IUPUI INDIANA UNIVERSITY-PURDUE UNIVERSITY INDIANAPOLIS

Research Enterprise

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.

Research Offices:

Development Administration Compliance Enterprise Archive

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If you have a news item or recent noteworthy researchrelated 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.

July 20, 2012

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FEATURE STORY

Centers Receive IUPUI Signature Centers Initiative Funding

Indianapolis – Indiana University-Purdue University Indianapolis (IUPUI) Vice Chancellor for Research Kody Varahramyan announces the 2012 Signature Centers Initiative (SCI) award winners. The awarded centers are provided significant seed funding over the course of three years to stimulate innovative multidisciplinary research and scholarly activity. Upon completion of the three-year award period, the SCI funded centers will undergo a rigorous evaluation to determine if they have met the expectations to receive official designation as an IUPUI Signature Center.

The ultimate goal of the SCI is to create strong research units that are uniquely identifiable with IUPUI and will lead the way in world-class research and creative activities that will substantially enhance IUPUI's reputation locally, nationally, and internationally. In addition to representing an area of research and scholarly strength, the center will usually build on some ongoing activities and have many of the following attributes for a Signature Center designation:

- Signature centers will often be interdisciplinary in character. They should have the capacity to attract significant external funding appropriate to the disciplines involved, including federal grants and foundation support. The centers need to bring academic distinction to the campus. After an initial period of campus-based seed funding, they should become largely self-sufficient in a 3 to 5 year time frame.
- The work of the center should have something unique and distinctive, which makes it stand out. It should not focus on an area commonly studied at many other universities, although collaborations with other institutions could be a desirable feature.
- The center should engage in work which takes advantage of the urban location in Indianapolis and establish partnerships with local community and cultural organizations.

"This initiative has become a key cornerstone of the IUPUI research enterprise, playing an important role in enhancing research and scholarly activity while fostering the development of research centers that are bringing national and international recognition and visibility," said Dr. Varahramyan.

The selected centers are:

Center for Civic Literacy

The mission of the center is to increase scholarly and public understanding of the dimensions of our civic deficit and the effect of that deficit upon democratic decision-making and civil society and identify, develop, and disseminate evidence based best practices to help educators and others address and correct the problem.

Center for Human Papillomavirus Research

The overall mission of the center is to improve understanding of Human Papillomavirus (HPV) transmission and infection, and prevention of HPV infection and its consequences. The center brings together researchers from multiple health and life sciences disciplines. These researchers are engaged in the realization of multiple collaborative projects ranging from transmission to prevention of HPV infection.

Center for Pediatric Obesity and Diabetes Prevention Research

The primary mission of the center is the performance and translation of research in obesity and diabetes prevention among children and adolescents. The center is dedicated to advancing the health of vulnerable populations through internationally recognized obesity and diabetes prevention research focusing on mechanisms of progression from obesity to type 2 diabetes, defining best practices for obesity/diabetes prevention among youth, and cost-effective translation of the research to the community.

For more information about the IUPUI Signature Centers Initiative, go to <u>http://research.iupui.edu/centers/signaturecenters.html</u>.

ANNOUNCEMENTS

Lugar Center at IUPUI Gets Department of Energy Award for Clean-coal Research Project

Indiana University-Purdue University Indianapolis is one of nine universities to share in \$2.7 million in federal funding for research projects that will support the continuing innovation and development of cleancoal technologies.

The Richard G. Lugar Center for Renewable Energy in the Purdue School of Engineering and Technology at IUPUI won a \$293,519 U.S. Department of Energy award to research a manufacturing process to improve the high-temperature corrosion resistance coatings on turbine blades and other components used in coalfired power plants.

The Lugar Center will research the production of novel high-temperature oxide-based double-layer thermal barrier coatings. Compared with conventional thermal barrier coatings, the proposed novel oxides have demonstrated lower thermal conductivity and better

thermal stability -- characteristics crucial to extending



Jing Zhang, PhD Department of Mechanical Engineering School of Engineering and Technology

the life and improving the performance of turbine components used in advanced coal-fired plants. These novel coating materials can tolerate the harsh operating temperatures in power generation equipment and can potentially enable operation at conditions that would improve generation efficiency, conserve fuel and reduce

carbon pollution.

Under the supervision of principal investigator Dr. Jing Zhang, the Lugar Center, including student researchers, will collaborate with Praxair Surface Technologies of Indianapolis to design and fabricate the novel high-temperature oxide-based coatings, evaluate and characterize the coating properties in real-operating conditions, and develop computational models to study the coating performance.

"We're thrilled to be selected by the Department of Energy as one of the nine universities in the country to help advance American clean-coal technologies," said Dr. Zhang, assistant professor in the Department of Mechanical Engineering and faculty researcher at the Richard G. Lugar Center for Renewable Energy.

"Together with Praxair Surface Technologies, we'll leverage our advanced energy research strengths to develop novel thermal barrier coatings for key components of steam turbines used in electric power generation -- a technology that can lead to longer component lifetimes, greater reliability and eventually lower production costs for electricity.

"These results could benefit any type of power plant that uses heat, including those which run on coal, uranium, biomass, municipal solid waste or concentrated solar power. Ultimately, our goal is to contribute to the improvement of our national energy security."

The clean-coal university research grants will help build on extensive progress made by the Obama administration to promote innovative technologies that help make coal-fired energy cleaner and more cost-competitive, while training the next generation of scientists and engineers in cutting-edge clean coal technologies, U.S. Energy Secretary Steven Chu said in announcing the awards.

In March, Chu made a special visit to IUPUI to meet with university leaders and to conduct a student town hall forum on the future of clean energy. That meeting followed a September 2011 announcement that the School of Engineering and Technology would receive a \$1.3 million DOE competitive grant to train undergraduate- and graduate-level students in manufacturing efficiency.

"We are delighted that Dr. Zhang has been awarded this highly competitive funding and he will be leading this project as a member of our Richard G. Lugar Center for Renewable Energy," said David Russomanno, dean of the School of Engineering and Technology. "Our school's new strategic plan emphasizes competing at the highest levels and becoming one of the nation's premier, urban schools for engineering and technology. Dr. Zhang's work supports this plan."

The university research projects funded include those that will focus on the development of high-temperature, high-pressure corrosion-resistant alloys, protective coatings and structural materials for advanced coal-fired power plants and gas turbines, as well as projects to develop new processes and computational design methods to develop these materials, improve efficiency and reduce the costs of cleaner power generation systems.

IUPUI Center for Research and Learning Announces 2012 Summer Research Program Poster Symposium

Students from all IUPUI Center for Research and Learning Summer Research Programs and affiliates will present their summer research posters on July 26, 2012, from 1:00 to 5:00p.m. in the IUPUI Campus Center Room 450. To register, go to http://postersymposium.eventbrite.com/. For more



information, please contact the Center for Research and Learning at 274-8880 or <u>crlstaff@iupui.edu</u>.

Health Care Innovation Award to School of Medicine

A \$7.8 million Health Care Innovation Award to Indiana University from the Centers for Medicare & Medicaid Services (CMS), will expand the Aging Brain Care model developed by researcher-clinicians from the IU Center for Aging Research and the Regenstrief Institute. Based upon a successful pilot study conducted at Wishard Health Services, the new program will serve more than 2,000 Medicare beneficiaries with dementia or late-life depression who live in Marion County, Ind., evaluating the ability of the ABC program to deliver better health care to older adults.

The CMS-supported expansion of the ABC model to Wishard's 11 community health centers will be led by Regenstrief Institute investigator Dr. Malaz Boustani, associate professor of medicine at the IU School of Medicine.



Malaz Boustani M.D., MPH Department of Medicine School of Medicine

"The ABC growth will improve the quality and lower the

cost of care for the most vulnerable population we serve," said Dr. Boustani, who is associate director of the IU Center for Aging Research and medical director of the Healthy Aging Brain Center at Wishard.

Innovative brain care that has been demonstrated in a pilot study to reduce emergency department visits by 45 percent and hospitalizations by 54 percent, and to encourage use of medications that are not harmful to older brains, the ABC model broadens the definition of a patient to include family members who enable cognitively impaired and depressed individuals to live in the community. Physicians, nurses, social workers and other staff members work closely with both the older adult and family caregivers -- in the exam room and in the home, as well as over the phone and via email -- to deliver care to improve both brain and physical health.

Patients receiving the ABC model of care are given an initial cognitive, social and psychological needs assessment. The ABC team then helps both patient and caregivers develop a personal treatment plan that typically includes recognizing potentially harmful medications, prescribing new medications, initiating brain and physical exercise regimens, and working on reducing stress to improve daily life.

The ABC model provides individualized and integrated care through an interdisciplinary care team staffed by nurse-practitioners, social workers and care coordinator assistants. These teams work with patients, families, primary-care providers and specialists to develop patient-specific care plans, deliver evidence-based protocols, and respond to real-time monitoring and feedback, improving care and lowering cost through care management.

"We are grateful to Dr. Boustani and his team for their presence at Wishard and their thoughtful development and execution of this groundbreaking approach to care," said Lee Livin, chief financial officer for Wishard Health Services, who worked with Dr. Boustani to establish the Healthy Aging Brain Center at Wishard and will serve as co-director of this Aging Brain Care model expansion. "This is a terrific example of how Wishard's longstanding partnership with the Regenstrief Institute, widely recognized as a national model for health care innovation, directly benefits the patients we serve." Partners in the CMS-supported project, in addition to the IU Center for Aging Research, Regenstrief and Wishard, are the Geriatrics Program of the IU School of Medicine, Indianapolis Discovery Network for Dementia, Indiana Clinical and Translational Sciences Institute, IU School of Medicine Simulation Center and the Indiana Network for Patient Care.

"The IU School of Medicine is delighted to learn of the Health Care Innovation Award to Dr. Boustani," said David Wilkes, M.D., executive associate dean for research affairs at the IU School of Medicine and the August M. Watanabe Professor of Medical Research. "This award is testament to his outstanding expertise in health care innovation and implementation science. Furthermore, this will leverage our partners in health care delivery at Wishard Hospital, IU Health and the Regenstrief Institute, amongst others. We are confident that patient care will benefit greatly due to studies supported by this award."

Over the three-year period of CMS support, the award recipients estimate that 25 jobs will be created for positions including advanced practice care coordinators, nurses, medical care coordinators' assistants, social workers and a medical director.

The Healthy Aging Brain Center at Wishard is already drawing referrals from across the country. Last month, the Senior Health Implementation Center at the Regenstrief Institute announced that it will broadly disseminate ABC tools, including a how-to manual for clinicians, a dementia symptoms monitor and a resource handbook for caregivers, as well as provide onsite training.

According to the Alzheimer's Association, an estimated 5.4 million Americans -- one in eight older Americans -- have Alzheimer's disease.

Fourth Annual Indiana Clinical and Translational Sciences Institute Meeting Announced

<u>Registration</u> is now open for the fourth annual meeting of the Indiana Clinical and Translational Sciences Institute on Friday, Aug. 31, 2012, at the University Place Conference Center and Hotel.

The highlight of the program will be plenary talks by leaders from the National Institutes of Health, Lilly Research Laboratories, Indiana University Health and the Indiana University School of Medicine, as well as poster presentations and breakout sessions. This is a free event and is open to anyone who wants to learn more about the Indiana CTSI and its programs.

Learn more about guest speakers:





"Translational Therapeutics Development at NIH" Christopher P. Austin, M.D., Scientific Director, National Institutes of Health Center for Translational Therapeutics

"Transformations in Health Systems: Indiana University Health Vision" Daniel F. Evans, Jr., President and CEO, Indiana University Health

"Transformations in Pharma Industry: Eli Lilly Model" Andrew Dahlem, Ph.D., COO, Lilly Research Laboratories, Eli Lilly & Co





"Transformations in Academic Medical Centers: IUSM Vision" David Wilkes, M.D., Executive Associate Dean for Research, Indiana University School of Medicine

INSTITUTE SPOTLIGHT

Glick Eye Institute Researcher Lands NIH Funding to Study Racial Disparities in Glaucoma

Why do people of African descent develop glaucoma at rates higher than Caucasians? Funding from the National Institutes of Health will help Dr. Alon Harris, director of clinical research at the Eugene and Marilyn Glick Eye Institute, learn the answer to that question.

Dr. Harris and his team in the IU School of Medicine Department of Ophthalmology at the Glick Eye Institute have received a two-year R-21 grant for \$429,000 from the National Institutes of Health to expand current glaucoma research to include racial disparities. The Glick Eye Institute last month received a \$1 million NIH K-08 grant to study congenital glaucoma and potential treatments.

"This is the first NIH research funding to investigate ocular blood flow in people of African descent to help explain why the disease is more prevalent in that race than in Caucasians," said Dr. Harris, the grant's principal investigator.



Alon Harris, M.S., Ph.D., FARVO Department of Ophthalmology School of Medicine Glick Eye Institute

Dr. Harris, who also is the Lois Letzter Professor of Ophthalmology and professor of cellular and integrative physiology, has been researching the role of the vascular system and glaucoma for 20 years and is considered an international expert on the topic. He and his team of investigators have published several preliminary reports on blood flow disturbances in people of African descent over the past 10 years. This is his second NIH R award since joining the department in 1993 and brings his total external funding to more than \$5 million.

Co-investigators from the Department of Ophthalmology are Louis B. Cantor, M.D., chair of the department; Darrell WuDunn, M.D., Ph.D.; Lyne Racette, Ph.D.; and Brent Siesky, Ph.D. Other co-investigators are George Eckert, MAS, and Huiping Xu, Ph.D., both of the IU School of Medicine's Department of Biostatistics.

"We know that people of African descent have an increased prevalence of systemic vascular diseases such as high blood pressure, stroke and diabetes," Dr. Harris said. "This suggests that ocular blood flow, or how the blood supply flows to the eye, could tell us why glaucoma is more prevalent in this population. Another of our current research projects, the Indianapolis Glaucoma Progression Study, looks at the overall effect of blood flow on glaucoma. We will narrow the focus with this study."

Glaucoma, often called the sneak thief of sight, can cause vision loss before a diagnosis is made. Current theory suggests that increased eye pressure causes damage to the optic nerve; Dr. Harris' research examines blood and perfusion pressure and blood flow to determine the cause and effect of glaucoma and the vascular system.

"This area of research will help to unravel the mystery of glaucoma, the leading cause of preventable, yet irreversible, blindness in the United States. Understanding the racial differences that may lead to glaucoma helps us to ultimately understand why glaucoma develops in everyone," Dr. Cantor said.

Warning signs of glaucoma include a loss of peripheral vision, which is often unnoticed by the patient; sudden severe pain in the eye; cloudy vision; halos around lights; and red or swollen eyes. Once vision is lost it cannot be recovered.

Open angle or chronic glaucoma is the most severe type; it runs in families and is most associated with people of African descent. Angle closure or acute glaucoma develops rapidly when the eye's fluid cannot drain naturally, raising pressure and damaging vision. Other kinds of glaucoma include congenital glaucoma, which is seen at birth, and secondary glaucoma, which develops as a side effect of drugs or other conditions.

FACULTY SPOTLIGHT

Study Finds Race Has an Impact on Enrollment and Disenrollment in Hospice Care

Although use of hospice services is increasing dramatically, a study led by Regenstrief Institute investigator Dr. Kathleen T. Unroe, an assistant research professor of medicine at the School of Medicine, has found that nonwhite Medicare patients with heart failure are 20 percent less likely to enroll in hospice than their white counterparts.

The study also found that racial differences in hospice use persisted over time and that nonwhite patients who do enroll in hospice are more likely to disenroll than white patients.

These findings are reported in "Racial Differences in Hospice Use and Patterns of Care after Enrollment in Hospice among Medicare Beneficiaries with Heart Failure" published in the June issue of American Heart Journal.



Kathleen T. Unroe, MD, MHA Department of Medicine School of Medicine

Significantly, among those who elected for hospice care, nonwhite patients were more likely to have an emergency department visit, to be hospitalized and to have an intensive care unit stay. Among patients who remained in hospice until death, nonwhite patients had higher rates of acute care resource use and higher overall costs than white patients in hospice.

"When considering end-of-life care options, it is important to consider hospice services at home, in nursing homes or in hospice facilities," said Dr. Unroe, a center scientist with the IU Center for Aging Research. "Our findings highlight that there is a significant difference between how white patients and nonwhite patients and their families utilize hospice services."

The researchers studied a national sample of 219,275 Medicare beneficiaries with heart failure.

According to the <u>National Hospice and Palliative Care Organization</u>, about 1.58 million patients received hospice services in 2010. About 42 percent of all deaths in the United States were under the care of a hospice program in 2010. Heart disease was the third most common diagnosis of individuals receiving hospice care.

An individual is eligible for hospice care if a physician estimates a life expectancy of six months or less, should the disease run its normal course. The emphasis of hospice is on enhancing the quality of life until death.

Co-authors of the study in addition to Dr. Unroe, who conducted the work while a geriatric medicine fellow at Duke University, are Melissa A. Greiner, M.S.; Kimberly S. Johnson, M.D., MHS; Lesley H. Curtis, Ph.D.; and Soko Setoguchi, M.D., Dr.P.H., of Duke. The research was supported by a John A. Hartford Foundation award to Dr. Unroe.

In a previous study of Medicare patients who died of heart failure, Dr. Unroe and colleagues found that use of hospice among heart failure patients "dramatically" increased, from 19 percent in 2000 to nearly 40 percent in 2007. However, rates of hospitalization in the final six months of life remained constant at about 80 percent.

With support from the National Center for Palliative Care, Dr. Unroe is currently studying use of hospice by nursing home patients.

STUDENT SPOTLIGHT

High School Students from Near and Far Explore the Possibilities of Nanotechnology at IUPUI Summer Camp

During the weeks of June 11-15 and June 25-29, the Office of the Vice Chancellor for Research, in partnership with the Integrated Nanotechnology Development Institute and the Center for Research and Learning, hosted 40 students from high schools (local and as far away as South Africa) at the IUPUI Nanotechnology Discovery Camp. The students were part of a week-long camp to explore the world of nanotechnology, working with faculty from across many related disciplines at IUPUI. According to Dr. Mangilal Agarwal, camp director and lead instructor, "We had a wonderful group of high school students and really enjoyed working with



them. These students have very bright futures ahead of them."

The week-long camps provided a unique opportunity for the students to explore the interdisciplinary field of nanotechnology, which is becoming an essential part of science, engineering, medicine and many other disciplines. For some of the students, the fascination with nanotechnology started early.

"I've always been interested in nanomedicine," said Sanjana Sridhar, a sophomore attending McClean High School in McClean Virginia. "In eighth grade I wrote a paper on nanomedicine and its emerging field. Since then, I have been very interested in the field and have been reading articles and trying to get my hands on databases on the topic. So I feel this camp was kind of fate."



Sanjana Sridhar

Along with the classroom lectures/discussions and

campus research lab tours, camp activities included demonstration of various equipments (for e.g. Scanning Electron Microscopes, Atomic Force Microscope, Scanning Tunneling Microscope, and Photolithography instrumentations), the fabrication and testing of solar cells, testing of fuel cells, and the fabrication and testing of micro/nanofluidic devices used in medical applications. "It was excellent and really opened my eyes to nanotechnology and its applications. My favorite part of the camp was going to all of the labs on campus and actually seeing the scientists in action and learning how nanotechnology is applied to our everyday lives," shares Reyan Coskin, a sophomore attending the International School of Indiana.

At the end of each week, the students showcased the fruits of their labor and gave demonstrations on some of the devices developed and tested. Zane Whitfield, an entering high school senior from the American International School of Johannesburg in South Africa, shared his interest in becoming a pilot and plans to pursue aeronautical engineering. "Nanotechnology is how aviation is able to exist as a sophisticated technology (both electrical and mechanical). This really fuels my motivation to pursue aviation."



Quinn Fox

Anyone interest in learning more about the work of INDI should contact Dr. Agarwal at <u>agarwal@iupui.edu</u>.

OVCR INTERNAL GRANT DEADLINES

RESEARCH SUPPORT FUNDS GRANT (RSFG): The Research Support Funds Grant (RSFG) program is designed to enhance the research mission of IUPUI by supporting research projects and scholarly activities that are sustainable through external funding. The next RSFG application deadline is October 15, 2012. For grant guidelines and application forms, go to <u>http://research.iupui.edu/funding/</u>.

INTERNATIONAL DEVELOPMENT FUND (IDF) GRANT: The IDF grant was developed to enhance the international research and scholarly activity focus of the IUPUI academic mission. Generally, the IDF grant serves as venture capital to stimulate additional funding for international research and scholarly activity, which have strong potential to generate indirect cost recovery from extramural sources. The next IDF application deadline is November 15, 2012. For grant guidelines and application forms, go to http://research.iupui.edu/funding/.

Enhanced Mentoring Program with Opportunities for Ways to Excel in Research (EMPOWER): The EMPOWER program supports IUPUI faculty who are historically underrepresented and/or excluded populations in their discipline or area of scholarship and historically denied admission to higher education or that discipline, 1) to become successful in sponsored research and scholarly activity, and 2) to achieve significant professional growth and advancement. The program sustains mentorship opportunities through the EMPOWER Grant Program, supporting achievement of excellence in research and scholarly activity, and optimal attainment of academic career goals and objectives. The next EMPOWER application deadline is September 5, 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 **September 15, 2012.** For grant guidelines and application forms, go to <u>http://research.iupui.edu/funding/</u>.

OTHER INTERNAL GRANT DEADLINES

Indiana Clinical and Translational Sciences Institute (CTSI) Grant Programs – now accepting applications

Research Invention and Scientific Commercialization (RISC) program grants provide up to \$25,000 to foster cutting-edge scientific breakthroughs and technology. <u>READ MORE</u>

Indiana CTSI Project Development Teams provide pilot funds to research in areas such as basic and clinical sciences; pediatrics; behavior and population research; imaging science; community and urban health; and more. <u>READ MORE</u>

2012 Fall Core Pilot grants, which provide investigators up to \$10,000 in services from Indiana CTSI-designated core facilities, will be open in August. <u>READ MORE</u>

OVCR EVENTS AND WORKSHOPS

OVCR Research Orientation

When: Wednesday, August 29, 2012 | 10:00 AM-12:00 PM Where: University Library, Room 1126

This session will provide an overview of research resources, services and support offered to IUPUI faculty by the Office of the Vice Chancellor for Research. Participants will also meet with some current IUPUI faculty members to hear how they were able to achieve success in the early stages of their tenure at IUPUI.

Register: http://crl.iupui.edu/Events/eventsRegistration.asp?id=2916

OVCR Research Orientation (Repeat Session)

When: Thursday, September 6, 2012 | 1:00 PM-3:00 PM Where: University Library, 1126

This session will provide an overview of research resources, services and support offered to IUPUI faculty by the Office of the Vice Chancellor for Research. Participants will also meet with some current IUPUI faculty members to hear how they were able to achieve success in the early stages of their tenure at IUPUI.

Register: <u>http://crl.iupui.edu/Events/eventsRegistration.asp?id=2917</u>

Preparing Science & Engineering Research Proposals

When: Tuesday, September 11, 2012 | 11:00 AM-12:30 PM Where: University Library, Room 1126

This session will center on the essentials of building a successful grant proposal for agencies that fund the sciences and engineering. The necessity for knowing who will review your proposal, budget limitations, and how to communicate complex ideas in a limited space will be discussed.

Register: <u>http://crl.iupui.edu/Events/eventsRegistration.asp?id=2918</u>

Finding Funding

When: Thursday, September 13, 2012 \mid 10:00 AM-11:30 AM 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 the university subscription.

Register: <u>http://crl.iupui.edu/Events/eventsRegistration.asp?id=2919</u>

Nine Golden Rules to Succeed in Research and Scholarship

When: Friday, September 21, 2012 | 12:00 PM-2:00 PM Where: University Library, Room 2115 E

This session will reveal the Nine Golden Rules on how to succeed in research and scholarship. It is focused toward new and early career investigators; however, mid career faculty should find information of interest as well.

Register: <u>http://crl.iupui.edu/Events/eventsRegistration.asp?id=2920</u>

COS PIVOT (Finding Funding & Collaborators)

When: Tuesday, September 25, 2012 | 2:00 PM-3:30 PM Where: University Library, Room 0106

Indiana University is a member of COS Pivot. Whether your work is in the arts or the sciences, COS Pivot funding and expertise search tools and services can help support and advance your research and scholarly activity. Learn how to take full advantage of these services and help our institution promote its work. This event is a hands-on open lab session.

Register: <u>http://crl.iupui.edu/Events/eventsRegistration.asp?id=2921</u>

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 - May 2012

PI	Agency	Project Title	School	Department	Total
WILKES,DAVID S.	INDIANA UNIVERSITY HEALTH	Strategic Research Initiative (SRI) IUH and Indiana University School of Medicine	MEDICINE	DEAN MED-GENERAL PROGRAM SUPP	\$15,000,000
TAKAGI,YUICHIRO	NATIONAL SCIENCE FOUNDATION	Molecular basis of Mediator interactions with RNA polymerase II transcription machinery	MEDICINE	BIOCHEMISTRY/MOLECULAR BIOLOGY	\$930,000
BODENHAMER,DAVID JACKSON	INDIANA DEPARTMENT OF HOMELAND SECURITY	Indiana University Disaster Resistant University (DRU) Initiative	LIBERAL ARTS	POLIS	\$195,238
WRIGHT,ERIC REANEY	INDIANA FAMILY AND SOCIAL SERVICES ADMINISTRATION	SEOW Supplemental Grant	MEDICINE	PUBLIC HEALTH	\$142,500
YODER,KAREN MASBAUM	DELTA DENTAL FUND	Indiana Rural Head Start Mobile Dental Clinic Restorative Services	DENTISTRY	DENTISTRY-RESEARCH	\$137,799
CHUMBLER,NEALE ROSS	INDIANA STATE DEPARTMENT OF HEALTH	A Summative Evaluation of Journaling for Underserved Pregnant and Parenting Adolescents	LIBERAL ARTS	INST FOR RESEARCH ON SOC ISSUE	\$125,449

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 OF THE HUMANITIES

Enduring Questions: The Enduring Questions grant program supports faculty members in the teaching and development of a new course that will foster intellectual community through the study of an enduring question. This question-driven course will encourage undergraduates and teachers to grapple with a fundamental concern of human life addressed by the humanities, and to join together in a deep and sustained program of reading in order to encounter influential thinkers over the centuries up to the present day. What is an enduring question? The following list is neither prescriptive nor exhaustive, but serves to illustrate the crux. What is good government? Can war be just? What is friendship? What is evil? Are there universals in human nature? What are the origins of the universe? *Application deadline is September 13, 2012.*

NATIONAL INSTITUTES OF HEALTH

Macroeconomic Aspects of Population Aging (R01): This focus is on the macroeconomics of aging - the impact of population aging on the macroeconomy and in turn how macroeconomic factors impact health and well-being. *Application deadline is October 13, 2012.*

Role of Environmental Chemical Exposures in the Development of Obesity, Type 2 Diabetes and Metabolic Syndrome (RO1): The focus is on understanding the role of environmental chemical exposures in the development of obesity, type 2 diabetes and/or metabolic syndrome. Applications must link an environmental exposure to the increased incidence of weight gain, glucose tolerance/insulin sensitivity and aspects of metabolic syndrome in animal models or human studies. Standard dates apply.

Identifying Health Outcomes Associated with Changes in Use of Illicit Drugs (R01): The focus is on testing the hypothesis that reductions in illicit drug use are associated with improved health outcomes in patients. This FOA will support both prospective and retrospective studies, which may include, but not limited to, identification and characterization of beneficial health outcomes that are associated with reduced levels of drug use. Such studies may focus on identification and or validation of strategies, methods, and tools (including biomarkers) that can assess the salutary consequences resulting from reduced use of a particular illicit drug. *Application deadline is August 22, 2012.*

Alcohol Abuse, Sleep Disorders and Circadian Rhythms (R01, R21): This Funding Opportunity Announcement (FOA), issued by the National Institute on Alcohol Abuse and Alcoholism (NIAAA), encourages Research Project Grant (R01) applications proposing to conduct mechanistic studies in humans and animal models on the relationships between alcohol abuse, circadian rhythms and sleep disorders. <u>Standard dates</u> apply.

NATIONAL SCIENCE FOUNDATION

<u>Advancing Informal STEM Learning</u>: The Advancing Informal STEM Learning program invests in research and development of innovative and field advancing out

of school STEM learning and emerging STEM learning environments. *Preliminary* proposal due August 14, 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 <u>http://grants.nih.gov/grants/guide/listserv.htm</u>. 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 <u>http://service.govdelivery.com/service/multi_subscribe.html?</u> <u>code=USNSF&custom_id=823</u>. 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 <u>https://www.fbo.gov</u>. 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 <u>emward@iupui.edu</u> or 317-278-8427. For a description of upcoming limited submission funding opportunities, as well as guidelines and application forms, go to: <u>http://research.iu.edu/limited_sub.shtml</u>. 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

