Office of the Vice Provost for Research
YEAREND REPORT
IU Bloomington 2013–14

creating opportunities

enhancing research

investing resources
FY2013–14 was another year of significant accomplishments for the Office of the Vice Provost for Research at IU Bloomington, due in large part to the strong leadership of my predecessor Sarita Soni, who retired as vice provost for research on May 29, 2014.

Those accomplishments include:

- Establishing the $15,000 Outstanding Faculty Collaborative Research Award and Lecture, designed to recognize the achievements of up to five IU Bloomington faculty members.
- Completing a Phase 1 study of the research and creative activity space needs across the IU Bloomington campus.
- Revising the Faculty Research Support Program to support projects that were previously submitted for, but did not receive, external funding and whose likelihood of funding on resubmission will increase with the acquisition of additional data or proof of concept.
- Celebrating the grand opening of the Social Science Research Commons (Woodburn Hall 200), in partnership with the Office of the Provost, University Information Technology Services, and the College of Arts and Sciences.
- Completing the five-year IU Bloomington Media Preservation Initiative, in partnership with the Office of the Provost. As a result of this work, in fall 2013, IU President Michael McRobbie announced the establishment of a university-wide IU Media Digitization and Preservation Initiative with $15 million funding and the development of an official IU Digitization Master Plan.

Most significantly, Vice Provost Soni led a team of faculty who contributed a crucial piece to IU Bloomington’s strategic plan, developed throughout FY13–14 by Provost Lauren Robel and hundreds of faculty across the campus. The research plan encompasses strategies that will enhance IU Bloomington’s strengths in basic, applied, translational, and multidisciplinary research endeavors and creative activities that produce high-impact results, answer significant questions, and/or influence important policy decisions.

The plan especially focuses on identifying “grand challenges”—complex and far-reaching research problems—that can be fruitfully addressed by cross-campus collaborations. Considerable OVPR effort in FY15 will focus on implementing the research components of the strategic plan, especially working with faculty to identify research grand challenges for our campus. I’m honored to continue Sarita Soni’s work as we extend this plan to IU Bloomington faculty.

Sincerely,

Michael J. Wade
Interim Vice Provost for Research
Indiana University Bloomington
The mission of the Office of the Vice Provost for Research at Indiana University Bloomington is to work with individuals, teams, centers, institutes, and schools to foster excellence in research and creative activities and to offer support to faculty to successfully compete for external funding while enhancing IU Bloomington’s reputation through publications and national and international recognition.

ovpr.indiana.edu

PRIORITIES for FY2015

IU Bloomington strategic plan for research implementation

OVPR will work closely with the provost, deans, and faculty to implement three major research objectives of the campus strategic plan:

• Identify and address grand challenges. Whether local, national, or global, grand challenges are risk-taking initiatives with achievable goals that expand the frontiers of human knowledge. In addressing such challenges, faculty will harness strengths in science, social science, arts, humanities, and technology to address problems with innovative solutions.

• Make strategic investments to advance emerging areas of research based on IU Bloomington’s strengths. These areas of research are not expected to be as extensive as the grand challenges, but are areas in which IU Bloomington faculty can become national and international leaders with moderate investment.

• Enhance research infrastructure, including research facilities, and position IU Bloomington as a preferred research collaborator. Investing in a core facility management tool for the purpose of increasing the utilization of shared resources, OVPR will lead the development of a complete inventory of all core facilities and equipment at IU Bloomington to expedite facility and equipment reservation and usage, tracking, billing and invoicing, and reporting. OVPR also will work to develop strategic partnerships in government, nonprofit, and for-profit sectors that can benefit from use of core facilities and faculty expertise, thereby expanding IU Bloomington’s influence and reputation as a preferred research collaborator.

IU Bloomington-Indiana Clinical Translational Sciences Institute

During the past fiscal year, the IU Bloomington-Indiana Clinical Translational Sciences Institute assisted 13 principal investigators at IU Bloomington with receiving IndianaCTSI funding, in addition to education/training grants for two predoctoral candidates and one postdoctoral fellow. OVPR and IndianaCTSI also sponsored the Project Seed Program in Bloomington, in which high school students (including minority or disadvantaged students) conducted research in IU Bloomington labs and received mentorship throughout the summer. During the next fiscal year, the IU Bloomington-IndianaCTSI will continue to develop new programs that will engage IU Bloomington scientists who, in turn, will bring together scientists from IU School of Medicine, IUPUI, Notre Dame, and Purdue University to develop centers of excellence. An IndianaCTSI navigator, based in Bloomington and appointed by OVPR, assists research scientists with translational research efforts, especially helping them identify IndianaCTSI-related funding opportunities.

Enhanced Proposal Development Services

Capitalizing on the successes of OVPR’s Proposal Development Services (PDS) group in assisting and supporting faculty with the submission and administration of grants, OVPR will evaluate ways to enhance services offered by PDS with the goal of lessening administrative burdens on faculty.
IU Bloomington’s Brilliant Minds video series continues to shine

OVPR’s Brilliant Minds research video series, established in 2012, features short two- to three-minute videos produced in collaboration with IU Communications. These research videos showcase a few of the more than 2,000 full-time faculty at work on the IU Bloomington campus. New videos in the series focus on “Imag(in)ing Science,” a collaborative art installation created by IU Bloomington scientists from biology, geology, informatics, and psychology and IU Bloomington photographers, video artists, textile artists, and painters, as well as Jason Baird Jackson and the Mathers Museum of World Cultures, which recently celebrated its 50th anniversary on the IU Bloomington campus.

The series may be viewed through the IU Bloomington research site at research.iub.edu or on IU’s YouTube channel.

New support for associate professors

Under the leadership of Eileen Julien, professor of French and comparative literature in the College of Arts and Sciences at IU Bloomington, the Institute for Advanced Study (IAS) has refocused on fostering the research and scholarly work of associate professors. Supported by OVPR, the institute’s new mission is to help associate professors expand the scope of their research and scholarship.

New internal funding opportunities for associate professors are a key part of the support the IAS now offers. In spring 2014, more than two dozen IU Bloomington associate professors received approximately $160,000 in funding awards through new programs developed by the institute. These seed funds are meant to help associate professors boost their publications, performances, or exhibits and obtain larger externally funded research awards.

The new funding opportunities include individual research awards of up to $3,000, collaborative fellowships of up to $10,000 for groups of faculty sharing expertise on a project, and consultation fellowships of up to $10,000 to support collaborations with colleagues from other institutions. IAS is also sponsoring informal discussion groups to help associate professors develop new research ideas and more formal conferences intended to refine ideas about current and future research directions.

For more on the IAS funding programs for associate professors, visit ias.indiana.edu.

IU Bloomington faculty publications

Proposal Development Services expands faculty services

In its third year, OVPR’s Proposal Development Services focused on presubmission project management services and full-scale assistance to faculty in preparing complex proposals such as large training grants, center grants, and program projects. In FY2014, PDS provided full-scale support for 22 proposals, including four training grants, one center grant, and one program project application. Eleven of the proposals were seeking more than $1 million in support.

For less complex proposals, PDS supplements the services offered by IU’s Office of Research Administration. PDS specialists offer advice and one-on-one consultations regarding resources to help formulate proposal narratives and structure applications; understand agency funding priorities; and identify appropriate campus, community, and external resources. On request, PDS also provides comprehensive presubmission reviews of technical portions of proposals.

During FY2014, PDS offered 23 workshops serving more than 400 faculty members, including a “Writing Winning Grant Proposals to NIH and NSF” workshop, which drew 155 IU Bloomington faculty and staff, and a research networking event that brought together more than 40 faculty members to develop research ideas focused on health, disease, and health policy. The PDS group also offered five workshops to faculty in the arts and humanities, focused on writing successful proposals for funding agencies such as the National Endowment for the Humanities and the Guggenheim Foundation.
Collaborations for international research areas

Sixteen IU Bloomington faculty and graduate students received grants in the second round of funding made possible by the Mellon Innovating International Research, Teaching and Collaboration (MIIRT) program. Administered by OVPR, the MIIRT program is funded through a $750,000 award from The Andrew W. Mellon Foundation.

A diverse group of faculty from IU Bloomington received awards, including faculty in the College of Arts and Sciences, the School of Education, IU Maurer School of Law, and the School of Public Health. The awards allowed researchers to conduct work in Benin, Brazil, Cameroon, China, the Dominican Republic, El Salvador, England, Haiti, India, Jordan, Kenya, Korea, Latin America, Liberia, the Middle East, South Africa, Tibet, and Zambia.

In each of the three project years, there are four funding programs: faculty short-term fellowships, graduate short-term fellowships, curriculum development fellowships, and innovative workshops. Along with IU Bloomington schools, OVPR is committed to providing two additional years of funding for this program.

Discovery team formed to foster IU Bloomington translational research

In 2013, Lilly Endowment Inc. awarded Indiana University $5 million to support several programs through the endowment’s Initiative to Promote Opportunities Through Educational Collaborations. The grant will fund new and continued activities at several IU campuses aimed at increasing the number of college graduates who find meaningful employment in Indiana.

At IU Bloomington, the focus is on leveraging the research and expertise of faculty to create start-up companies that provide near-term employment opportunities and have potential for long-term growth. OVPR oversaw the formation of a discovery team, led by Professor Keith Davis as chief discovery scientist. The discovery team exists to identify faculty research at IU Bloomington that has potential to translate into commercial enterprise, in turn producing high-skill jobs in Indiana.

Davis and team members are working closely with IU’s Spin Up program, a part of the IU Research and Technology Corporation (IURTC). The Spin Up program enables faculty members to focus on the research and development side of a new company, while Spin Up personnel handle the business administration. Polina Feldman of the IURTC has primary responsibility for expanding the Spin Up program at IU Bloomington. In 2014, the Spin Up program helped establish Anagin, a new company resulting from a collaboration between IU Bloomington and IU School of Medicine researchers that is developing novel therapies for post-traumatic stress disorder.

For more information on the discovery team and Spin Up program at IU Bloomington, contact Keith Davis at keirdavi@indiana.edu.
## Awards received by IU Bloomington 2009–14

<table>
<thead>
<tr>
<th>Year</th>
<th>Received</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009–2010</td>
<td>$157,965,459</td>
<td>$15,442,843 (ARRA*)</td>
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<tr>
<td>2010–2011</td>
<td>$132,569,507</td>
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<tr>
<td>2011–2012</td>
<td>$166,737,708</td>
<td>$33,000,000 (Lilly)</td>
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<td>2012–2013</td>
<td>$117,790,295</td>
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<tr>
<td>2013–2014</td>
<td>$119,761,241</td>
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* American Recovery and Reinvestment Act

## External awards and expenditures by unit 2013–14

Research expenditures refers to total spending on projects funded by external grants and contracts during the fiscal year.

<table>
<thead>
<tr>
<th>Unit</th>
<th>Number of Proposals</th>
<th>Number of Awards</th>
<th>Awards</th>
<th>Expenditures</th>
</tr>
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<tbody>
<tr>
<td>Arts and Sciences</td>
<td>620</td>
<td>388</td>
<td>$60,599,704</td>
<td>$63,806,024</td>
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<td>Budget and Fiscal Affairs</td>
<td>4</td>
<td>4</td>
<td>$102,449</td>
<td>$158,391</td>
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<tr>
<td>Division of Student Affairs</td>
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<td>$614,184</td>
<td>$33,867</td>
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<tr>
<td>Education</td>
<td>121</td>
<td>63</td>
<td>$8,322,828</td>
<td>$10,560,025</td>
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<td>Executive Management/Academic Support</td>
<td>11</td>
<td>9</td>
<td>$6,463,591</td>
<td>$667,658</td>
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<tr>
<td>Informatics and Computing</td>
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<td>75</td>
<td>$13,626,570</td>
<td>$13,908,677</td>
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<td>IU Jacobs School of Music</td>
<td>1</td>
<td>1</td>
<td>$74,553</td>
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<td>IU Kelley School of Business</td>
<td>26</td>
<td>18</td>
<td>$3,292,026</td>
<td>$2,569,118</td>
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<td>Libraries</td>
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<td>1</td>
<td>$9,350</td>
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<tr>
<td>IU Maurer School of Law</td>
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<tr>
<td>Optometry</td>
<td>36</td>
<td>33</td>
<td>$4,841,207</td>
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<td>Public and Environmental Affairs (SPEA)</td>
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<td>Public Health</td>
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<td>53</td>
<td>$8,155,302</td>
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<td>Undergraduate Education</td>
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<td>$431</td>
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<td>Vice President for Diversity, Equity, and Multicultural Affairs</td>
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<td>4</td>
<td>$56,700</td>
<td>$25,989</td>
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<td>Vice President for Information Technology</td>
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<td>Vice Provost for Research (centers, museums, and institutes)</td>
<td>90</td>
<td>75</td>
<td>$10,210,783</td>
<td>$10,643,751</td>
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<td><strong>TOTAL</strong></td>
<td><strong>1,162</strong></td>
<td><strong>753</strong></td>
<td><strong>$119,761,241</strong></td>
<td><strong>$119,122,105</strong></td>
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Traditions of Excellence at IU Bloomington, 2013–14

American Academy for the Advancement of Science Fellows

- Elizabeth C. Raff, professor of biology, College of Arts and Sciences
- Malcolm E. Winkler, professor of biology, College of Arts and Sciences
- Olaf Sporns, Provost Professor of psychological and brain sciences, College of Arts and Sciences
- Peter T. Cherbas, professor emeritus of biology, College of Arts and Sciences

American Academy of Arts and Sciences

- Susan Gubar, Distinguished Professor emerita of English, College of Arts and Sciences
- Ellen Ketterson, Distinguished Professor of biology and gender studies, College of Arts and Sciences

John Simon Guggenheim Foundation Fellowships

- Adrian Matejka, assistant professor of English, College of Arts and Sciences

OVPR Centers, Institutes, and Museums

- Center for Exploration of Energy and Matter
- Center for Genomics and Bioinformatics
- Center for Research into the Anthropological Foundations of Technology
- Center for Survey Research
- Center on Congress
- Glenn A. Black Laboratory of Archaeology
- Indiana Geological Survey and Center for Geospatial Data Analysis
- Indiana Institute on Disability and Community
- Indiana Molecular Biology Institute
- Institute for Advanced Study
- Institute for Digital Arts and Humanities
- Kinsey Institute for Research in Sex, Gender, and Reproduction
- Laboratory Animal Resources
- Light Microscopy Imaging Center
- Mathers Museum of World Cultures
- Ostrom Workshop in Political Theory and Policy Analysis
  - Center for the Study of Institutions, Population, and Environmental Change

Front cover images, clockwise from top: detail of art from Imag(in)ing Science exhibit, by Margaret Dolinsky and Roger Hangarter; James Russell, director of leveraged resources in the College of Arts and Sciences’ IT office, speaks in the Social Science Research Commons (photo by Chris Meyer); “cultured hippocampal neurons on a bed of astrocytes,” nano art image created by research scientist Alex Straiker, winner of the People’s Choice Award in the Nano Art exhibition at the WonderLab Museum of Science, Health and Technology in Bloomington