Request for Applications:
Big Ideas Seed Grants

Office of Research and Economic Development
University of Nebraska-Lincoln

Notice of Intent to Submit Deadline: July 18, 2014
Concept Paper Deadline: August 15, 2014
Application Deadline (Invitation Only): November 7, 2014

Introduction
The Big Ideas Seed Grants program will support the formation of new interdisciplinary teams and enhance the competitiveness of groups submitting large-scale, collaborative grant proposals requesting significant external funding in areas related to one or more of the thematic areas discussed during the 2014 Interdisciplinary Faculty Retreat at the University of Nebraska-Lincoln (UNL). These thematic areas are:

- **Signaling, Sensing and Imaging at the Intersection of Engineering and the Physical & Life Sciences:** Scientists and engineers increasingly are exploring the frontiers where biology, chemistry, physics, computer science, and engineering intersect. At the same time, the development of new tools and technologies is critically important for studying the widely varying scales of biological systems, from nano-sized organisms to global ecosystems. Big Ideas Seed Grants proposals submitted in response to this thematic area should detail plans to pursue funding for the development and application of innovative technologies and new collaborative approaches.

- **Enhancing Lives: Integrating Research and Practice Across the Social, Behavioral & Educational Sciences:** The goal of this thematic area is to develop a broad vision and identify specific initiatives that will leverage UNL’s strengths and propel its national profile in educational, behavioral and social science research, broadly conceived. Big Ideas Seed Grants proposals submitted in response to this thematic area should describe the creation of interdisciplinary initiatives and empirical projects that address complex societal problems via translational research approaches.

- **Integrating Big Data into Your Research Program at UNL:** The advent of big data offers unprecedented opportunities for data-driven discovery and decision-making in nearly every area of research. Realizing the transformative potential of big data requires addressing challenges in managing data and acquiring knowledge of computational methods for data analysis that may be new to researchers. Big Ideas Seed Grants proposals submitted in response to this thematic area should describe plans to advance knowledge and discovery by working with big data and the resources available at UNL (or elsewhere) for computation and analysis.

Award Amount and Project Scope
The Office of Research and Economic Development (ORED) will award up to $500,000 in Big Idea Seed Grants during FY2014-2015. Faculty teams may apply for two levels of funding: 1) planning grants of up to $10,000 for one year and 2) accelerator grants of up to $100,000 over two years.

Eligibility
Tenured/tenure-track and research faculty may serve as the principal investigator (PI) on one planning grant and/or one accelerator grant through the Big Ideas Seed Grants program. Co-principal investigators (co-PIs) must hold a full-time appointment at UNL, but they do not need to hold a tenured/tenure-track or research faculty position. There is no limit regarding the number of
applications on which individuals may serve as co-PI or in another capacity. As appropriate, co-PIs may be affiliated with other institutions. To foster the level of interdisciplinary research that is increasingly the hallmark of large-scale, collaborative efforts, at least one co-PI on each Big Ideas Seed Grants application must have an appointment in a college or discipline different from that of the PI.

Investigators with current internal or external research funding will not be at a competitive disadvantage for funding from the Big Ideas Seed Grants program. However, priority will be given to proposals whose PIs do not have current seed grant support from ORED. Further, applications to the program must describe plans to organize new interdisciplinary teams or to support the development of new interdisciplinary projects for which it is possible to secure a major stream of external funding. Big Ideas Seed Grants will not be used to support plans to further advance existing projects or initiatives.

**Notice of Intent to Submit**

Faculty teams that plan to submit a proposal to the Big Ideas Seed Grants program must provide notice of intent to submit by **July 18, 2014**. Notices of intent to submit will enable ORED to effectively plan for review of applications submitted to the program.

To provide notice of intent to submit, send an email to unlresearch@unl.edu. Include the text “Big Ideas Seed Grants – Intent to Submit” in the subject line of the email. In the message, provide the name, title, and affiliation of the PI and each co-PI; the title of the proposed project; the type of support being requested (i.e., planning grant or accelerator grant); the thematic area(s) to which the project will respond; and a two- or three-sentence summary of the team’s vision for the project.

**Concept Paper Requirements**

Only teams that provide notice of intent to submit Big Ideas Seed Grants may submit project concept papers. Project concept papers will be reviewed by the members of UNL’s Research Advisory Board and administrators from the colleges/divisions and from ORED. Planning grant awards will be made following a review of concept papers. Teams submitting accelerator grant concept papers that describe innovative and meritorious interdisciplinary approaches will be invited to submit a full proposal (see below).

To submit a Big Ideas Seed Grants concept paper, send the document as an email attachment to unlresearch@unl.edu by **August 15, 2014**. Include the text “Big Ideas Seed Grants – Concept Paper” in the subject line of the email. Concept papers – which are limited to three pages in length – must contain the following information and be submitted in PDF format:

- An overview of the opportunity or challenge and the thematic area to which the proposed project responds. Teams pursuing planning grants should describe the rationale for the formation of the proposed interdisciplinary team. Teams pursuing accelerator grants should describe the primary objective of the proposed research and how it relates to prior or ongoing work.
- An outline of the goals and objectives for the proposed project. Describe the project’s overall aim and the steps that will be taken to meet that target. Include a detailed plan of work for completing the project during a 12-month award period.
- A summary of the level of innovation associated with the composition of the proposed team or research and how the project team provides the interdisciplinary expertise and experience necessary to support that innovation.
- An inventory of expected project outcomes, including a development roadmap or a timeline for pursuing major external funding via known or emerging opportunities.

Teams pursuing planning grant support must append a detailed budget and a budget justification of no more than one page in length to their concept paper. Detailed budgets are not required for concept
papers describing accelerator grant projects. Budget information will not count toward the three-page limit allowed for planning grant concept papers. Planning grants may not be used to support faculty summer salary or teaching release time. Planning grants will support activities that build interdisciplinary research teams, including:

- faculty retreats to conduct strategic planning, discuss project management, or develop strategies to enhance communication and collaboration among team members;
- meetings with team members from other campuses, including minority-serving institutions;
- meetings with an external advisory board;
- collection of stakeholder input; or
- use of nationally recognized outside experts to evaluate the interdisciplinary research team at UNL.

**Full Proposal Requirements**

Submission of full proposals for accelerator grants is by invitation only. Following the review of concept papers, invitations to submit full proposals will be made by September 15, 2014. Full applications for accelerator grants must be submitted via the Internal Competitions module within NUgrant (http://nugrant.unl.edu) by 5 p.m. CST on **November 7, 2014**.

Teams invited to submit full proposals for accelerator grants should prepare the following information as a single PDF file in the order described:

- A letter of transmittal that includes the application title and the names and affiliations of all senior/key personnel.
- A project plan of no more than six pages that details the following:
  - Brief project overview (written in language accessible to non-experts)
  - Plans for preliminary study and/or data collection to enhance grant proposal competitiveness
  - Alignment with institutional strengths and relevant prior investment (e.g., personnel, facilities, equipment, etc.)
  - Description of the innovation associated with the proposed interdisciplinary approach and the project's fit with one or more of the thematic areas detailed in the introduction to this document
  - Information regarding the project’s alignment with federal research priorities and prior institutional investment
  - Summary of relevant funding opportunities and a detailed proposal submission timeline (applicants should describe plans for preparing and submitting a major federal grant within 12 months following the period of Big Ideas Seed Grant support)
  - Description of key personnel and their project role and substantive contribution
- A list of references cited within the project plan that is no more than one page in length.
- A detailed budget and budget justification of no more than two pages for funds requested from the Big Ideas Seed Grants program. Applicants should provide a strong rationale for their budget request and describe how funds will be used to support preliminary study and/or data collection (e.g., GRA or postdoctoral research associate support, travel, etc.). Funds may not be used for faculty summer salary or teaching release time, which may instead be provided by the PI’s academic unit or college to strengthen institutional commitment to the proposed effort. Sub-awards are not allowed; however, external collaborators may invoice project-specific expenses.
- A two-page biographical sketch or CV for all faculty named to the interdisciplinary research team. Applicants are encouraged to use the standard format required by the potential funding agency. Please use a common format for all team members.
Program Requirements
Each team receiving Big Ideas Seed Grants program support must submit a final written report of project outcomes to ORED within 30 days following the end of the project period (the report guidelines will be distributed with award notification letters). Following submission of the final report, a face-to-face meeting will be scheduled for all members of the interdisciplinary research team and senior research administrators from the relevant college(s) or division and ORED. The purpose of this meeting will be to discuss the project’s overall progress and the next steps needed for the interdisciplinary research team to obtain additional internal or external funding.

In addition, if they have not already done so, all members of the interdisciplinary research team from UNL are expected to participate in at least one proposal writing seminar sponsored by ORED during the award period.

Selection Criteria and Review Process
Primary selection criteria for planning grants will include:

- Potential to launch a new interdisciplinary initiative or project within one or more thematic areas, as well as alignment with institutional and federal priorities for interdisciplinary research;
- Description of a clear, comprehensive planning process; detail regarding expected project outcomes; and inclusion of an appropriate project management strategy;
- Project team member qualifications; and
- The extent to which the proposed project costs are necessary and reasonable.

Primary selection criteria for accelerator grants will include:

- A clear fit between the proposed project and one or more thematic areas, as well as alignment with institutional and federal priorities for interdisciplinary research;
- Scholarly merit and capacity of the proposed research to solve critical societal challenges;
- The level of innovation of the proposed project and its potential for generating a significant level of new external funding;
- Feasibility of the team’s plan to submit large-scale grant proposals;
- Project team member qualifications; and
- The extent to which the proposed project costs are necessary and reasonable.

Applications will be reviewed initially by members of UNL’s Research Advisory Board and senior research administrators from ORED. In addition, ORED may solicit external reviewers (and possibly additional internal reviewers) to aid in the decision-making process. The Vice Chancellor for Research and Economic Development will make the final selection. Award notification for planning grants will occur during September of 2014, and notification of accelerator grants will occur during December of 2014.

Additional Information
For additional information regarding the Big Ideas Seed Grants program, contact Nathan Meier, director of research strategy (402.472.3902 or nlm@unl.edu), or Monica Norby, assistant vice chancellor for research (402.472.4180 or mnorby1@unl.edu).