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## December 2012/January 2013



Last year we had more students than ever. Apply early!

Apply now: [CRL Summer Applications](#)

The Center for Research and Learning is pleased to announce that our Summer 2013 program applications are available now and will be up until March 1, 2013. Make sure to apply early and read through the application. Some programs have changed. Make sure to check the CRL webpage for more information, including program specific information, what documents you'll need to apply, and how to apply.

**[For more information, click here>>](#)**



Last year's Mentoring Award winner was Professor Stephen Randall.

Nominations are Now Being Accepted for the 2013 CRL Awards

The CRL is now accepting nominations for the 2013 Bowling-Jones-Russo Memorial Undergraduate Research Award, the Kathryn Wilson Director's Mentoring Award and the Chancellor's Award for Outstanding Undergraduate Research. Please visit the Center for Research and Learning website for details!

» **[For more information, click here>>](#)**

Spotlight on Sara Ibrahim

Sara Ibrahim is a junior majoring in biology at the School of Science at IUPUI. Ms. Ibrahim got into research during her senior year in high school while working with her ninth grade biology teacher, Mrs. Patrick, on Inflammatory Bowel Disease. "Mrs. Patrick was an amazing mentor who had taken great



Sara is a current McNair and MURI scholar as well as a CRL Ambassador.

interest in my future career and had realized that I was truly interested in research.” Ms. Patrick then directed Ms. Ibrahim to the IUPUI Center for Research and Learning and specifically guided her towards the Indiana University Simon Cancer Center Summer Research Program (IUSCCSRP). Since then Sara has been involved in the Multidisciplinary Undergraduate Research Institute (MURI), the Ronald E. McNair Postbaccalaureate Achievement Program (McNair), and Life-Health Sciences Internship (LHSI) research programs, and also acts as a CRL ambassador.

Ms. Ibrahim currently is working on a few research projects. Her primary project is with Dr. Jake Chen in a bioinformatics laboratory. “The project that I have been continuously working on since May 2010 is about a pathway modeling approach to determining the most effective drugs for specific disease models. In this project, we build pathway models for specific diseases such as breast cancer, Alzheimer’s disease, and pancreatic cancer. After performing literature curations and database searches, we then implement drug-protein target information onto the disease pathways.”

» **For more information on UROP, click here>>**



Dr. Chen has been involved with research for over 15 years.

Featuring Dr. Jake Chen

Jake Chen has been conducting research and development in bioinformatics and computational biology since 1995. Prior to coming back to academia, in 2002-2003, he was the head of computational proteomics at Myriad Proteomics, Inc. (now Prolexys Pharmaceuticals, Inc.), Salt Lake City, Utah, where he led a team of bioinformatics researchers and developers to process and study the “human protein interactome” data, a proprietary network map of human, protein-protein interactions consisting of more than 10,000 human proteins and 80,000 interactions from more than 1TB of collected raw data. Jake Chen is passionate about innovating collaborative, interdisciplinary research that has high-impact potentials. Besides conducting research, he devotes time to several community-based, non-profit, professional organizations.

**For more on Dr. Chen, click here>>**

Featuring Dr. Jinhui Chen:

Dr. Jinhui Chen is an assistant professor of neurological surgery



Dr. Jinhui Chen is interested in what happens to the brain after traumatic injury.

in the IU School of Medicine Stark Neurosciences Research Institute. He has a Ph.D. from the Institute of Biochemistry and Cell Biology at the Chinese Academy of Sciences. Dr. Chen says, "Stem cell research offers unprecedented opportunities to explore fundamental questions of biology and to develop novel medical therapies for debilitating diseases such as injury, neurodegenerative diseases and aging. The long-term goals of my laboratory are to explore the molecular and cellular mechanisms that regulate neurogenesis in the adult hippocampus and to seek the potential of stem cells for repairing neocortical circuitry damaged by traumatic brain injury."

Sara Ibrahim has "been working on a project with Dr. Jinhui Chen since August 2011. For this project, I have been investigating the effects of Traumatic Brain Injury (TBI) on possibly leading to the development of neurodegenerative diseases such as Epilepsy. Working in Dr. Jinhui Chen's lab has provided me exposure to biological research on the molecular and cellular level. Dr. Jinhui Chen has always put everything in perspective for me and has taught me the necessary skills and techniques to investigate complex problems associated with Traumatic Brain Injury."

» **For more on Dr. Chen, click here**>>



MURI works with teams of students and faculty members.

#### Call for Academic Year 2013 MURI Proposals

The Center for Research and Learning welcomes faculty proposals for the [AY 2013-2014 Multidisciplinary Undergraduate Research Institute \(MURI\) at IUPUI](#). Proposals should represent two or more disciplines and should offer undergraduate students the opportunity to engage in a substantive, research experience focused on a significant research problem.

This is a unique opportunity provided to IUPUI faculty and researchers for mentoring students while conducting pilot projects or testing new techniques and designs.

» **For more information, click here**>>



IUPUI Students enjoy the

#### IUURC was a Huge Success!

The 18th Annual Indiana University Undergraduate Research Conference was held on November 16, 2012, here at IUPUI. Over 175 students presented their research either with a poster or orally. We had students from seven IU campuses, with over 300 people attending the conference. Dr. Nasser Paydar was the keynote speaker, giving brief remarks on how research has

keynote luncheon.

affected his life.

» **[For conference highlights, click here>>](#)**

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### Save the Date: Research Day 2013

Faculty and Students: April 5, 2013. Save the date for the 2013 Research Day! Abstract submission deadlines will be posted shortly. Make sure to visit the abstract guidelines on the resources page. The guidelines have changed.

» **[Click here to view the abstract resources page>>](#)**

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Don't miss your chance to present your research!



### For More Research Opportunities:

Interested in additional research opportunities? Check out the "Resources" tab on the CRL web page. We frequently post undergraduate research and scholarships opportunities from other campuses there. Please check the page frequently, opportunities change as we have new listings.

» **[For more opportunities, click here>>](#)**

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Are you interested in more research?

