RESEARCH AND INNOVATION

Request For Proposals
Zumberge Preliminary Studies Research Award

FUNDING ORGANIZATION   USC Research and Innovation (R&I)
APPLICATION DEADLINE     5 PM Pacific Time, February 5, Annually. Proposals submitted after this deadline will be rejected without review. When a due date falls on a weekend, federal holiday, or when USC offices are closed due to severe weather, the application deadline is automatically extended to the next business day.

SCIENTIFIC MERIT REVIEW March - April
PROGRAMMATIC REVIEW May
NOTIFICATION June
EARLIEST AWARD DATE July – August
AWARD PROJECT PERIOD Maximum project period is one year.
AWARDS (UP TO) Large Program Award: $100,000
STEM Program Award: $ 50,000
DEI in Research Award: $ 50,000
The number of awards is contingent upon the receipt of a sufficient number of meritorious applications. All awards are subject to the yearly availability of funds, terms and conditions, cost principles, and other considerations.

BACKGROUND
The University of Southern California (USC) is committed to enhancing and expanding its support of faculty research activities by stimulating the pursuit of funding from Federal agencies and other external sponsors. Researchers can bolster a grant application with strong preliminary data to demonstrate two key factors: (1) approach — the proposed research is promising; and (2) feasibility — the ability of the researcher and research team to carry it out is credible. The more paradigm-shifting the hypothesis is, the more a researcher must lay a solid foundation for the proposed projects. Similarly, if initial findings are surprising, the inclusion of more data is very useful to convince reviewers that the results are real, replicable, and statistically significant. A sufficient degree of preliminary data is necessary to convince scientific peer reviewers that the project has a high likelihood of success.
OPPORTUNITY

The Zumberge Preliminary Studies Research Award will provide researchers with funds to plan and conduct circumscribed research projects that will generate preliminary data that will be valuable in enhancing the competitiveness of future grant proposals submitted to external sponsors. While financial support may be obtained from any external sponsor, proposals that target federal funding agencies are of greatest interest. The Zumberge Preliminary Studies Research Award will consist of four subprograms that are described below: (1) Large Program Award; (2) STEM Program Award; and (3) Diversity, Equity, and Inclusion (DEI) in Research Award. All funds will be awarded after the completion of a competitive scientific peer review and a programmatic review. The program is not to support planning and other activities by which research teams and partnerships are developed, or planning activities supported that will enable submission of a competitive research proposal. Also, this program is not meant to support the means by which investigators can share information and ideas; plan the myriad of activities necessary for the development of a research proposal; coordinate ongoing or planned research activities; foster synthesis and new collaborations; develop community standards; or in other ways advance science and education through communication and sharing of ideas. The exclusive focus of the Zumberge Preliminary Studies Research Award is on the generation of preliminary data.

LARGE PROGRAM AWARD

The Large Program Award accepts proposals in a diverse range of research areas, including, but not limited to: information & data sciences, life sciences, engineering, physical sciences, social sciences, sciences, social work, education, business, law, and architecture, among others. Awardees will receive funding for broad, collaborative research activities that are interdisciplinary and involve groups of faculty members from multiple schools across USC. Successful proposals are led by faculty with strong records of previous research accomplishments. A Large Program Award provides support for research by a group working on a large proposal that will be submitted to a Federal funding agency or another external sponsor. The research supported under this award is meant to serve as preliminary data that will strengthen this application. The major difference between this program and the Small Award Program include identification of a significantly larger Funding Target that typically will be a center, program project, etc. (see examples in FUNDING TARGETS below). PIs are strongly encouraged to include researchers from other universities and institutions as part of their application for a Large Program Award, given the fact that the large research programs of many federal funding agencies and other external sponsors targeted by the team expect a competitive proposal to include multiple universities and other partners. The duration of the award is one year.

STEM PROGRAM AWARD

The STEM Program Award accepts proposals with a focus on broad disciplines in the physical and life sciences, architecture, technology, engineering, mathematics, education and engagement in STEM research and related areas of study. The aim of the program is to provide junior faculty in the fields of science, technology, engineering, architecture and math (STEM), with seed funds to launch their scholarly research careers. It does so by providing grants that assist faculty in developing self-sustaining research programs or serve as a steppingstone to external funding agencies for faculty who do not already have significant sponsored research programs. Non-traditional biomedical research, such as psychology or behavioral, studies are not eligible to apply; investigators in these fields are directed to apply to other R&I award programs, listed here.

Awardees will receive funding to support preliminary research, team building, and other planning activities needed to apply to STEM-related grant programs of federal agency and other external sponsors. Among eligible faculty, the potential for future external funding will be an important consideration in making awards, with priority given to awards that make an appreciable difference in faculty research potential. Applicants must have previously applied for external funding to government agencies (e.g., NSF and NIH) and are required to submit reviewer comments from their previous submission as part of the application process. The duration of the award is one year.
DIVERSITY, EQUITY, AND INCLUSION (DEI) IN RESEARCH AWARD

The DEI in Research Award accepts proposals that address critical gaps in knowledge on equity, diversity, and inclusion, and those that benefit underrepresented and disenfranchised communities. Awardees will receive funding for projects focused on diversity-related research, including but not limited to topics such as health disparities and health-related outcomes in underrepresented populations, community health, socioeconomic status, sociocultural factors, education and workforce development, among others. The duration of the award is one year.

TOPICS

Research topics can focus on any scientific domain for which an external sponsor has a funding program and include but are not limited to the physical sciences, information & data sciences, biological & life sciences, and social sciences. Proposals supported by funding through the Zumberge Preliminary Studies Research Award can vary in size and scope depending on the specific subprogram to which the applicant is submitting. Awards are intended to support the configuration of collaborative, interdisciplinary, and multi-investigator teams for external submission to federal agency or other external agency funding opportunities.

FUNDING TARGETS

Proposals submitted to the Zumberge Preliminary Studies Research Award are required to submit an application to a grant program of a targeted federal agency or external sponsor. Examples include but are not limited to the following:

**Large Program Award**

  Annual Deadline: January – February.
- National Science Foundation (NSF) Engineering Research Centers (ERC) ([https://beta.nsf.gov/funding/opportunities/gen-4-engineering-research-centers-erc](https://beta.nsf.gov/funding/opportunities/gen-4-engineering-research-centers-erc)).
  Annual Deadline: May.
  Deadline: November, biannually
  Annual Deadline: March.
- National Institutes of Health (NIH) Specialized Center Grants (U54) ([https://grants.nih.gov/grants/funding/ac_search_results.htm?text_curr=u54&Search.x=0&Search.y=0&Search_Type=Activity](https://grants.nih.gov/grants/funding/ac_search_results.htm?text_curr=u54&Search.x=0&Search.y=0&Search_Type=Activity)).
  Annual Deadline: January, May, and September.
- National Institutes of Health (NIH) Research Program Project Grant (P01) ([https://grants.nih.gov/grants/funding/ac_search_results.htm?text_curr=p01&Search.x=0&Search.y=0&Search_Type=Activity](https://grants.nih.gov/grants/funding/ac_search_results.htm?text_curr=p01&Search.x=0&Search.y=0&Search_Type=Activity)).
  Annual Deadline: January, May, and September.
  Annual Deadline: January, May, and September.
  Annual Deadline: June.
• National Institutes of Health (NIH) NINDS Morris K. Udall Centers of Excellence for Parkinson's Disease Research
  Deadline: New announcement forthcoming, anticipated deadline September
• Multidisciplinary University Research Initiatives (MURI) Program
  Annual Deadline: September.

**STEM Program Award**

• **National Science Foundation (NSF) EHR Core Research**
  https://beta.nsf.gov/funding/opportunities/ehr-core-research-ecrcore
  Deadline: October
• **National Science Foundation (NSF) Advancing Informal STEM Learning**
  https://beta.nsf.gov/funding/opportunities/advancing-informal-stem-learning-aisl
  Deadline: January
• **National Science Foundation (NSF) Discovery Research PreK-12**
  https://beta.nsf.gov/funding/opportunities/discovery-research-prek-12-drk-12
  Deadline: October
• **National Science Foundation (NSF) EHR Building Capacity in STEM Education Research**
  Deadline: February

**Diversity, Equity, and Inclusion (DEI) in Research Award**

• National Science Foundation (NSF) Inclusion Across the Nation of Communities of Learners of Underrepresented Discovers in Engineering and Science (NSF INCLUDES)
  Annual Deadline: October.
• National Institutes of Health (NIH) Mentored Career Development Award to Promote Faculty Diversity in Biomedical Research
  Deadline: Varies by year
• National Institutes of Health (NIH) Ruth L. Kirschstein National Research Service Award (NRSA) Individual Predoctoral Fellowship to Promote Diversity in Health-Related Research
  Deadline: April, August, December
• National Science Foundation (NSF) ADVANCE: Organizational Change for Gender Equity in STEM Academic Professions
  Deadline: August

**RETURN ON INVESTMENT**

It is expected that projects funded under this program will yield a return on investment of at least 10 times the funding received for an application submitted to this Request for Proposals. This will be determined by considering the magnitude of future funding awarded by federal agencies or other external sponsors that was enabled by inclusion of preliminary data and publications generated through this award.

**RESOURCES FOR SUBMITTING GRANT PROPOSALS**

Applicants selected for funding are required to contact Research Strategy & Development (RSD), a Research & Innovation suboffice dedicated to supporting faculty in the preparation of competitive applications to federal funding agencies. RSD has considerable experience in generating and submitting proposals to federal
agencies. RSD can provide support services to applicants, including science writing, budget preparation, and supporting documentation collection. Specific support provided is contingent on RSD workload and prior commitments. Applicants should contact RSD by sending an email to robyngil@usc.edu.

RESOURCES FOR PROMOTING INNOVATION

Applicants selected for funding are required to contact USC Stevens Center for Innovation (USC Stevens). USC Stevens is the university’s technology licensing office, responsible for the translation of USC research into products for public benefit through licenses, collaborations, and the promotion of entrepreneurship and innovation. USC Stevens staff can provide critical guidance related to the invention disclosure and technology licensing processes, as well as an overview of USC’s policies related to intellectual property, researcher IP rights, and responsibilities, amongst other topics. Specific support provided may include organized events through Research and Innovation’s Center for Excellence in Research, and is contingent on USC Stevens workload and prior commitments. Applicants should contact USC Stevens by sending an email to stvinfo@usc.edu.

PROPOSAL REQUIREMENTS

Applicants must carefully follow instructions. Information uploaded beyond what is requested will not be included in the proposal package provided to reviewers.

a) **Award Program:** Specify the program to which you are applying (Small Program Award; Large Program Award; STEM Program Award; DEI in Research Award).

b) **Brief Description:** (not to exceed 60 words): A brief description of the proposed work.

c) **Abstract:** (not to exceed 20 lines of text): Provide a stand-alone succinct description of the proposed work.

d) **Narrative:** (not to exceed 5 pages): Page limits are inclusive of figures and tables and include 1” margins of single-spaced text in Arial font. The following headers should be included:

   a. **Background/Significance/Broader Impact:** Describe the area of research to be supported from the following perspectives: What is the goal of the research in terms of advancing fundamental knowledge? In general, what is the importance of the project to USC, the research community, and society? What is the state of the research activity at USC and elsewhere, and what are the important research questions for the topic? Who at USC is engaged in similar research and how would their research be integrated through the proposed project?

   b. **Approach:** Describe what activities will be undertaken during the project to accomplish project goals, and the research methodologies involved. Activities may include pilot data collection and analysis, workshops or seminar series that involve groups of researchers, or other relevant activities. Describe preliminary planning or research activities that the team of investigators has already carried out for this project.

   c. **Funding Target:** All proposals must identify a specific external sponsor funding opportunity to be pursued (including URL).

   d. **Project Team:** Identify a USC PI (or Co-PIs) and any USC Co-Is. Identify key collaborators and describe their roles and participation in the project. Proposals should include a detailed description of the proposal team, including a discussion of each team member’s past and current research that is relevant to this effort. Discuss why the proposal team would be successful in pursuing this opportunity, and how the research expertise of the PI/Co-PIs and any Co-Is will be integrated through the proposed project.

   e. **Timeline:** A clear timeline for the completion of the work should be included in the application, identifying specific milestones associated with project goals, and including a targeted submission date for the opportunity identified as the Funding Target.
e) **Return on Investment:** Identify an external sponsor grant program to which an application will be submitted, and also identify future Funding Targets of at least 10 times the funds requested under this RFP.

f) **Grant Submission Commitment:** Include a statement in which the applicant commits to submit a proposal to the opportunity or opportunities identified as the Funding Target.

g) **Innovation Ecosystem Commitment:** Research & Innovation is committed to establishing a thriving innovation ecosystem at USC that will build collaborations between USC researchers and venture capital firms, accelerators, incubators, small and large businesses, and foundations. Research & Innovation is working closely with USC University Advancement to develop these partnerships. The proposal must include a statement in which the applicant commits to contacting University Advancement at hpourman@usc.edu to discuss the potential for obtaining funding for research that may arise as a result of this research project.

h) **Budget and Budget Justification** (not to exceed 2 pages): Specify a project start and end date. Utilize standard budget categories, only including the allowable budget cost categories as detailed in the **Grant Conditions** section.

i) **Current Funding:** List all sources of internal and external support awarded during the past five years, current or pending, for the PI/Co-Pis and Co-Is. For each source, specify who on this proposal was involved, their role on the project, title of the award, period, award amount, and sponsor (including subagency).

j) **Letter(s) of Support:** Provide a letter(s) of support from the applicable individual(s).

k) **Federal Agency Review Documents** (STEM Program Award submissions only): Provide a copy of an NIH summary statement or NSF review document from the last submission. Applicants may also upload the rebuttal to reviewer comments, submitted with the resubmission of the proposal to the external sponsor.

l) **Scientific References:** This includes citations listed in the narrative.

m) **Curriculum Vitae** (not to exceed 5 pages per PI/Co-PI/Co-I): Applicants may use any standardized CV format (e.g., NIH Biographical Sketch, NSF Biographical Sketch, etc.).

**ELIGIBILITY**

PIs/Co-PIs must be permanent, full-time faculty at USC. Tenure track and non-tenure track faculty are eligible; visiting and adjunct faculty are not eligible to apply. For the Zumberge STEM program award only, to be eligible, faculty must be of the rank of Assistant Professor (Ph.D. or MD); non-tenured-track Assistant Professors who have research as a job expectation are eligible.

**GRANT CONDITIONS**

R&I’s awards and grant programs are administered by the Research Initiatives and Infrastructure (RII) office.

- If a faculty has an industry relationship, an approved management plan must be in place prior to receipt of award (https://disclose.usc.edu). Teams that will form a startup should anticipate submitting a conflict of interest disclosure. Questions regarding conflict of interest and disclosures can be directed to Ben Bell in the Office of Compliance (benjamab@usc.edu).

- At the time of being notified by RII that an award will be made and as a condition of funding, awardees will provide to RII the name, title, and email address of a USC senior business official who will establish an internal funding account in which RII funds for the award will be transferred.

- Within one month of being notified by RII that an award will be made and as a condition of funding, awardees will provide RII with an account number and enable view access for the account, such that RII staff will be able to view the account balance. If this information is not provided to RII within this timeframe, RII may elect to rescind the award and use the funds to make an award to another applicant.
• Awardees commit to attend an in-person ceremony with Research & Innovation leadership.
• Awards include fringe benefits but are not assessed Facilities & Administration Costs (formerly known as Indirect Costs).
• Awardees commit to submitting in the future an application or applications to a funding opportunity (Funding Targets) sponsored by a federal agency.
• Awardees commit to contacting Research Strategy & Development (RSD) to explore obtaining support services for external agency grant submissions, including science writing, budget preparation, and supporting documentation collection. Awardees contact RSD by sending an email to robyngil@usc.edu.
• Awardees commit to contacting USC Stevens Center for Innovation to obtain guidance related to the invention disclosure and technology licensing processes, as well as an overview of USC’s policies related to intellectual property, researcher IP rights and responsibilities, amongst other topics. Awardees contact USC Stevens by sending an email to stvinfo@usc.edu.
• Failure to spend at least half of the awarded funds within six months of the project start date may result in the suspension of the remaining funds.
• This award will not provide financial support beyond the duration of the award and does not carry the opportunity for renewal.
• Funds not spent by the end of the project period will be returned to Research & Innovation.
• Prior to release of funds, all awardees will attend an in-person ceremony with Research & Innovation leadership.
• Awardees have discretion in budgeting and re-budgeting funds to meet their research needs within the fund’s guidelines and the terms of the proposal. However, funds may not be transferred to another project or other researchers or institutions.
• All programs:
  o Allowable Budget Expenses:
    ▪ Faculty salary & fringe
    ▪ Materials & Supplies
    ▪ Postdocs/graduate/undergraduate student Ras/administrative personnel salary & fringe, excluding funding student tuition and other student-related fees.
    ▪ Equipment
    ▪ Other expenses
  o Non-allowable Budget Expenses:
    ▪ Travel
    ▪ Consultants
    ▪ Subcontracts
• All USC rules, concerning conflict of interest, human subject research, animal research, etc., apply to projects funded under this program. Funding will only be provided following confirmation that all pertinent reviews have been submitted for approval by relevant committees (e.g., IRB, IACUC).

SCIENTIFIC REVIEW CRITERIA

Applications will be reviewed by a standing committee of researchers with expertise in large-scale, multidisciplinary federal grant programs. The committee will be convened yearly to review applications submitted to this program. Review criteria will be based on the following:

1. Scientific Approach: Rigor and technical merit
2. Significance/Broader Impacts: Impact on knowledge, practice, outcomes, or policy; societal benefit; contribution to scientific inquiry and discovery
3. **Technical Expertise:** The proposal specifies an appropriate team of researchers with appropriate scientific expertise who will engage in activities expected to culminate in the submission of a proposal to an identified Funding Target. The PI/co-Pis, and the team have a history of funding from the agency sponsoring the Funding Target. The PI/co-Pis have identified collaborators or have a plan to identify a multidisciplinary team of collaborators.

4. **Feasibility:** Ability of the project to be completed within the designated project period

5. **Potential of Future Funding:** A Funding Target expecting to yield a return on investment of at least 10 times the funding requested has been specified, and this is an appropriate and realistic Funding Target based on the PI/Co-PI/Co-I’s expertise and funding history with the specific subagency sponsoring the Funding Target.

6. **Budget:** Cost-effectiveness and availability of any support/match funding from a USC school or program. Reviewers will consider whether the budget and the requested period of support are fully justified and reasonable in relation to the proposed activities.

In addition to a peer review, applications will be evaluated programmatically in terms of this program's and the university's strategic research priorities. Funding decisions will be made based on both peer and programmatic reviews.

**PROGRAMMATIC REVIEW**

We will incorporate aspects of existing policies and procedures regarding funding decisions that are utilized by major federal funding agencies like NSF and NIH, i.e., proposals will be subject to scientific peer review and programmatic review. Programmatic review assures maximum efficiency for funding awards and strategic alignment with this program's and the university's strategic research priorities. While financial support may be obtained from any external sponsor, proposals that target federal funding agencies are of greatest interest.

Ultimate funding decisions will be made based on both scientific peer and programmatic reviews.

**DIVERSITY, EQUITY, AND INCLUSION**

Research & Innovation strongly support a culture of diversity, equity, and inclusion. Proposals should incorporate meaningful DEI practices across the project team and proposed activities. This will be a consideration during the programmatic review.

**REPORTING AND ACKNOWLEDGEMENT OF SUPPORT**

Awardees will be required to submit a one-page progress report, due six months into the project period and at the point of completion. This report must detail scientific, financial, and research performance over the preceding months.

**PROPOSAL SUBMISSION**

Submit your proposal application utilizing the RII application submission and reporting portal. Go to [https://rii.usc.edu/funding/](https://rii.usc.edu/funding/) to log in or create an account using your USC email address.

**FURTHER INFORMATION AND PROGRAM CONTACT INFORMATION**

We encourage inquiries to RII concerning this funding opportunity and welcome the opportunity to answer questions from potential applicants. For additional information or inquiries, please send an email to rii@usc.edu with “Zumberge Preliminary Studies Research Award” in the subject line.

**APPLICATION CHECKLIST**

- [ ] Award Program
- [ ] Brief Description
- [ ] Abstract
Narrative
  - Background/Significance/Broader Impact
  - Approach
  - Funding Target
  - Project Team
  - Timeline

Return on Investment

Grant Submission Commitment

Innovation Ecosystem Commitment

Budget and Budget Justification

Current Funding

Letter(s) of Support

Federal Agency Review Documents (if applicable)

Scientific References

Curriculum Vitae
FREQUENTLY ASKED QUESTIONS (FAQs)

Q1: Can I work with faculty across multiple USC schools?
A1: Absolutely—the Zumberge Preliminary Studies Research Award requires we strongly encourage applicants to work with colleagues across multiple USC schools.

Q2: How does the Zumberge Preliminary Studies Research Award differ from the Collaborative Research Planning Award?
A2: The Zumberge Preliminary Studies Research Award aims to support the generation of preliminary data that will be valuable in enhancing the competitiveness of future grant proposals submitted to external sponsors. The Collaborative Research Planning Award is meant to support planning and other activities by which research teams and partnerships are developed, and planning activities supported that will enable submission of a competitive research proposal. This program is meant to support research and not to facilitate the development of a collaborative research team. The assumption is that faculty who apply to the Zumberge Preliminary Studies Research Award are well prepared to take the next step in preparing for the generation of a grant proposal. This next step typically requires the generation of preliminary study data, which demonstrates the cohesiveness of the team and its ability to collaboratively work together. The Zumberge Preliminary Studies Research Award is a logical internal funding mechanism to pursue, in order to generate such preliminary data. The sequential pursuit of first the Collaborative Research Planning Award and then the Zumberge Preliminary Studies Research Award provides multi-year support to bring a collaborative group of investigators together through the planning stages, through to the collection of preliminary data that will enhance the competitiveness of a research proposal to an external sponsor.

Q3: How does the Large Program Award differ from the Collaborative Research Award?
A3: For Collaborative Research Award program applications, USC faculty are required to include researchers from other universities, research institutions, and other organizations.

Q4: If I am awarded in August, I may miss some of the standard deadlines for the funding target opportunities.
A4: The program deadlines are not matched to federal funding program deadlines in a given calendar year. You certainly can apply to this program in advance of federal funding deadlines, for submission to the next year’s deadlines.

Q5: How much funding can I request?
A5: Program caps are listed on page 1 of the RFP. You should request an amount you think is scientifically appropriate and justified. The requested budget is subject to both scientific peer and programmatic review, and any RII award made could be for a lesser amount than requested.

Q6: If my proposal is selected for funding, will I automatically receive my requested amount?
A6: Not necessarily. The budget is subject to scientific peer and programmatic review, and a recommended award may be for less than what was requested.

Q7: I am dissatisfied with my review. Can I rebut the review and get a new one?
A7: RII goes to considerable effort to ensure that the scientific peer review is fair and impartial. Constituting review committees and organizing reviews takes considerable time and effort. Thus, RII does not have the resources or a mechanism to re-review proposals. Thus, the results of the scientific peer review are final.