

CRL Highlights

May-June-July 2016

CRL is now accepting MURI Project applications by faculty for 2016-2017 AY



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It's that time again!

CRL summer research programs orientation Monday, June 6

The IUPUI Center for Research and Learning (CRL) will host its annual summer research programs orientation on Monday, June 6, 2016, at the R3 Joseph E. Walther Hall (R3) Auditorium. ***It is mandatory for all students participating this summer in a program affiliated with CRL to attend.*** Please dress professionally; allow plenty of time for parking; and arrive at the R3 auditorium between 9:30 and 9:45 a.m.



Remember the time!

CRL summer poster session

The Center for Research and Learning invites all undergraduate students conducting independent faculty-mentored research this summer to submit their abstracts for

the 2016 summer poster session. The poster session will take place Thursday, July 28, 2016, from 1:30 to 4:00 p.m. in University Tower. This event is open to the public.

Students presenting a poster are asked to sign in and set up their posters starting at 1:00 and ***no later than 1:20 p.m.*** Please check the CRL website in late June for submission and registration instructions. Abstract guidelines will be similar to those for IUPUI Research Day.

Events and Deadlines



Give us a call we do it all.

Call for MURI faculty proposals for AY 2016-2017

The Center for Research and Learning invites proposals from all IUPUI/IUPUC faculty for the Multidisciplinary Undergraduate Research Institute (MURI), which provides researchers representing two or more areas unique opportunities to mentor undergraduates while conducting pilot projects or testing new techniques and designs. MURI offers students a competitive stipend and the chance to engage in a substantive faculty-mentored research experience focused on a significant research question.

The primary mentor submits the MURI project proposal by the deadline, which for AY 2016-2017 is **Tuesday, July 5, 2016**. Please follow the specified proposal guidelines ([MURI_Proposal_Guidelines.pdf](#)).

For further information, please contact Derrick Brownie (dbrownie@iupui.edu or 317-274-8880).

[MURI Website](#)



Strength in numbers.

CRL Ambassadors Program/CRL Student Advisory Board

Since around the time of its inception, the IUPUI Center for Research and Learning (CRL) has had a panel of faculty members who serve as its steering committee, leadership team or advisory board. In 2012, the CRL Ambassadors Program was launched, which in its first four years saw the successful service of 19 students.

CRL at present is in the beginning stages of forming a student advisory board, for now composed of the current cohort of ambassadors. This new board will serve CRL in a consulting capacity to provide insight into how CRL can enhance

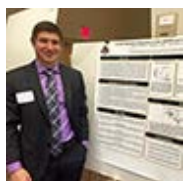
outreach and service to IUPUI's student population.

The Center for Research and Learning (CRL) Ambassadors Program is a unique organization that provides outstanding undergraduates with the opportunity to serve as representatives of CRL at special events. Ambassadors assist in student recruitment efforts related to CRL undergraduate-research opportunities; help with the center's events; act as university guides to future and current students interested in undergraduate research as well as current and potential donors; and aid CRL's staff and faculty in various capacities.

CRL ambassadors benefit from multiple opportunities to network with campus faculty, staff, senior administrators and community leaders as part of their service to IUPUI and CRL. Professional and personal development is a primary objective of this exciting initiative.

To be eligible to participate in the CRL Ambassadors Program and become a member of the CRL Student Advisory Board, students need to be enrolled at IUPUI; to be either a current or previous participant in any CRL program; and to maintain a 3.0 cumulative GPA. Those who are selected receive an invitation to schedule a personal interview. Currently, CRL is seeking ambassadors entering their sophomore or junior year. To apply please go to the CRL website. For further information, please contact Dr. Dominique M. Galli (dgalli@iu.edu).

Join Today!



Something to think about.

Cameron Morris: Fired up about neuronal protein overexpression

Senior neuroscience-chemistry (BS-ACS) double major Cameron Morris embarked on undergraduate research in AY 2014-2015 for his capstone project, investigating psychological aspects of neuroscience under the tutelage of Anthony J. Baucum, II, Ph.D., Assistant Professor, Department of Biology. He continued his work on DNA-protein overexpression in living cells as a 2015 Undergraduate Research Opportunities Program (UROP) summer fellow, and his ongoing work in Dr. Baucum's laboratory garnered an honorary mention for Cameron's oral presentation on "Mechanisms underlying the SAPAP3 and spinophilin interaction: Implications in OCD and Parkinson's disease" at the Midwest Undergraduate Cognitive Science Conference (MUCSC) on April 9, 2016, at Indiana University Bloomington.

Remarking, “My work is *part* of who I am, but it’s not *all* that I am,” this Millennial, Peer-led Team Learning (PLTL) leader says of his work as a mentor for Chemistry 105 recitation, “It’s challenging; I *love* it!” During AY 2015-2016, Cameron began serving as a Center for Research and Learning (CRL) ambassador, meeting with interim executive director Dominique M. Galli, Ph.D.; brainstorming with her in an advisory capacity on how to attract freshmen to undergraduate research; and assisting staff with the annual IUPUI Research Day symposium.

Looking forward to his final course this coming fall and aspiring to enter an M.D.-Ph.D. program, Cameron is intrigued with the multiple facets of how each doctorate—the clinical practice and the laboratory research—can inform the other, a phenomenon to which shadowing Eli Lilly and Company neurologist Ann M. Hake, M.D., opened his eyes. Dr. Hake leads a multidisciplinary clinical-trials team on Alzheimer’s disease with dosing sites around the globe. Looking ahead, Cameron yearns to see, “how my work can affect patients’ lives.”

With his undergraduate research focusing on molecular mechanisms, i.e., protein interaction, that can have implications on the disease states of Obsessive-Compulsive Disorder (OCD) and Parkinson’s disease, his professional goal is to pursue a career in academia, continuing to conduct the same type of research but rather focusing on Alzheimer’s, which affects a different brain region. Genuinely grateful for the opportunities that he has been fortunate to receive, he notes, “It’s kind of rare that as an undergraduate you really get to combine everything you love



3, 2, 1 ---- Blast off!!

MURI team wins competitions for investigating plasma-assisted turbulent jet ignition for rapid-combustion applications

The plasma hot jet-ignition team project funded by the IUPUI Multidisciplinary Undergraduate Research Institute (MURI) won first place in the technical-design competition of the American Institute of Aeronautics and Astronautics (AIAA) Region III Student Conference held April 1-2, 2016, at the University of Illinois Urbana-Champaign.

This team of undergraduate students of diverse disciplines was composed of Zach Wozniak, a physics major; Jesse Burton, an electrical engineering major; with Daniel Robinson, Cameron Hedrick, and Qiuyu Deng from mechanical engineering. These college students, under the mentorship of Ali Tarraf Kojok, graduate student, Department of Mechanical Engineering;

Mohammad Ebrahim Feyz, doctoral student, Department of Mechanical Engineering; and Associate Professor of Engineering Technology Afshin Izadian worked industriously throughout the 2015-2016 academic year at the Combustion and Propulsion Research Lab directed by Professor of Mechanical Engineering Razi Nalim to design a new ignition system. The one they successfully designed is part of an efficient combustor concept geared toward reducing fuel consumption. The plasma MURI team presented their research before a panel of judges from the aerospace industry, including The Boeing Company and Rolls-Royce Corporation, with favorable reviews. They also took part in the technical-design challenge to build the fastest flying blimp, competing against more than 10 teams from other participating universities. Their blimp broke the records, landing the team first prize.

AIAA Region III Student Conference



King of the hill.

CRL scholars named to IUPUI most outstanding male, top 20 and top 100 students

The Center for Research and Learning takes pleasure in congratulating several students who have completed CRL programs and otherwise have distinguished themselves academically at IUPUI, being recognized on Friday, April 8, 2016, at the 17th annual IUPUI Top 100 Outstanding Students Recognition Dinner, hosted by the IUPUI Alumni Council and the Student Organization for Alumni Relations (SOAR), at the Marriott Indianapolis Downtown.

Students must be seeking their first bachelor's degree from the IUPUI campus and may be nominated by faculty, staff, or other students; or they may self-nominate. Honorees are selected based upon their scholastic achievement, collegiate and co-curricular activities on campus, and civic/community service. From 2013 to 2015 86% of students who attained top-100 status had a GPA of 3.5 or above. More than 2,000 students were nominated in 2016.

Diversity Scholars Research Program (DSRP) Scholar Ayodamola "Ayo" Otun, a junior in biology, was selected as the most outstanding male student at Indiana University-Purdue University Indianapolis for 2016. Three additional DSRP scholars were named to this year's top 100: Sharifah Kyazike, a senior in biology and a CRL ambassador; Jasmine Herbert, senior in computer and information technology; and Hadyatoullaye "Hadya" Sow, junior in international studies and medical humanities.

CRL RISE Scholar Melanie Scheive, junior in neuroscience, was among IUPUI's top 20 students for 2016.

IUPUI Undergraduate Research Opportunities Program (UROP) scholars chosen for top 100 honors this year include Macy Ballard, psychology junior; Alexandra Hochstetler, biology junior; Casey Miller, biology junior; and Oliver Strobel, biochemistry junior.

Those participants in the Multidisciplinary Undergraduate Research Institute (MURI) team-research program who were recognized at this year's banquet were Landan Mintch, junior in biomedical engineering; Paxton Ott, senior in exercise science; and another of CRL's ambassadors, Phillip Witcher, junior in chemistry and biochemistry.

IUPUI Top100



Show and tell.

Save the date for 2016 Indiana University Undergraduate Research Conference!

College students: Plan to showcase your work at the 22nd annual Indiana University Undergraduate Research Conference (IUURC) on Friday, December 2, 2016, in the Ruth Lilly Learning Center of the Riley Outpatient Center at IUPUI. The IU University Graduate School and the IUPUI Office of Academic Affairs co-sponsor this annual event, which was established in 1994. IUURC is dedicated to promoting independent, undergraduate research, scholarship and creative activity in all fields of study, which is mentored by faculty members or professional staff as a vital component of an Indiana University undergraduate education. Students from all eight campuses of Indiana University will present their fascinating and relevant research procedures and findings during poster sessions and talks covering all academic fields. In presenting at IUURC, these budding scholars meet the important challenge of communicating the knowledge that they have created through conducting their research and the insights they have gained in the process.

This symposium is open to the public. Please save the date and look for more information to follow.

<http://iuurc.indiana.edu/>



Register today!

Win a scholarship on food preservation!

Pressure Cooker Pros is an online publishing company reaching over 50,000 readers per month. We believe strongly

in food preservation, and part of our mission is to empower others to take part in advocacy. We think that one of the best ways to do that is through a scholarship.

The Pressure Cooker Pros Scholarship For Food Preservation is open to any undergraduate or graduate student currently enrolled in school in the United States. You do not have to study in a related field. We understand that food preservation advocates come from all walks of life. You can be a business student, or you can be an aspiring teacher. You can be 18 or 65. All that matters is that you love fighting for a good cause and that you have a good plan for doing it.

To be eligible, one must be a U.S. citizen or permanent U.S. resident currently enrolled in an undergraduate or graduate program in the U.S. (or will be by the time the scholarship is awarded).

The deadline is June 30, 2016, and the award varies between \$250 and \$750, depending on how many winners are chosen per scholarship period. Optional award: We'll also happily extend an invitation to write a piece for our website, reaching over 50,000 monthly readers (this is 100% optional). Winners will be announced in July.

To apply, submit a 500-word essay to elizabeth@pressurecookerpros.com. **No attachments;** instead, ***please paste the essay into the body of your e-mail***. The topic should be, "How can individuals take part in food preservation?" The winning essay(s) will be published on the Pressure Cooker Pros website.

pressurecookerpros.com/scholarship/

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