

Strategic Networks and Initiatives Program (SNIP)

**2019/2020
Request for Proposals**

The Strategic Networks and Initiatives Program (SNIP) provides support for faculty-driven, interdisciplinary initiatives at the vanguard of agricultural and natural resources research. Supported by the Office of Research and Graduate Education in the College of Agricultural Sciences, the **2019/2020** SNIP offers three levels of grants. At all levels, funding will be awarded to collaborative interdisciplinary teams seeking to investigate focused research problems in pursuit of large-scale extramural grant opportunities.

Contact Dr. Gretta Tritch Roman (gst118@psu.edu), Research Initiatives Associate, for assistance with development of proposals and background information related to the program.

Level I: Launch Grants

Up to \$10,000 for 1 year of support

Launch Grants will provide support for the initial development of an innovative research question and the formation of an interdisciplinary collaborative team required to address it. Funds will be awarded to support team-building activities aiming to establish research trajectory, refining research goals and objectives, promoting networks across departments in the College of Agriculture and the university, defining leadership, structuring the collaboration, and identifying potential extramural funding sources. The activities could include group meetings, seminar series, small workshops, grant writing workshops and others. The majority of SNIP grants awarded in FY 2019/20 will be Launch Grants.

Level II: Pursuit Grants

Up to \$50,000 for 2 years of support

Pursuit Grants will provide support for strategic research initiatives that are competitive for large-scale extramural grants. Eligible interdisciplinary teams should be able to demonstrate ongoing research, clear research goals, and established partnerships. The funding could be used to collect preliminary data to strengthen the proposal/s or for other activities aimed at submitting a proposal for significant extramural grants by the end of the SNIP grant term.

Level III: Cohort Grants

Up to 2 years of support for 3-5 new Ph.D. students

Cohort Grants will provide support to established interdisciplinary research initiatives by sponsoring cohorts of **Ph.D. students** recruited to conduct interconnected and innovative research. This program is intended to build interactive graduate student-faculty teams that will pursue extramural funding. Cohorts may be composed of a minimum of 3 and a maximum of 5 newly enrolled students for their first two years in a CAS or CAS-affiliated doctoral program. A plan for summer stipend support and continuation of stipend and tuition funding after the two years for these new Ph.D. students is required. **Master's-level students are not funded through this program.**

Two-phase Application Process

Phase 1 Concept Note Submission

Submit a short concept note for proposals (**max 200 words**) by email to the Office of Research and Graduate Education (agresearch@psu.edu) by **August 30, 2019**, including:

- 1) The level of SNIP grant to be pursued (Level I, II, or III);
- 2) A brief summary of the research problem and why an interdisciplinary team is required to address it;
- 3) The cross-cutting thematic area to be advanced by this research (see below);
- 4) Expected outcomes and duration of the grant (within the limitations outlined in the summaries on the first page).

Phase 2 Full Proposal Submission

Full proposals must be submitted as a PDF by 5:00 pm on **September 20, 2019**, to the Office of Research and Graduate Education (agresearch@psu.edu).

Specific requirements for each grant level are included below, and are available as individual PDFs at <https://agsci.psu.edu/research/resources/funding/college-of-agricultural-sciences-snip>
For questions, contact Dr. Gretta Tritch Roman (gst118@psu.edu), Research Initiatives Associate.

Cross-cutting strategic thematic areas

*Proposals at all levels need to distinguish **one** of the following five cross-cutting strategic thematic areas:*

Advanced Agricultural and Food Systems – transforming thinking and practice in agricultural and food systems through research focused on productivity, sustainability, and adaptability.

Biologically-Based Materials and Products – discovering novel approaches using genetic systems and biological materials to create value-added commercial and consumer products in a sustainable, profitable manner.

Community Resilience and Capacity – helping communities improve their economic resilience, create sustainable infrastructures, and promote their local economy through value-added opportunities and new business development.

Environmental Resilience – providing innovative research to enhance and protect managed and natural ecosystems, ecosystem services, and human well-being.

Integrated Health Solutions – improving the health of humans, animals, and communities through research into preventative, corrective, diagnostic, and predictive solutions to the challenges presented by lifestyle, diseases, pests, and toxins.

Level I: Launch Grants

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Specific proposal requirements for Launch Grants

- A. Title, Thematic Area, Primary Investigator
 - a. Designate only one PI who will serve as the primary contact for the project (PI must be a faculty member in the College of Agricultural Sciences)
- B. Summary (200 words maximum)
 - a. Summarize the research problem and the proposed activities aiming to build the team and/or the collaborative network
- C. Proposal Narrative
 - a. Refining the Problem
 - i. State the research problem and the significance of the work for the future of agricultural and natural resources research.
 - ii. Describe the proposed activities that will help to formulate the research problem more clearly as an initiative.
 - iii. How will the project advance **one** of the college's [cross-cutting themes](#)?
 - b. Building the Team
 - i. Why does this problem require the collaboration of an interdisciplinary team to address it?
 - ii. What are the proposed team-building activities that will promote networking across departments in the College of Agricultural Sciences?
 - iii. Which disciplines do you anticipate being integral to the initiative and how do you propose to engage faculty?
 - iv. Describe the proposed structure of the initiative's leadership and collaboration.
 - c. Sustainability Plan
 - i. Provide benchmarks that will be used to identify the progress in launching the initiative during the funding period.
 - ii. Provide a plan for continued collaboration including, when appropriate, how the proposed activities would lead to a Level II proposal.
- D. Budget and Justification
 - a. Include a detailed budget justification, providing a brief description and explanation of need for costs associated with Launch Grant activities. Use the following budget sections as a guide:
 - i. *Personnel* (Fringe benefits ARE REQUIRED in personnel costs.)
 - ii. *Travel* (for invited guests)
 - iii. *Meeting expenses and meals*

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- iv. *Honoraria* (Honorarium payments are limited by the University to \$1,000 or less. If payment to a visiting faculty member or other individual for speaking will exceed \$1,000, payment can still be made, but must be identified as a Personal/Professional Service, and the [University Scholar Agreement](#) must be completed.)
- b. All other project costs typically allowed by federal extramural sponsors are allowed in this program.
- c. Funds cannot be used for:
 - i. Faculty salaries (including supplemental) or standing appointment salaries
 - ii. Travel to professional meetings
 - iii. Support of personnel not in the College of Agricultural Sciences
- d. Budgets can be constructed for **a maximum of 1 year**.
- e. Please note that submissions to this internal competition do not require the budget to be created through the College's Grants and Contracts Office.
- f. Funds from this program must be expended within one year of the award date.

Level II: Pursuit Grants

Up to \$50,000 for 2 years of support

Pursuit Grants will provide support for strategic research initiatives that are competitive **for large-scale extramural grants**. Eligible interdisciplinary teams should be able to demonstrate ongoing research, clear research goals, and established partnerships. The funding could be used to collect preliminary data to strengthen the proposal/s or for other activities aimed at submitting a proposal for significant extramural grants by the end of the SNIP grant term.

Specific proposal requirements for Pursuit Grants:

- A. Title, Thematic Area, Primary Investigator
 - b. Designate only one PI who will serve as the primary contact for the project. (PI must be a faculty member in the College of Agricultural Sciences.)
 - i. Note: Include list of co-PIs and other participants in section D (described below).
- B. Summary (200 words maximum)
 - a. Summarize the established research initiative or collaborative project and the proposed plan to develop and submit a proposal for large-scale extramural funding.
- C. Proposal Narrative
 - a. Description of the initiative and future directions:
 - i. Provide a brief description of the initiative/team.
 - ii. State and explain the significance of the research with particular attention to how the research is transformative and addresses a critical research need with potential to be competitive for large-scale extramural funding.
 - iii. Describe past activities that shaped the interdisciplinary collaboration.
 - iv. Describe the current and future research goals of the initiative/team.
 - v. Describe the plan and the target program for external funding (include the following: agency, request for proposals, submission deadline).
 - vi. Describe the proposed activities that will support the submission of (a) proposal(s).
 - vii. Provide benchmarks that will be used to measure the progress of the project during the funding period.
 - b. College readiness
 - i. What key strengths in the college will contribute to success?
 - ii. What gaps in the college create a need for the initiative?
 - iii. How will the proposed activities address the gaps and capitalize on the strengths?
 - c. Benefits to the College and University:
 - i. What impact will the project have on the stature and visibility of the college and university?
 - ii. How will the project advance one of the college's [cross-cutting thematic areas](#)?
 - iii. What will be the lasting effects of the network or initiative?
 - d. Sustainability plan:
 - i. Provide a plan for the future of the initiative or the collaborative research with benchmarks beyond the funding period.

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- D. Project team (2-page maximum, individuals can participate in multiple proposals):
- a. The team must include the PI and two or more co-PIs, all from different CAS departments. Extraordinary exceptions will be considered with a strong justification that three or more distinct disciplines from CAS are represented within the team. Faculty from any college at Penn State may be included as participants.
 - b. List all team members with their departmental affiliations and describe the role and responsibilities of each project team member, including how the expertise of each is required to address the proposed research problem.
 - c. Describe a plan to include additional faculty in the network, initiative, or project.
- E. Budget and Justification
- a. Include a detailed budget justification, providing a brief description and explanation of need for costs associated with Pursuit Grant activities. Use the following budget sections as a guide:
 - i. *Personnel* (Fringe benefits ARE REQUIRED in personnel costs.)
 - ii. *Travel* (for invited guests)
 - iii. *Meeting expenses and meals*
 - iv. *Honoraria* (Honorarium payments are limited by the University to \$1,000 or less. If payment to a visiting faculty member or other individual for speaking will exceed \$1,000, payment can still be made, but must be identified as a Personal/Professional Service, and the [University Scholar Agreement](#) must be completed.)
 - v. *Purchased Services* (i.e. AV for conferences, analysis of samples, etc.)
 - b. All other project costs typically allowed by federal extramural sponsors are allowed in this program.
 - c. Funds cannot be used for:
 - i. Faculty salaries (including supplemental) or standing appointment salaries
 - ii. Travel to professional meetings
 - iii. Support of personnel not in the College of Agricultural Sciences
 - d. Budgets can be constructed for **a maximum of 2 years**.
 - e. Please note that submissions to this internal competition do not require the budget to be created through the College's Grants and Contracts Office.
 - f. Funds from this program must be expended within two years of the award date.

Level III: Cohort Grants

Up to 2 years of support for 3-5 new Ph.D. students

Cohort Grants will provide support to established interdisciplinary research initiatives by sponsoring cohorts of **Ph.D. students** recruited to conduct interconnected and innovative research. This program is intended to build interactive graduate student-faculty teams that will pursue extramural funding. Cohorts may be composed of a minimum of 3 and a maximum of 5 newly enrolled students for their first two years of a CAS or CAS-affiliated doctoral program. **Master's-level students are not funded through this program.**

Cohort Grants for 2019/2020 will support the 3-5 newly enrolled Ph.D. students by providing ½-time graduate assistantships (Grade 12) plus GIA for 2 semesters/year, beginning Fall semester 2019 and ending Spring semester 2021. A plan for summer stipend support and continuation of stipend and tuition funding after the two years for these new Ph.D. students is required.

Specific proposal requirements for Cohort Grants:

- A. Title, Thematic Area, Primary Investigator (PI), co-PIs
 - a. Designate only one PI who will serve as the primary contact for the project. (PI must be a faculty member in the College of Agricultural Sciences.)
 - b. List names and affiliations of co-PIs
- B. Summary (200 words maximum)
 - a. Summarize the research initiative, the training concept, and the activities aiming to build the student-faculty team.
- C. Proposal Narrative (5 pages maximum, not including letters of support)
 - a. Overview of the existing strategic network and/or interdisciplinary team:
 - i. Describe the team research goals.
 - ii. Describe ongoing research activities related to the project.
 - iii. Describe the impact of the work on the stature of CAS research.
 - iv. Describe how the project advances one of the [cross-cutting thematic areas](#).
 - b. Project Team:
 - i. Identify the team members (must involve multiple CAS departments).
 - ii. Identify proposed major CAS faculty advisors for the students.
 - iii. Identify participating graduate programs (students in IGDP programs with CAS advisors are allowed).
 - c. Student cohort recruitment plan for new Ph.D. students (this program provides funding only for newly recruited graduate students in a doctoral program and must be applied to their tuition and graduate assistantship stipends during the first two years of their studies):
 - i. Indicate the proposed number of students to be recruited for the cohort.
 - ii. Describe the composition of the cohort, including the training and synergism concept.
 - iii. Describe the approaches to recruit new students.
 - d. Proposed activities:
 - i. Describe specific collaborative team activities that will engage students beyond individual laboratory affiliations.
 - ii. Describe the proposed student research topics and their integration into the long-term goals of the team.

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- iii. Provide benchmarks identifying the progress of the entire project, including specific benchmarks pertaining to individual student projects.
- e. Sustainability plan:
 - i. Identify current sources of funding for summer salary and programmatic needs.
 - ii. Identify specific extramural sources that will be pursued for stipend/tuition support after the two-year funding period (include the agency, request for proposals, submission deadline, etc.).
 - iii. Describe a contingency plan if the extramural funding is not secured.

D. Letters of Support

- a. Provide appropriate letters of support from department heads or IGDP directors of graduate programs for the proposed activities of the graduate student cohort.
- b. Commitments for additional funding from departments are not necessary, unless they are part of the contingency plan.
- c. Programmatic assistance with graduate student recruiting efforts would strengthen the proposal.

E. Other Guidelines

- a. Students must be enrolled and registered full-time in the College of Agricultural Sciences or CAS-affiliated Ph.D. program and be mentored by a CAS faculty member.
- b. Funding will be allocated for enrolled students only during the semesters requested in the proposal. There is no carry-over of funds in this program beyond the two-year period (Fall 2020 through Spring 2022).
- c. Any modifications/deviations from this request will only be given in special circumstances. Requests must be submitted for prior approval in writing and will be dependent on the availability of funds. Cohort Grants cannot be postponed until the student's third year or later. For instance, should a student receive recruitment awards from the University or Graduate School, the SNIP award cannot be applied to the student's tuition or graduate assistantship beyond the student's second year of the Ph.D. program.
- d. Top-ups from other sources to higher grades are permissible. Note that this pay grade may require a top-up to match other assistantships in your program. The source of top-up funds should be explained in the body of the proposal and confirmed in accompanying letters.

Proposal Review Process

Level I

- Proposals will be evaluated by program administrators within the CAS Office of Research and Graduate Education.
- Evaluation criteria: Proposals must demonstrate the potential for developing advanced agricultural and natural resources research questions and present a clear plan for building the interdisciplinary team required to address these questions.
 - Intellectual Merit
 - Potential of the concept for refining a research question that requires interdisciplinary inquiry
 - Relevance to the thematic area
 - Collaboration Plan
 - Soundness of the proposed plan and activities with clear benchmarks for launching a research initiative
 - Potential for developing new and productive collaborations

Level II

- Proposals will be evaluated by a review panel who will make funding recommendations to the Associate Dean for Research and Graduate Education.
- Proposals from research teams established through SNIP grants are encouraged, but previous or current SNIP funding is not required.
- Preference will be given to inter-departmental teams.
- Evaluation Criteria: Proposals must include innovative research ideas, provide strong evidence of the importance of the proposed research, and demonstrate that SNIP funding will contribute to the preparation of the teams in pursuit of large-scale external funding from government, corporate, and foundation partners.
 - Intellectual Merit
 - Evidence that the proposal addresses a critical research need and opportunity
 - Innovative approach
 - Soundness of the proposed plan, activities, and timeline
 - Relevance to the thematic area
 - Impact on Growth in Thematic Area
 - Strategy to leverage this initial support for longer-term funding
 - Plan for building/organizing a core of strength in the thematic area
 - Additional or continuing activities to stimulate long-lasting impact
 - Collaboration Plan
 - Commitment of the team members
 - Potential for developing new and productive collaborations among participants or strengthening existing ones in the thematic area
 - Funding Plan
 - Specific funding programs identified
 - Submission deadlines clearly stated
 - Description of strategy to obtain the targeted funding

Level III

- Proposals will be evaluated by a review panel who will make funding recommendations to the Associate Dean for Research and Graduate Education.
- Proposals from research teams established through SNIP grants are encouraged, but previous or current SNIP funding is not required.
- Evaluation Criteria: Proposals must emphasize advanced agricultural research questions with the goals of building interdisciplinary student-faculty teams in pursuit of large-scale external funding from government, corporate, and foundation partners.
 - Intellectual Merit
 - Advances potentially transformative interdisciplinary research in a thematic area
 - Integrates graduate education to enhance research in a thematic area
 - Demonstrates potential for sustained national competitiveness in a thematic area
 - Collaboration sustainability and leverage
 - Continue to promote interdisciplinary research across multiple CAS programs
 - Integrate graduate student activities and research initiatives
 - Demonstrate innovative approaches to achieve the research goals
 - Demonstrate strong potential for large-scale extramural funding
 - Collaboration Plan
 - Builds or strengthens productive collaborations among team and network participants
 - Demonstrates potential for high impact synergies among disciplines
 - Funding Plan
 - Describes a robust, long-term collaborative funding plan for continued student funding

Reporting

Level I

- Interim report will be due June 1, 2020.
- A final report on a SNIP-funded Level I project will be due November 1, 2020.
- Submit report as a PDF to the Office of Research and Graduate Education (agresearch@psu.edu). Report templates will be provided.

Level II

- Interim reports on a SNIP-funded Level II project will be due at six-month intervals depending upon the duration of the proposed project (i.e. June 1, 2020; November 1, 2020; June 1, 2021)
- A final report on a SNIP-funded Level II project will be due on November 1, 2020 or November 1, 2021 (depending on the term funded).
- Submit all reports as a PDF to the Office of Research and Graduate Education (agresearch@psu.edu). Report templates will be provided.

Level III

- Student recruiting report is due June 1, 2020; mid-term report is due June 1, 2021.
- A final report is due June 1, 2022.
- Submit all reports as a PDF to the Office of Research and Graduate Education (agresearch@psu.edu). Report templates will be provided.