LAS Signature Research Incubator

Motivation
The LAS Signature Research Incubator (SRI) has a mission to stimulate and foster interdisciplinary programs that address major challenges facing humanity. The SRI promotes the Iowa State strategic vision to advance the land-grant ideals of putting human creativity, science and technology to work. The SRI builds on the diversity of LAS, cultivating an interdisciplinary network of faculty, staff and students focused on challenging problems that require a multiplicity of disciplinary perspectives. This network can yield new, ingenious ways to advance the LAS mission to strengthen and enrich families and communities in Iowa and around the globe. Through seed funding, the SRI provides opportunities for innovation that might not otherwise occur.

Interdisciplinary collaborative research has become a major emphasis area for federal funding agencies. A prime motivation for these programs is a recognition that the biggest challenges facing society are highly complex and transcend the boundaries of any single discipline. The research the SRI sponsors is use-inspired and translational, promoting directions for fundamental research that provides solutions to the world’s challenges. Arriving at equitable, sustainable solutions requires participation and synthesis of knowledge from the humanities, social sciences, mathematics and natural sciences. As a college that embraces all of these disciplinary areas, the College of Liberal Arts and Sciences at Iowa State University is well-positioned to promote the Signature Research Incubator.

Features of SRI projects
LAS has identified several key cross-disciplinary themes, the five Signature Themes (https://www.las.iastate.edu/research/signature-themes/), that build on core capabilities of the College. The SRI invites proposals each fall for seed funding of three years in two categories: (a) $25,000 - $50,000 per year and (b) up to $100,000 per year, pending availability of funds. To be considered an Incubator program, a proposal must include these features:
1. address a major, challenging area of research, preferably under a Signature Theme,
2. involve faculty, staff and students substantively from multiple areas of research in the college, with a lead PI in LAS and preferably including faculty from humanities, social science and STEM disciplines,
3. engage a new interdisciplinary collaborative team or an existing team working on a topic distinctly different from past work, and
4. have a plan for attaining further impact.
   (4a) For proposals driven largely by humanities, this would be a plan for producing campus and/or broader community impact and for opening new opportunities for further funding. For example, a humanities project might explore an Iowa community’s historical legacy through the social and economic impacts of the arrival of the railroad. Community engagement contributing to the research and its outcomes could be part of the project’s impact.
   (4b) For proposals driven largely by STEM fields or social sciences, this would be a plan for seeking external funding at least five times the received seed funding, based on the foundation established using SRI support, as well as a plan for producing broader impact.
Innovative, forward-thinking research with a significant risk but a high impact potential is encouraged. Especially desirable are research activities that show promise for attaining substantial external recognition, such as AAU-level awards.

The primary use of the seed funding is to support research development, so its focus should be to support students, faculty time in teaching-intensive disciplines and limited equipment development. The funds also can be used for a variety of purposes that promote the project, such as running relevant workshops, bringing in appropriate visitors for consultation, making trips to meet with funding agency program officers, or providing part of matching funds that may be needed for an outside grant. However, in the case of matching funds, the SRI project should be structured so that it can progress irrespective of the success of the outside grant proposal. For the larger category, the budget must include cost sharing of 10% of the total budget, provided from other ISU sources, such as PI incentive funds and/or funds from the PIs’ departments. In developing proposals for external support, the LASERS team can provide appropriate assistance.

**Broader view**

More broadly, the SRI offers potential to link with other initiatives and opportunities at Iowa State, such as the ISU and LAS strategic plans and research priorities identified under it. For example, a project might link with growing activities in the Iowa State Research Park or programs of ISU Extension and Outreach, thereby reaching out to the broader community and serving needs of Iowa. High growth projects might become formal centers at Iowa State. The SRI also presents opportunities to attract alumni interest and funding, through specific projects it helps develop.

**Eligibility**

The lead PI of each team must be a tenure-eligible or tenured faculty member within LAS. Team members should include faculty from different disciplines and preferably include faculty from humanities, social science and STEM disciplines. Teams may be composed of two or more members. Teams may include collaborators from other colleges within ISU and from different institutions. Support for non-ISU collaborators is limited to travel.

**Application Procedure**

**a. Letter-of-Intent**

Each planned SRI proposal requires submitting of a Letter-of-Intent (LOI), which gives the LAS College a pre-submission count of the number and disciplinary breadth of proposals to expect in order to plan for the number and types of reviewers needed. The **LOI should be submitted electronically by October 1** to the LAS Associate Dean for Research, William Gutowski (gutowski@iastate.edu), and to Nolan McDonald (nolanm@iastate.edu), and should include the following:

- **Title of the proposal.** This need not be the final proposal title but it should accurately reflect the intended focus and scope of the proposal.
- **Names and affiliations of investigators.** Provide the full name, organizational, departmental and college affiliation for each investigator. The tenure home of the PI must be in the LAS College.
• Brief abstract. This should be a single, concise paragraph describing the intended focus and scope of the proposal. This is only intended to guide reviewer selection but will not be included in the proposal review.

• An ISU collaborators list. A list of all persons at ISU, in alphabetical order, who are currently, or who have been collaborators or co-authors with the project investigators on a project, book, article, report, abstract or paper during the 48 months preceding the submission of the proposal.

b. Full Proposal

Full proposals for SRI funding have a due date of October 15 each fall for funding that would start the following fiscal year (July 1st). Proposals should be submitted electronically to the LAS Associate Dean for Research, William Gutowski (gutowski@iastate.edu), and to Nolan McDonald (nolanm@iastate.edu). An SRI proposal has these parts:
1. Cover page on SRI template
2. Project description (maximum 5 pages)
3. Budget on SRI template
4. Budget justification on SRI template
5. Impact action plan. This is required for both funding categories and should be part of the project’s timeline. For the larger funding category, the plan and budget must include a visit by the PI to each of the external sponsors identified in the plan.
6. Two-page CVs for the PI and co-PIs.
7. For large-category proposals, approval of cost-share from sources.

Only one application per LAS principal investigator is permitted; however, a PI may be a co-PI on other SRI applications.

Project Description. The project description should be no more than five pages, single-spaced, using a 12-point font and one inch margins, and must include the following:
• Description of the proposed project. Clearly describe the proposed project, including the aims and objectives for the project, whether it is focused on research, team-building or a combination of both. Also include a concise description of the role of each of the investigators in the project.
• Justification and rationale for the proposed project. Clearly describe the rationale for the proposed project and any research to be performed. As appropriate, the rationale should describe how the project relates to and enhances one or more LAS Signature Themes (https://las.iastate.edu/research/signature-themes/)
• Description of the long-term research goals and activities that will be undertaken. Explain the need for a collaborative approach involving multiple investigators, and the means of achieving an integration of the various investigators into a functional collaborative.

Budget. The budget should be for three years. The 3-year funding amount for the smaller category is $75,000-$150,000 with a maximum of $50,000/year. For the larger category, the 3-year funding amount is $300,000 with a maximum of $100,000 per year.
• Budget template. Enter your budget on the Budget Form provided. Note that funds can be used for research and/or team building activities but must include, at a minimum, a visit by the PI to each of the sponsors targeted in the funding action plan (large-category
proposals) and a team-building workshop or retreat to assure integration of all members of the team. Support for non-ISU collaborators is limited to travel. The funding could be part of matching funds that humanities funding agencies often require for their grants. The college’s LASERS team (https://las.iastate.edu/faculty-staff/award-support/) can assist with filling the template for those unfamiliar with such forms.

- **Cost share.** Be sure to include the required cost share (10%) if the proposal is in the larger funding category. Identify the cost-share sources on the SRI Budget Justification form, and attach to the proposal the approval documentation of the cost shares from the funding sources. Cost sharing can come from other ISU sources such as PI incentive funds and/or funds from the PIs’ departments.

**Budget Justification.** Explain and justify the budget, using the SRI Budget Justification template.

**Impact Action Plan.**

- **Impact action plan narrative.** This is required for both funding categories. On the provided Impact Action Plan form, you should enter on the action plan narrative tab a short, detailed, description of your action plan (i.e., timeline of activities) for the duration of the award. Note that an intent of the SRI awards is to fund projects with the potential to grow and expand well beyond the SRI funding period, so the narrative should also address expectations and plans beyond the expected duration of the SRI award.

- **Funding action plan, for proposals in the larger funding category.** On the provided Impact Action Plan form, you should complete the top section under the header Proposed New/Pending Submissions. You should provide details, including sponsor, RFP descriptions, maximum award dollars, and actual or projected submission dates for external research proposals that will be enabled by this LAS SRI funding and that will be submitted during the active funding period for the LAS SRI grant.

  Note that the funding action plan must include at least one proposal during the first year of LAS SRI funding that requests at least as much funding as the total LAS SRI grant, and, during the active period of the LAS SRI grant, external proposals requesting at least 5 times the total funding provided by the LAS SRI grant. Also, the plan and budget must include a visit by the PI to each of the external sponsors identified in the plan.

**Two-Page CVs.** A CV (limited to two pages) is required for each individual identified as a PI or Co-PI. The following information should be provided in the order and format specified below. All CVs for the SRI proposal should be assembled into single pdf text file (i.e., not scanned documents).

- **Professional Preparation.** A list of the individual's undergraduate and graduate education and postdoctoral training as indicated below:

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<thead>
<tr>
<th>Undergraduate Institution(s)</th>
<th>Major</th>
<th>Degree &amp; Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Graduate Institution(s)</td>
<td>Major</td>
<td>Degree &amp; Year</td>
</tr>
<tr>
<td>Postdoctoral Institution(s)</td>
<td>Area</td>
<td>Inclusive Dates (years)</td>
</tr>
</tbody>
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- **Appointments.** Current appointment at ISU, followed, in reverse chronological order, by any academic/professional appointments of note.

- **Products.** A list of: (i) up to five products most closely related to the proposed project; and (ii) up to five other significant products, whether or not related to the proposed project. Individuals can decide what are acceptable products, based on the standards of their discipline. Only the list of 10 will be used in the review of the proposal.
Acceptable products can include publications, data sets, software, patents, and copyrights. Less desirable products include unpublished documents not yet submitted for publication, invited lectures, and additional lists of products. Any product that is a publication should include full citation information such as (where applicable and practicable) names of all authors, date of publication or release, title, title of enclosing work such as journal or book, volume, issue, pages, website etc.

- **Current Funding.** As appropriate, and guided by funding expectations of the applicant’s discipline, provide a list of all current funding, including funding source, duration (with start/end dates), your role (e.g., PI, co-PI, etc.), project PI (if not you), number of co-PIs, total award amount and award amount to you. This could involve projects you have collaborated on without necessarily receiving funding yourself.

**Review Process**

**a. Proposals**

The LAS Associate Dean for Research will assemble a review panel that reflects the range of disciplines covered in the Letters of Intent. The review panel will be an interdisciplinary team of ISU faculty, excluding those with conflicts of interest. *Therefore, proposals should be written in a manner appropriate for review by a broad team that includes non-experts.* The final award decision will be made by the LAS College by January 1. Funding will be available beginning the following July 1, but start dates can begin later.

The review panel will evaluate the proposals on the basis of these criteria:

1. adherence to the SRI project features listed on page 1,
2. potential to extend LAS research impact, especially in the Signature Themes,
3. potential to compete successfully for additional funding (if submitting a proposal for the larger category),
4. the scholarly impact demonstrated by proposal faculty in previous work, and
5. the appropriateness of the proposed budget.

On the basis of the evaluations, the review panel will decide which are fundable and then rank fundable proposals. The panel can decide that none are fundable under the criteria listed above for an SRI program.

**a. Annual progress**

The Associate Dean for Research will review funded programs annually, with assistance from others as deemed appropriate, such as the LAS Dean or other faculty and administrators with relevant expertise. The annual review will consist of a presentation late in the spring semester of approximately 40 minutes, followed by 10-15 minutes of questions, on program progress. The program’s PI will submit a report giving products of the program, such as publications, presentations and proposals submitted by the program team, along with a budget spending plan for the coming year. The program PI will also provide, as appropriate, information on other ways the program has shown impact to Iowa State and the broader community. On the basis of the annual review and availability of funds, LAS will decide funding for the next year is warranted.

At the end of the final year of funding, a final, comprehensive report should be submitted within 30 days following the end of funding.
More specifically, the annual progress reports and the comprehensive, final report should each include the following:

- Progress on research goals, including expected products, such as papers published and manuscripts submitted, presentations at conferences, etc., in addition to a concise narrative explaining research progress to date. The narrative should include information on how the research is advancing one or more of the LAS Signature Themes and advancing the University Priorities.
- Progress on the project’s impact action plan. For proposals in the larger funding category, this would include submission of all relevant extramural research proposals, whether included in the funding action plan or not, as well as information on whether funded, not funded or still pending. Reviews should be included for any proposals on which funding decisions have been made, whether positive or negative.
- Description of travel and other efforts undertaken to interact personally with the sponsors targeted in the funding action plan, and a description of any team-building workshops or retreats that took place.

**Questions?**
Any questions should be directed to Associate Dean William Gutowski (gutowski@iastate.edu), 294-4031. In addition, Dr. Gutowski will be available to meet with groups to discuss this opportunity and encourages individuals and groups to contact him with ideas, questions, etc., by telephone or email, as well as for in person discussions.