

EPSCoR P3 Center Collaborative Seed Grants Program

Purpose. Within the Plant-based Bioproduction focal area (P3 Center) of the Arkansas ASSET Initiative (NSF EPSCoR Grant, August 2007 to July 2010), competitively awarded collaborative seed grants will be used to 1) solidify cross-disciplinary/cross-institutional projects that will address key challenges in plant-based bioproduction and 2) enable researchers within the Center to develop the “preliminary data” and publications needed to prepare nationally competitive proposals within the challenge areas.

Seed Grant Submission.

Applications should be submitted electronically to Dr. Carole L. Cramer, Arkansas State University at ccramer@astate.edu and cc'd to your institutional PI (ASU: Cramer; UALR: Grace; UAF: Korth) by 5 pm on the application receipt date. Emerging and new faculty within the Center are eligible to serve as the primary investigator of a seed grant, and supporting faculty are eligible to serve as co-investigators. The awards (18-22 months) can be used to support postdocs, graduate students, undergraduate researchers, faculty summer salary, travel to meeting, equipment (limited to \$6,000) and research supplies and can be distributed to multiple institutions to support collaborative efforts. Successful grants will address one or more of the key challenge areas and emphasize innovative cross-disciplinary research teams with postdocs and students actively involved at multiple labs and locations. A required outcome of each grant is submission of at least one competitive grant to a federal funding agency.

Application Receipt Date: March 3, 2008 5:00pm Central Time

Review Date(s): March 4 thru April 15, 2008

Earliest Anticipated Start Date: May 15, 2008 or October 1, 2008

Seed Grant Proposal Description. The proposal should use 1-inch margins, standard fonts (e.g., Times New Roman or Arial) no smaller than 11 point (figure legends may be smaller), and adhere to the page limits listed below. The proposal should include the following.

- **Cover Sheet** including proposal title, PI and co-PIs, PI's address, phone, fax, and email; and institutional sign-off (<http://abi.astate.edu/people/EPSCoR/COVER%20SHEET%20P3.pdf>)
 - **Proposal start date:** multiple start dates are necessary to accommodate NSF annual budget constraints; some PIs who are awarded grants requesting the May 15 start date may be required to delay grant initiation or adjust budgets to accommodate these budget limitations.
- **Proposal Abstract** (limited to 350 words)
- **Budget.** PIs should use NSF budget format (forms available at www.nsf.gov and <http://abi.astate.edu/people/EPSCoR/New%20budget%20worksheet%20with%20fringe.xls>). Proposed budget may encompass 18 to 22 months with total funding request (direct plus indirect costs) capped at \$150,000 at a single institution or \$250,000 at multiple institutions. If multiple sites are involved, provide separate budget for each site and a compilation budget.
- **Budget Justification** (follow NSF guidelines - www.nsf.gov)
- **Project Description (limited to 10 pages, including figures)** and should include
 - **Specific Aims**
 - **Background and Significance**
 - **Preliminary Results (if available)**
 - **Experimental Plan**
- **Support of EPSCoR Goals (limited to 2 pages)** and should include:
 - **Project's potential to address significant issues in plant-based bioproduction**
 - **Project collaboration/integration of EPSCoR resources and expertise**
 - **Project's potential for translational applications or regional workforce development**

- **Grantsmanship strategic plan** (how does this project position PIs for successfully competing for a federal grant? What specific agency, program and deadline will be targeted?)
- **CVs of Key Personnel** (follow NSF format - www.nsf.gov)
- **Current and Pending Support** (include title, PIs and co-PIs, source of funding, dates of funding, and amounts; include any funding active within the last three years.). (<http://abi.astate.edu/people/EPSCoR/Current%20and%20Pending%20Support%20P3.pdf>) (www.nsf.gov)

Seed Grant Evaluation. Scientific review of the proposals will be managed by the P3 Center External Advisory Board (P3-EAB). Each grant will be peer reviewed by a minimum of three experts within the field and may include ad hoc mail reviews solicited from the national or international scientific community. The Plant-based Bioproduction Steering Committee will review and make recommendations on the “**Support of EPSCoR Goals**” section of each proposal and coordinate with the P3-EAC to finalize awards and funding recommendations. The review criteria will include the:

- 1) Scientific merit
- 2) Plan and likelihood for obtaining non-EPSCoR funding
- 3) Potential for significant contributions to the area of plant-based bioproduction
- 4) Strength of collaborations and integrations of EPSCoR resources and expertise
- 5) Innovation/potential for translational applications
- 6) Contributions to regional workforce development.

Each PI will receive copies of the confidential ad hoc reviews and a summary review from the steering committee.

Because the Arkansas ASSET Initiative is an NSF EPSCoR Program and a key outcome of the Collaborative Seed Grants Program is to increase the number of competitive grants for Arkansas researchers in this focus area, both applicants and reviewers are encouraged to consider the NSF review criteria (taken from [nsf.gov](http://www.nsf.gov)) in developing and/or reviewing proposals.

A. Review Criteria

The National Science Foundation strives to conduct a fair, competitive, transparent merit-review process for the selection of projects. All NSF proposals are evaluated through use of two National Science Board approved merit review criteria. In some instances, however, NSF will employ additional criteria as required to highlight the specific objectives of certain programs and activities. For example, proposals for large facility projects also might be subject to special review criteria outlined in the program solicitation.

The two merit review criteria are listed below. The criteria include considerations that help define them. These considerations are suggestions, and not all will apply to any given proposal. While proposers must address both merit review criteria, reviewers will be asked to address only those considerations that are relevant to the proposal being considered and for which the reviewer is qualified to make judgments.

What is the intellectual merit of the proposed activity? How important is the proposed activity to advancing knowledge and understanding within its own field or across different fields? How well qualified is the proposer (individual or team) to conduct the project? (If appropriate, the reviewer will comment on the quality of prior work.) To what extent does the proposed activity suggest and explore creative, original, or potentially transformative concepts? How well conceived and organized is the proposed activity? Is there sufficient access to resources?

What are the broader impacts of the proposed activity? How well does the activity advance discovery and understanding while promoting teaching, training, and learning? How well does the proposed activity broaden the participation of underrepresented groups (e.g., gender, ethnicity, disability, geographic, etc.)? To what extent will it enhance the infrastructure for research and education, such as facilities, instrumentation, networks, and partnerships? Will the results be disseminated broadly to enhance scientific and technological understanding? What may be the benefits of the proposed activity to society?

NSF staff will give careful consideration to the following in making funding decisions:

Integration of Research and Education: One of the principal strategies in support of NSF's goals is to foster integration of research and education through the programs, projects and activities it supports at academic and research institutions. These institutions provide abundant opportunities where individuals may concurrently assume responsibilities as researchers, educators, and students, and where all can engage in joint efforts that infuse education with the excitement of discovery and enrich research through the diversity of learning perspectives.

Integrating Diversity into NSF Programs, Projects, and Activities: Broadening opportunities and enabling the participation of all citizens, women and men, underrepresented minorities, and persons with disabilities, are essential to the health and vitality of science and engineering. NSF is committed to this principle of diversity and deems it central to the programs, projects, and activities it considers and supports.