

**System Science
Collaboration Initiative
NEBRASKA RESEARCH INITIATIVE
Request for Applications (RFA)**

Retreat Registration/Preliminary Topic Identification Deadline:

To be eligible for funding, PIs must register and attend the November 3, 2017 Collaboration Initiative Retreat. Registration closes on Friday, October 27, 2017, 5pm Central Time.

Application Deadline:

PIs must submit fully completed applications by Friday January 12, 2018, 5 PM Central via the grants-awards.nebraska.edu website. Consult your research office for additional campus-specific requirements.

Program Website, Retreat Registration, and Application Directions:

<http://nebraska.edu/system-science/>

Introduction: The primary purpose of the **Collaboration Initiative** is to strengthen the University of Nebraska's research competitiveness by fully leveraging its multi-campus intellectual capacity and research resources. The **System Science** funding program is designed to facilitate new and strengthen existing research collaborations among faculty studying extramurally-fundable research question(s) from a broad multidisciplinary "systems" approach. This initiative is focused on helping position faculty teams to be more competitive for the extramural funding required to further their research and to better understand the wide variety of complex systems found in nature and society.

Grant Descriptions:¹

Planning and Proposal Generation Grants

[Up to \$20,000 total for one year]

Planning Grants are intended to facilitate and build new collaborations across University of Nebraska campuses. Funding is available to support planning meetings, retreats, and travel to funding agencies in order to meet with National Program Leaders (or equivalent) and gage support for the proposed programmatic direction(s). These one-year grants should enable teams to: 1) identify specific extramural funding opportunities that would grow its collective research portfolio; 2) identify knowledge and expertise gaps that must be addressed in order to prepare a competitive extramural research proposal; 3) facilitate study design and/or modest data collection; and 4) prepare extramural funding applications. PIs who have not received extramural research funding (as a PI or Co-PI) are eligible for this grant-type, but one of the Co-PIs on their application must be currently grant-active and willing to serve as a research mentor to the team.

¹ The total award budget for this program will be approximately \$2.8 million. All awards are subject to funding availability and determinations of application suitability. It is anticipated that award notifications will be available prior to June 1, 2018. Funding will commence July 1, 2018.



Formed/Forming Team Seed Grants

[Up to \$150,000 total over two years]

Formed/Forming Team Grants are designed to enhance research collaborations among PIs that have had modest levels of previous collaboration. Participating PIs, for example, may not have systematically worked together on a single proposal or have only recently identified team members. PIs must have a record of extramurally-funded research as a PI or Co-PI. Teams receiving these grants are expected to prepare and submit extramural grant applications to a funding program specified in their proposal. Applicants should request seed grant funding proportional to that available from the extramural program from which they will eventually seek support.² The purpose of this grant type is to establish a collaborative research team that is actively generating knowledge/preliminary data critical to developing or enhancing a nationally competitive extramural funding proposal.

Team Strengthening Seed Grants

[Up to \$300,000 total over two years]

Team Strengthening Grants are designed to build upon existing research collaborations among PIs with a proven record of extramural funding; the addition of new members to fill expertise gaps is encouraged. Teams receiving these grants will be expected to prepare applications to an existing program project or multi-investigator funding opportunity (award types of ~\$400,000 per year and above). The purpose of this grant type is to strengthen existing research collaborations in order to establish a foundation from which the team will better compete for significant extramural research funding at levels or with programs exceeding present/previous funding levels. Faculty are encouraged to consult with their research administrator(s) regarding this grant type/funding level; faculty without strong existing collaborations (joint publications and/or joint grant funding) are encouraged to apply to the Formed/Forming Team Seed Grants mechanism.

General Eligibility: Assistant, Associate or Full Professors and equivalent-rank researchers employed by any University of Nebraska campus are eligible to submit funding applications as Principal Investigators (PIs). PIs may apply for no more than one planning grant and one seed grant associated with this RFA; there is no limit on their participation as Co-PIs.

Collaboration Requirements: Proposals will not be considered for funding unless meaningful multi-campus and appropriate disciplinary collaborations are documented. A PI employed by one University of Nebraska campus (UNK, UNL³, UNMC and UNO) must identify at least one collaborator affiliated with another campus; if appropriate because of unique expertise/resource availability, additional collaborations with researchers at other institutions are allowed. Funding for non-NU collaborators will not typically be allowed, unless they provide a billable service to the project. Collaborations are to be driven by mutual interest and disciplinary expertise needs.

² To seek funding for the full \$150,000 two-year award amount, the extramural program should fund applications at or greater than \$200,000 per year.

³ The Institute of Agriculture and Natural Resources (IANR) is part of the UNL campus.



Retreat: A retreat to facilitate multi-campus collaborations will be held on Friday November 3, 2017 at the Nebraska Innovation Campus Conference Center in Lincoln. Potential PIs/team leaders wishing to be eligible for funding must attend unless special dispensation is granted; identified team members (PIs/Co-PIs), former and current Collaboration Initiative grantees, and others looking to participate on planning or seed grants are strongly encouraged to attend. Those registering for the retreat will need to briefly describe their research interest area(s). Registrants also will be expected to informally discuss their potential fundable research concepts with other retreat attendees; topic discussions will be facilitated by faculty leaders and research administrators.

Deadlines:

Retreat Registration:

Complete by Friday, October 27, 2017 - 5 PM Central Time

Funding Applications:

PIs must submit fully-completed applications by Friday January 12, 2018, 5 PM Central via the grants-awards.nebraska.edu website. Consult your research office for additional campus-specific requirements.

Application Format and Content: Applications (including references, tables, and figures) must not exceed the page limits specified for the grant type. Font size must be 12 points or larger and margins must be at least one inch on all four sides. A title or signature page is not required. Proposals will only be accepted when submitted by the grants-awards.nebraska.edu website; campus approval processes also must be followed. Consult your grants or research office for more information. In addition, by submitting (or administratively approving) an application, each campus certifies that named PIs, Co-PIs, and the campus itself agrees to waive all rights of access to the identity of any person who may conduct internal or external peer evaluations of their application. Each application shall have the following components:

Online Entry Form

- Application Title
- Grant Type (Planning, Team Forming, Team Strengthening)
- PI Contact Information (Auto completed, please confirm)
- Co-PI List
- Total Funds Requested
- Non-Disclosure Agreement Request
- Abstract/Summary (not to exceed 300 words)
- Budget
- Budget Justification
- (Up to) Five primary aims/goals/objectives (these must match those outlined in the proposal narrative)
- Seed Grants Only: Contact Information for six potential external reviewers



Project Description/Narrative and CVs (uploaded as a single PDF document)

Planning Grant Applications: Three-page maximum (not including CVs, but including all references, tables, and figures), with the following elements:

- **Research area(s):** Describe the research area, questions to be addressed, and likely source(s) of extramural funding
- **Approach/Work Plan:** Describe how researchers involved in the planning effort intend to a) interact with potential funding agencies and program leaders to identify specific funding programs that would be sources of extramural support; b) hone research question(s) so that their significance, innovation and societal impact(s) are clear; and c) identify gaps in researcher expertise and further build/identify collaborations within and between faculty at University of Nebraska campuses (and, if appropriate, other institutions). The work plan also should include a timeline associated with all undertakings (including one for writing and submitting an extramural funding proposal). Fundable activities include research retreats (with external speakers), extramural application planning and preparation (writing) meetings, and travel to funders. Funding for modest data collection or literature review activities will be an allowable expense only after sufficient interaction with funding agencies and collaboration building has occurred. The activities/actions listed in this section should match those listed in the online form (“Up to Five primary aims/goals/objectives”).
- **CVs:** Include CVs for each PI/Co-PI; follow a recognized standard federal grant agency or foundation format (the same format must be used for all CVs). In lieu of Co-PI CVs, a brief biographical paragraph may be supplied. For PIs without previous extramural research grant activity, identify which grant-active Co-PI will serve as a research mentor. There is no expectation that all potential collaborators be identified prior to a planning grant award.

Seed Grant Applications: Eight-page maximum (not including CVs, but including all references, tables, and figures), with the following elements:

- **Long-Term Objectives:** Clearly state the research question(s) to be addressed in an eventual federal or other extramural grant application. Cite the agency/foundation and announcement/program number (or equivalent) from which the team will seek extramural funding. Indicate when the team plans to submit the extramural funding application.
- **Significance, Innovation, and Impacts:** Describe the significance of addressing the long-term research goals (solves or addresses a scientific problem and/or helps meet an educational/societal need), why the team’s eventual extramural funding application will represent a conceptual innovation and/or an innovative approach, and how anticipated achievements will lead to a societal benefit/broader impact.



- **Specific Aims and Approach** [work to be accomplished using seed grant funding]: Clearly outline the research question(s), the hypothesis to be tested, and goals to be achieved if the proposed seed grant is funded. Describe the approach (work plan) to be used to achieve these goals/aims (including timeline for completion of key project milestones) and how the proposed effort will better position the research team to obtain support for their eventual extramural proposal. For applicants seeking Team Strengthening Seed Grants, clearly indicate how this funding will make the existing team more competitive for grant types not previously accessed by the collaborators. The aims listed in this section should match those listed in the online form (“Up to) Five primary aims/goals/objectives”).
- **Collaborative Roles.** Clearly indicate the *role(s)*, *unique expertise*, and *expectations* for the PI and each collaborator (Co-PI). Describe how the team’s expertise is ideally suited to address the specific aims of this application and the research questions to be addressed by each team member. Outline the existing facilities available to each participant, and the resources that will be made available if the project is funded extramurally in the future. Describe any existing collaborations, how they will be strengthened, and how new Co-PIs will be integrated into the research team. Specify the management plan for PI oversight and team collaboration that will be employed to ensure impactful and meaningful data acquisition, data sharing, data management, and quality reviews/accountability. In the management plan, specify a process for conflict resolution.
- **CVs:** Include CVs for each PI/Co-PI; follow a recognized standard federal grant agency or foundation format (the same format must be used for all CVs).

Additional Guidance:

Budget

Complete the online budget and budget justification forms. Personnel expenses aggregated on the budget form must be justified individually.

- F&A costs are not allowable expenses.
- Academic year salary for PIs and Co-PIs are not allowable expenses. Summer salary expenses (0.5 month maximum) are only allowed for a PI without summer support (no summer salary is allowed for any Co-PI); no salary savings can be accrued.
- Outline what budget resources (dollars) would be made available to each PI/Co-PI and what resources will be managed “centrally” by the PI. Provide a clear rationale linking budgetary resources and collaborative role(s).



External Reviewers

For Planning Grant Applications:

- Proposals will be assessed by a committee of NU research administrators; a listing of external reviewers is not needed.

For Seed Grant Applications (via online form):

- Provide the names, professional affiliations, and email address for six experts not affiliated with the University of Nebraska, who may be recruited as external reviewers for the proposed project. Indicate if proposal reviewers should be asked to sign a non-disclosure form prior to receiving your proposal for review.⁴ By providing these names, the PI confirms that none of these experts has a conflict of interest with the application's PI and Co-PIs. For the purpose of this application, conflict of interest is defined as having received grant funding together, having jointly published articles with fewer than 20 co-authors, having an existing personal or professional relationship, and/or having served as PhD or MS (or equivalent) degree mentors/mentees.

General Criteria for Evaluation: Applications will first be screened to determine if all RFA guidelines have been met, including (but not limited to) retreat participation, general eligibility, formatting, collaboration requirements, and budget amounts.

Planning Grants

For those applications that meet stated RFA submission criteria, at least four internal (NU) reviews will be solicited. Planning grant reviewers will be asked to rate applications to determine the potential for the PI/Co-PIs to build research teams that will actively seek and ultimately receive extramural funding. Applications will be scored (using a 40-point scale) based on: a) the plan to interact with potential funding agencies/foundations (8 pts.); b) evidence that the completed work plan will help the PI/Co-PIs align their research question(s) with funding agency/foundation interests and justify the proposed approach (10 pts.); c) their strategy to identify expertise needs, build collaborations, and prepare competitive extramural research applications (10 pts.); d) having a realistic timetable (6 pts.); and e) having a budget adequate to support the work plan (6 pts.). Reviewers also will be asked to provide an evaluative summary.⁵ Final funding decisions will be made by the Vice Provost and the Executive Vice President and Provost. Funding announcements are expected to be made prior to June 2018.

⁴ A reviewer NDA should only be requested in those cases where the disclosure would seriously jeopardize future extramural funding opportunities.

⁵ Reviewers provide written comments and group applications into four categories (Exemplary: Definitely fund, Very Good: Strongly consider for funding, Needs Improvement: Fund only if resources allow, and Inadequate: Do not fund).



Seed Grants

For those applications that meet stated RFA submission criteria, at least two external reviews will be solicited. Seed grant reviewers will be asked to rate applications (using a 40-point scale) to determine the potential for the team to receive extramural funding for the stated research question(s). Applications will be scored for: a) Research Significance, Innovation and Impact (10 pts.); b) Alignment of research question to an existing extramural funding program (8 pts.); c) Evidence the completed work plan would make subsequent extramural grant proposal(s) more competitive (8 pts.); d) Realistic and achievable work plan and timetable (6 pts.); e) Budget and facilities adequate to support work plan (4 pts.); and f) Meaningful collaborations/roles defined for PI/Co-PIs (4 pts.). Reviewers also will be asked to provide an evaluative summary.⁶ Final funding decisions will be made by the Vice Provost and the Executive Vice President and Provost. Funding announcements are expected to be made prior to June 2018.

Post Award Management, Obligations, and Reporting Requirements: PIs will be required to submit a brief project initiation report three months after award; while the grant remains active, programmatic progress and detailed financial reports will be due 30 days after each award anniversary. A final report will be due 90 days after the award's termination date. As the purpose of this program is to enhance the University of Nebraska's research capacity and competitiveness, submission of significant high-quality extramural research grants is a condition of all awards. Satisfactory progress and adherence to award conditions will be required for access to current and future award funds from the University of Nebraska. All reports will be shared with applicable campus/institution research offices. This program is administered by the University of Nebraska's Office of the Executive Vice President and Provost.⁷

⁶ Reviewers provide written comments and group applications into four categories (Exemplary: Definitely fund, Very Good: Strongly consider for funding, Needs Improvement: Fund only if resources allow, and Inadequate: Do not fund).

⁷ RFA and award management questions should be directed to Vice Provost Dr. David Jackson (djackson@nebraska.edu).

