2009-2010 Research, Vice Chancellor

Mission

The Office of the Vice Chancellor for Research (OVCR) is dedicated to the advancement of the research enterprise at IUPUI. The primary sections and units associated with OVCR consist of Research Development (http://research.iupui.edu/development/), the Center for Research and Learning (http://crl.iupui.edu/), and the Solution Center (http://www.iupui.edu/~soltcr/). These sections and units support the campus in the achievement of its research mission. Central to this mission are the development and expansion of innovative research programs that align well with institutional mission and strategic plan, address important national and global needs, and through technology transfer and commercialization noticeably support the economic development of Indiana and the nation.

Goals and Objectives

1. RESEARCH EDUCATION AND COMMUNICATION Goal: Enhance communication between the Research and Sponsored Programs Office and the IUPUI campus community and increase research education for IUPUI investigators.

Objective: Advertise internal and external funding opportunities, disseminate time sensitive information about grant and contract submission and award procedures, and changes in policy and regulations affecting research activity. Strengthen the educational programs on grantsmanship and the responsible conduct of research.

Campus Planning Theme: Research, Scholarship and Creative Activity

Secondary Goals:

Sub Unit:

Time Frame:

Actions taken for 2009-2010:

- Maintained the RESEARCH ENTERPRISE e-newsletter, which served as the primary mode of communication from the Office of the Vice Chancellor for Research to the IUPUI research community. The RESEARCH ENTERPRISE was published monthly, featuring time sensitive research information and links to information on grants and contracts, funding opportunities, research compliance, and research centers.
- Developed and implemented a strategic content plan for the Research Enterprise, creating discipline-specific themes per issue and alternating with OVCR/CRL theme. Moreover, developed and instituted submission/publication schedule and submission guidelines.
- Increased the number of subscribers to the RESEARCH ENTERPRISE by over 100%, totaling over 7000 subscribers, which include current and new faculty, research staff and graduate students.
- Continued proactive efforts to disseminate research and sponsored programs funding information through Research Notices sent on an on-going basis to faculty and administrators.
- Worked with the IUPUI Office of Communication Marketing to develop packaging for the first print publication of an OVCR annual report to be strategically disseminated to stakeholders and potential funders/donors.
- Served as a central source for the IUPUI faculty and administration regarding facts and information on grants and contracts on the IUPUI campus.
- Worked out agreement to have second and third IUPUI representatives to serve on the editorial board of the Research and Creative Activity system-wide research magazine, to help shape the research content.
- Began efforts to develop a research and creative activity photo gallery to reside on the OVCR webpage.
- Began the development of a new webpage for the Center for Research and Learning to optimally communicate about the center’s programs and services, and comply with user-friendly web standards.
Evidence of Progress for 2009-2010:

Activities planned for 2010-2011:

- Develop and implement OVCR Research Imaging Initiative that involves strategic efforts to increase the diversity in research and scholarly activity in images used in IUPUI/OVCR marketing and communications materials and projects.
- Complete the development of a new webpage for the Center for Research and Learning to optimally communicate about the center's programs and services, and comply with user-friendly web standards.
- Complete efforts to develop a research and creative activity photo gallery to reside on the OVCR webpage.

Center for Research and Learning (CRL)

The mission of the Center for Research and Learning is to promote, create, and coordinate, through partnerships within and outside IUPUI, implementation of innovative inquiry-based learning programs that integrate research and education to provide students effective pathways for lifelong active learning and professional development. CRL serves students through three primary program areas, identified as Undergraduate Research Programs, Diversity Research Programs, and Summer Research Programs. During FY 2009-2010, through the multitude of its programs and services, CRL has served close to 500 students. The following examples are indicative of the programs and services provided by CRL:

- Administered the Multidisciplinary Undergraduate Research Institute (MURI) program, sponsoring 17 teams in summer of 2009, 12 teams during the 2009-2010 academic year; and seven teams during the summer of 2010.
- Administered the Undergraduate Research Opportunities Program (UROP), supporting 36 students through new independent research grants. Additionally, 35 students have been supported as Summer Fellows.
- Made significant impact through the Louis Stokes Alliances for Minority Participation (LSAMP) program on closing the achievement gap of the underrepresented minority in STEM fields. As part of this, ten LSAMP students who are underrepresented minority in the School of Science graduated with Science degrees during the academic year 2009-10.
- Recruited in partnership with the IU Simon Cancer Center Summer Research Program 18 high school and college underrepresented (to cancer research) scholars (from a competitive selection process with 144 applicants) to participate and conduct clinical and population-based biomedical cancer research with mentors.
- Recruited in partnership with the Bridges to the Baccalaureate Program the second cohort of Ivy Tech Community College – Central Indiana underrepresented minority students (19 full-time) to participate in a 2-year mentor-driven, laboratory-based research experience in biomedical and related fields, with an IUPUI School of Science faculty mentor to “bridge” and eventually transfer into an IUPUI School of Science baccalaureate program.
- Recruited four students from the (9 full-time) 2009 Bridges to the Baccalaureate Program cohort, who successfully “bridged” and transferred into IUPUI as full-time students and continue to participate in undergraduate research and the Bridges to the Baccalaureate Program.
- Recruited in partnership with the Office of Diversity, Equity, & Inclusion six undergraduate students from various Historically Black Colleges and Universities (Spelman College, Morehouse College, Virginia State University) to participate in the IUPUI McNair Scholars Program Summer Research Program, which pairs scholars with faculty mentors to conduct research projects, attend career-development seminars and conferences in preparation for doctoral studies.
- Instituted a combined Diversity Scholars Research Program (DSRP)-Bridges to the Baccalaureate Program monthly seminar for over 30 students from IUPUI and Ivy Tech.
- Planned and implemented the undergraduate and graduate poster sessions for the 2010 IUPUI Research Day, held on April 9, 2010.
- Administered the Clinical Translational Sciences Institute (CTSI) Undergraduate Research Program.
Solution Center

The mission of the Solution Center is to serve Indiana and IUPUI as a “front door” to the community, assisting in the economic development, by connecting the university’s intellectual capital to the pressing needs of business, government, and the nonprofit sector. Drawing on the talent of IUPUI’s faculty and students, the Solution Center facilitates partnerships with Indiana’s business, industry, nonprofit and government sectors, designed to build human capital and aid in economic growth, through increase in the number of highly trained and degreed professionals in the State of Indiana, and development and transfer of information, technologies, and methods that enhance innovation and practice.

The following represent some of the Solution Center accomplishments realized in FY 2009-2010:

- Completed year one and began year two of the Lilly Endowment grant. Granted $298,186 and leveraged $400,970 in match funding in support of engagements for 172 students and 35 faculty members in 59 community organizations and businesses.
- Coordinated internships, class projects, and community-based research efforts, serving a total of 240 students, 114 faculty, and 76 community organizations and businesses.
- Granted $48,673 in match support for three invention projects, involving eight student researchers and six faculty members.
- Posted 1,000 internships (up from 657 in 2009), 1,729 full-time positions (up from 966 in 2009), and 2,626 part-time positions (up from 1,867 in 2009) through www.IUPTalent.net, a campus-wide resource administered by the Solution Center. These numbers reflect a 66% increase from the number of openings posted in the previous year.
- Launched IUPUI Innovation Initiative (13) in December 2009, to fund and support researchers at IUPUI working to move their ideas and inventions into the marketplace. In addition, the Solution Center:
  - Partnered with the Office of the Vice Chancellor for Research and the Indiana University Research and Technology Corporation (IURTC) to host the first workshop, “Discovery to Enterprise,” to help faculty understand the process of commercialization and technology transfer. The workshop was attended by 94 faculty members and researchers from 18 schools.
  - Co-hosted the Innovation Workshop Series, a partnership with the Indiana University Office of the Vice President of Engagement, the IURTC, and ProLiance Energy. The two spring forums were well attended by faculty, inventors, venture capitalists, attorneys, and researchers.
  - Hosted the Intern Connections Fall Fair and the Spring Just in Time Fair drawing 136 total recruiters to IUPUI: 681 students and 115 IUPUI alumni attended these events.
  - Increased educational programming in the Nonprofit Solutions Initiative through six training and capacity-building workshops, attended by 240 participants, and the Nonprofit Capacity Building Conference, with 135 attendees.
  - Was named as the new host of the Indiana Achievement Awards, an annual event that recognizes and supports nonprofit organizations that demonstrate excellence as measured by impact, sustainability, and innovation in their work within the state of Indiana.

2. RESEARCH DEVELOPMENT Goal: Facilitate growth of research on the IUPUI campus in all scientific areas, with an emphasis on interdisciplinary scientific collaboration in the area of the Health and Life Sciences, in order to move toward fulfilling the campus goal of tripling research.

Stimulate research in new areas, support investigators with bridge funding between grant periods, encourage interdisciplinary research collaborations, and distribute internal funding in a way that increases the probability that IUPUI investigators will subsequently secure external funding.

Campus Planning Theme: Research, Scholarship and Creative Activity
Secondary Goals:
Sub Unit:
Time Frame:
Actions taken for 2009-2010:

- Oversaw the 27 centers funded under the IUPUI Signature Centers Initiative (SCI), including the third year review of the Round 1 centers, five of which have qualified to receive IUPUI Signature Center designation. Moreover, oversaw the review of applications received for new centers to be funded under the SCI program, resulting in the selection of seven new centers. The Signature Centers Initiative has been resulting in the development of nationally and internationally known research centers of excellence at IUPUI.
- In partnership with the IU Office of the Vice President for Research, and the IUB Office of the Vice Provost for Research, supported the efforts that have led to the development of the IU Energy Institute. The mission of the Institute is to coordinate and enhance IU energy-related activities in research, education, outreach, sustainability and technology transfer.
- Developed and launched a new internal grant program, known as the IUPUI Arts and Humanities Internal (IAHI) Grant. This program has been created to support campus-wide attainment of excellence in research and creative activity in arts and humanities. It is designed to enhance the research and creative activity mission of IUPUI by supporting research projects and scholarly activities that are conducted by arts and humanities faculty. The program is intended to stimulate existing and new research and creative activity, and to support faculty in becoming competitive in securing external funding and sponsorship.
- Developed and launched a new internal grant program, known as Developing Diverse Researchers with Investigative Expertise (DRIVE). This program is designed to enhance the diversity and research and creative activity mission of IUPUI. Faculty from historically underrepresented populations, usually defined as African-American, Latino-American, Native American, Pacific Islanders, and women are particularly encouraged to apply. The DRIVE program supports projects that have the potential for sustainability through external funding.
- Organized and hosted the 2010 IUPUI Research Day. This has been the largest event of its kind held at IUPUI. It provided an opportunity for the entire campus and their academic, industrial, governmental partners, and the broader community, to come together and find out more about the research enterprise at IUPUI, explore new collaborations, and lay the foundation for new partnerships. The Research Day also included programs for K-12 students, teachers, and administrators from Indianapolis and the region. Dr. Steven Beering, Chairman of the National Science Board gave the keynote address to an audience of over 400 campus and outside participants.
- Planned and hosted the IUPUI National Science Foundation (NSF) Day, where two NSF Program Directors made presentations to approximately 150 faculty and research staff. The event represented the kickoff for a series of NSF-related workshops, which were offered during the academic year, and included a presentation by Dr. Myles Boylan of NSF and another one by Dr. David Skalnik of the School of Medicine, who has received NSF funding.
- Offered approximately 30 workshops and presentations to nearly 1000 participants. The topics covered have ranged from how to write top quality grant proposals, to how to find funding sources and develop successful research programs.
- Administered 5 OVCR internal grant programs, providing seed funding in support of research projects which have good prospects to grow and succeed, including through external funding support. A total of 176 proposals were submitted and 74 received funding. The total funding was $1,388,233.
- Organized nine individual research teams representing faculty from multiple schools to develop large funding opportunities.
- Prepared and submitted five multimillion dollar federal proposals, representing 19 faculty investigators in eight schools.
- Generated five proposals to promote interdisciplinary collaborations between departments and schools, to support research, and to utilize shared resources.
- Developed and/or offered five proposal development workshops/writing circles that produced eight proposals for external submissions.
- Provided advice and/or assisted in writing and submission of seven proposals to external agencies.
- Co-sponsored, and financially subsidized, the annual GRANT WRITING WORKSHOP with the School of
Medicine. This workshop is appropriate for all faculty members who are contemplating a competitive application to federal or state agencies or foundations in either basic science or clinical research. The workshop emphasizes idea development, how to write for grant reviewers, and tips and strategies for great grantsmanship.

- Worked with IUB to expand the current database of limited submission grant opportunities and developed a more systematic approach for disseminating information on limited submission grant opportunities.
- Supported the Community of Science, which has served as IUPUI’s primary research funding and expertise search tool. We have been instrumental in promoting its use on the IUPUI campus by training IUPUI faculty on how to navigate the system.

Evidence of Progress for 2009-2010:

Refer to actions taken section.

Activities planned for 2010-2011:

- Assist campus in the development of large grant-supported initiatives in key areas of strength.
- Provide proposal development support for the preparation of large grant proposals.
- Continue to administer and oversee the IUPUI Signature Centers Initiative, monitoring and evaluating the efficacy of these centers and the overall initiative.
- Conduct a call for proposals for the fourth round of the Signature Centers Initiative.
- Develop and implement at least 2 agency-specific proposal development workshops in preparation for target grant programs.
- Continue to co-sponsor and financially subsidize the annual GRANT WRITING WORKSHOP with the School of Medicine, which is normally held in the fall. This workshop is appropriate for all faculty members who are contemplating a competitive application to federal or state agencies or foundations in either basic science of clinical research. The workshop emphasizes idea development, how to write for grant reviewers, and tips and strategies for great grantsmanship.
- Continue the regular offering of proposal development workshops sponsored and presented by the Office of the Vice Chancellor for Research.
- Offer at least 2 Finding Funding and 2 Community of Science workshops sponsored and presented by the Office of the Vice Chancellor for Research.
- Develop and implement a series of NSF workshops sessions, including 1-2 that feature NSF program directors as presenters.
- Invite at least 1 nationally known speaker to the IUPUI campus to present on a relevant research/scholarly related topic(s) and meet with select research teams and centers.
- Work closely with the New Faculty Orientation planners to ensure that an adequate amount of pertinent research-related content is offered to incoming faculty and develop programming to promote research development in their first as IUPUI faculty members.
- Pursue at least 2 of the 3 OVCR philanthropic giving initiatives that will have direct impact on entire IUPUI research enterprise.
- Hire the new Center for Research and Learning director to help lead efforts to position the center for increased success in securing external funding and being recognized locally, nationally, and internationally as a premier center for student research initiatives, particularly in undergraduate research.
- Develop a Research Administrators Network to provide coordinated research development support for research faculty members within the schools/units.
- Work with IUB to revise the limited submission internal coordination process to ensure 100% compliance with agency limitations and that a fair process is implemented to select the candidates to move forward with application/nominations to such opportunities.
application nominations to such opportunities.

- Continue to emphasize that all investigators reapplying to an internal grant mechanism within the Office of the Vice Chancellor for Research must provide evidence that they have sought external funding prior to reapplication.

Fiscal Health

The accounts in the Office of Vice Chancellor for Research are managed and monitored by the Vice Chancellor for Research and the fiscal officer located in the Office of Academic Affairs via the FIS standard budget and accounting system. Accurate and timely reporting ensures the fiscal health of the Office of the Vice Chancellor for Research and supports decision making and planning processes. All institutional financial policies and accounting practices are followed.

Reallocation Plan

Other Question(s)

1. Please describe faculty/staff participation in the planning process in your unit. What factors strongly influence your budget and planning priorities? Please give examples, which might include attracting and retaining undergraduates, strengthening graduate programs, building collaborative partnerships, increasing diversity in faculty and student populations.

A key manner by which faculty/staff participation occurs in the planning process in the Office of the Vice Chancellor for Research (OVCOR) is through close communication and interaction with the Council of Associate Deans for Research and the Research Affairs Committee. The factors that strongly influence OVCOR’s budget and planning priorities include maximum possible allocation of resources in support of the strategic initiatives and of the programs and services that will grow and strengthen IUPUI’s research enterprise. An example is the realization of resources to aid in the development of large grant proposals.

2. How do the plans within your unit align with the President’s Principles of Excellence and the Chancellor’s Guideposts? Please describe your process for integrating your unit’s plans with those of the campus.

Plans within OVCOR align with and are supportive of practically all of the President’s Principles of Excellence and the Chancellor’s Guideposts. The reason is that OVCOR through its central mission supports the development and advancement of research across IUPUI, and as research is central to IUPUI’s existence, OVCOR has direct impact on supporting excellence in research, education, and the other President’s Principles of Excellence and the Chancellor’s Guideposts.

3. What longer-term trends (5-10 years) exist in your discipline/field that will affect your unit?

The longer term trends in the area of research development include further emphasis on interdisciplinary research initiatives, collaborations across institutions, closer connections with business and industry, and increased contribution to economic development through technology transfer and commercialization of research outcomes.

4. If the University experiences further budget cuts, what existing and emerging programs/initiatives in your unit will be your highest priorities?

If the University experiences further budget cuts, the existing and emerging programs/initiatives in OVCOR that will be of highest priorities will consist of the ones that will support as many as possible (based on budget availability) of the strategic research programs and initiatives.