

# Research Enterprise

October 11, 2013

## INSIDE THIS ISSUE:

- [Feature Story](#)
- [Announcements](#)
- [Institute Spotlight](#)
- [Faculty Spotlight](#)
- [Student Spotlight](#)
- [Translational Research Impact](#)
- [OVCR Internal Grant Deadlines](#)
- [Other Internal Grant Deadlines](#)
- [OVCR Events and Workshops](#)
- [Other Events and Workshops](#)
- [Recent External Funding Awards](#)
- [Current External Funding Opportunities](#)
- [Identifying Funding Opportunities](#)

## FEATURE STORY

### Center for Urban Health to Lead Research to Create a New Kind of Science Museum

The Center for Urban Health (CUH) will serve as the primary research partner on a \$2.9 million grant from the National Science Foundation to create sites along Indianapolis waterways where arts and sciences will be used to educate the public about the local water system.

"We're creating the first science museum in Indianapolis, but it will not be a building. We're using the city itself as a learning environment," said Gabriel Filippelli, director of the CUH.

Filippelli collaborated on the grant proposal with Tim Carter, Ph.D., director of the Center for Urban Ecology at Butler University. The ongoing initiative Reconnecting to our Waterways (ourwaterways.org), a citywide grassroots movement dedicated to strengthening local waterways by strengthening neighborhoods, identified six local waterways for the "City as Living Laboratory" sites: White River, Fall Creek, Central Canal, Eagle Creek, Pleasant Run, and Pogue's Run.

By spring 2015, sites along these waterways will host activities such as dance, music and poetry that will interpret scientific content. The project departs from the traditional, brick-and-mortar museum concept, and instead showcases the living, learning environment already familiar to urban residents, Filippelli said.

"We're really trying to use the waterways to connect people in ways other than for commerce or transportation," Filippelli said. "We want people in urban areas to learn more about their connection to the environment."



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](#)

#### Editor:

Etta Ward

#### Layout:

James Hoffman

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.

The sites will have opportunities for community members to physically engage with work built by collaborations between artists and scientists. In addition, the project will be accessible virtually through a site-specific application for mobile devices and online sites, so temporary installations will have a life beyond the live performances.

Funding will go to the artists installing sites and also toward research and evaluation so the lessons learned from this project can inform future installations in other places.

"This innovative form of informal science learning—combining scientific content and artistic endeavors of sculpture, music, dance, and poetry—has the potential to reframe how future science museums around the country are constructed and programmed," Carter said.

Goals of the project include helping residents to understand connections between their daily activities, the science of the city's water system—where water comes and goes, where storm water flows, what lives in the water—and scientific thinking in general. Filippelli said he hopes it will provoke the public to ask questions and test their prior knowledge about their surroundings, which could result in a new appreciation for the waterways as an asset to neighborhoods.

"This will hopefully result in a new way that art is created and a novel approach to interpreting science" Filippelli said. "The aim is to creatively provide a way for people to engage with their waterway, learn about the water system adjacent to their neighborhoods, and understand that the city they experience every day is itself a living laboratory."

Indianapolis Mayor Greg Ballard also praised the project.

"This National Science Foundation grant will go a long way toward fulfilling my goal of improving Indy neighborhoods through trails, connectivity and enhanced waterways," Ballard said. "This unique combination of art, science and trails will provide great new places for families, walkers, runners and cyclists to see out beautiful city and perhaps even learn a thing or two in the process."

Other partners on the project include:

- [New Knowledge Organization](#)
- [Mary Miss Studio](#)
- [Butler University's Department of Dance](#)
- [DaVinci Pursuit](#)
- [The Children's Museum of Indianapolis](#)
- [The Goods](#)
- [The Kinetic Project](#)
- [Poets House](#)
- [Lifelong Learning Group](#)

The project was one of 13 selected from more than 400 proposals. Grant requests could not exceed \$3 million.

Filippelli currently serves as a [Jefferson Science Fellow to the U.S. Department of State](#), the first faculty member from any IU campus to be appointed to the position. The Center for Urban Health, supported through the IUPUI Signature Center Initiative and the Office of the Vice Chancellor for Research, is designed to enhance health and sustainability for urban populations, with an eye toward both environmental legacies and emerging threats. Its central themes include environment, community and health.

## ANNOUNCEMENTS

### Researchers Honored as Giants in Their Fields

It wasn't long ago that testicular cancer was a death sentence, but an Indiana University physician scientist has revolutionized treatment, and the disease now has an 80 percent cure rate, even if it has spread to other parts of the body. In the field of nephrology, or the study of the kidneys, two Indiana University School of Medicine (IUSM) faculty were recently honored internationally for their decades of research that has resulted in sweeping changes in how doctors understand and treat kidney disease. While the lifelong researchers collected new accolades as a result of their successes, each one is still at the laboratory bench, striving to improve patients' lives.

Dr. Lawrence Einhorn was named one of the 2013 "Giants of Cancer Care" by OncoLive, an oncology industry group, for his discoveries in 1974 that led to testicular cancer—the most common cancer in men between 15 and 35—becoming a curable disease. Dr. Einhorn developed a treatment regimen called combination platinum-based chemotherapy, and the results are, indeed, revolutionary: using this treatment, 95 percent of all patients with testicular cancer now survive. Even patients with metastatic testicular cancer, meaning it has spread, are likely to do well with some 80 percent of patients surviving, up from 10 percent before Dr. Einhorn's therapy.

"It's still an amazing thing to look a young man straight in the eyes with far advanced cancer—or their wives, parents, or children—and say this is a bad disease, it's a rough time going through chemo, but we're going to cure your disease, and you're going to be able to work full-time, get back with your family and live a normal lifespan," says Dr. Einhorn, an IU distinguished professor and researcher at the IU Melvin and Bren Simon Cancer Center.

Dr. Einhorn—still looking to further increase the cure rate and reduce the toxicities of the drugs used—is also interested in studying "the burden of the cured," or consequences of chemo that may appear later in life for survivors. He also spends an equal amount of time studying lung cancer.



Lawrence Einhorn, M.D.

"In one fell swoop, with the advent of platinum as a chemotherapy drug, the cure rate [for testicular cancer] literally went from 5 percent in a pre-platinum era to 80 percent for patients who have metastatic testicular cancer," says Dr. Einhorn. "I'd like to think in my lifetime we'll see similar types of advances with other types of treatment. But platinum, for a researcher, is the walk on the moon you do just once in your lifetime—that moonshot where you really make a major difference in how an individual disease is treated and managed."

In the area of kidney disease, two IUSM faculty claimed two of only a handful of international awards from the World Congress of Nephrology. The group recognized Dr. Bruce Molitoris for "lifetime achievement" in understanding acute renal failure, a state in which the kidneys suddenly stop working.

"For two of these awards to come from one country—let alone one institution—is really something," says Dr. Molitoris. "We have a very strong kidney program, and there are interactions and a teamwork-type of spirit across the campus that facilitates these developments and the progress that we were recognized for."

While Dr. Molitoris says there have been tremendous technological improvements in dialysis and transplantation, the area of kidney diagnostics and therapies "has to be a revolution now." To help work toward this goal, he has co-founded FAST BioMedical, a startup that's developing a method and device for rapid detection of acute kidney injury and chronic kidney-



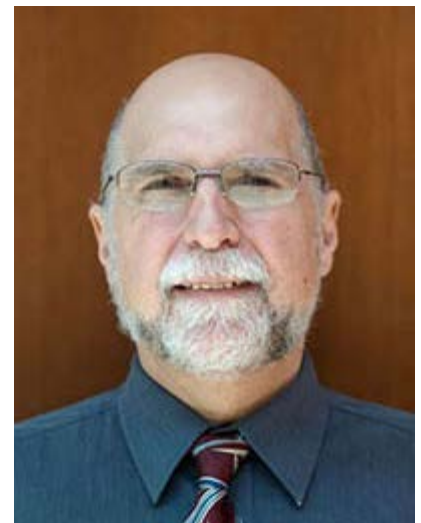
Bruce Molitoris, M.D.

related diseases.

"[This diagnostic] is really important in moving the ball forward in caring for patients. If that comes to fruition, and we're in Phase 2 studies now, it will be the crowning glory of my commitment to the field," says Dr. Molitoris, an IUSM professor of medicine and medical director for the Indiana Center for Biological Microscopy. "Results and helping patients are far more important than the awards that go along with it—those are just incidental icing on the cake."

Dr. Vincent Gattone was honored by the same organization for his 30 years of research surrounding polycystic kidney disease, the leading genetic cause of kidney failure. Dr. Gattone has discovered unique treatment pathways, including the discovery of a drug—now in the approval process with the FDA—that is the first to show slowed progression of the disease.

"This [award] was particularly nice in the sense that the treatment I had developed, which had gone through human Phase 3 clinical trials, had just gone to the FDA for new drug approval," says Dr. Gattone, an IUSM adjunct professor in nephrology. "I kind of share this moment with the idea that what I had developed may actually be used to treat people with polycystic kidney disease."



Vincent Gattone, M.D.

Despite the enormity of the awards, all three researchers contend they must not rest on their laurels, but continue working diligently in their respective fields, acknowledging a great amount of work that still needs to be done.

## Proposals Sought for Medical Device Research Funding

Association of University Technology Managers (AUTM), through the generous support of the Wallace H. Coulter Foundation, is seeking proposals from individuals that can determine-through research-the impact of academic institutions and academic medical centers on the development of medical devices used in healthcare. The selected party will conduct the research and produce a report detailing the impact academia has had on the development of medical devices on the market, complete with corresponding research strategy, methodology and support data.

One or more of the following aspects of academia's support of medical devices should be addressed: case studies of academia's efforts to develop and test medical devices; reviews of the resources invested in academia in device design/development; analyses

of medical device licensing outcomes and revenue generation; quantification of the level of impact of academic-conceived devices on the market; and case studies of successful medical device products and programs.

The study award amount will depend on budgetary needs for the winning proposal, but will fall within the range of \$40,000 - \$60,000 for the entire term of the study. For details, go to <http://www.autm.net/AM/Template.cfm>.

**The deadline for proposals is November 11, 2013.**

Question can be directed to Chrys Gwellem at AUTM headquarters (847-559-0846 x 360 or [cgwellem@autm.net](mailto:cgwellem@autm.net)).

## **Kuali Coeus (KC) IRB Release: Life after Go-Live!!**

*What went well in Phase I?*

1. Researchers were able to access the system with no or minimal difficulties.
2. Researchers can successfully submit new studies and upload study documents to KC IRB.
3. Information regarding CITI and COI completion was successfully integrated into KC IRB such that researchers could see immediately if these requirements had been completed by IU affiliated researchers and research staff.
4. Researchers reported appreciating being able to update information, such as study contacts, on their own without having to notify the HSO to do so on their behalf.

For more information regarding KC IRB and this newsletter, please visit:

[http://researchadmin.iu.edu/News/Newsletters/Systems/KCIRB/06/orc\\_newsletter06.html](http://researchadmin.iu.edu/News/Newsletters/Systems/KCIRB/06/orc_newsletter06.html)

## **INSTITUTE SPOTLIGHT**

### **How Parents Teach Children about Charitable Giving Matters, New Study Finds**

Parents who talk to their children about charitable giving significantly increase the likelihood that those children will give to charity, according to [\*Women Give 2013\*](#), a new study from the Women's Philanthropy Institute at the Indiana University Lilly Family School of Philanthropy.

That finding holds true regardless of the child's sex, age, race, and family income. Children whose parents talk to them about giving are 20 percent more likely to give to charity than children whose parents do not discuss giving with them.

"This research provides a clear, effective path for parents who want to encourage their children to be generous and caring," said Debra J. Mesch, Ph.D., Director of the Women's Philanthropy Institute. "The way parents teach their children about giving matters. Talking to children about charity is effective across all types of U.S. households, pointing the way to raising future philanthropists."

The [IU Lilly Family School of Philanthropy](#) study is among the first to analyze and compare what parents can do to encourage their children's charitable behavior. It



Debra Mesch, Ph. D.



examines two approaches through which parents teach children about charitable giving: (1) talking to children about charitable giving and (2) role-modeling charitable giving. For this study, role-modeling is defined as parents giving to charity. The study also investigates whether girls and boys participate differently in giving and volunteering, expanding the Women's Philanthropy Institute's exploration of how gender affects charitable giving. It follows the same 903 children over two time periods, 2002-2003 and 2007-2008.

Role-modeling alone does not appear to be as effective as talking to children about giving, the researchers found. Parents who want to raise charitable children should talk intentionally with them about their own philanthropic values and practices throughout childhood and adolescence in addition to role-modeling, they say.

Children are philanthropic, according to the study. Nearly nine out of 10 children, ages eight to 19, give to charity. The study also found that girls and boys are equally likely to make monetary gifts to charity; however, girls are more likely than boys to volunteer, a pattern that continues in adulthood.

"Understanding how children learn about charity has important implications for the future of giving in America. Studies like this benefit parents, teachers, nonprofit leaders and policy makers as they seek to engage the next generation in philanthropy," said Una Osili, Ph.D., Director of Research at the IU Lilly Family School of Philanthropy, located on the Indiana University-Purdue University Indianapolis (IUPUI) campus.

The United Nations Foundation partnered with the Women's Philanthropy Institute on *Women Give 2013*. Kathy Calvin, President and CEO of the UN Foundation said, "This study confirms what we at the UN Foundation view as one of the most powerful trends of our time: Young people are a force for positive change in the world. From grade school students raising money to fight malaria to teenage girls advocating against child marriage, today's young people aren't waiting to make a difference – they're doing it now. As more parents talk to their children about the importance of giving, we will see new philanthropists emerge to help create a brighter future for all of us."

*Women Give 2013* is the fourth in a series of research reports conducted at the [Women's Philanthropy Institute](#) that focuses on gender differences in giving. Prior research has demonstrated that men and women exhibit different motivations for giving and different patterns of giving. Little is known about how girls and boys learn to become charitable adults. This new study uses data from the Panel Study of Income Dynamics and its Child Development Supplement, the nation's largest nationally representative sample that tracks giving patterns among the same households over time. It builds on academic research conducted by Wilhelm, Estell, and Perdue (2012) which explores issues around raising charitable children.

The complete *Women Give 2013* report is available at:  
[www.philanthropy.iupui.edu/womengive](http://www.philanthropy.iupui.edu/womengive)

## FACULTY SPOTLIGHT

### A Virtual Journey to Real Peace

This year marks the second year that Gaza University has partnered with IUPUI in peace education in what Dr. Ian S. McIntosh, professor of anthropology in the School of Liberal Arts, calls the Gaza Visioning Project. In 2012, 16 IUPUI students and 16 students from Gaza University embarked on a "virtual study abroad" experience where the overarching theme was exploring the pathways to peace and prosperity in the Middle



Ian S. McIntosh, Ph. D.

East. In 2013, in concert with Dr. Jamil Alfaleet, professor of political science at Gaza University, McIntosh added a Massive Open Online Class

Component (MOOC), making it free and open to participants anywhere in the world. The 2013 class included students from China, France, Kenya, Uruguay, Russia, Nigeria, as well as more than 30 students from the Gaza Strip.

The experience provided an opportunity for IUPUI students in 2012 to eat at Middle Eastern restaurants, visit a mosque, and interact with Palestinians from different walks of life both in the US and virtually, through the internet, with their host families in Palestine. They also heard presentations from a rabbi, a member of the Jewish social-justice organization J Street, a former member of the Israeli Defense Forces (IDF), and also by Eva Mozes Kor, a "Mengele twin" who founded the CANDLES Holocaust Museum and Education Center in Terre Haute.

The very best students from Gaza University are rewarded with an opportunity to participate in the Center for Research and Learning's Undergraduate Research Opportunities Program (UROP) Summer Fellows initiative. Last year's undergraduate researchers, Siriya Qadada and Walaa Abu Hassan, spent two months at IUPUI researching social media and social change in the Arab world, and women's empowerment in the Gaza Strip. In 2013, Mohammed H. Al-Aila conducted research on the implementation of a peace-education curriculum in the Gaza Strip. McIntosh characterized his mentee as, "a driven, young man; a ferocious advocate for improving the lot of Palestinians. He wants to see a free, peaceful and prosperous Gaza Strip by the year 2050." Mohammed Al-Aila was very active in the 2013 visioning class. One of eight Gaza applicants for IUPUI UROP Summer Fellows, Al-Aila's goal was to develop a peace curriculum to be implemented in all Gaza schools.

"Groups who have been in conflict for a long time cannot begin to reconcile their differences until they have mutually acknowledged the truth," said Dr. McIntosh. Experiences in Australia, seeing Aboriginal people denied their rights to land and sea sparked his interest in social justice and reconciliation, his doctoral focus. He teaches a class on truth-and-reconciliation in global perspective at IUPUI. By *reconciliation* he means long-term conflict resolution, closure and healing.

Dr. McIntosh began his career in the early 1980's, a time when there was no agenda for social justice or reconciliation in Australia, serving as a welfare officer to dispossessed indigenous Australians living in abject poverty amid some of the greatest wealth in the country. Then, from 1997 to 2002, he was the managing director of one of the world's premier agencies promoting the rights, voices and visions of indigenous peoples, Cultural Survival Inc. in Cambridge MA. At IUPUI since 2004, he now serves as Director of International Partnerships in the Office of International Affairs.

Dr. McIntosh became interested in Gaza University once a representative visited IUPUI about four years ago. He and a couple of colleagues had been perfecting the virtual study-abroad methodology to simulate as best possible actual study-abroad opportunities. With Gaza he saw an opportunity for a very interesting, challenging and thought-provoking student experience.

During the course of mentoring undergraduate researchers, Dr. McIntosh seeks to instill in his students a vocabulary of reconciliation. "They should have on the tip of their tongues fifty to one hundred things people can do to build mutually advantageous, peaceful and prosperous futures." Our challenge is to see beyond the current "zero-sum-game" mentality so evident in many conflicted regions of the world where my

victory equals your total annihilation. This is the starting point for all peace-and-reconciliation studies.”

Rather than having to seek out students to assist with research projects, Dr. McIntosh is distinguished by attracting them like bees to nectar. His mentees either are past students of his reconciliation class returning for more advanced studies, or they approach him because of his work in the field of social justice.

Dr. McIntosh envisions working long-term with Jamil Alfaleet on major Middle East-focused projects in the classroom and beyond. Dr. Alfaleet is fulfilling a fellowship in the 2013 fall semester at Columbia University where he will have a chance to interact closely with Israeli colleagues on the topic of visioning. McIntosh expects that major initiatives will emerge from this collaboration, and they will have the potential for large-scale involvement by IUPUI students and faculty.

## STUDENT SPOTLIGHT

### CRL Ambassadors Engage Undergraduates in Research Opportunities

The brainchild of Dr. Richard E Ward and colleagues, in AY 2012-2013, the IUPUI Center for Research and Learning (CRL) launched the CRL Ambassadors Program. CRL Ambassadors assist with the dissemination of information about CRL programs and the recruitment of students interested in undergraduate research and the learning experience that is derived from it. The charter cohort, sponsored by Wayne J. Hilson, Jr., comprised nine undergraduate researchers—including Charnelle Free, Sara Ibrahim, Abdul Khan, Branden Lanier, Robinah Maasa, Zahir Sheikh, and Alexis Taylor—and CRL alumna Alyssa Gutiérrez. These accomplished students, in consultation with faculty and staff advisors, defined and inaugurated the program successfully. This fall Mark Canner and Tsungai Chingombe succeed alumni Jim Plew and Jenny Romine, and Rick Ward facilitates the program.



Wayne Hilson (top) and AY 2012-2013 CRL Ambassadors (l-r) from rear: Jim Plew; (middle row) Alexis Taylor, Alyssa Gutiérrez, Robinah Maasa, Abdul Khan; (front row) Charnelle Free, Jennifer Romine, Zahir Sheikh.

2012 recipient of the IUPUI Chancellor's Award for Outstanding Undergraduate Research, Alyssa joined the program, wanting to give back to CRL. "You really opened the door for me for a lot of...awards! ...It was an amazing four years!" As an ambassador, she presents to students on professionalism and available programs and resources. Currently a master's student in occupational therapy, Alyssa observes, "[CRL] gave me a really good foundation to start this program." Many of her classmates have no prior research experience and seek her guidance. Alyssa recommends that students finishing a CRL program who have the time join the ambassadors to help peers grasp how valuable undergraduate research is.

Alexis Taylor, a senior Diversity Scholars Research Program (DSRP) and Ronald E. McNair Postbaccalaureate Achievement Program scholar, is a double Army brat who aspires to a career helping veterans with PTSD. To help pay for college, she embarked on research, spanning from multicultural-teaching practices to criminal justice. Of ambassadorship she notes, "Definitely, the Themed Learning Communities are my favorite thing to do...you can emphasize research. I tell them, 'When you look up Justin Timberlake or Miley Cyrus on Google, *that's* research, pursuit of an interest!' Once you tell someone that, they can see, 'Hey! I can DO this!' You can find whatever you want



and make it your own." Alexis's enthusiasm is contagious. "The biggest benefit from the CRL is that I will be getting out of school debt-free. I am a *rarity!* I thank God for the CRL...I can think about...options in life that many of my peers won't have."

Zahir Sheikh, a junior preparing for an M.D.-Ph.D., assists with an O-Team seminar and says of his ambassador experiences, "One of my favorite was when Wayne and I spoke at O-Team's *own* orientation!" A DSRP scholar now in the Multidisciplinary Undergraduate Research Institute (MURI), Zahir reflects, "I've had a great time with [CRL] and know I've had experiences I wouldn't have gotten anywhere else...I think I've gotten quite a few students involved. I hope I've made a difference in their lives...CRL is one of the resources that make this campus unique."

Senior Mark Canner, a MURI and Undergraduate Research Opportunities Program (UROP) scholar in nanotechnology research, comments, "Over the past two and a half years, I had a wonderful experience with CRL...I was an Honors College mentor and enjoyed telling my mentee about all the CRL programs, and I thought the best way to do more of that would be to join the CRL ambassadors."

## TRANSLATIONAL RESEARCH IMPACT

### **IU Surgeon and Purdue Engineer Collaborate on 'Robotic Scrub Nurse'**

It's a scene from a science fictional novel: a robotic assistant helping in the operating room. However, this is exactly what researchers at the IU School of Medicine and Purdue University are working to create with support from the Indiana Clinical and Translational Sciences Institute.

Dr. George Akingba, assistant professor of surgery and medicine at the IU School of Medicine, and Dr. Juan Wachs, Regenstrief Center for Healthcare Engineering Scholar and assistant professor of industrial engineering at Purdue, are working together to make a robotic assistant for the operating room a reality. The project will advance research that ultimately tackles one of the greatest challenges facing the U.S. health care system – the shortage of qualified nurses, surgical technicians and other operating room assistants.



George Akingba, M.D., Ph.D.

"Many hospitals today are understaffed, and the nurses you do have are overworked," Dr. Akingba said. "This can result in negative outcomes, such as higher risks of morbidity and mortality among patients, and lower quality of care. We want to make up for the lack of nurses by programming and implementing this robot to perform some of the repetitive tasks that usually are assigned to the surgical scrub technician."

Dr. Akingba is quick to add that the robot does not aim to replace scrub nurses or other surgical assistants, only those human activities that do not require critical thinking. The technology will actually free up the scrub tech to act as a surgeon's assistant and perform more critical functions by remaining focused on the surgery taking place, he said.

"Here you just have the robot give and take instruments from a surgeon, so now you have more in-depth thinking being done by the scrub nurse, who can perform more complicated tasks," Dr. Akingba said. "This robotic assistant will help operating rooms become more efficient and effective, and, most importantly, consistent, by making better use of resources."

Using a combination of hand signals and voice recognition, Dr. Wachs is working to perfect the technology which allows a surgeon to request specific tools, without removing their attention from the patient. The technology to control the machine is under development by Dr. Wachs' lab at Purdue; the actual robotic arm was developed by Barrett Technologies, Boston.

The idea to implement a robot in the operating room began three years ago, but a surgeon who could pilot the technology was needed. Soon after being introduced by a former colleague, Drs. Wachs and Akingba forged a partnership.

"Dr. Akingba and I share many similar interests," Dr. Wachs added. "Specifically, using technology to improve healthcare systems and reduce the number of complications in the operating room."

Dr. Akingba will be the first surgeon to validate the robot in a clinical environment using simulated patient and animal models. A surgeon with a strong background in biomedical engineering and medical device implementation, he also recently patented a modular arterio-venous shunt device to improve dialysis treatment through the IU Research and Technology Corporation.



Juan Wachs, Ph.D., with the robotic arm.

The initial work with the robot will focus on reducing mistakes in the operating room, including misplacing surgical tools and retaining surgical instruments in the body. In addition to handing tools to the surgeon, the robot will keep track of the tools used and the location of the tool throughout surgery.

As the primary investigator on the project, Dr. Wachs continues to work on increasing the number signals recognized by the robot. Dr. Akingba will then engage in a series of simulated procedures to collect preliminary data on the robot's performance in a clinical environment.

The goal will be to collect enough information to garner additional external funding, bringing the work another step closer to eventual implementation in a real-world operating room scenario.

Drs. Akingba and Wach's project is supported in part by a \$75,000 Indiana CTSI Collaboration in Translational Research (CTR) award, which requires collaboration among two or more investigators. Collaborators may come from the IU School of Medicine, IUPUI, IU Bloomington, Purdue or the University of Notre Dame.

"Without the two of us coming together with the help of the CTR grant, we would not be able to get this done," Dr. Akingba said. "It's a win-win situation because the CTR grant gives individuals funding to collect preliminary data to move their ideas forward to get external funding. Without the CTR grant researchers like myself, would find it extremely difficult to carry out these types of projects."

In addition to some equipment costs and their travel between universities, the CTR grant provides support for a graduate student on the project. The equipment support is critical, as the robot being used in this project costs three to four times more than a typical "industrial" robot, including a highly advanced, articulated "wrist" for the robot.

"The extra cost ensures the robot is extremely dexterous, smooth and highly appropriate for the operating room," Dr. Wachs added.

In addition to perfecting their "robotic scrub nurse," Dr. Wachs and Dr. Akingba note their frequent communication and travel between Purdue and IU has spawned several additional projects related to surgical robotics.

Additional support includes a grant from the U.S. Agency for Healthcare Research and Quality.

## OVCR INTERNAL GRANT DEADLINES

**Important Note:** *Guidelines for most of the Office of the Vice Chancellor for Research internal grant programs have changed. The new guidelines must be used for all applications starting this fall including resubmissions.*

**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, 2013**. For grant guidelines and application forms, go to <http://research.iupui.edu/funding/>.

**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, 2013**. For grant guidelines and application forms, go to <http://research.iupui.edu/funding/>.

## OTHER INTERNAL GRANT DEADLINES

### Indiana Biobank Launches Pilot Grant Program

The [Indiana Biobank](#) has launched its first pilot funding application specifically designed to promote research studies using the samples in IB.

Applications to this program are expected to have a maximum requested amount of \$10,000. The submission deadline is **5 p.m. Monday, November 11, 2013**.

The Indiana Biobank was established in 2010 as a statewide resource of biosamples that are linked to electronic medical records. Initial funding to establish infrastructure was provided by a grant from the Lilly Endowment with additional support provided by the Indiana Clinical and Translational Sciences Institute, a partnership among Indiana University, Purdue University and the University of Notre Dame through a Clinical and Translational Sciences Award from the National Center for Advancing Translational Research at the National Institutes of Health.

The Indiana Biobank aims to assist in the consenting of subjects and the collection of blood and saliva samples. The mission of the Indiana Biobank is to create a collection of well characterized biosamples that can serve as a research resource to enhance translational research. To date, samples and data from more than 11,000 individuals have been collected through 25 different hospitals or clinics.

Samples are either blood or saliva that can be used for DNA extraction. Samples are available from both pediatric and adult populations. All samples are linked through the medical record number (MRN) to the Indiana Network for Patient Care (INPC). INPC was established in 1995 as the Regional Health Information Exchange. Typically, data from multiple clinical encounters are available.

All subjects were consented to link their biological samples to the electronic medical



record. In addition, subjects were consented to allow for broad, unspecified future research use of their samples. Thus, broad based biomedical hypotheses can be addressed using these samples. Summary information is available for the samples for particular disorders in the application materials. However, it is expected as part of this proposal that researchers may need additional information about the number of individuals who meet criteria for particular disease and/or have been prescribed specific medications, or experience an adverse event. If the project is selected for potential funding, the investigators will work with the Indiana Biobank and the Indiana CTSI Data Core to identify subjects meeting more specific diagnostic criteria.

All costs to obtain DNA from Indiana Biobank as well as to obtain a clinical dataset for the subject will be subsidized. In addition, the investigator can request funds to support the proposed pilot studies.

Projects typically are one year in duration. Funding for up to three projects is planned.

To learn about this grant program or access the application form, visit [www.indianactsi.org/grants](http://www.indianactsi.org/grants) and log in using your institutional username and password.

Application instructions are under "Pilot Funding for Research Use of Indiana Biobank (IB) Samples - 2013.11 (PIB)."

For questions about the scope of the proposals, contact Dr. Tatiana Foroud, at [tforoud@iu.edu](mailto:tforoud@iu.edu) or Brooke Patz at [bpatz@iu.edu](mailto:bpatz@iu.edu).

For questions about financial issues related to budgeting and grant submissions, contact Lisa Dinsmore at [ldinsmo@iu.edu](mailto:ldinsmo@iu.edu)

## OVCR EVENTS AND WORKSHOPS

### Developing Multi-Investigator, Multi-Institutional Proposals

When: Thursday, October 17, 2013 | 11:30 AM-1:00 PM  
Where: University Library, Room 1116

The current funding environment favors large, complex, multi-institutional, multi-investigator projects. However, organizing a successful submission takes a great deal of planning and teamwork. What works best in which situation? Should you use a "Red Team Review"? What role does the RFP serve to organize the writing efforts? Professional proposal writers and editors will discuss these and a number of related issues at this session. You are welcome to bring your lunch. (limited to 30 attendees)

Register: <https://crm.iu.edu/CRMEvents/MultiInvestigatorProposals/>

### Nine Golden Rules to Succeed in Research and Scholarship

When: Friday, October 25, 2013 | 11:30am - 1:00pm  
Where: University Library, Room 1126

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: <https://crm.iu.edu/CRMEvents/NineGoldenRules/>

## IUPUI Innovation to Enterprise Showcase & Forum

When: Tuesday, November 19, 2013 | 4:00pm - 6:00pm

Where: Campus Center, Room 450 A and B

The Office of the Vice Chancellor for Research and the Indiana University Research & Technology Corporation (IURTC) cosponsor the IUPUI Innovation to Enterprise Showcase & Forum. This event highlights the research and creative successes of our faculty, research scientists, and students as they relate to technology transfer and commercialization, noticeably supporting the economic development of Indiana and the nation. Explore the many opportunities for partnering with IUPUI or learn about the exciting entrepreneurial ventures being launched.

Register: <https://crm.iu.edu/CRMEvents/InnovationShowcase/>

## IUPUI Arts and Humanities Internal (IAHI) Grants Information Session

When: Tuesday, December 3, 2013 | 1:00pm - 3:00pm

Where: University Library, Room 1126

This session will provide participants with an overview of the IAHI internal funding opportunity, how to apply, and more importantly how to develop a competitive proposal. Members of the IAHI grant advisory group will be present to answer questions, as well as IUPUI faculty who have received IAHI funding and who have reviewed arts and humanities proposals.

Register: <https://crm.iu.edu/CRMEvents/IAHIGrantSession/>

## OTHER EVENTS AND WORKSHOPS

### Women in Medicine & Science (WIMS) Conference: *Making Your Life Work*

Monday, November 11, 2013

2:30 PM - 5:00 PM

Women and men today need a toolbox of techniques to cope with the demands of academic life. As one of only five medical schools in the country **recognized by the Alfred P. Sloan Foundation as an Innovator in Faculty Career Flexibility**, Indiana University School of Medicine recognizes the need to support diverse faculty, staff, and learners of all genders, at all career stages.



Ellen Ernst Kossek, Ph.D.

This highly interactive workshop is designed to share a framework for helping individuals better understand approaches to dividing time and attention between the many demands of work and personal life.

#### About the Presenter:

[Ellen Ernst Kossek, PhD](#) is the Basil S. Turner Professor of Management at Purdue University's Krannert School of Management and Research Director of the [Susan Bulkeley Butler Center for Leadership Excellence](#).

#### About the Women in Medicine & Science Conference:

Held each fall, the IUSM Women in Medicine and Science (WIMS) conference provides a



collegial and professional environment for faculty, residents and fellows, students, and staff to discuss career advancement, particularly issues of interest to women.

## 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 - July 2013

PI	Agency	Project Title	School	Department	Total
Mirmira, Raghu G	NATIONAL INSTITUTE OF GENERAL MEDICAL SCIENCES	Indiana Medical Scientist/Engineer Training Program	MEDICINE	PED-CHAIRMAN'S OFFICE GENERAL	\$1,618,948
Mayo, Lindsey D	NATIONAL CANCER INSTITUTE	Regulation of Mdm2 activity by kinase signaling pathways	MEDICINE	PED-HEME/ONC BASIC RESEARCH	\$1,592,714
McBride, William J.	NATIONAL INSTITUTE ON ALCOHOL ABUSE AND ALCOHOLISM	Neuronal underpinnings of repeated deprivations on cue-induced alcohol-seeking	MEDICINE	PSYCHIATRY	\$1,560,000
Halstead, Judith A	HEALTH RESOURCES AND SERVICES ADMINISTRATION	Indiana University Interprofessional Collaborative Practice Model	NURSING	NURSING	\$1,241,069
Loehrer, Patrick J.	WALTHER CANCER FOUNDATION, INC.	Personalized Cancer Genomics	MEDICINE	CANCER CENTER	\$1,200,000
Froehlich, Janice C.	NATIONAL INSTITUTE ON ALCOHOL ABUSE AND ALCOHOLISM	When one plus one equals more than two.	MEDICINE	ENDOCRINOLOGY	\$1,092,000
Wilkes, David S.	THE ROBERT WOOD JOHNSON FOUNDATION	Harold Amos Medical Faculty Development Program (AMFDP)	MEDICINE	DEAN'S OFFICE-MEDICINE	\$848,811
Hollenhorst, Peter C	AMERICAN CANCER SOCIETY, INCORPORATED	Specificity in the ETS family of oncogenic transcription factors	MEDICINE	DEAN'S OFFICE-MEDICINE	\$750,000
Chen, Rongrong	NATIONAL SCIENCE FOUNDATION	Electricity from Bio-Ethanol Powered Fuel Cells	ENGINEERING AND TECHNOLOGY	ELECTRICAL TECHNOLOGY	\$599,985
Tsechenakis, Gavriil	NATIONAL SCIENCE FOUNDATION	CAREER: Modeling the structure and dynamics of neuronal circuits in the Drosophila larvae using image analytics	SCIENCE	COMPUTER SCIENCE	\$572,526
Tersey, Sarah A	AMERICAN DIABETES ASSOCIATION	The mechanism of islet 12-lipoxygenase in obesity and insulin resistance	MEDICINE	PED-ENDOCRINOLOGY BASIC RES	\$400,200
Liu, Yan	U.S. ARMY MEDICAL RESEARCH AND MATERIEL COMMAND	Modulating Leukemia-initiating Cell Quiescence to Improve Leukemia Treatment	MEDICINE	PED-NEONATAL BASIC RESEARCH	\$374,400
Ingram, David A	INDIANA STATE DEPARTMENT OF HEALTH	Indiana National Development Center for Circles out of Poverty	MEDICINE	PED-NEONATAL MEDICINE	\$249,478
Zunich, Janice	INDIANA STATE DEPARTMENT OF HEALTH	I.U. Northwest Genetics	MEDICINE	IUSM-NORTHWEST	\$220,846
Brown, Mary Beth	AMERICAN HEART ASSOC-GREATER MIDWEST AFFILIATE	Optimizing Aerobic Exercise Training as Therapy in a Rat Model of Pulmonary Arterial Hypertension	HEALTH/REHABILITATION SCIENCES	HEALTH/REHABILITATION SCIENCES	\$214,500
Lei, Zhigang	AMERICAN HEART ASSOC-GREATER MIDWEST AFFILIATE	Regulation of potassium channels by calpain in poststroke seizures and epilepsy	MEDICINE	ANATOMY & CELL BIOLOGY	\$214,500
Econs, Michael J.	VIDARA THERAPEUTICS	Test of therapeutic strategies in a mouse model of osteopetrosis	MEDICINE	ENDOCRINOLOGY	\$210,538
Payne, R.	FRIEDREICH'S	Mitochondrial Protein Acetylation and Heart Failure		PED-CARDIAC DEV	

Mark	ATAXIA RESEARCH ALLIANCE	in Friedreich's Ataxia	MEDICINE	BIOLOGY WELLS	\$200,000
Beam, Daren Moss	EMERGENCY MEDICINE FOUNDATION	Direct Fibrinolysis to Treat Acute Pulmonary Embolism	MEDICINE	EMERGENCY MEDICINE	\$150,000
Arrizabalaga, Gustavo A	AMERICAN HEART ASSOC-GREATER MIDWEST AFFILIATE	Dissecting the role of a unique kinase in the propagation and virulence of the cardiac pathogen <i>Toxoplasma gondii</i>	MEDICINE	PHARMACOLOGY & TOXICOLOGY	\$143,000
Fallon, Robert J	CHILDREN'S HOSPITAL OF PHILADELPHIA	CCOP Per Case Reimbursement for Research Base Grant (U10CA095861)	MEDICINE	PED-HEMATOLOGY/ONCOLOGY	\$132,000
Mosher, Catherine Esther	AMERICAN CANCER SOCIETY, INCORPORATED	Telephone Symptom Management for Advanced Lung Cancer Patients & Caregivers	SCIENCE	PSYCHOLOGY	\$117,000
Lapish, Christopher C.	ALCOHOLIC BEVERAGE MEDICAL RESEARCH FOUNDATION	Targeting the prefrontal cortical dopamine system in excessive drinking	SCIENCE	PSYCHOLOGY	\$100,000

### Grants and Awards - August 2013

PI	Agency	Project Title	School	Department	Total
Paczynski, Sophie	NATIONAL INSTITUTE OF CHILD HEALTH, HUMAN DEVL.	Bridging Pediatric and Adult Biomarkers of Graft versus Host Disease	MEDICINE	PED-HEMATOLOGY/ONCOLOGY	\$2,469,606
Yin, Xiao-Ming	NATIONAL INSTITUTE ON ALCOHOL ABUSE AND ALCOHOLISM	The dynamics and mechanisms of autophagy in ethanol-induced liver pathogenesis	MEDICINE	PATHOLOGY AND LABORATORY MED	\$2,107,545
Gunst, Susan J	NATIONAL HEART, LUNG AND BLOOD INSTITUTE	Targeting actin dynamics to inhibit airway inflammation hyperresponsiveness	MEDICINE	CELLULAR & INTEGRATIVE PHYSIO	\$2,081,647
Androphy, Elliot J	NATIONAL INSTITUTE NEUROLOGICAL DISORDERS & STROKE	The COPA vesicle protein and pathogenesis of spinal muscular atrophy	MEDICINE	DERMATOLOGY	\$1,705,079
Chang, Ching-Pin	NATIONAL HEART, LUNG AND BLOOD INSTITUTE	Chromatin mechanism of molecular motor gene regulation	MEDICINE	CARDIOLOGY	\$1,541,280
Kapur, Reuben	NATIONAL HEART, LUNG AND BLOOD INSTITUTE	Novel Mechanisms of C-Kit Regulation in Mast Cells	MEDICINE	PED-NEONATAL BASIC RESEARCH	\$1,541,280
Torke, Alexia Mary	NATIONAL INSTITUTE ON AGING	Improving Surrogate/Clinician Communication: Validation of the Family Inpatient Communication Survey	MEDICINE	GENERAL INTERNAL MEDICINE	\$1,377,633
Bidwell, Joseph P.	U.S. DEPARTMENT OF DEFENSE	MAXIMIZING PTH ANABOLIC OSTEOPOROSIS THERAPY	MEDICINE	ANATOMY & CELL BIOLOGY	\$1,152,303
Xie, Jian	ARGONNE NATIONAL LABORATORY	Integration of Polymer Electrolyte Fuel Cell Cathodes	ENGINEERING AND TECHNOLOGY	MECHANICAL ENGINEERING	\$904,084
Foroud, Tatiana M	MICHAEL J FOX FOUNDATION FOR PARKINSONS RESEARCH	The Parkinson's Progression Markers Initiative	MEDICINE	MEDICAL & MOLECULAR GENETICS	\$850,000
Clapp, D Wade	CHILDREN'S TUMOR FOUNDATION	NFTC	MEDICINE	PED-NEONATAL BASIC RESEARCH	\$347,218
Osili, Una O	BANK OF AMERICA	2014 High Net Worth Study on Philanthropy	PHILANTHROPY	PHILANTHROPY	\$328,356
Bies, Angela	THE HENRY LUCE FOUNDATION INC	Initiative on Philanthropy in China	PHILANTHROPY	PHILANTHROPY	\$300,000
Lysaker, Paul H	RESEARCH FOUNDATION CITY UNIVERSITY OF NEW YORK	Randomized Controlled Trial of Treatment for Internalized Stigma in Schizophrenia	MEDICINE	PSYCHIATRY	\$179,632
Markand, Omkar N	INDIANA FAMILY AND SOCIAL SERVICES ADMINISTRATION	Epilepsy Clinic and Services	MEDICINE	NEUROLOGY	\$176,097
Imler, Timothy D	AMERICAN SOCIETY FOR GASTROINTESTINAL ENDOSCOPY	Tracking Real-time Assessment of Quality Monitoring in Endoscopy (TRAQ-ME)	MEDICINE	GASTROENTEROLOGY	\$140,000
Groh, William J.	UNIVERSITY OF ROCHESTER	Late Sodium Current Blockade in High-Risk ICD Patients - CCC- Lead Application (RAID)	MEDICINE	CARDIOLOGY	\$130,650
Guise, Theresa Ann	U.S. DEPARTMENT OF DEFENSE	Muscle dysfunction in androgen deprivation: Role of ryanodine receptor.	MEDICINE	ENDOCRINOLOGY	\$121,131
Rowan, Courtney	INDIANA UNIVERSITY HEALTH	Improving the Management of the Pediatric Critical Airway	MEDICINE	PED-PULMONARY INTENSIVE CARE	\$100,000

Marie

**Grants and Awards - September 2013**

PI	Agency	Project Title	School	Department	Total
Carroll, Aaron E	AGENCY FOR HEALTHCARE RESEARCH AND QUALITY	Improving Patient Centered Outcomes Research in Pediatric Subspecialties	MEDICINE	PED-HEALTH SERVICES RESEARCH	\$4,817,245
Kline, Jeffrey Allen	NATIONAL HEART, LUNG AND BLOOD INSTITUTE	Phase II Randomized Trial of Inhaled Nitric Oxide to Treat Acute Pulmonary Embolism	MEDICINE	EMERGENCY MEDICINE	\$3,566,508
Twigg, Homer L	NATIONAL HEART, LUNG AND BLOOD INSTITUTE	Genomic Analysis of Immunity and Chronic Lung Inflammation in HIV Infection	MEDICINE	PULMONARY	\$3,174,497
Kassab, Ghassan S	NATIONAL HEART, LUNG AND BLOOD INSTITUTE	Micro-Mechanical Role of Hypertension in Intimal Hyperplasia	ENGINEERING AND TECHNOLOGY	BIOMEDICAL ENGINEERING	\$2,187,455
Chalasan, Naga P.	NATIONAL INSTITUTE OF DIABETES, DIGESTIVE & KIDNEY	Collaborative Clinical Research on Hepatotoxicity	MEDICINE	GASTROENTEROLOGY	\$1,912,665
Monahan, Patrick O	NATIONAL INSTITUTE ON AGING	Develop and Validate Tool to Monitor Patient Centered Outcomes Through Caregivers	MEDICINE	DEPT OF BIOSTATISTICS	\$1,540,787
Swigonski, Nancy L.	RILEY CHILDREN'S FOUNDATION	Neurodevelopmental and Behavioral Center - Early Diagnosis Clinic Apprenticeship Model	PUBLIC HEALTH	PUBLIC HEALTH	\$1,267,312
Carlson, Joan Marie	SUBSTANCE ABUSE AND MENTAL HEALTH SERVICES ADMIN	Advancing Multidisciplinary Education for Screening, Brief Intervention and Referral to Treatment (SBIRT)	SOCIAL WORK	SOCIAL WORK	\$937,935
Stevens, Andrew	HEALTH RESOURCES AND SERVICES ADMINISTRATION	Indiana University- SIREN	MEDICINE	EMERGENCY MEDICINE	\$899,700
Wright, Eric R.	INDIANA DIVISION OF MENTAL HEALTH AND ADDICTION	State Epidemiological Outcomes Workgroup (SEOW)	PUBLIC HEALTH	CENTER FOR HEALTH POLICY	\$782,939
Richards, Nigel G	U.S. DEPARTMENT OF EDUCATION	Graduate Assistance in Areas of National Need Fellowship Program	SCIENCE	CHEMISTRY	\$670,860
Thurmond, Debbie C	JUVENILE DIABETES RESEARCH FOUNDATION INTERNATIONAL	Syntaxin 4 as a biomarker and as restorative of functional cell mass	MEDICINE	PED-ENDOCRINOLOGY BASIC RES	\$494,738
Bodenhamer, David J	LILLY ENDOWMENT, INCORPORATED	Spirit & Place Civic Festival 2014 - 2016	LIBERAL ARTS	POLIS CENTER	\$399,999
Chang, Ching-Pin	AMERICAN HEART ASSOCIATION INCORPORATED	Heart development and disease	MEDICINE	CARDIOLOGY	\$280,000
Kelley, Mark R.	HYUNDAI MOTOR AMERICA	Studies to Support Clinical Translation of a Novel Ref-1-Targeted Therapy for Relapsed Childhood Acute Lymphoblastic Leukemia	MEDICINE	PED-HEME/ONC BASIC RESEARCH	\$250,000
Swigonski, Nancy L.	INDIANA STATE DEPARTMENT OF HEALTH	Project Launch Grant - Indiana State Department of Health	PUBLIC HEALTH	PUBLIC HEALTH	\$170,661
O'Neil, Kathleen M.	CHILDREN'S HOSPITAL MEDICAL CENTER OF CINCINNATI	Gene Expression in Pediatric Arthritis	MEDICINE	PED-RHEUMATOLOGY	\$161,500
Blum, Janice S.	JUVENILE DIABETES RESEARCH FOUNDATION INTERNATIONAL	Suppressing Beta Cell Immune Activation by Disrupting Heat Shock Protein 90	MEDICINE	MICROBIOLOGY & IMMUNOLOGY	\$150,000
McAllister, Jeanne Walker	LUCILE PACKARD FOUNDATION FOR CHILDRENS HEALTH	Consensus Standards for Care Plans and Care Planning for CSHCN.	MEDICINE	PED-HEALTH SERVICES RESEARCH	\$120,753
Wilkes, David S.	ALEXION PHARMACEUTICALS INC.	Complement inhibition in TBI-induced lung injury in lung transplantation	MEDICINE	PULMONARY	\$118,052
Mastouri, Ronald A	NEW YORK UNIVERSITY	International Study of Comparative Health Effectiveness with Medical and Invasive Approaches	MEDICINE	CARDIOLOGY	\$117,406

**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.

## DEPARTMENT OF DEFENSE

**Minerva Research Initiative:** The Minerva Research Initiative is a university-based social science research program initiated by the Secretary of Defense. The program focuses on areas of strategic importance to U.S. national security policy. It seeks to increase the Department's intellectual capital in the social sciences and improve its ability to address future challenges and build bridges between the Department and the social science community. Minerva brings together universities, research institutions, and individual scholars and supports multidisciplinary and cross-institutional projects addressing specific topic areas determined by the DOD. The Minerva Research Initiative aims to promote research in specific areas of social science and to promote a candid and constructive relationship between DOD and the social science academic community. The Minerva Research Initiative competition is for research related to the 4 topics and 12 subtopics listed below. Innovative proposals related to these research topics are highly encouraged. White papers and full proposals are solicited which address the following topics: 1. **Belief Formation and Movements for Change** 1-A. Belief formation and influence 1-B. Group identity, cultural norms, and security 1-C. Movements for change 1-D. Organizational dynamics in movements 2. **Models of Societal Resilience and Change** 2-A. Economic factors 2-B. Governance factors 2-C. Energy, environment, and resource factors 2-D. Additional factors impacting societal resilience and change 3. **Theories of Power and Escalation** 3-A. The changing role of the state in a globalized world 3-B. Beyond conventional deterrence 4. **Emerging Topics in Conflict and Security** 4-A. Quantification and metrics 4-B. *Deadlines: white paper: November 18, 2013; application: February 14, 2014.*

## NATIONAL INSTITUTES OF HEALTH

**Consortium on Human Islet Biomimetics (UC4):** This FOA invites participation in the Consortium on Human Islet Biomimetics, part of the Human Islet Research Network (HIRN), which will support the development of a human islet microphysiological system or niche (a system that combines cells, cytoarchitecture, matrix, physical factors, secreted factors, etc.). CHIB will focus on Biomimetics, the study of the formation, structure and function of biological systems, and will facilitate the assembly of an in vitro system that closely mimics a functional human islet, by integrating stem cell biology, islet cell biology and tissue engineering. CHIB will be part of a collaborative research framework, the Human Islet Research Network (HIRN) that will include four research consortia, and an Administrative HUB composed of a Bioinformatics Center and a Coordinating Center. HIRN's overall mission will be to support innovative and collaborative translational research to understand how human beta cells are lost in T1D, and to find innovative strategies to protect and replace functional beta cell mass in humans. *Deadlines: Letter of intent: January 27, 2014; submission: February 27, 2014.*

**Pragmatic Research in Healthcare Settings to Improve Diabetes Prevention and Care (R18):** This FOA is to support research to test approaches to improve diabetes treatment and prevention in existing healthcare settings. Applications are sought that test practical and potentially sustainable strategies, delivered in routine clinical care

settings, to improve processes of care and health outcomes of individuals who are at risk for or have diabetes. Areas of research focus should have the potential to generalize to other settings and types of payment and clinical practice situations. Trials that include community resources to augment healthcare are permissible but the community resources must be well integrated into healthcare delivery. Referral to community programs by the healthcare system of staff is not, in itself, an adequate linkage. Research examples include, but are not limited to: 1. Studies of innovative models of healthcare delivery including Patient Centered Medical Homes, shared medical appointment/group visits, team care approaches, care coordination, integrated care, shared decision making, pharmacy/pharmacist based initiatives, or use of eHealth, mHealth, or health information technology. 2. Studies of incentives to improve diabetes prevention, treatment, and/or outcomes. 3. Studies to improve patient adherence to efficacious self-management and treatments, such as medications, blood glucose monitoring, lifestyle change, or other aspect of diabetes care or prevention. 4. Redesign of workflow in physician's office to improve screening, initial counseling, and follow-up of patients. *Deadline: March 3, 2014.*

**Nutrition and Alcohol-Related Health Outcomes (R01)**: This FOA issued by the National Institute on Alcohol Abuse and Alcoholism (NIAAA) and the National Cancer Institute (NCI) encourages applications from institutions and organizations that propose to examine associations between nutrition and alcohol-related health outcomes in humans and animal models. The goal of this program announcement is to stimulate a broad range of research on the role of nutrition in the development, prevention, and treatment of a variety of alcohol-related health outcomes including alcohol dependence and psychiatric co-morbidities, chronic and acute diseases, and organ function and damage. Study designs may include biomedical research, epidemiologic approaches, and intervention studies. *Deadline: February 5, 2014.*

**Adaptation of Scalable Technologies to Illuminate the Druggable Genome (U01)**: The goals of this FOA are to foster the development of technologies and information management to facilitate the unveiling of the functions of the poorly characterized and/or un-annotated members in four protein classes of the Druggable Genome. This FOA calls for adaptation of an ensemble of scalable technology platforms to characterize functions of proteins as a large group at molecular and cellular levels in medium- to high-throughput fashion, rather than repeating the "one at a time" approach that might otherwise be undertaken. The objective is to establish transformative scalable technology platforms and streamlined experimental workflows incorporated with multiple robust assay and physiological perturbation protocols for large-scale functional studies of poorly characterized and/or un-annotated proteins encoded by the Druggable Genome. Applications are invited to adapt well-established scalable technologies as well as innovative scalable approaches to enable swift, cost-effective, and robust interrogation of molecular and cellular functions of proteins. Applications should address limitations and gaps of prior technologies/technology platforms as a benchmark against which the improvements or competitive advantages of the proposed ones are measured. These transformative technology platforms should provide sensitivity, selectivity, scalability, spatiotemporal resolution and reproducibility in analyses of protein functions in complex biological tissues, living organisms, or another physiologically relevant system. *Deadline: December 11, 2013.*

## NATIONAL SCIENCE FOUNDATION

**Decadal & Regional Climate Prediction Using Earth System Models (EaSM)**: The EaSM funding opportunity enables interagency cooperation on one of the most pressing problems of the millennium: climate change and how it is likely to affect the world. It allows the partner agencies--National Science Foundation (NSF) and U.S. Department of Agriculture (USDA)--to combine resources to identify and fund the most meritorious and highest-impact projects that support their respective missions, while avoiding duplication of effort and fostering collaboration between agencies and the investigators they support. This interdisciplinary scientific challenge calls for the development and



application of next-generation Earth System Models that include coupled and interactive representations of such components as ocean and atmospheric currents, agricultural working lands and forests, biogeochemistry, atmospheric chemistry, the water cycle and land ice. This solicitation seeks to attract scientists from the disciplines of geosciences, agricultural sciences, mathematics and statistics. Successful proposals will develop intellectual excitement in the participating disciplinary communities and engage diverse interdisciplinary teams with sufficient breadth to achieve the scientific objectives.  
*Deadline: December 23, 2013.*

**Collaborative Research in Computational Neuroscience (CRCNS)**: Computational neuroscience provides a theoretical foundation and a rich set of technical approaches for understanding complex neurobiological systems, building on the theory, methods, and findings of computer science, neuroscience, and numerous other disciplines. Through the CRCNS program, participating organizations of the National Science Foundation (NSF), the National Institutes of Health (NIH), and the German Federal Ministry of Education and Research (Bundesministerium für Bildung und Forschung, BMBF) support collaborative activities that will advance the understanding of nervous system structure and function, mechanisms underlying nervous system disorders, and computational strategies used by the nervous system. Three classes of proposals will be considered in response to this solicitation: Research Proposals describing collaborative research projects, U.S.-German Research Proposals describing international collaborative research projects to be funded in parallel by U.S. and German agencies, and Data Sharing Proposals to enable sharing of data and other resources. As detailed in the solicitation, appropriate scientific areas of investigations may be related to any of the participating funding organizations. *Deadline: November 2, 2014.*

---

**NOTE:** All faculty, researchers, and scientists on continuing contracts at IU interested in applying for Department of Defense funding are eligible for assistance by the consulting firm--Cornerstone Government Affairs-- arranged by the Vice President for Research. Those interested in securing assistance from Cornerstone must submit a 2 page summary of their research project and a CV or biosketch to the VP for Research Office at [vpr@iu.edu](mailto:vpr@iu.edu). Prior to submission, the IUPUI Office of the Vice Chancellor for Research is offering assistance with the 2 page summaries. For more information, contact Ann Kratz [akratz@iupui.edu](mailto:akratz@iupui.edu).

## 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](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](mailto: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](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.

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. Please contact [Dee Metaj](#) at 317-278-5644 if you have any questions regarding this list.

IU Authentication is required to view the following attachments:

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

Office of the Vice Chancellor for Research - [ovcr@iupui.edu](mailto:ovcr@iupui.edu)  
Indiana University Purdue University Indianapolis  
755 West Michigan Street, UL1140, Indianapolis, IN 46202-2896  
Phone: (317) 278-8427

[Subscribe](#) or [Unsubscribe](#)