

Information

Thank you for your interest in the INBRE Funding Opportunity- **Developmental Research Project (DRP)**.

Before you begin, please review the following information:

1. Once you have created a login and password, you may exit and return to this application at any time. You may also move freely between sections. You may not submit your final application until all required fields are completed.

2. Application and Review Timeline:

- Application posted: **9/1/2020**
- **Application due: 2/1/2021**
- Scientific Merit Review & Advisory Council Review by: 3/1/2021
- Earliest Start Date: 5/1/2021
- Expiration: 4/30/2024

3. This funding opportunity is contingent upon the successful renewal of the Idaho INBRE-4 Program.

4. Please direct your questions regarding this application to Whitney Myers, INBRE Program Manager & Fiscal Director (whitneym@uidaho.edu).

5. If you have technical issues with this application, please email help@embark.com.

Program Overview

The purpose of the Idaho INBRE **Developmental Research Project (DRP)** is to stimulate biomedical research at Idaho educational institutions. The **DRP** grants will create opportunities for scientists and institutions to contribute to the Nation's biomedical and behavioral research effort by supporting small-scale research projects proposed by faculty members of eligible institutions. This **Developmental Research Project** requires 50% PI effort (6 months minimum effort to research).

The research projects are intended to:

1. Address the Idaho INBRE-4 scientific theme of 'Cell Signaling'.
2. Provide faculty the opportunity to invigorate their career with collaborative research that will be sustainable after the award period ends.
3. Provide intensive competitive biomedical research experiences for students.
4. Maintain and expand the biomedical research culture in Idaho.

Specific Requirements for a DRP

The planned outcome of a DRP award is to sustain a vigorous Idaho biomedical research network, to integrate research into the educator's career, and prepare the next generation of research scientists. Specific requirements for a DRP application include:

1. Commitment of a single faculty member at 50% research effort (6 calendar months) to conduct the project.
2. Plans to involve undergraduate students or graduate students in the proposed DRP project. The application should include plans for students to do hands-on research.
3. Identification of a Scientific Mentor with expertise relevant to the proposal, although not required, will strengthen the application. The Scientific Mentor must be an established scientist with an active research program that includes a laboratory group, recent publications in high impact scientific journals, and funding support. Scientific Mentors will help oversee the training and career development of the DRP awardee.

Eligibility

Eligible Organizations:

Institutions identified in the INBRE-4 grant proposal are eligible and include: Boise State University, Brigham Young University-Idaho, Idaho State University, Lewis-Clark State College, Northwest Nazarene University, The College of Idaho, and University of Idaho. Eligible non-profit research foundations include the Idaho Veterans Research & Education Foundation.

Eligible Individuals (Project Investigator): Any individual with the skills, knowledge, and resources necessary to carry out the proposed research as the Project Investigator (PI) is invited to work with his/her organization to develop an application for support. Individuals from under-represented racial and ethnic groups as well as individuals with disabilities are always encouraged to apply.

In keeping with the priority of the IDeA INBRE Program, funding priority is to junior investigators to provide the means to secure independent funding. Other eligibility and criteria include:

- The PI must have a primary faculty appointment at an eligible Idaho institution.
- The PI may not be the PI of any active NIH research grant at the time of an award.
- The PI may not be a COBRE-funded Investigator.
- PI's on a 9-month appointment may request summer salary.
- The PI may not be awarded more than one INBRE Developmental or Pilot Project at a time.
- Individuals who have been supported as an investigator for more than 7 years (cumulative) OR who were the recipient of a Developmental Research Project in INBRE-3 are not eligible to apply.
- The PI must be submitting an application with new, stand-alone specific aims.

Number of Applications and Awards per Institution:

Eligible institutions may submit more than one application. However, no more than four awards will be assigned to one institution. Efforts will be made to competitively distribute funding across the state.

I certify that I meet all eligibility requirements listed in the above section *

Award Information

NIH grants policies described in the NIH Grants Policy Statement, will apply to the applications submitted and awards made in response to this Idaho INBRE DRP FOA.

1. **Funding Instrument:** Sub-award of the University of Idaho INBRE-4 program
2. **Funding available and anticipated number of awards:** We anticipate making 4 to 7 awards. Awards are contingent upon successful renewal of the University of Idaho parent INBRE-4 grant, NIH/funding appropriations, the submission of meritorious applications, positive outside review, and geographic distribution.
3. **Award Budget:** For projects with the PI devoting 50% effort, applications may request up to \$100,000 per year in direct costs plus applicable Facilities & Administrative (F&A)/indirect costs unless the PI has a research appointment at their home institution. If the PI has a research appointment at their institution, only \$75,000 direct costs plus applicable institutional F&A per year may be requested (no salary buy-out will be granted).
4. **Award Project Period:** The DRP will be funded up to two years based on productivity and milestone completion. Recipients may request a third year of funding with appropriate justification. No matter the duration of the funding period, all projects will have an annual non-competitive renewal process for funding beyond year one.

The Research Plan for the DRP is **limited to ten pages**.

Research plans must include:

1. Specific Aims and when appropriate a hypothesis (one page limit)
2. Research Strategy (nine page limit) organized into **Significance**, **Innovation**, **Approach**, and **Impact** on the Idaho Biomedical Research Network. State how the project addresses the 'Cell Signaling' scientific theme of INBRE-4; provides faculty the opportunity to invigorate their career with collaborative research; provides an intensive competitive research experiences for undergraduate students. Preliminary Data is not required. Cited references are NOT part of the ten page limit.

Please use Arial or similar font, size 11 or larger, 1 inch margins minimum.

Upload Research Strategy*

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Appendix

Appendix (four page limit) must include:

1. Letter of agreement, signed by PI's institution administration agreeing to 50% effort required.
2. Summary of PI's record in training undergraduate student researchers.
3. Letter of agreement to participate from the identified Scientific Mentor, if applicable.

**Letter from PI home institution for
effort***

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**Summary of PI record with training
undergraduates***

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**Letter of Agreement from Mentor (if
applicable)**

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Budget

Detailed Budget- Year 1 only

Detailed budget for Initial Budget Period and detailed justification (up to \$75,000 – \$100,000 based on PI's research appointment) for year one to include:

- Personnel costs (up to 50% effort for the PI or in-kind support)
- Personnel costs for at least one undergraduate student
- Technician if needed
- Operating expenses
- Travel
- Equipment
- Appropriate F&A

Other considerations: Since a primary objective of the DPR is to expose students to meritorious research, PIs should include undergraduate and/or graduate students in the proposed research to the extent practical. Indicate aspects of the proposed research in which students will participate. If participating students have not yet been individually identified, the number and academic level of those to be involved should be provided.

To access the forms to complete and upload, click the description below. The form will pop up in a new window.

1. Detailed Year 1 Budget
2. Justification Page
3. Budget Entire Period

FOR UI APPLICANTS ONLY: EIPRS is not needed at this time, nor is a letter from OSP. You may upload a blank document with "not required at this time" as a placeholder to satisfy the requirement.

Detailed Year 1 Budget*

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**Detailed budget justification (for
year 1 only)***

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Budget for entire two year period*

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Other attachments

Include a signed letter from **Authorized Organization Official** (Office of Sponsored Programs or equivalent) that states the proposal/budget is approved.

For University of Idaho applicants, you may upload a pdf placeholder. Only UI applicants selected for funding will complete this step and process their proposal through VERAS.

AOR Signed Letter*

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Include a current NIH Biosketch for the PI. Please highlight any publications authored by undergraduate students.

Directions and a sample form can be found here: <https://grants.nih.gov/grants/forms/biosketch.htm>

**Please use the "Non-fellowship" version*

NIH Biosketch (non-Fellowship)*

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Criteria & Review Considerations

Criteria. Only the review criteria described below will be considered in the review process. For this particular announcement, note the following: The objectives of the DRP are to (1) provide support for meritorious research, (2) strengthen the research environment of the institution and (3) facilitate an NIH grant application. Preliminary data are not required for an application; however, they may be included if available.

Overall Impact: Reviewers will provide an overall impact/priority score to reflect their assessment of the likelihood for the project to make an important scientific contribution to the research field(s) involved, to provide research opportunities to students, and to strengthen the research environment of the institution, in consideration of the following review criteria and additional review criteria (as applicable for the project proposed).

Scored Review Criteria: Reviewers will consider each of the review points below to determine scientific merit and give a separate score for each criterion. An application does not need to be strong in all categories to be judged likely to have major scientific impact. For example, a project that by its nature is not innovative may be essential to advance a field.

1. **Significance:** Does the project address an important problem or a barrier to progress in the field? If the aims of the project are achieved, how will scientific knowledge, technical capability, and/or clinical practice be improved? How will successful completion of the aims change the concepts, methods, technologies, treatments, services, or preventative interventions that drive this field? If funded, will the DRP award have a substantial effect on the school/academic component in terms of strengthening the research environment and exposing students to research?
2. **Project Investigator:** Are the PI and the Scientific Mentor well suited to the project? Does the PI have appropriate experience and training? Will the project provide the PI the opportunity to invigorate their career with collaborative research that will be sustainable after the award period ends? Does the PI have suitable experience in supervising students in research? Has the Scientific Mentor demonstrated accomplishments that have advanced their field?
3. **Innovation:** Does the application challenge and seek to shift current research or clinical practice paradigms by utilizing novel theoretical concepts, approaches or methodologies, instrumentation, or interventions? Are the concepts, approaches or methodologies, instrumentation, or interventions novel to one field of research or novel in a broad sense? Is a refinement, improvement, or new application of theoretical concepts, approaches or methodologies, instrumentation, or interventions proposed?

4. **Approach:** Are the overall strategy, methodology, and analyses well-reasoned and appropriate to accomplish the specific aims of the project? Are potential problems, alternative strategies, and benchmarks for success presented? If the project is in the early stages of development, will the strategy establish feasibility and will particularly risky aspects be managed?

If the project involves clinical research, are the plans for 1) protection of human subjects from research risks, and 2) inclusion of minorities and members of both sexes/genders, as well as the inclusion of children, justified in terms of the scientific goals and research strategy proposed?

Does the application provide sufficient evidence that the project can stimulate the interests of students so that they consider a career in the biomedical or behavioral sciences?

5. **Environment:** Are the institutional support, equipment and other physical resources available to the project investigator and the Scientific Mentor adequate for the project proposed? Will the project maintain or enhance the Idaho INBRE biomedical research network through research activities at a primarily undergraduate institution? Does the application demonstrate the likely availability of well-qualified students to participate in the research project? Does the application provide sufficient evidence that students have in the past or are likely to pursue careers in the biomedical or behavioral sciences?

Other Considerations

Additional Review Considerations will be:

Budget and Period of Support: Reviewers will consider whether the budget and the requested period of support are fully justified and reasonable in relation to the proposed research.

Inclusion of Women, Minorities, and Children: When the proposed project involves clinical research, the committee will evaluate the proposed plans for inclusion of minorities and members of both genders, as well as the inclusion of children. For additional information on review of the Inclusion section, please refer to the Human Subjects Protection and Inclusion Guidelines.

Vertebrate Animals: The committee will evaluate the involvement of live vertebrate animals as part of the scientific assessment according to the following five points: 1) proposed use of the animals, and species, strains, ages, sex, and numbers to be used; 2) justifications for the use of animals and for the appropriateness of the species and numbers proposed; 3) adequacy of veterinary care; 4) procedures for limiting discomfort, distress, pain and injury to that which is unavoidable in the conduct of scientifically sound research including the use of analgesic, anesthetic, and tranquilizing drugs and/or comfortable restraining devices; and 5) methods of euthanasia and reason for selection if not consistent with the AVMA Guidelines on Euthanasia

Biohazards: Reviewers will assess whether materials or procedures proposed are potentially hazardous to research personnel and/or the environment, and if needed, determine whether adequate protection is proposed.

**Does this work involve animals,
human subjects, and/or
biohazards?***

- Yes
 No

Investigator Milestones

Milestone Productivity Expectations	Developmental Research Project Investigator
Meetings with Scientific Mentor/Advisor	Monthly, if applicable
Monthly Networking Meetings	Required for Treasure Valley recipients
Attract Undergraduates to project	yes
Make progress on project Specific Aims	yes
Present at a national/international scientific meeting	Annually
Attend Manuscript and/or Grant writing workshop	Encouraged
Submit and publish manuscript in a peer-reviewed journal	Yearly
Have review of NIH R-type grant proposal	Year 2
Submit NIH R-type proposal	Year 2
Revise and resubmit to NIH and re-package proposal for other funding sources	Year 2
Graduate from program	After 2 years or acquisition of other funding whichever is first
Submit non-competing renewal to SC/EAC for review	Annually

Reporting Requirements

Progress reports are due annually.