

**College of Agriculture and Life Sciences
CALF FACULTY BIG IDEAS INNOVATION PROGRAM ("BIG IDEAS")**

EXECUTIVE SUMMARY

VISION: Creation of an organizational culture, process and infrastructure within CALS that cultivates the strategic partnerships and collaborations necessary for the generation, development, and sustainment of faculty-driven, transformative BIG IDEAS in research, teaching and Extension.

BACKGROUND:

In the spring of 2013, CALS conducted a rigorous strategic planning effort that resulted in many suggestions for guiding the College. One major theme that emerged was the need to focus on bold interdisciplinary ideas and initiatives that would create intellectual excitement and recognition for CALS and CALS faculty. In response, in January 2014, Dean Linton hosted a BIG IDEAS Faculty Task Force meeting of nearly forty thought-leader faculty members representing all departments, career levels, and the breadth of disciplinary expertise found in CALS. The Task Force produced several outcomes, one of which was a proclamation that "CALS needs an organizational culture, process and infrastructure that result in increased interdisciplinary interactions and collaborations." Based on this outcome, a second BIG IDEA faculty session was held on August 15, 2014 in order to build momentum and direction for institutionalizing a BIG IDEA culture and process within CALS. Over twenty of the faculty from the January meeting assembled to begin answering the difficult questions required to transform the working model of the college from traditional vertical silos into thriving interdisciplinary networks.

Following the second session, the BIG IDEAS Faculty Task Force issued several recommendations. The first four recommendations relate to the creation of a competitive grant program which allows faculty to compete for financial and institutional support of their BIG IDEA, and the identification of a point person in CALS to coordinate and manage the process. In direct response to faculty recommendations, Dean Linton established the CALS Faculty Big Ideas Grant Program (Big Ideas) and assigned Christy Sandy, CALS Proposal Developer, as the point of contact for faculty. The complete Big Ideas Task Force Report will be posted on the CALS website.

FUNDING FOR BIG IDEAS:

The CALS Faculty Big Ideas Grant Program is funded through the Dean's "*Open Fields Initiative*." *Open Fields* is a new leadership fund supported by external private donors who share CALS mission and vision and want to help find science-based solutions to the grand challenges facing society in agriculture and biosciences. **These funds are not state, federal, or generated by sponsored research. They are being provided to the College for solely the purpose of promoting important forward thinking, faculty-driven, "think and do" initiatives such as the CALS Faculty Big Ideas Innovation Program.**

PROGRAM PURPOSE:

The goal of the CALS Faculty Big Ideas Innovation Program is to establish a grassroots, faculty-driven process to provide CALS faculty the resources necessary to bring innovative, interdisciplinary, Big Ideas to fruition. Our College envisions the development of bold, interdisciplinary programs that show potential to significantly impact multiple strategic priorities of the College and solve grand challenges that impact us locally, nationally, and globally. The purpose of Big Ideas is two-fold: (1) to function as an umbrella that will catalyze

collaboration and partnership within CALS, across the University, and beyond; and (2) to provide structure and funding.

PROGRAM DESCRIPTION:

The program is divided into four separate funding phases ranging from small awards to facilitate brain storming on a proposed BIG IDEA, to larger, recurring awards that provide seed funding and potentially permanent institutional support for the most innovative and promising BIG IDEAS. BIG IDEAS must matriculate through each step of the funding process. The four steps/phases include:

Phase I: Big Ideas Imagination Fund: Awards up to \$500 to support activities that encourage faculty collaboration, interdisciplinary team building, and BIG IDEA investigation and exploration. An idea does not have to be new to be a Big Idea. However, it should be transformative; interdisciplinary; integrate research, teaching, and Extension; and possess the “wow” factor to energize faculty, stakeholders, external funders, and media. One outcome should be a “go or no-go” decision by the team as to whether or not the BIG IDEA is ready to move to the next step, Big Ideas Proof of Concept Fund.



Phase II: Big Ideas Concept Fund: Awards up to \$5,000 to move a BIG IDEA from imagination stage to the design stage funding the development of a proof of concept. Proposals must have completed the Big Ideas Imagination Fund phase before submitting to this program.



Phase III: Big Ideas Innovation and Development Fund: Awards ranging from \$5,000-25,000 to move the BIG IDEA to a well-developed proposal including an interdisciplinary team, strategic action plan, preliminary data, goals, objectives, and identified potential external funding partners. Proposals must have completed phases I and II before submitting to this program.



Phase IV: Big Ideas Seed Fund: Recurring awards up to \$100,000 annually for up to five years serving as institutional support to provide stability as a promising BIG IDEA is launched and external funding secured. Proposals must have completed the first three phases before submitting to this program.

CALS FACULTY BIG IDEAS INNOVATION PROGRAM

Phase I: BIG IDEAS Imagination Fund Request for Proposals

ELIGIBLE ACTIVITIES

Activities/Ideas supported: The “Big Ideas Imagination Fund” will support activities that encourage faculty collaboration and interdisciplinary idea generation. The idea does not have to be “new” to be a Big Idea. However, it should be transformative; interdisciplinary; integrate research, teaching and Extension; and possess the “wow” factor to energize faculty, stakeholders, external funders, and media.

AWARD INFORMATION

Deadlines and Award Amount: Proposals are accepted and awards made on a rolling basis. The duration of the project if funded is up to four months (120 days). Awards are up to \$500, no match required.

Eligibility/Interdisciplinary Team: All CALS faculty are eligible for funding. In addition to CALS PI, team must include at a minimum: two other CALS departments and 1 non-CALS NCSU college. External partners and stakeholders are highly encouraged.

PROPOSAL CONTENT AND SUBMISSION INSTRUCTIONS

Proposal Content: Big Ideas Imagination Fund proposals should not exceed one page and should:

1. Identify the issue that the Big Idea will address;
2. Demonstrate how the Big Idea will impact two or more of the five [strategic priorities](#) of the college;
3. Identify the interdisciplinary team/experts expected to be involved in the Big Idea conversation; and
4. Explain what activities the \$500 investment will support to bring people together for the “Big Idea Imagination” conversation.

Submission & Due Date: Proposals should be submitted by email to cals_research@ncsu.edu with a subject heading: Big Ideas Imagination Fund – PI last name. This program operates on a rolling basis, with no deadline.

Review Criteria: Each proposal will be reviewed by the Dean on a monthly basis. Competitive proposals will:

- be well aligned with at least two of the CALS strategic priorities;
- have an interdisciplinary team exploring an interdisciplinary issue;
- show potential to have broad impacts on grand challenges facing agriculture and biosciences;
- show potential for large scale external funding; and
- Integrate research, teaching and Extension.

REPORTING REQUIREMENTS

Reporting Requirements: Within four months (120 days) from date of the award, PIs must submit a one page summary on the outcomes of the \$500 investment, what activities were conducted, the results of those activities, participants, and if/how the team plans to continue developing the Big Idea to the next step. If the decision is to not pursue the idea, the final report should provide the same information minus next steps, but including the basis for the “no-go” decision. Should the team decide to apply for funding through the next step, (Phase II) “Big Idea Proof of Concept Fund,” this one page report will serve as the cover page for that proposal.

Inquiries regarding this solicitation should be directed to Christy Sandy, CALS Proposal Developer, Christy_Sandy@ncsu.edu, 919-513-3150.

CALS FACULTY BIG IDEAS INNOVATION PROGRAM

Phase II: BIG IDEAS Proof of Concept Fund Request for Proposals

ELIGIBLE ACTIVITIES:

Activities: The “Big Ideas Proof of Concept Fund” will support activities that move the BIG IDEA from the imagination stage to the creativity stage of development. Eligible activities include, but are not limited to: identifying interdisciplinary team/necessary expertise, identifying stakeholders, networking, seminars/workshops, identifying external funders, collection of data, feasibility assessment, and travel.

AWARD INFORMATION

Deadlines & Award Amount: Proposals will be accepted and awards made on a rolling basis. The duration of the project if funded is no longer than nine months. Awards are up to \$5,000. No match required.

Eligibility/Interdisciplinary Team: Eligible proposals will have completed the “Big Ideas Imagination Fund” (Phase I). It is anticipated that the team will have expanded during implementation of Phase I.

PROPOSAL CONTENT AND SUBMISSION INSTRUCTIONS

Proposal Content:

1. Cover Page: The one page summary submitted at the completion of the “Big Ideas Imagination Fund” phase, will serve as the proposal cover page.
2. Program Description: No more than two pages that includes, but is not limited to:
 - Justification for moving forward with the Big Idea;
 - Proposed activities;
 - Potential future funding opportunities for the Big Idea; and
 - Anticipated impacts and/or deliverables that could come from the Big Idea and how it addresses the [strategic priorities](#) of the College.

Submission Instructions & Deadline: Proposals should be submitted by email to cals_research@ncsu.edu at with a subject heading: Big Ideas Proof of Concept Fund – PI last name. Proposals are accepted on a rolling basis with no deadline.

Review Criteria: Each proposal will be reviewed by the Dean on a monthly basis. Competitive proposals will:

- be well aligned with at least two of CALS strategic priorities;
- have an interdisciplinary team exploring an interdisciplinary issue integrating research, teaching and Extension;
- show potential to have broad impacts on grand challenges facing agriculture and biosciences; and
- show potential for large scale external funding.

NOTIFICATION OF AWARD AND REPORTING REQUIREMENTS

Reporting Requirements: Within nine months from date of award, PIs must submit a two page summary on the outcomes of the \$5,000 investment including: what activities were conducted; the results of those activities; participants; next steps if the team plans to continue developing the Big Idea; and budget report. If the decision is to not pursue the idea, the final report should provide the same information minus next steps, but include the basis for the “no-go” decision. Should the team decide to apply for funding through the next step, (Phase III) “Big Ideas

Innovation and Development Fund," this two page report will serve as the Introduction for that proposal.

Inquiries regarding this solicitation may be directed to Christy Sandy, CALS Proposal Developer, christy_sandy@ncsu.edu, 919-513-3150.

CALS FACULTY BIG IDEAS INNOVATION PROGRAM
Phase III: BIG IDEAS Innovation and Development Fund
Request for Proposals

ELIGIBLE ACTIVITIES:

Activities: The "Big Ideas Innovation and Development Fund" will support academic, Extension and research related activities that move the Big Idea from the proof of concept stage through the development stage. It is anticipated that Phase III funding will result in well-developed competitive projects eligible for identified extramural funding opportunities.

Eligible activities include, but are not limited to:

- Collection of preliminary data
- High-level seminars or workshops to promote networking, academic/private sector partnerships
- Workshops on emerging Big Idea research area
- Development of white papers
- Travel to establish partnerships or interact with funding agencies/program officers
- Creation of collaborative resources such as websites, apps, etc.
- Support for international collaboration
- Proposal development activities for submitting external funding applications
- Salary (summer salary allowed, but needs to be very well justified)
- Match to leverage additional seed funding (needs to be very well justified)

AWARD INFORMATION

Deadlines & Award Amount: Proposals will be accepted and awards made on a rolling basis. The duration of the project if funded is no longer than one year. The maximum award amount is \$25,000. No match required. Awards will be placed into the same Account and Phase Number provided by PI for Big Ideas Phase II funding. Funds will be made available within 30 days of award notice.

Eligibility: Eligible teams/projects will have completed both Phase I and Phase II of the Big Ideas grant program and submitted final reports. All eligibility requirements for Phase I & II, apply to Phase III.

PROPOSAL CONTENT AND SUBMISSION INSTRUCTIONS

Proposal Content:

1. **Cover Page Phase III:** One page
 - Lead PI Name, Department, Contact Information
 - Name and Organization of Co-PIs and collaborators
 - Amount of funds requested
 - Background/Results of Phase I & II Big Ideas Grant (Approx. 1/2 to 3/4 page): Summary of Phase I & II Report highlighting rationale for decision to pursue Phase III funding. Is Big Idea still of national significance and well-aligned with CALS strategic priorities? Is this team and NC State the right people and place to be the hub of research-academic-

extension innovation and excellence in this research area? What actions have been taken outside of the Big Ideas funding mechanism to promote project/concept?

3. Program Description: No more than four pages including, but not limited to:

- Overall goal, objectives, and proposed activities;
- Potential future funding opportunities for the Big Idea;
- How proposal activities address the [strategic priorities](#) of the College;
- Does NC State have a competitive advantage in this area;
- Budget (Please use format at end of RFP. Add or subtract categories/rows as needed).

4. Appendices

- References Cited
- Biosketch of each PI, co-PI, and other key personnel
- Letters of Support: Letters of support from collaborating partners/stakeholders (Optional)
- Draft of 1-page white paper for “Big Idea” suitable to share with potential funders (Optional)
- Identified funding opportunities that will be pursued in the next 1-3 year time frame

Submission Instructions & Deadline: Proposals should be submitted by email to cals_research@ncsu.edu as a single PDF document with a subject heading: Big Ideas Innovation and Development – PI last name. Proposals are accepted on a rolling basis with no deadline.

Review Criteria: Proposals will be reviewed by the Dean on a monthly basis. Review criteria include:

- Potential for future funding in the near future (Be specific as possible including agency names, programs, dates, potential amounts, any other relevant information such as contact with program directors, etc.);
- Feasibility of establishing “Big Idea” as a bold, sustainable, interdisciplinary program at NC State that will attract the high quality faculty and students to CALS;
- Alignment with at least two of CALS strategic priorities;
- Team qualifications: PI/team are a qualified and appropriate for the project and roles of team members are clearly defined and reasonable;
- Potential to have broad impacts on grand challenges facing agriculture and biosciences; and
- Budget reasonable and well justified.

NOTIFICATION OF AWARD AND REPORTING REQUIREMENTS

Notification of Award: Lead PI will be notified within 30 days of submission. If awarded, funds will be made available within 30 days of submission.

Reporting Requirements: Within 13 months from award date, Lead PI must submit a final report including activities conducted, participants/roles, and results of those activities (grant applications submitted, publications, resources developed, leveraged funds, training, outreach, etc.), financial report, and next steps in pursuing Big Idea.

CALS "Big Ideas" Budget Form

| | Total |
|-------------------------------|--------------|
| Personnel | |
| Materials and supplies | |
| Catering/Food | |
| Software and tools | |
| Travel | |
| Other | |
| Budget Justification: | |