

Research Enterprise

January 17, 2012

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FEATURE STORY

Lilly Endowment Provides Nearly \$5 Million to Continue Woodrow Wilson Indiana Teaching Fellowships

A new grant of \$4,896,000 from Lilly Endowment Inc. will allow the Woodrow Wilson National Fellowship Foundation to create two additional rounds of fellowships that recruit and prepare math and science teachers for high-need rural and urban Indiana schools and that encourage change in the way Indiana teachers are prepared.

The Woodrow Wilson Indiana Teaching Fellowships, created in late 2007 with an initial Lilly Endowment grant of more than \$10 million, prepare accomplished career changers and outstanding recent college graduates in science, mathematics, engineering, and technology (the STEM fields) to teach in the state's high-need secondary schools. Along with supplemental state funding of more than \$3 million, championed by Gov. Mitch Daniels, the new Lilly Endowment grant brings the program total to just over \$18 million.

"We are always pleased to see new ideas percolate in the field of teacher training," said Sara B. Cobb, Endowment vice president for education. "The Woodrow Wilson Indiana Teaching Fellows are finding this program a challenging and exciting experience, and they are transmitting that excitement in high-need schools across Indiana. The program is an important part of the Endowment's efforts to improve education."

Fellows receive a \$30,000 stipend to complete a special intensive master's program at one of four selected Indiana universities—Ball State University, Indiana University-Purdue University Indianapolis, Purdue University, and the University of Indianapolis. All four universities have redesigned teacher preparation to prepare teachers in local classrooms, the way physicians learn in hospitals and attorneys in law offices. Programs also include intensive emphasis on specific teaching approaches for the STEM fields. After a year of classroom-based preparation, Fellows commit to teach for at least three years in a high-need Indiana school, with ongoing support and mentoring.

"This additional commitment from Lilly Endowment is a gift to Indiana, its children

The Office of the Vice Chancellor for Research (OVCR) publishes the RESEARCH ENTERPRISE to keep the academic community and the community at large informed about research activities, opportunities and development on the IUPUI campus.

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If you have a news item or recent noteworthy research-related achievement that you would like to share, please see the [Research Enterprise Submission Guidelines](#).

Please be aware that not all news items will be deemed appropriate or timely for publication, but each item will be carefully considered.

and its future," said Arthur Levine, the president of the Woodrow Wilson National Fellowship Foundation. "The Fellows and the partner universities are doing amazing work to strengthen STEM education in the state's high-need schools. Lilly Endowment is once again demonstrating tremendous education leadership for Indiana." Levine, a former president of Teachers College, Columbia University, led a multiyear study on needed improvements in teacher education and is a nationally noted expert on teacher preparation and education reform.

"This generous support from the Lilly Endowment will continue the preparation and training of high quality STEM teachers," said Uday Sukhatme, Executive Vice Chancellor and Dean of the Faculties at IUPUI. "IUPUI is steadily emerging as a national leader in the STEM disciplines as a result of the Woodrow Wilson program as well as other federally funded initiatives. Next year, we plan to establish a dedicated STEM Institute on campus to serve as an umbrella for the many ongoing research and training efforts, and open up additional exciting opportunities."

"The School of Education is proud to significantly increase the number of exemplary teachers in STEM areas through preparation of our Woodrow Wilson Fellows," said Patricia Rogan, Executive Associate Dean of the IU School of Education at IUPUI. "As the only Woodrow Wilson program in the country offering dual certification (STEM plus special education), our graduates are highly qualified to improve student success in high need schools."

From the first two years of the Fellowship competition, 104 Woodrow Wilson Indiana Teaching Fellows are working in schools throughout the state. Another 54 Fellows are now progressing through the program, doing master's work and clinical preparation in Indiana classrooms. To date, the program has a 99 percent retention rate for teachers.

"In our school, we're finding that the Woodrow Wilson Indiana Teaching Fellows are well prepared pedagogically and have a strong background in their content areas. They don't have some of the insecurities and management issues we can sometimes see in new teachers—several of my colleagues have said they feel the Fellows are much more prepared for the classroom than is the case with new teachers who have a typical one-semester student teaching experience. We would definitely consider working with more of these Fellows," said Troy Inman, principal of Pike High School in Indianapolis.

Robert Guffin, the principal at Harshman Magnet Middle School, said, "Several Woodrow Wilson Teaching Fellows have been placed here at Harshman for their internship experience, and they have been willing, collaborative, and supportive of our mission. We were fortunate that we could hire one of last year's Fellows as our engineering teacher for the 2011-2012 school year. We're not surprised that he is quickly developing into a teacher leader."

The Indiana fellowship is part of a national Woodrow Wilson fellowship initiative with four goals: to transform teacher education by creating new models of preparation at the participating institutions; to get strong teachers into high-need schools; to attract the very best candidates to teaching through a significant fellowship with national prestige; and to cut the nation's teacher attrition rate of one-third to one-half during the first three years of teaching and retain top teachers through intensive clinical preparation and ongoing in-school mentoring.

Indiana was the first state to implement the Woodrow Wilson approach. To date, two other states—Ohio and Michigan—have followed Indiana's lead. Additional states are in discussion with the Woodrow Wilson Foundation about creating versions of the Woodrow Wilson Teaching Fellowship.

Applications for the 2012 group of Woodrow Wilson Indiana Teaching Fellows are available online at www.wwteachingfellowship.org through Jan. 10. The next Fellows will be named in spring 2012 and will begin master's work later in the year. They will be ready to start classroom teaching in 2013.

The Woodrow Wilson National Fellowship Foundation (www.woodrow.org) identifies and develops the best minds for the nation's most important challenges. In these areas of challenge, the Foundation awards fellowships to enrich human resources, works to improve public policy, and assists organizations and institutions in enhancing practice in the U.S. and abroad.

Lilly Endowment Inc. (www.lillyendowment.org) is an Indianapolis-based, private philanthropic foundation created in 1937 by three members of the Lilly family—J.K. Lilly Sr. and sons J.K. Jr. and Eli—through gifts of stock in their pharmaceutical business, Eli Lilly and Company. The Lilly family's foremost priority was to help the people of their city and state build a better life. Although the Endowment also supports efforts of national significance and an occasional international project, it remains primarily committed to its hometown, Indianapolis, and home state, Indiana.

ANNOUNCEMENTS

2012 IUPUI Research Day – Save the Date

On April 13, 2012, the Office of the Vice Chancellor for Research will host the 2012 IUPUI Research Day and encourages everyone at IUPUI to mark their calendars and plan to attend this year's event. The keynote speaker is Dr. Subra Suresh, director of the National Science Foundation (NSF). Dr. Suresh oversees the NSF's \$7-billion budget, directing programs and initiatives that keep the United States at the forefront of scientific fields, empower future generations of researchers and scholars, foster economic growth and innovation, and improve the quality of life for all Americans. More information will be announced in upcoming issues of the RESEARCH ENTERPRISE. Questions can be directed to Etta Ward at emward@iupui.edu or 317.278.8427.



Dr. Subra Suresh, Director
National Science Foundation

School of Science at IUPUI Launches New Problem Solving Institute

The School of Science has launched the Institute for Mathematical Modeling and Computational Science, an interdisciplinary endeavor dedicated to solving perplexing problems in such diverse fields as medicine, the environment, and computer science. iM2CS's parallel mission is to train a new generation to identify and solve the scientific issues with which they will be faced.

Students and researchers from IUPUI, as well as businesses and researchers in Indiana or anywhere around the world, can benefit as iM2CS faculty utilize sophisticated mathematical and computational approaches to address issues and solve problems found in the life, earth, social and physical sciences as well as engineering. Drug delivery, pollution, construction and forensics are among the thousands of areas that can be studied with mathematical modeling and



Giovanna Guidoboni, Ph.D and
Snehasis Mukhopadhyay, Ph.D.

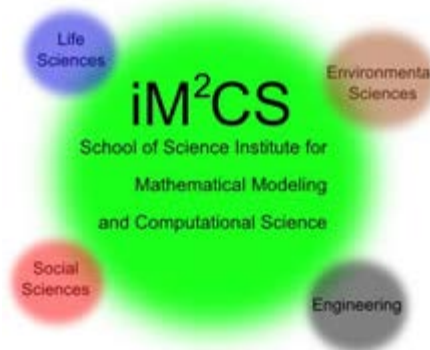
computational science problem solving approaches.

Led by Dr. Giovanna Guidoboni, associate professor of mathematical sciences, and Dr. Snehasis Mukhopadhyay, professor of computer and information science, the new institute, with an initial faculty of 19 investigators, is a virtual laboratory and consulting center available to researchers in any discipline.

"The math modeling and computation science of iM2CS creates greater opportunities for discovery and increases competitiveness in seeking and procuring extramural funding to support research, educational and outreach activities," said Guidoboni.

Among initial areas of iM2CS focus are:

- blood flow in the eye and its relation to glaucoma
- brain circuitry of Parkinson's disease patients
- brain mapping using computer vision methods
- fetal alcohol syndrome diagnosis
- flooding in watersheds
- fluid dynamics of red blood cells



"Statistics can help discover correlations. With the tools of mathematical modeling and computational science, our researchers reveal causality. We test hypotheses and provide important knowledge and feedback to colleagues," said Guidoboni.

Institute faculty researchers offer an introductory course in biomathematics to IUPUI upper level undergraduates and graduate students. A paid undergraduate summer research program, in collaboration with six other universities across the country, will bring students into iM2CS labs

where they will work alongside faculty.

"The Purdue School of Science is proud to announce the creation of iM2CS. Mathematical and computational modeling is one of the great strengths of the school's faculty, and represents a unique niche within the IUPUI community. We expect that the development of the iM2CS will lead to further interactions between our school's faculty and colleagues throughout IUPUI and the wider Indiana community", according to David Skalnik, Ph.D., associate dean for research and graduate education at the Purdue School of Science at IUPUI.

Initial funding for iM2CS is from the Purdue School of Science at IUPUI. iM2CS investigators have grant funding from the National Institutes of Health and the National Science Foundation. The Institute is seeking additional funding from government, industry and other sources.

The iM2CS website, with links to faculty research interests, student opportunities and other information, can be found at

<http://www.mmcs.science.iupui.edu/index.html>

CENTER SPOTLIGHT

IUPUI Solution Center Receives Grant from Chase to Support Near Eastside Legacy Initiative

The JPMorgan Chase Foundation has awarded the IUPUI Solution Center a grant of \$75,000 to support IUPUI's initiative to increase student and faculty involvement in the Near Eastside of Indianapolis.

"This grant is the latest in Chase's \$10 million investment in the Near Eastside neighborhood," said Dennis Bassett, chairman of Chase in Indiana. "The neighborhood is experiencing a renaissance, and the IUPUI Solution Center will ensure residents are aware of the available programming and services."

The Chase – IUPUI Near Eastside Legacy Initiative (NELI) is designed to increase awareness of and activity in the Chase Legacy Center, and promote health, wellness, and education programming in the community through targeted communication and public health awareness strategies. Over two years, the initiative will involve more than 100 students, faculty, and community partners through research projects, class projects, and independent internships. The Solution Center will provide match support of \$75,000 from its Community Venture Fund and serve as Project Manager for the initiative.



Teresa Bennett, Director
IUPUI Solution Center

The Near Eastside Legacy Initiative (NELI) grew from invitations from the John H. Boner Community Center, the Near Eastside Collaborative Taskforce, and residents of the Near Eastside Community Organization (NESCO) in support of Near Eastside Quality of Life Plan.

"The Chase NELI will focus on communication strategies aimed at increasing knowledge of health, education, and quality of life resources, as well as increasing awareness of and participation in the new Chase Legacy Center," said Teresa A. Bennett, Solution Center Director. "The impact of this initiative will exceed \$250,000, and result in greater community use and awareness of health and wellness resources," Bennett said.

Work to date includes a communication audit conducted by nine students from Herron School of Art and Design in the fall 2011. The audit will be used to launch the project. In spring and summer of 2012, NELI activities will include additional communication planning by Herron and Liberal Arts students, design internships in collaboration with start-up CODO Design, and the development of a community-based health asset map and public health awareness plan by the graduate students in the School of Public Health.

FACULTY SPOTLIGHT

U.S. Department of Energy Funds IUPUI Study to Improve Battery Energy, Life, Range

The United States Department of Energy's (DOE) Office of Energy Efficiency and Renewable Energy's (EERE) Vehicle Technologies Program, through Argonne National Laboratory, recently awarded researchers at the Purdue School of Engineering and Technology at IUPUI more than \$100,000 to conduct a rechargeable lithium metal battery study that could lead to revolutionary changes in the battery and electric vehicle industries.

The research program, led by Dr. Jian Xie, is developing new materials which allow lithium metal to be recharged without shorting caused by dendrite formation—a crucial breakthrough to advance this technology. This breakthrough builds on an innovative concept and materials design patented through IUPUI's partner organization, the Indiana University Research & Technology Corporation (IURTC).

This new technology could lead to a completely new type of lithium battery with much higher energy density than current lithium ion batteries—up to twelve times as much. This advancement from today's Li-ion battery could have a revolutionary impact on portable electronics (iPhone, iPad, laptop, etc.), transportation (EV and HEV), defense (unmanned vehicles, laser weapon systems, etc.) and other applications.

"Our School is competing at the highest levels," said Dr. David Russomanno, Dean of the Purdue School of Engineering and Technology at IUPUI. "Dr. Xie's groundbreaking work is yet another example that our faculty are not only effective teachers and scholars, but they are also premier researchers, making an impact in their fields alongside leaders from the Department of Energy and other National labs."

This research program builds on the School's ever-increasing involvement in energy-related fields. Students, faculty and industry alike benefit from the resources of the Lugar Center for Renewable Energy and the energy research and advancements made by the School's premier faculty. Students may also enroll in the new B.S. in Energy Engineering degree, a one-of-a-kind program designed to develop the next generation of alternative energy experts.



Jian Xie, Ph.D.
Department of Mechanical Engineering
School of Engineering and Technology

TRANSLATIONAL RESEARCH IMPACT

Computerized Education to Prevent Hypoglycemia When Driving

Dr. Joseph Defazio's long-term goal is to decrease the risk for driving accidents associated with severe hypoglycemia among adolescents/young adults with Type 1 Diabetes Mellitus. Type 1 diabetes is a common chronic disease affecting millions of U.S. children and adolescents. Although maintaining blood sugar levels near normal will decrease the risk for long-term complications of blindness and kidney failure, tight control carries the risk of severe hypoglycemia (low levels of blood sugar) which may result in impaired



Joseph Defazio, Ph.D.
Associate Professor

judgment, loss of consciousness and seizures. If this occurs while driving, it may result in severe injury and death. Intensive group-based blood glucose awareness training (BGAT) has been shown to decrease the risk for hypoglycemia when driving for adults but the existing program has not been designed or tested with adolescents. Dr. Defazio's interdisciplinary project will develop and test a unique computer-based delivery system to provide the initial education about driving and hypoglycemia to adolescents and their parents using combined audiovisual formats provided on a laptop computer.

This model is also being translated to support online training for parents of children with special health care needs to enhance their leadership skills. In partnership with Family Voices Indiana, Dr. Defazio and his team are working to establish a mechanism to support parents in creating a portfolio of experience and competencies to demonstrate their leadership capacities. These skills will support parents in advocating for their children in their community or at the state/national level, and compete for jobs that utilize their skill set.

OVCR INTERNAL GRANT DEADLINES

Release Time for Research (RTR)

IUPUI maintains a robust research enterprise. To support faculty in having adequate time to prepare competitive proposals, the IUPUI Office of the Vice Chancellor for Research has developed the Release Time for Research (RTR) internal funding mechanism. This funding program allows IUPUI faculty a "buy out" of teaching time to prepare high quality grant/contract proposals for submission to external funding agencies. It also supports non-tenure track faculty who are full-time senior lecturers or clinical track faculty possessing terminal degrees relevant to their fields, and who have a desire to engage in research or creative activity in an area that directly relates to their teaching or service mission. The next RTR application deadline is **February 1, 2012**. For grant guidelines and application forms, go to <http://research.iupui.edu/funding/>.

Developing Diverse Researchers with InVestigative Expertise (DRIVE)

The Developing Diverse Researchers with InVestigative Expertise (DRIVE) 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. The next DRIVE application deadline is **February 15, 2012**. For grant guidelines and application forms, go to <http://research.iupui.edu/funding/>.

IUPUI ARTS AND HUMANITIES INTERNAL GRANT (IAHI): The IAHI Grant Program exists 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 next IAHI application deadline is **March 1, 2012**. For grant guidelines and application forms, go to <http://research.iupui.edu/funding/>.

Funding Opportunities for Research Commercialization and Economic Success (FORCES)

The FORCES program is designed to support IUPUI researchers in the successful transformation of their research findings into commercially viable outcomes. The key goals of FORCES are to support: 1) realization of short-term projects that will enhance commercial value of IUPUI intellectual property assets, by facilitating commercialization of inventions, technologies, or other intellectual property derived from existing research projects, and 2) development of research initiatives that show great promise for commercialization of the research outcomes. The next RTR application deadline is **March 15, 2012**. For grant guidelines and application forms,

go to <http://research.iupui.edu/funding/>.

OVCR EVENTS AND WORKSHOPS

Finding Funding

When: Thursday, January 19, 2012 | 2:00 PM-3:30 PM
Where: University Library, Room 0106

This session will provide an overview of the various types of external funding sources, identify tools to locate funding opportunities, explain how to design a funding search, and demonstrate several knowledge management systems that contain thousands of funding opportunities available by university subscription.

[Click here to register](#)

The National Science Foundation Faculty Early Career Development (CAREER) Grant Writing Circle – Multiple Sessions

When: Friday, January 20, 2012 | 12:00 PM-1:30 PM
Where: University Library, Room 2115J

The NSF CAREER Grant-Writing Circle brings together faculty members who are preparing proposals for the mid-July 2012 due date. Faculty members may check their eligibility for this award at this web site:

<http://www.nsf.gov/pubs/2011/nsf11038/nsf11038.jsp>. Sessions will assist project conception and development, budget construction and proposal writing and editing. Participants will assist each other to develop their project ideas and edit their writing as much as possible. Four sessions, ninety minutes each, will be followed up by proposal writing, editing, and submission assistance from staff in the Office of the Vice Chancellor for Research. To qualify for assistance from the OVCR proposal writing staff, in the writing, editing, and submission processes, proposal writers must attend all four sessions. Note that meeting times are different for Wednesday and Friday workshops. Additional summer dates will be arranged as required.

Note: Faculty who submit an NSF CAREER proposal in 2012 are eligible to be considered for an OVCR CAREER Project Seed Grant related to that submission. Up to three awards may be made.

Register for all four workshops. You may choose to attend a Wednesday or a Friday for each workshop, to fit your schedule.

Workshop 1:

Friday, January 20 | 12 - 1:30 pm [register](#)
Wednesday, February 1 | 1 - 2:30 pm [register](#)

Workshop 2

Friday, February 24 | 12 - 1:30 pm [register](#)
Wednesday, February 29 | 1 - 2:30 pm [register](#)

Workshop 3

Friday, March 23 | 12 - 1:30 pm [register](#)
Wednesday, April 4 | 1 - 2:30 pm [register](#)

Workshop 4

Friday, April 20 | 12 - 1:30 pm [register](#)
Wednesday, May 2 | 1 - 2:30 pm [register](#)

Meeting the NSF Data Management Plan Requirement: What you need to know

When: Tuesday, January 24, 2012 | 10:00 AM-11:00 AM

Where: University Library, Room 2115E

As of January 18, 2011, the National Science Foundation now requires a Data Management Plan for all new proposals. This plan should describe how the proposed study will disseminate and share the collected research results. Do you know what this plan should include? Are you aware of best practices and standards for data management, sharing, and curation? Do you know what support services are available at IUPUI? This workshop will outline the process of developing a data management plan, provide resources for DMP development, and introduce data services available on campus. Q&A will follow the presentation. Anyone interested in or planning to apply for NSF funding should attend.

[click here to register](#)

Nine Golden Rules to Succeed in Research and Scholarship

When: Wednesday, January 25, 2012 | 1:00 PM-3:00 PM

Where: University Library, Room 1126

This highly acclaimed workshop provides a framework for succeeding in research and scholarship and distills this into 9 Golden Rules. While this interactive session is filled with practical advice for those in the early stages of their faculty careers, more senior faculty can also benefit.

[click here to register](#)

Proposal Development / Writing Circle – Multiple Sessions

When: Friday, January 27, 2012 | 1:00 PM-2:30 PM

Where: University Library, Room 2115E

The OVCR Proposal Development/Writing Circle brings together faculty members who are preparing external proposals of any kind or length (concept pieces, letters of intent, partial drafts, completed drafts, etc.) to discuss their ideas and documents with circle participants before proposal submission to an external agency. Participants may bring to the workshop any proposal to share with other members of the group for discussion. Sessions will assist project conception and development, budget construction and proposal writing and editing. Participants will assist each other to develop their project ideas and edit their writing as much as possible. Work will occur in the workshops as well as online, by email and through the Oncourse project site. Faculty members who participate in at least three workshops **during Fall 2011 and/or Spring 2012** will subsequently be eligible to apply for follow-up assistance for proposal writing, editing, and submission by the proposal development staff in the Office of the Vice Chancellor for Research.

Participation in each session is highly encouraged.

January 27 | 1:00 pm - 2:30 pm [register](#)

March 2 | 1:00 pm - 2:30 pm [register](#)

April 6 | 1:00 pm - 2:30 pm [register](#)

April 27 | 1:00 pm - 2:30 pm [register](#)

National Science Foundation Research Experiences for Undergraduates (REU) Workshop/Writing Circle

When: Friday, January 27, 2012 | 3:00 PM-4:30 PM

Where: University Library, Room 1116

The NSF REU Grant-Writing Circle brings together faculty members and other researchers who are preparing proposals for the next [REU Site awards program](#) due either June 01, 2012 (for those requiring access to Antarctica only) or August 22, 2012 (all others). Sessions are designed to simplify project conception and development, budget construction and proposal writing and editing. Participants will assist each other to develop their project ideas and edit their writing as much as possible. Four sessions, ninety minutes each, will be followed up by proposal writing, editing, and submission assistance from staff in the Office of the Vice Chancellor for Research. Proposal writers and their collaborators should attend all sessions.

[Register for all four workshops.](#)

January 27 | 3:00 pm - 4:30 pm [register](#)

March 2 | 3:00 pm - 4:30 pm [register](#)

April 6 | 3:00 pm - 4:30 pm [register](#)

April 27 | 3:00 pm - 4:30 pm [register](#)

Additional summer dates will be arranged as required

Center Proposals for Signature Centers Initiative

When: Wednesday, February 8, 2012 | 1:00 PM-2:30 PM

Where: University Library, Room 1126

This workshop is intended for those interested in submitting high quality center proposals to the Signature Centers Initiative program. The intent is to provide the participants with a better understanding of what constitutes a research center and its desired attributes. In addition, the review process and review criteria for Signature Centers Initiative applications will be discussed. Ample time will be given for questions. The workshop will be presented by two experienced reviewers of Signature Centers Initiative applications representing the fields of "Health and Life Sciences" and the "Arts and Humanities". Participants need to register for only one of the workshops.

[click here to register](#)

Increasing and Expanding Your Research Agenda through Community Engagement

When: Wednesday, February 14, 2012 | 1:30 PM-3:30 PM

Where: IUPUI Solution Center, Walker Building, 719 Indiana Avenue

The [IUPUI Solution Center](#), a division of the Office of the Vice Chancellor for Research, actively engages in building community partnerships through research, internships, and business assistance. The Solution Center helps IUPUI faculty brainstorm and coordinate experiential learning opportunities, locates internal and external contacts and funding for community-based research, and identifies community organizations for class projects, case studies, or other initiatives. The Solution Center Community Venture Fund provides matching grants to organizations in order to create and sustain meaningful, challenging, and career-relevant internships and applied projects.

In this session, staff from the IUPUI Solution Center will talk about how the Center can help faculty to expand and enhance their teaching and research goals through community engagement. Drawing from examples of faculty projects, this session will explore:

- Developing a community engagement plan
- Identifying partners
- Selecting tools and resources
- Engaging students

- Funding

[click here to register](#)

RECENT EXTERNAL FUNDING AWARDS

The Office of the Vice Chancellor for Research recognizes and congratulates all IUPUI faculty and researchers for recent awards they have received and that help to advance the IUPUI research enterprise. The following table highlights those receiving \$100,000 or more in external grants.

Grants and Awards - December 2011

PI	Agency	Project Title	School	Department	Total
KRAUSS, JOHN L	LILLY ENDOWMENT, INCORPORATED	Terminal operating support for the Center for Urban Policy and Environment and its work with the IU Public Policy Institute	PUBLIC & ENVIRONMENTAL AFFAIRS	PUBLIC & ENVIRONMENTAL AFFAIRS	\$6,600,000
VAN DER POL, BARBARA J.	CEPHEID	Fee for Service	MEDICINE	INFECTIOUS DISEASES	\$3,000,000
EINTERZ, ROBERT	LILLY ENDOWMENT, INCORPORATED	Indiana University Kenya Project Campaign	MEDICINE	GENERAL INTERNAL MEDICINE	\$2,500,000
GRANNIS, SHAUN JASON	AGENCY FOR HEALTHCARE RESEARCH AND QUALITY	Supporting Improved Population Health Through Enhanced Targeted Regional Decision Support	MEDICINE	FAMILY MEDICINE	\$2,041,559
FIELD, LOREN J.	NATIONAL HEART, LUNG AND BLOOD INSTITUTE	Genetic enhancement of cardiac repair with adult stem cells	MEDICINE	CARDIOLOGY	\$1,090,979
MARRERO, DAVID GRAYSON	WEIGHT WATCHERS INTERNATIONAL, INC.	Assessing the Effectiveness of a Weight Watchers-based Lifestyle Intervention for the Primary Prevention of Type 2 Diabetes	MEDICINE	ENDOCRINOLOGY	\$778,429
MOTT, NATHAN DAVID	INDIANAPOLIS PUBLIC SCHOOLS	University students rising to the challenge of service and experiential learning working as mentors and tutors serving Learning Centers at Indianapolis Public Schools	E&T	ORG LEADERSHIP & SUPERVISION	\$535,128
VAN DER POL, BARBARA J.	CEPHEID	Clinical Evaluation of the Xpert CT/NG Assay	MEDICINE	INFECTIOUS DISEASES	\$498,600
TEEMANT, ANNELA	U.S. DEPARTMENT OF EDUCATION	IUPUI ESL Partnerships: Building Capacity Across and Within Institutions	EDUCATION	EDUCATION	\$399,987
PAYNE, RONALD MARK	CHILDREN'S HOSPITAL MEDICAL CENTER OF CINCINNATI	Early Intervention for Acute Kidney Injury After Pediatric Cardiopulmonary Bypass	MEDICINE	PED-CARDIOLOGY	\$192,500
GOODPASTER, JOHN V	UNIVERSITY OF CENTRAL FLORIDA	Degraded Ignitable Liquids Database: An Applied Study of Weathering and Bacterial Degradation on the Chromatographic Patterns of ASTM E 1618 Ignitable Liquid Classes	SCIENCE	CHEMISTRY	\$171,650
YODER, MERVIN CLEM	PURDUE UNIVERSITY	Collagen Cross-links Direct Matrix-Induced Vasculogenesis Via Tunable Pathways	MEDICINE	PED-NEONATAL BASIC RESEARCH	\$168,076
CORNETTA, KENNETH G.	RIMEDION INC	Transient Generation and Production Harvest of a Lentiviral Vector Supernatant	MEDICINE	MEDICAL & MOLECULAR GENETICS	\$165,830
SLEDGE JR, GEORGE W	THE GENEVA FOUNDATION	Studies Directed Toward the Eradication of Brain Metastases of Breast Cancer	MEDICINE	HEMATOLOGY/ONCOLOGY	\$160,000
CUMMINS, THEODORE R	ELI LILLY AND COMPANY	Resurgent sodium current in models of chronic pain and modulation by phosphorylation	MEDICINE	PHARMACOLOGY & TOXICOLOGY	\$150,000
KLEMSZ, ABIGAIL F	INDIANA UNIVERSITY HEALTH	Riley Hospital - Program for Children with Special Health Care Needs	MEDICINE	PED-CHAIRMAN'S OFFICE GENERAL	\$120,000

CHEN, JIE	U.S. DEPARTMENT OF ENERGY	Establishment of an Indiana Industrial Assessment Center (IAC)	E&T	MECHANICAL ENGINEERING	\$121,926
CHEN, RONGRONG	INNOVATEK, INC.	CATALYTIC MEMBRANE REACTOR FOR THE PRODUCTION OF HYDROGEN FROM BUTANOL	E&T	MECHANICAL ENGINEERING TECH	\$106,310
ROONEY, PATRICK M.	ROCKEFELLER BROTHERS FUND	Enhancing Capacity and Effectiveness of South China NGOs	LIBERAL ARTS	CENTER ON PHILANTHROPY	\$100,000
LAHM, TIMMY	PFIZER FOUNDATION	PVDASPIRE-US 2011_Compartment-specific effects of 17 beta-estradiol on pulmonary vascular and right ventricular remodeling in angioproliferative pulmonary arterial hypertension	MEDICINE	PULMONARY	\$100,000

CURRENT EXTERNAL FUNDING OPPORTUNITIES

Funding opportunities in this section include selected current grant announcements from federal agencies for new initiatives and changes to existing programs. Announcements with limited scope are not listed here but are, instead, sent directly to IUPUI School Deans. For comprehensive coverage of funding opportunities please use the on-line search tools listed below.

NATIONAL ENDOWMENT FOR THE HUMANITIES

Summer Seminars and Institutes: These grants support faculty development programs in the humanities for school teachers and for college and university teachers. NEH Summer Seminars and Institutes may be as short as two weeks or as long as five weeks. *Application deadline is March 1, 2012.*

Summer Scholar Awards: NEH Summer Scholars are awarded fixed stipends to help cover travel costs, books and other research expenses, and living expenses. Stipend amounts are based on the length of the NEH Summer Seminar or Institute: \$2,100 (2 weeks), \$2,700 (3 weeks), \$3,300 (4 weeks), or \$3,900 (5 weeks). *Application deadline is March 1, 2012.*

Preservation and Access Research and Development: The focus is on projects that address major challenges in preserving or providing access to humanities collections and resources. These challenges include the need to find better ways to preserve materials of critical importance to the nation's cultural heritage—from fragile artifacts and manuscripts to analog recordings and digital assets subject to technological obsolescence—and to develop advanced modes of searching, discovering, and using such materials. *Application deadline is May 19, 2012.*

NATIONAL ENDOWMENT OF THE ARTS

Research: Art Works: The NEA will make grants for research projects that use existing datasets to mine data for analyses of the value and impact of the U.S. arts sector on the nation, whether on individuals or communities. Applications should present novel research questions that have not previously been explored with the referenced dataset(s). *Application deadline is March 8, 2012.*

NATIONAL INSTITUTES OF HEALTH

New Methods for Understanding the Functional Role of Human DNA Sequence Variants in Complex Phenotypes (R01): This Funding Opportunity Announcement (FOA) issued by the National Institutes of General Medical Sciences

(NIGMS), National Institutes of Health (NIH), solicits applications that propose experimental and computational approaches to determining the functional relevance of human DNA sequence variants. *Application deadline is February 17, 2012.*

Cancer Education Grants Program (R25): The purpose of this FOA is to support innovative educational efforts that would help to reduce cancer incidence, morbidity, and mortality, and that would improve the quality of life of cancer patients. *Standard application deadlines apply.*

Advancing Diversity in Aging Research (ADAR) through Undergraduate Education (R25): The National Institute on Aging (NIA), NIA MSTEM: Advancing Diversity in Aging Research (ADAR) through Undergraduate Education, encourages institutional Research Education Grant (R25) applications from institutions that propose creative and innovative research education programs to diversify the workforce in aging by (1) supporting undergraduate competency and completion in medicine, science, technology, engineering and mathematics) ((MSTEM) to be referred to as NIA MSTEM fields henceforth), as they relate to aging and, also, by (2) application and transition to graduate study that advances a cadre of students from diverse backgrounds into NIA MSTEM fields. The interests of the NIA span biological, biomedical, behavioral, clinical and social sciences research across the lifespan with a focus on processes of aging through midlife and into old age. *Standard dates apply.*

Implications of the Economic Downturn for Health, Wealth, and Work at Older Ages (R01): The focus is on the implications of exogenous shocks, such as those produced by the recent economic downturn, for health, economic circumstances, and planning throughout the life-cycle. *Standard dates apply.*

NATIONAL SCIENCE FOUNDATION

Smart Health and Wellbeing: Through the Smart Health and Wellbeing (SHB) Program, NSF seeks to address fundamental technical and scientific issues that would support much needed transformation of healthcare from reactive and hospital-centered to preventive, proactive, evidence-based, person-centered and focused on wellbeing rather than disease. The issues to be addressed include, but are not limited to, sensor technology, networking, information and machine learning technology, modeling cognitive processes, system and process modeling, and social and economic issues. Effective technology-based solutions must satisfy a multitude of constraints arising from clinical needs, social interactions, cognitive limitations, barriers to behavioral changes, heterogeneity of data, semantic mismatch and limitations of current cyberphysical systems. The high degree of complexity and broad range of the problems require multidisciplinary teams of scientists and engineers to identify and address barriers limiting quality of life, independence for chronically ill and elder individuals, and other aspects of wellbeing. *Application deadline is February 6, 2012.*

Physical and Engineering Sciences in Oncology (PESO): NSF in collaboration with the Office of Physical Sciences-Oncology (OPSO) of the National Cancer Institute will accept and review investigator-initiated proposals related to the application of physical and engineering sciences knowledge towards understanding cancer diseases. *Application deadline is February 15, 2012.*

IDENTIFYING FUNDING OPPORTUNITIES

On-line search tools are available to IUPUI investigators who are interested in identifying funding opportunities in their areas of interest.

Community of Science (COS): COS is a primary on-line search tool for identifying

funding opportunities. To take advantage of this tool, register at <http://www.cos.com/login/join.shtml>. Once you have completed the short registration process, you can personalize your search by selecting the option entitled "launch your workbench". You can access federal, local, corporate, foundation, nonprofit and other funding opportunities using key terms and save the results of up to 20 searches and have them delivered to you weekly via email.

National Institutes of Health (NIH) "NIH Guide": To take advantage of this search tool, register at <http://grants.nih.gov/grants/guide/listserv.htm>. It allows you to receive discipline specific funding opportunities that are delivered to you weekly via email.

National Science Foundation (NSF) "MyNSF": To take advantage of this search tool, register at http://service.govdelivery.com/service/multi_subscribe.html?code=USNSF&custom_id=823. It allows you to receive discipline specific funding opportunities that are delivered to you weekly via email.

Federal Business Opportunities "FedBizOpps": FedBizOpps is the single government point-of-entry for Federal government procurement opportunities over \$25,000. To take advantage of this search tool, visit <https://www.fbo.gov>. Opportunities found at this site include, but are not limited to, presolicitations and special notices for research and service contracts for specific projects and some national centers and surveys that would not be found in Grants.gov and may not be found in the Community of Science.

Limited Submission Funding Opportunities:

Many federal agencies and foundations offer grants, awards and fellowships that limit the number of applications that can come from one institution or require special handling. In order to comply with agency and foundation guidelines and increase the chances of Indiana University (IU) succeeding in such limited submissions and special handling opportunities, IU policies and procedures are in place and are utilized by the Office of the Vice Chancellor for Research and other IU research offices to facilitate internal coordination and competitions.

Individuals interested in responding to limited submission opportunities must inform the Office of the Vice Chancellor for Research about their intent to apply to a given limited submission opportunity, such that they can be included in the internal review and selection process. Failure to do so may disqualify individuals from consideration for submission to the funding opportunity.

Individuals interested in a limited submission opportunity or have any questions about the internal coordination process, contact Etta Ward at emward@iupui.edu or 317-278-8427. For a description of upcoming limited submission funding opportunities, as well as guidelines and application forms, go to: http://research.iu.edu/limited_sub.shtml. Please note that this is not a comprehensive list, and that any external funding opportunity that imposes any type of submission limitation is subject to the IU limited submission policy and procedures.

Special Handling: The Special Handling list was created in order to communicate donor restrictions and/or preferences for managing solicitation requests from Indiana University. The list reflects special relationships that exist between donors and the university and includes corporations and foundations that the President's office wishes to review prior to submission in order to coordinate Indiana University's requests to these donors. The Special Handling List was compiled and is maintained by the Indiana University Foundation office of Corporate and Foundation Relations. Questions regarding this list can be directed to Bobbi Bosch at 317-278-5648 or bsbosch@indiana.edu.

[IUF Special Handling List and Principal Gifts Review Template](#)

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