Emerging Areas of Research Funding Program (EAR)

Abstract Deadline: June 15, 2016

Proposal Deadline: September 9, 2016

Guidelines and Application

Questions regarding the EAR should be directed to:

<table>
<thead>
<tr>
<th>Position</th>
<th>Name</th>
<th>Email</th>
<th>Phone</th>
</tr>
</thead>
<tbody>
<tr>
<td>EAR Administrator:</td>
<td>Rick Van Kooten</td>
<td><a href="mailto:rvankoot@indiana.edu">rvankoot@indiana.edu</a></td>
<td>855-3931</td>
</tr>
<tr>
<td>EAR Coordinator:</td>
<td>Alicia Adelman</td>
<td><a href="mailto:earprogram@indiana.edu">earprogram@indiana.edu</a></td>
<td>855-0126</td>
</tr>
<tr>
<td>EAR Finance Manager:</td>
<td>Cheryl Gilliland</td>
<td>c ölçü<a href="mailto:li@indiana.edu">li@indiana.edu</a></td>
<td>855-3246</td>
</tr>
<tr>
<td>EAR Resources</td>
<td>Eva Allen</td>
<td><a href="mailto:evaallen@indiana.edu">evaallen@indiana.edu</a></td>
<td>855-2869</td>
</tr>
</tbody>
</table>

This document, associated documents, and a link to the electronic application (by May 1), are available on OVPR’s website: ovpr.indiana.edu/ear
SYNOPSIS

The Indiana University Bloomington Strategic Plan calls for the campus to invest significant resources to support research and creative activity. These investments, which are a key part of a collection of strategic research initiatives at IU, include the Emerging Areas of Research Funding Program (EAR) at IU Bloomington. Throughout this document, research is defined as research, creative activity, or scholarship, or any combination of these.

The Emerging Areas of Research Funding Program seeks to support key areas of research strength on the IU Bloomington campus that are novel or established, but in need of support that would establish or increase the stature of a research area at IU Bloomington. The EAR Program is separate, unique, and distinct from the Grand Challenges Program. Faculty who have not been involved in a Grand Challenge team are encouraged to submit to the EAR Program. However, teams not selected in a Grand Challenge competition can repurpose or downsize their proposal to compete in an EAR competition.

The EAR funding program will support investigators who are prepared to undertake a significant and complex investigation involving fresh approaches to research. While multidisciplinary research is not essential, the EAR program does emphasize collaboration and a team approach. The research that is emerging should capitalize on existing strengths on campus and/or fill an existing gap in personnel that is critical to important research opportunities that will enhance the volume, quality, impact and reputation of research at IU Bloomington, and lead to federal, corporate, or private funding.

Campus support for the development, expansion and enhancement of research by faculty at Indiana University Bloomington, will be leveraged to attract major national funding from agencies such as NSF, NEH, NIH, NEA, DOE, DOD and/or similar federal, state or private entities. In particular, competitive initiatives have to address likely sources of external funding necessary to sustain the initiative and/or potential for commercialization.

The campus anticipates funding up to six EAR initiatives over the next five years. Typically, EAR will be an annual competition with a goal of supporting 1-2 initiatives per round. For each 4-year EAR award, the campus anticipates investing approximately $3 million in cash and also financing between 1-3 faculty lines, i.e., salary, per EAR initiative.

Goals: IU Bloomington’s investments in the Emerging Areas of Research Funding Program are intended to significantly enhance the volume, quality, impact and reputation of research at IU Bloomington, and serve six goals for the proposed area of research:

1. Provide critical, strategic investments to advance emerging areas of research based on IU Bloomington’s strengths.
2. Improve the ability of IU Bloomington faculty to compete successfully for ambitious and diverse external research support, and create intellectual property with commercialization possibilities.
3. Facilitate collaboration that enables faculty to leverage resources in pursuit of common goals that facilitate or promote Schools/College objectives.
4. Identify an area of research where the campus can become more competitive with the addition of key faculty who may fill an existing gap in research strength.
5. Promote faculty to serve as world leaders among peers in a specific area of research and/or be recognized for identifying and executing a novel approach to disciplinary or interdisciplinary research.
6. Increase the community-facing impact of the campus through its engagement with the public.

IMPLEMENTATION TIMELINE

<table>
<thead>
<tr>
<th>Date</th>
<th>Event Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Friday, April 8, 2016</td>
<td>Distribution of full EAR Request for Proposals</td>
</tr>
<tr>
<td>Friday, April 15, 2016</td>
<td>Town Hall Meeting, Whittenberger Auditorium; 12 noon – 1:30 pm</td>
</tr>
<tr>
<td>Wednesday, June 15, 2016</td>
<td>Required 1-page abstract due, including: title of proposal, lead investigator/s contact information, and a paragraph describing the emerging area of research that will be proposed. The receipt of abstracts will be used to gauge the number and topics of full proposals under development.</td>
</tr>
<tr>
<td>Friday, September 9, 2016</td>
<td>Proposals are due by 5 p.m. (EST)</td>
</tr>
<tr>
<td>November 2016</td>
<td>Final decision announced</td>
</tr>
<tr>
<td>2nd semester AY16-17</td>
<td>First-round EAR implementation begins</td>
</tr>
</tbody>
</table>

GUIDELINES

ELIGIBILITY

Eligible as PIs (IU Bloomington)
  • All tenured and tenure-eligible faculty (including center directors).

Proposals including participation by women and members of underrepresented groups as PIs and team members are especially encouraged.

There is no limit on the number of proposals on which faculty and other eligible team members, as defined below may participate.

Eligible as team members but not as PIs (IU Bloomington)
  • Medical Sciences faculty
  • Faculty appointments not eligible for tenure
  • Emeritus faculty,
  • Visiting and adjunct faculty members
  • Research and Staff scientists
  • Post-doctoral research associates

ADDITIONAL ELIGIBILITY INFORMATION
Proposals focused on the development of curricular programs for students are NOT eligible for EAR support.

**FUNDING DURATION**

Each EAR initiative will be funded for four consecutive years.

**PROPOSAL PREPARATION AND SUBMISSION INSTRUCTIONS**

**Proposal Abstract**

1-page proposal abstract is due by June 15, 2016, and should be emailed to earprogram@indiana.edu. The receipt of abstracts will be used to gauge the number and topics of full proposals under development.

**Full Proposal - ONLINE APPLICATION**

For the final proposal, applications must be submitted electronically using a new online application process called InfoReady, which is in the final stages of development and will be implemented May 1, 2016. In mid-May, a link to the online application for the EAR program will be sent to all faculty and will be provided on the OVPR website. A PI must log in to complete and submit the application. IU authentication is required.

**APPLICATION COMPONENTS (PDFs are required)**

Proposals must be no more than 15 pages single-spaced excluding the cover page, biosketches, letters of support or engagement, budget, and budget justification. Please use standard fonts such as Arial, Times, Calibri, or Computer Modern, with a font size no less than 11 point; minimum one-half inch margins; and page numbers in the footer.

Each proposal must include the following components. No other attachments are necessary or permitted.

1. **Proposal Cover Sheet:** Generated by the online application system and completed by the PI.

2. **Personnel (2 page maximum):** Upload pdf attachment to the application. List:
   - The PI/Co-PIs and other project leaders for the proposed EAR initiative, and a brief statement on the expertise and value each will bring to the initiative.
   - The other team members who have agreed to participate, including area of expertise, and percent effort to be contributed to the initiative.

3. **Biosketches (3 page maximum each):** Upload pdf attachment to the application.

   Provide biosketches for the PI/Co-PIs and project leaders in NIH, NSF, or similar format. Biosketches are limited to 3 pages each, but are not counted in the cumulative word/page limit for the proposal. Please include a summary of current and past external funding.
4. Research Plan (15 page maximum): Upload pdf attachment to the application.

*Proposals should be written so that a reviewer from any discipline can understand and evaluate it. For this reason, it is recommended that you not use detailed content from proposals submitted or intended for external agencies with the exception of basic introductory narrative. *All sections must be included and labeled as they are presented below:*

A. **Introduction:** Describe the area of research and primary focus to be investigated, the rationale for the proposed initiative addressing the area of research and primary focus, and the current state of knowledge relevant to the proposed work. State the overall objective of the proposed research and state why, with additional resources, this proposed area of research becomes novel or world-class.

B. **Specific Aims:** Define the broad long-term objectives and the goals of the specific research projects for the initiative proposed, e.g., to test a hypothesis, create a novel design, solve a specific problem, challenge an existing paradigm, address a critical barrier to progress in the field or develop new technology. Describe the specific aims that will be used to achieve the long-term objectives and goals.

C. **Design and Methods:** Describe the research design, conceptual or clinical framework, and procedures that will be used to accomplish the specific aims of the research projects. Describe any new methodology and its advantage over existing methodologies. Describe any novel concepts, approaches, tools, or technologies that will be used for the proposed studies. Describe the approach to be used for data analyses and interpretation.

D. **Timetable:** Provide a proposed sequence of events and timetable for the four years of research of the overall initiative, as well as the individual projects.

E. **Significance and Impact:** For each project in the EAR initiative, clearly state the importance and relevance of the proposed work within the represented fields and the larger world of ideas. Discuss any novel ideas or contributions that each project offers.

F. **Future Funding/Sustainability:** Provide a detailed explanation of how this area of research can be sustained long-term, including the potential for, and likely sources of, external funding necessary to sustain the work and/or potential for commercialization. This section should address not only traditional sources of funding such as NSF and NIH, but other government agencies, and corporate and private funders such as foundations, companies, and private philanthropic support. When applicable, include specific funding announcements and a timetable for submissions.

G. **New positions proposed:** Justify why each new position is needed and its relation to current positions and how these positions serve the common interest of the Schools/College. Think of this as a “gap analysis” explaining what IU Bloomington has and what is needed for the proposed EAR
initiative to succeed.

H. IU and External Collaborative Arrangements: Briefly describe the collaborations you propose and provide evidence that the collaborators will be engaged in the initiative. (See section below entitled “Letters of Support.”)

I. Metrics and Deliverables: Include the metrics and deliverables for assessment, describing how progress and impact will be measured, as well as how enhancement of the reputation of IU Bloomington by the proposed initiative will be assessed.

5. Budget (2 page maximum): Upload pdf attachment to the application.

Provide an initial 4-year notional budget, which should include all projected expenditures. Acceptable expenses are determined by the nature of the initiative and relevant projects, and the justification. Group/s selected to receive funding will be expected to provide a full budget on an annual basis.

• Total EAR budgets should not exceed $3 million in cash, and must include half the estimated cost of start-ups for the new faculty hires, as well as all other expenses. It is expected that not all new hires will be at a senior level.
• See Budget Information below for allowable expenses.


The budget justification must provide a rationale for all salaries (excluding salaries for new faculty), materials, equipment, and travel funds requested, as well as any item whose purpose or cost computation is not self-evident.

Proposals requesting support for postdoctoral research associates or graduate students must outline a plan in the justification for how they will be appointed that is consistent with the anticipated start date, duration, and timeline for the EAR initiative.

For each proposed new faculty line, explain how the candidate will be a key contributor who will make the campus more competitive in attracting external funding and/or provide evidence that shows how his/her activity will enhance the reputation of IU Bloomington.

7. Letters of Support (2-page limit per letter): Upload attachment to the application; may alternatively be emailed or faxed.

Applicants should allow ample time to discuss with their chairs and deans the strength of the initiative, and how it either aligns with the unit’s strategic priorities or is a new strategic direction that deserves support. The number of required letters depends on the number of academic programs/units involved. Required letters include:

• One letter from the chair and one letter from the dean of each academic program/unit that is impacted by the initiative through involvement of the PI or Co-PIs.
• Two from experts in the field (outside of Indiana University) that assess the significance of the initiative and the likelihood of its success.
• Concomitant letters that reflect IU and external collaborative arrangements.

Emailed or faxed letters must be received by 5:00 p.m. on September 9. Please include the names of those providing support letters in the “Comments to the Administrator(s)” section at the end of the application. Email and fax contact information:

Alicia Adelman
Office of the Vice Provost for Research
Carmichael Center, Suite 202
earprogram@indiana.edu
812.855.0126 phone
812.855.6396 fax

BUDGETARY INFORMATION

EAR funds must be expended on the IUB campus. The base salaries of new faculty hires do not need to be included in the $3M cash budget. Of the $3M cash budget,

Allowable Costs
• If selected, summer salary for 10-month faculty appointee as discussed with unit Dean and Chair
• If selected, course release funds as discussed with unit Dean and Chair
• Start-up costs for new faculty (see details outlined on page 6 under the heading “Budget”)
• Equipment purchases
• Travel to conferences and meetings with collaborators and partners unique to the proposal – Maximum $20,000/year (not including field work)
• Fees associated with using IUB facilities. Non-IUB facilities may be utilized only if no comparable facilities exist at IU Bloomington.
• Development of seminars, colloquia, and engagement programs
• Sub-contracts and consultants are allowed with appropriate justification. For IU faculty or staff consultants, hourly compensation is limited to their direct rate (exclusive of fringe benefits). If the consultants are from outside IU, justification for their hourly rates must be provided.
• Postdocs/research scientists and graduate students are allowed with appropriate justification.
• A service contract for one year is allowed for equipment purchased as part of the EAR initiative.

Costs Not Allowed
• Full-year salary for any academic appointee (including sabbatical leave).
• Service contracts for existing equipment beyond one year.
• Collaborators are allowed from other IU campuses or institutions, but they may not receive any support from EAR funds. This includes summer salary, student or undergraduate salaries, or materials and supplies. Initiatives that include support for non-IUB participants will require appropriate cost sharing, since EAR funds may only be used to support IUB participants.
• Development of curricular programs for students.
**Human Subjects/Animals/Biosafety:** Funds will not be released until any required IRB/IACUC/IBC approvals have been received.

**No-Cost Extension:** A “no-cost extension” allowing funds to be carried over beyond year 4 requires a request with justification from the PI, and a progress report. Extensions are limited to an additional 12 months unless there are exceptional circumstances. Requests must be approved by OVPR prior to the expiration of the EAR award.

---

### REVIEW PROCESS

#### REVIEW PANEL

The EAR proposal review process is conducted by a faculty review panel comprised of faculty from the IU Bloomington campus. The first stage of the process consists of written review for which each proposal will be reviewed by an equal number of reviewers primarily from the disciplines covered by the proposed work. The reviewers will assign a numerical score to the proposal’s success in addressing each of the four goals of the program. A faculty review panel will then meet to discuss each proposal, weigh its responsiveness to the review criteria and evaluate its relative strength compared to other proposals. A shortlist of finalist proposals will be selected by the faculty review panel for additional review by the respective academic dean of the originating school or center. Reviews of all proposals will be provided to the Provost and to the Vice Provost for Research, who will make the final funding decision. Following award decisions, OVPR will provide to each PI a summary of their proposal’s strengths and weaknesses.

Depending on the review panel’s assessment and score of a proposal, some proposals not selected for EAR in the first round may be revised and resubmitted in the future, or considered for other types of institutional funding competitions. Proposals that have a strategic relationship to a Grand Challenge Initiative already identified for funding could potentially be evaluated and funded under a future Grand Challenge Initiative.

#### REVIEW CRITERIA

The following criteria will guide evaluation of an emerging area of research. A successful EAR initiative:

1. **Represents a complex, novel, and significant investigation** (which may be either discipline-specific or multidisciplinary).
2. **Strategically addresses an existing strength at IU Bloomington** for which the addition of resources will make the area of research world-class among peers or recognized for identifying and executing a novel approach to research.
3. **Identifies an area of research where the campus can become more competitive** with the addition of key faculty and that serve the broader goals of the Schools/College.
4. **Outlines well-defined, achievable goals** that can be measured quantitatively and qualitatively.
5. **Strategically leverages IU Bloomington’s existing resources** and potentially resources outside of the IU community.
6. **Has the clear potential to attract the external competitive, philanthropic, corporate, and/or government funding necessary to sustain the area of research.**
REPORTING:

1. Successful applicants are required to notify OVPR upon submission or funding of external proposals derived from the initiative funding received through the EAR program. Applicants should provide the IU proposal number.

2. Successful applicants will be required to submit an annual report every year after the start of the award. Requested data will include:
   - Percentage of initiative completed
   - Progress towards metrics and deliverables stated in the proposal
   - Resulting hires
   - Resulting publications, performances, conferences, exhibits—titles, dates, venues, bibliographic info, new research methodologies
   - Impact of EAR award on applying for external funding—titles, agencies, date submitted (past & future), amounts requested, status, awarded amount
   - Recognition—awards, honors, prizes, reviews
   - New annual budget

3. Successful applicants will be required to submit a full progress report no later than 1 year after the end of the award. Requested data will include:
   - Summary of results during the course of the initiative and how they addressed the initial EAR goals.
   - Success towards metrics and deliverables stated in the proposal
   - Hiring goals and implementation
   - Budget report outlining funds utilization and details on any expenditure(s) outside of the approved budget.
   - Resulting publications, performances, conferences, exhibits—titles, dates, venues, bibliographic info, new research methodologies
   - Progress in applying for external funding - titles, agencies, date submitted (past and future), amounts requested, status, awarded amount
   - Recognition: awards, honors, prizes, reviews
   - Additional follow-up information may be requested outside of the progress report, to determine the ongoing efficacy of the EAR.

4. Awardees will be required to present the outcomes of the EAR initiative at a special symposium planned by OVPR and held no more than 1 year after the end of the award.

IP POLICY:

All awards are subject to Indiana University's intellectual property guidelines. For policy details, see: [http://iurtc.iu.edu/policies/intellectual-property.shtml](http://iurtc.iu.edu/policies/intellectual-property.shtml)
ACKNOWLEDGEMENT:

EAR awards must be acknowledged in any resulting publications, including press releases, using the following suggested language:

“This initiative was funded (or partially funded) by IU’s Office of the Provost, the Office of the Vice Provost for Research, and [supporting academic unit/s] through the Emerging Areas of Research Funding Program. http://provost.indiana.edu/ http://ovpr.indiana.edu/“

An electronic copy of such publications should be submitted to earprogram@indiana.edu.