (RFP) for 2025 awards for program requirements.

This is a supplement to the UC National Laboratory Fees Research Program Collaborative Research and Training Awards RFP and is intended to provide additional guidance and technical support 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.

The University of California (UC) office of Research and Innovation is pleased to provide applicant instructions for submission of a Letter of Intent for the UC National Laboratory Fees Research Program Collaborative Research and Training Awards funding opportunity announced on April 2, 2024. Submission and approval of a Letter of Intent (LOI) is required to submit a full proposal. LOIs must be submitted **by May 23, 2024 before 12:00 noon Pacific Time in the SmartSimple System**. We encourage early submission of LOIs. Please note: LOIs will not be accepted after the deadline.

UCRI uses a grants management system called SmartSimple. Please use the following instructions to submit an LOI before the deadline above.

OVERVIEW OF ONLINE LOI SUBMISSION PROCESS

The LOI must be submitted through SmartSimple at https://rgpogrants.ucop.edu/. Applicants may submit LOIs via the online system any time between April 2, 2024 and May 23, 2024. The LOI submission must be **completed** (not merely initiated) by the May 23, 2024 12:00 noon PT deadline.

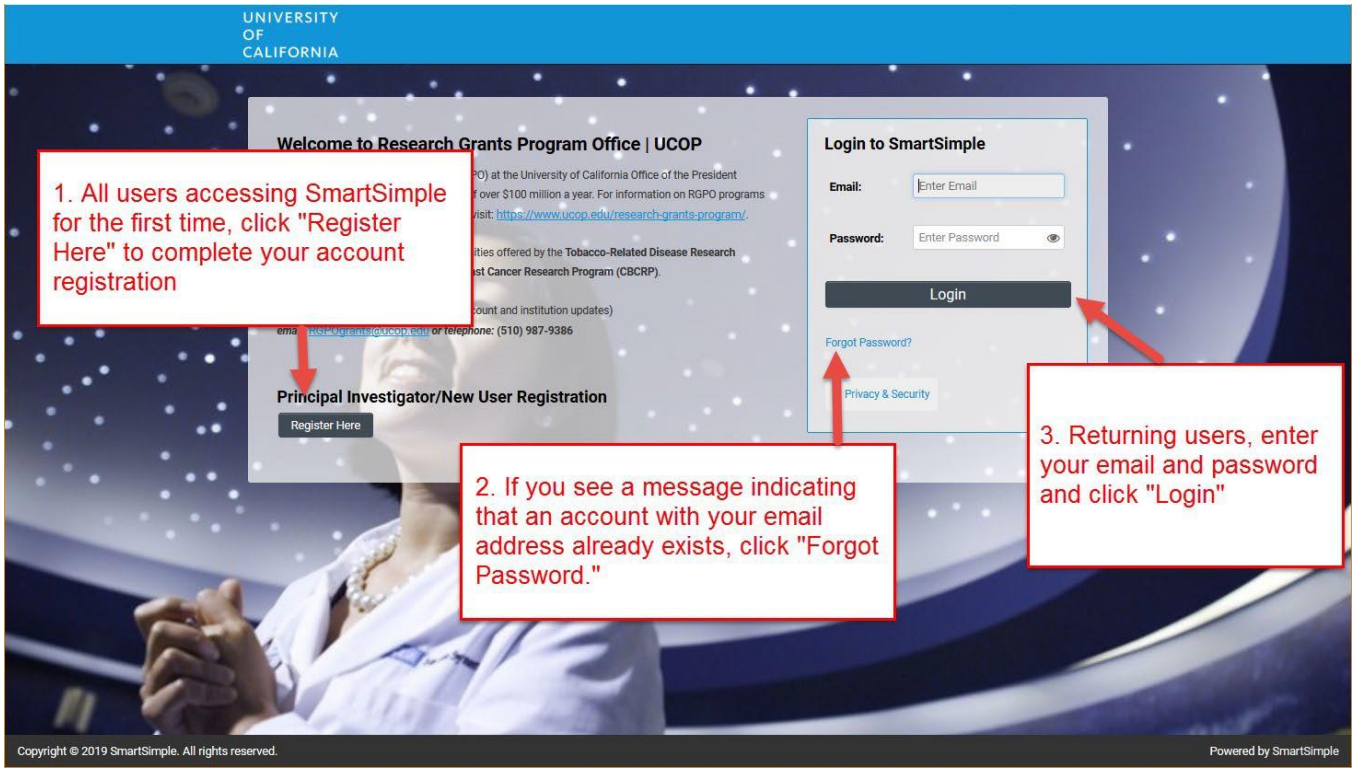
Step 1: Applicant Registration with SmartSimple

Applicant Principal Investigators (PIs) must register as users of SmartSimple to submit an LOI and complete a proposal at https://rgpogrants.ucop.edu/.

All Users Accessing SmartSimple for the First Time:

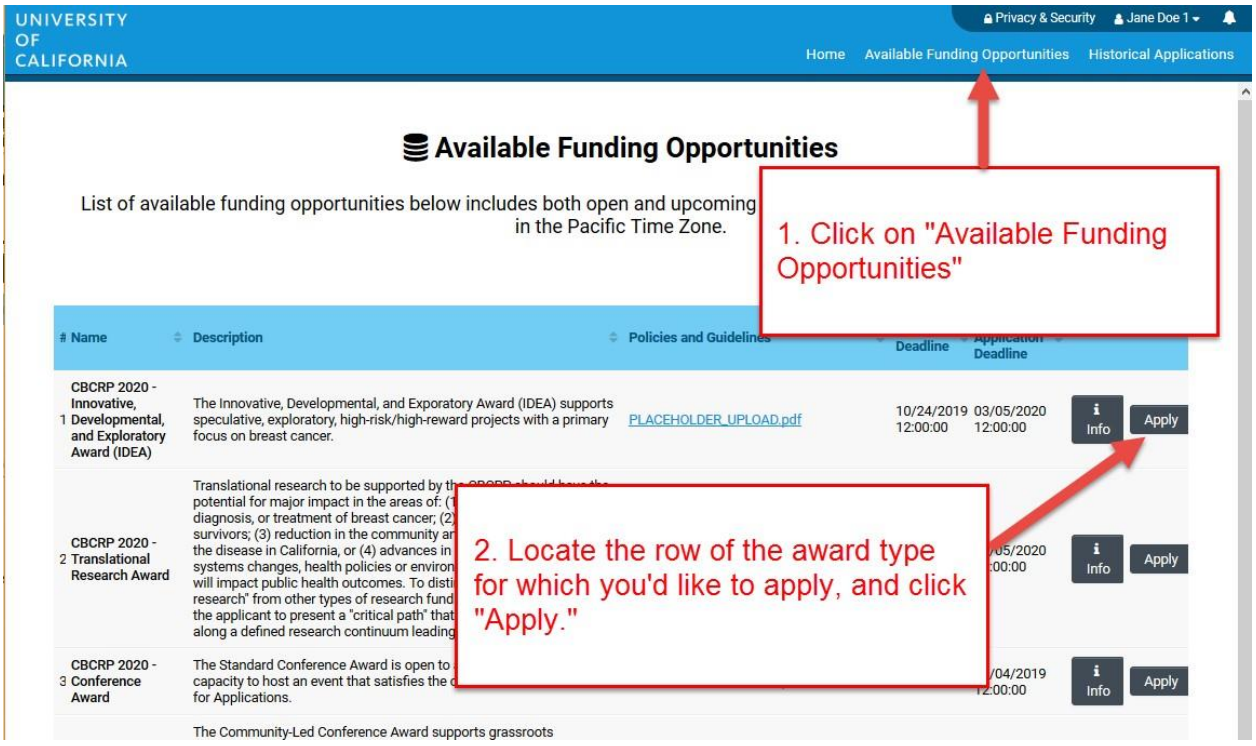
1. When accessing SmartSimple for the first time, all users should click the "**Register Here**" button under "**Principal Investigator Registration**" and follow the instructions to enter your institution, name, and contact information.
2. Each UC campus has one institution in the system; be sure to search for "University of California" to find their listings.
3. If you need to change the institution that your account is associated with, please contact us.
4. Your user account will then be created. You will receive an email with instructions to create a password and complete your account profile. Once you have completed this step, skip to Step 2: LOI Preparation.
5. If you see a pop-up message indicating that an account with your email address already exists, return to the main login page (https://rgpogrants.ucop.edu/), and click the "**Forgot Password**" link. You will receive an email with a link and instructions to reset your password. **If you do not receive the password reset email within one hour, please contact us using the contact information at the end of this document. Make sure to check your spam or junk folder.**

Returning Users: Applicants who have previously registered with SmartSimple or are returning to complete an in progress LOI should enter their username and password under "**Login**" and click the "**Login**" button on the SmartSimple homepage.

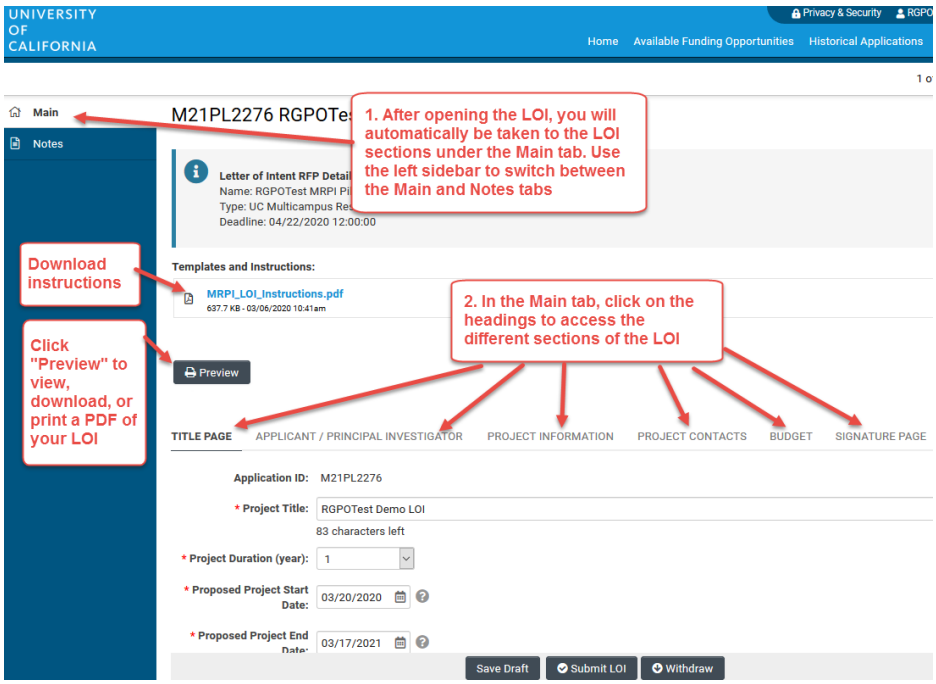


Step 2: LOI Preparation and Submission

1. Once logged into the system, click on "**Available Funding Opportunities**" (upper right corner).
2. Find the row for the Collaborative Research and Training Awards, then click **"Apply."** You will then be taken to the Eligibility Check.



3. Complete the Eligibility Check and click **"Submit."**
   - The Eligibility Check contains a series of questions and statements regarding applicant eligibility. You must provide an answer to acknowledge that you meet all eligibility criteria mentioned. Upon submitting a "Yes" response, you will be able to start the LOI process. If your answer is "No," you are not eligible to apply.
4. Review the Helpful Tips, and click **"Continue"** to begin your LOI.
5. Once in the LOI interface, you will see two options on the left sidebar: Main and Notes.
   - **Main:** Click this tab to access each section of the LOI. Detailed instructions for each section are provided below.
   - **Notes:** Click this tab to create Notes for your LOI. Click **"+"** to add a new Note. Any Notes stored here are for the applicant's reference only and will not be reviewed by program staff. Please make sure to include all relevant project information in the LOI sections under the Main tab.
6. In the "**Main**" tab, complete each section of the LOI and submit by the deadline. Please see below for detailed descriptions of each section. Note: Be sure to save your work often by clicking **"Save Draft."** You can access your LOI in later visits for additional work by selecting **"Open"** under **"In Progress Applications"** on the Home screen.



STEP BY STEP: DETAILED DESCRIPTIONS OF EACH LOI SECTION

1. Additional details for each section of the online LOI submission form are provided below. To begin the LOI, please select **Apply** from the **"Available Funding Opportunities"** page; if you have already started an LOI select the **"Home"** page and the **"In Progress Applications"** tile.
2. The LOI sections: **Title Page, Applicant/Principal Investigator, Project Information, Project Contacts, Budget, and Signature Page,** can be completed in any order and in any number of sessions prior to the deadline. You can move between sections by clicking directly on the section headings, or by clicking the "NEXT >" text at the bottom of the screen. Required fields are denoted with a red asterisk (*). **Note:** Please be sure to save your work periodically or after each entry.
3. As you move through each section using the horizontal navigation bar, instructions are always available for download at the top of the page.
4. Click the **"Preview"** button at any time to view, download, or print a PDF version of your LOI.

LOI Section: Title Page

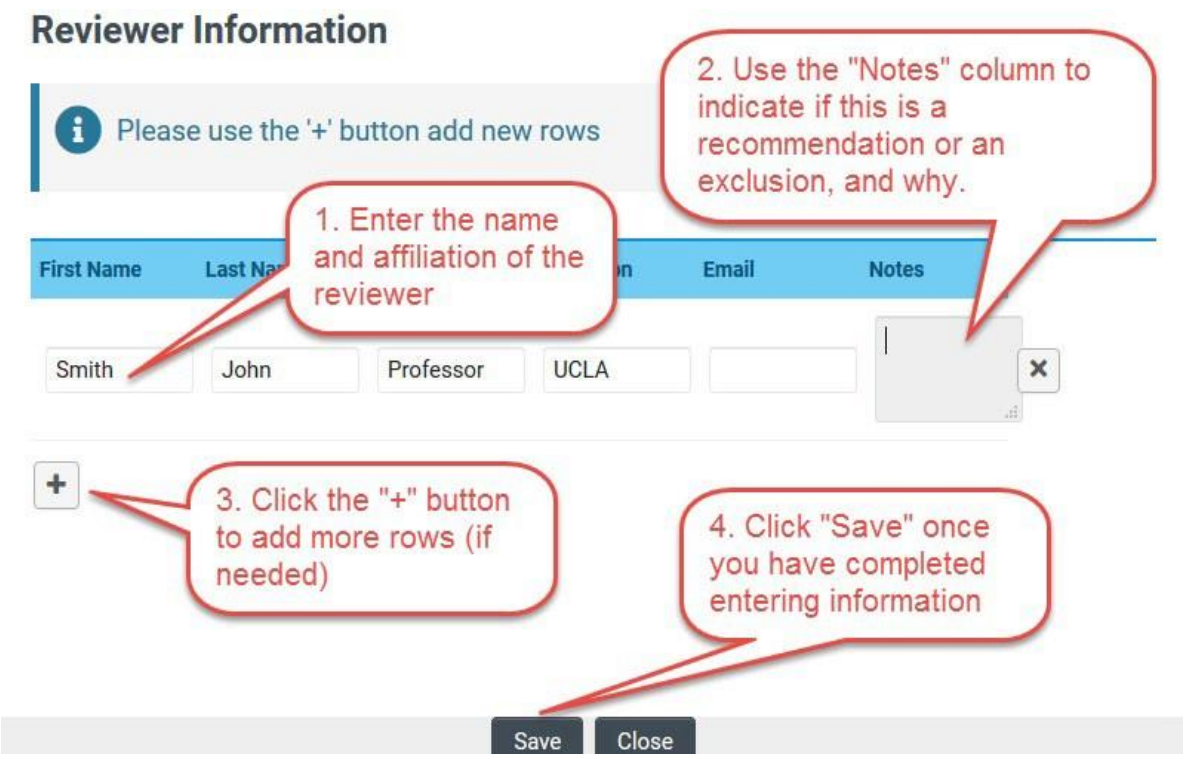
- **Project Title:** Please enter the project title here (100 characters or fewer including spaces).
- **Project Duration (Years):** Using the drop-down menu, select the duration of the project. Refer to the RFP for details.
- **Project Start Date:** The project start date is March 1, 2025.
- **Project End Date:** Please enter the project end date here, based on the number of years requested.
- **Targeted Research Area:** Please indicate your proposal's targeted research area as:
  - Research Advancing Microelectronics
- **Publications:** Confirm understanding regarding no restrictions on publications.
- A**pplicant PI UC Academic Appointment Title Group**: Please select Academic Appointment title here. Please consult Section 1-530 of the UC Contracts and Grants Manual for Principal Investigator appointment eligibility. https://www.ucop.edu/research-policy-analysis-coordination/resources- tools/contract-and-grant-manual/chapter1/chapter-1-500.html#ch1-530
- **Applicant PI percent time on UC payroll at one of the ten UC Campuses**: Please indicate applicable percent effort category.
- **Prior/Concurrent Funding:** Please answer the questions regarding previous and current funding. If "Yes" is selected on any of the questions, an additional text box will appear for you to provide more information.
- **Confirmation proposed collaboration meets eligibility requirements**: Provide confirmation you have reviewed the RFP and verified that the proposed collaboration, Applicant PI, and each Co-PI individually and collectively meet the eligibility requirements.

LOI Section: Applicant/Principal Investigator

Applicant/Principal Investigator information will be auto-populated from the "My Profile" section of your SmartSimple account. Please review this section for accuracy. To make changes to this information, click on your name in the upper right corner of the page, and select "My Profile." Save your changes. Return to the LOI by selecting **"Home"** in the upper right corner of the screen, and then the "In Progress Applications" tile. You can also go directly to the "My Profile" page in your account to make changes at any time.

LOI Section: Project Information

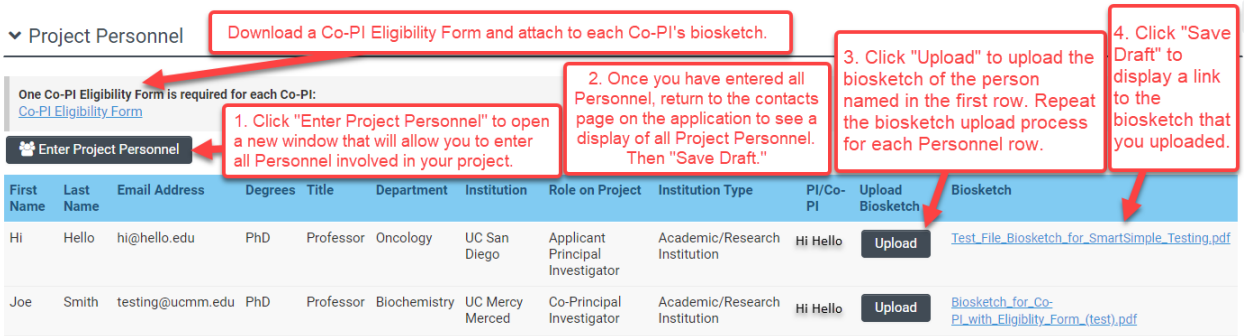
- **Lay Abstract:** In the textbox provided, concisely summarize the proposed project. This abstract is limited to 2,400 characters including spaces (approximately 350 words) and should be written in a manner that is appropriate for a general scholarly audience. Information must be entered as text only (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 abstract is non-confidential and may be published or circulated by the Program. An abstract is required.
- **Subject Area(s):** Select the subject area(s).
- **Focus Area(s):** Select "Microelectronics" and at least one additional focus area. Start typing the focus area and the system will populate options. Refer to the Focus Areas table for a full list of available focus areas.
- **Suggested Reviewers:** (Optional) UC Research Initiatives will assemble 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, email address, and affiliation of reviewers. In addition, you may identify scholarly peers who you do not want to review your proposal. Click the "Enter Suggested Reviewer" button to list individuals in either category.
  - Recommendations: In the "Notes" column, please indicate that this is a recommendation.
  - Exclusions: You may identify scholarly peers who you do not want to review your proposal. In the "Notes" column, please indicate that this is an exclusion. Such requests MUST include a brief explanation of the perceived conflict of interest in the "Notes" column.
  - Final determination of review assignments is at the discretion of the Program. All requests to include or exclude reviewers are confidential.



LOI Section: Project Contacts

- **Project Personnel:** At the LOI stage, you must enter the Applicant Principal Investigator of the project, and the Co-PI site lead for each collaborating campus/institution site lead. Click **"Enter Project Personnel."** A separate window will open. Using the **"+"** button, enter the names and details of the PI and Co- PI site leads. For each entry, you must provide the full ranked title the person assumes at his/her institution (e.g., Assistant Professor, Associate Professor, Professor). List only one Co-PI per participating site – do not include other collaborating investigators or other grant personnel on the LOI.
    - **Role on Project:** For each personnel, select their role on the project from the drop-down list. At the LOI stage, only include personnel with the Role of Applicant Principal Investigator or Co-PI.
    - **Institution Type:** Select "Academic/Research Institution" for each personnel from a UC campus or UC-affiliated site, including UC affiliated national laboratories
    - **PI/Co-PI column**: Disregard this column.
    - Click **"Save"** to save your changes. Click **"Close"** to return to the Project Contacts tab.

Upload Personnel Biosketches: On the Project Contacts tab, a button will appear to upload a biosketch/CV for the PI and Co-PIs. Each Co-PI (collaborating Campus/Institution site lead) should complete a *Co-PI Eligibility Form (download)* (which can also be found above the Project Personnel table) and attach to their biosketch/CV and upload here. When uploading a biosketch, please use the "print to PDF" functionality if using an NSF or other fillable PDF template. ***Note:*** *Please make sure that your uploaded PDFs are not password protected; if they contain electronic signatures, please "print to PDF" before uploading. Tip:* Click "Save Draft" to display a link to the biosketch that you uploaded.



LOI Section: Budget

- **Amount Requested:** Enter the estimated total amount requested for each year of the proposed project. Click **"Save Draft,"** and the system will calculate the total amount requested. This amount is an estimate only and is not binding. If your LOI is approved, you may adjust the amount(s) in the full application stage. Hint: You must first select the project "duration" on the Title Page in order for the system to display the budget line(s) per project period.

LOI Section: Signature Page

All Applicant PIs must certify that that the statements provided in the LOI are true, complete, and accurate to the best of the applicant's knowledge. The applicant is aware that any false, fictitious, or fraudulent statements or claims may subject me to criminal, civil, or administrative penalties. The applicant agrees to accept responsibility for the scholarly conduct of the project and to provide the required progress reports if a grant is awarded as a result of this application.

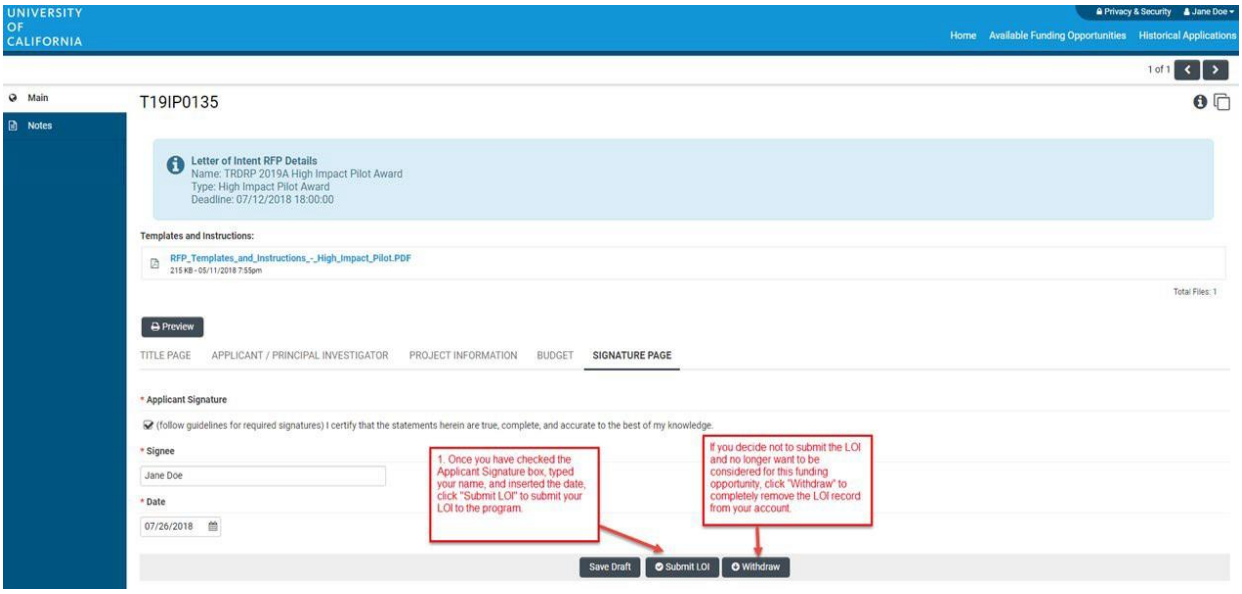
- **Applicant Signature: Check the box to certify the information in your LOI.**
- **Signee:** Type your full name into the field.
- **Date:** Select the date on which you have signed the LOI.

Review your LOI: Preview button

Click the **"Preview"** button to view or download a PDF of your LOI submission. The Preview button is made available so applicants may print or download their LOI submission. Click on the download or print icons (upper left corner) to view, print, or download the completed LOI.

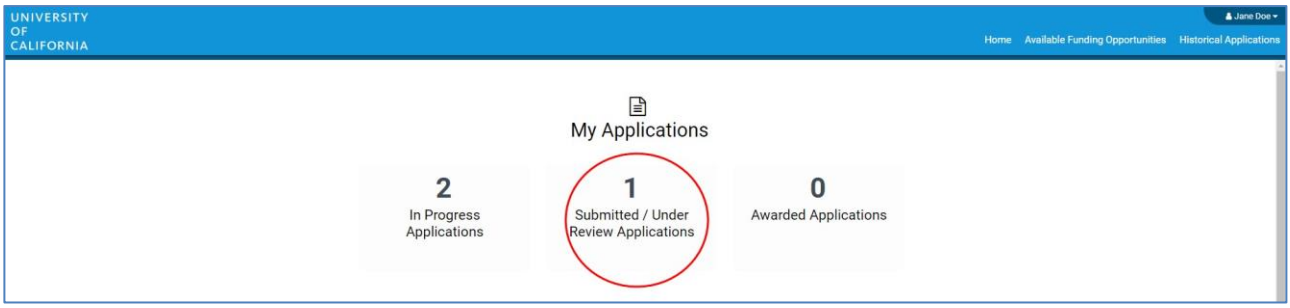
Submit your LOI

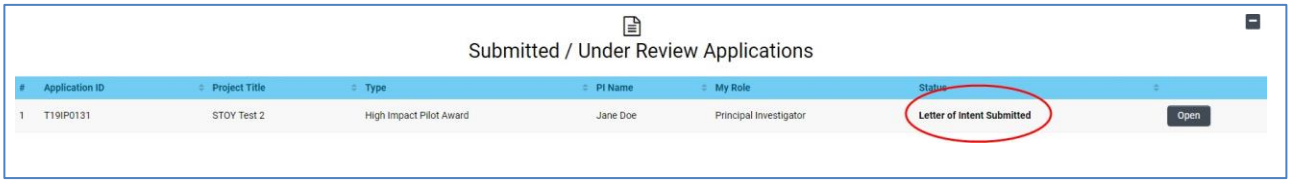
Click the "**Submit LOI**" button to submit your LOI to the program. If you decide not to submit the LOI and no longer want to be considered for this funding opportunity, you may wish to withdraw your LOI. Clicking on **"Withdraw"** will completely remove the LOI record from your account. In lieu of "Withdraw" you can choose not to submit a completed LOI.



Confirming Status of Your Submitted LOI

Following the submission of an LOI to SmartSimple, applicants will receive an email confirming receipt of the LOI. The email confirmation typically arrives within a few minutes (the length of time may be greater near the submission deadline). If you do not receive the SmartSimple confirmation email within an hour of your submission, please contact us using the contact information provided at the end of this document. You can also confirm the status of your LOI submission by going to your SmartSimple home page, under the **"Home"** link in the upper right corner and clicking on **"Submitted/Under Review Applications."**





Questions and Technical Support

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

- UC Research Initiatives at UCRI@ucop.edu regarding program scope, priorities, and eligibility.
- Research Grants Program Office at RGPOGrants@ucop.edu regarding application and pre/post- award procedures, and technical questions regarding SmartSimple.

For the most up-to-date application and review cycle information refer to the following website: https://www.ucop.edu/research-initiatives/programs/lab-fees/crt-awards.html

Appendix 3:

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.

Condition of Award for UC Faculty
In accordance with University of California policy, investigators applying from a UC campus must submit proposals through their campus contracts and grants office ("Policy on the Requirement to Submit Proposals and to Receive Awards for Grants and Contracts through the University," Office of the President, December 15, 1994"). Investigators from other UC locations or from the national laboratories should apply through their institution's contracts and grants office. Investigators with a joint or multi-location appointment should consult the eligibility guidelines in the RFP to determine through which location they are eligible to apply.

Human Subjects and Material, Animal Subjects, and Biohazards
Approvals for use of human subjects and material, animals, and biohazards 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 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 the research requires IRB approval, we encourage use of the UC IRB Reliance Registry to streamline the 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 funding program (e.g., UC National Laboratory Fees Research 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 the UC Publication Management System, 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 the research program must be made by UC campuses and are the property of the UC Regents. Special permission must be sought in advance to purchase equipment for a non-UC campus or entity. In the rare 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. Supply approved indirect (F&A) rate agreements as of the grant's start date and any derived budget calculations.
2. Supply any missing application forms or materials, including detailed budgets and justifications for any subcontract(s).
3. IRB or IACUC applications or approvals pertaining to the award.

4. Resolution of any scientific overlap issues with other grants or pending applications.
5. Resolution of any Review Committee and Program recommendations, including specific aims, award budget, or duration.
6. Modify the title and lay abstract, if requested.

All grant recipients must abide by other applicable pre- and post-award requirements pertaining 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.