

CEILS *Newsletter*

Center for Education Innovation & Learning in the Sciences | [UCLA](#)

Bi-Monthly Newsletter | [Feb 5, 2016](#)

Visit our website www.ceils.ucla.edu for more detailed information about CEILS and upcoming news and events.

Upcoming Events

CEILS Journal Club for STEM Education Research

Fridays from 2:00 – 3:00 PM in 1100 TSLB

CEILS members explore relevant education literature in more depth and develop greater understanding of assessment techniques and data analysis. Presenters will select a paper and lead a discussion about how education researchers have documented the relationship between effective teaching practices and their impact on student learning, knowledge retention, and persistence in STEM majors. Faculty, graduate students, and post-docs are welcome to participate!

Upcoming Presenters in Winter 2016:

- **February 12, 2016 | Ira Clark**, Academic Administrator for the Biomedical Research Minor, will present the work of he and his colleagues in Life Sciences surrounding development and assessment of key courses in the Minor, with context provided from the following paper: Clark et al. 2009, “Deconstructing” Scientific Research: A Practical and Scalable Tool to Provide Evidence-Based Science Instruction. [PLoS Biol. 7\(12\): e1000264.](#)
- **February 19, 2016** | No meeting today

Research into Practice: Evidence-Informed, Best Practice Visualization for a Deeper Understanding of Chemistry

February 9, 2016 | 4:30pm | 2033 Young Hall

Professor Roy Tasker from the Department of Chemistry at Purdue University will be speaking at the Instructional Division Seminar. More information about Prof. Tasker can be found at <https://www.chem.purdue.edu/people/directory/faculty/details/117>

Faculty, graduate students, and undergraduate students to attend, especially those interested in teaching as a career.

If you would like to meet with Prof. Tasker on Tuesday, February 9th, there are two morning appointments available, between 9:30 a.m. and 10:30 a.m. Please contact me

Carol Canedo, Physical Chemistry Division, UCLA Chemistry & Biochemistry Department at Carol@chem.ucla.edu or by phone 310-206-4956.

Details: http://www.chemistry.ucla.edu/sites/default/files/attachments/2016/02-09.TASKER_Instructional_Division.pdf

8th Conference on Understanding Interventions

February 26-28, 2016 | Philadelphia, Pennsylvania

This conference was established to facilitate dissemination and exchange of hypothesis-based research on interventions and initiatives that broaden participation in science and engineering research careers. The conference is designed to create a dialogue among behavioral/social science and education researchers, evaluators, and faculty in STEM (science, technology, engineering, and mathematics) fields who participate in intervention programs.

Visit the [conference website](#) to learn more.

2016 Southern California PKAL Regional Network Annual Meeting

Integrating Teaching, Assessment, & Education Research to Enhance Student Learning in STEM

February 27, 2016 | University of California, Irvine

Over the past decade, STEM education reports (e.g. “Engage to Excel”, “Vision and Change”, and “Reaching Students: What Research Says about Effective Instruction in Undergraduate Science and Engineering”) have highlighted the importance of evidence-based instructional practices. This trend is further manifested in the increased emphasis by funding agencies, professional societies, and our own institutions on using assessment to improve teaching and learning. Event organizers are soliciting proposals for professional development workshops that will support meeting participants in learning about the practical aspects of conducting classroom assessment and education research. The goal of these workshops is to empower meeting participants to engage in discipline-based education research (DBER) and to increase the rigor of assessments conducted at local institutions. **Workshop proposals and poster abstracts are due December 10, 2015.** For guidelines and additional event information, please visit the [website](#).

2016 PKAL Summer Leadership Institute for STEM Faculty

July 12, 2016 to July 31, 2016 | Adamstown, MD

The PKAL Summer Leadership Institute is designed for both early and mid-career STEM faculty engaged in leading projects aimed at transforming undergraduate STEM education in their classrooms, departments, and institutions. The five-day intensive Institute provides faculty participants with the theory and practice required to effectively

manage the politics of such change and contribute to the national STEM higher education reform effort. **Application Deadline: February 24, 2016.**

Institute dates:

Institute I: July 12 – July 17, 2016

Institute II: July 19 – July 24, 2016

Institute III: July 26 – July 31, 2016

Network of STEM Education Centers: [2016 SMTI/NSEC National Conference](#) - Center Roles in Improving Undergraduate STEM Education

June 8-9, 2016 | Hotel Contessa in San Antonio

Proposals should be sent in by March 4

APLU's Science and Mathematics Teaching Imperative (SMTI) in partnership with the Network of STEM Education Centers (NSEC) is now seeking proposals for presentations for the SMTI/NSEC 2016 National Conference, June 8-9, at the Hotel Contessa in San Antonio.

This year's conference will focus on centers engaged specifically in improving undergraduate STEM education, and/or involved in STEM teacher preparation and connection of the undergraduate experience with community efforts and broader impacts in STEM.

[2016 STEM Center Toolkit Workshop](#) - Strengthening Our Network by Sharing Strategies and Materials

June 9-10, 2016 | Hotel Contessa in San Antonio

Application Deadline is March 4

Join us in San Antonio following the SMTI annual conference for a one-day meeting focused on building a toolkit to support STEM Centers in their efforts to improve teaching and learning on their campuses. This workshop will focus on bringing together leaders from across the National STEM Education to develop the ideas brought forward by participants at the 2014 and 2015 NSEC meetings to generate a set of resources that will be useful to centers across the NSEC network.

[Creating a Research Action Cluster \(RAC\)](#)

Pre-Application Proposals are due March 4

The purpose of the Research Actions Clusters is to seed work that has the potential to transform undergraduate STEM education by leveraging the unique capacities of centers or a network of centers. Each selected RAC can apply for up to \$15,000 for the activities

of the RAC for one year, and may apply for additional funding in following years. Funded RAC activities are to begin summer or fall 2016.

Newsworthy

UCLA Online Engineering Program Again Ranked Best in the Nation by U.S. News

[Published in *UCLA Newsroom*](#)

The Henry Samueli School of Engineering and Applied Science at UCLA online master's degree program has been named the nation's best by U.S. News and World Report for the second consecutive year. The [Master of Science in Engineering Online](#) program is designed for engineering professionals who seek to advance their skill sets and career opportunities. MSOL students can earn a master's degree in two years through classes that are delivered completely online

President Obama Pushes for Computer-Science Education

[Published in *The Atlantic*](#)

In order to address the need for the next generation workforce to develop skills in computer science, the President has asked congress to fund a \$4 billion proposal that will be spent over three years to train teachers, connect schools with corporate and nonprofit partners, and expand instructional material. The funding programs, which will appear in the president's forthcoming budget proposal for 2017, are just the latest effort from the White House to bring more science and technology education to students.

New study tests three-step intervention to increase faculty gender diversity in STEM

[Published in *BioScience*](#)

Using a three-step intervention derived from self-determination theory, an interdisciplinary team from Montana State University demonstrated a low-cost way to improve gender diversity in STEM-faculty hiring. The results show that the numbers of women candidates considered for and offered tenure-track positions were significantly higher in the intervention groups compared with those in controls. Searches in the intervention were 6.3 times more likely to make an offer to a woman candidate, and women who were made an offer were 5.8 times more likely to accept the offer from an intervention.

Scholars challenge colleges to reform STEM learning

[Published in *Science*](#)

Melanie M. Cooper and colleagues from Michigan State University recently published an article in [Science Magazine](#) saying that college students are expected to learn too many facts that do not connect across their coursework or prepare them to apply scientific knowledge in their lives. They believe a *different set of strategies* taking hold in K-12 schools can be used to improve learning in science, technology, engineering and mathematics, or STEM, during the first two years of college.

Professional Development: STEM Grad Students & Post-Docs

Biomedical & Life Science Graduate Student Professional Development Workshops – Winter 2016

RSVP for any of these events at <http://www.uclagradprofdev.eventbrite.com>

2/9 - Developing Your Online Identity (10a – 11:30a | YRL Presentation Room)

2/16 - Managing Up: Renovating Your Relationship with Your PI

With Samantha Sutton, PhD (8:30a – 10:30a | CNSI Auditorium)

2/23 - Biomedical and Life Sciences Professional Development Half Day Conference

Featured speaker: Toby Freedman (1:15p – 6:30p | CNSI Auditorium)

CIRTLCast Series: Learning in the Active STEM Classroom

Online weekly events | 10am Pacific time

2/10 - Working with First-Year STEM Students

2/17 - Flipped Classrooms: What Are They, and Why Should You Use Them?

2016 ASM Biology Scholars Program

Applications are now being accepted for the 2016 Biology Scholars Program. Applicants may choose from three hybrid courses, all geared toward improving student learning:

- Assessment Course: Measuring Student Learning
- Education Research Course: Discipline-Based Education Research
- Writing and Publishing Course: From Science Education Research to Publication

In each course, accepted participants will attend webinars and complete online assignments from March through July. The experience is completed after Scholars meet face-to-face at workshops held July 19-20 in North Bethesda, Maryland. The deadline for applications is **March 1, 2016**: [Apply Now!](#)

For more information about selection criteria, eligibility and other general program questions, please contact us at biologyscholars@asmusa.org.

Job Opportunities in STEM

Post-Doctoral Fellowship Position in Science Education at Harvard University

Application Deadline: February 12, 2016

► <http://www.cirtl.net/JobPosting-HarvardPostDoc>

Senior Lecturer Position(s) in Biology at the College of Arts and Sciences, University of Washington

Application Review Begins: March 1, 2016; Open Until Filled

► <http://ap.washington.edu/ahr/academic-jobs/position/aa16618/>

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For more information about CEILS events and resources, including a list of STEM education events from previous mailers, please visit the CEILS website at www.ceils.ucla.edu or stop by the CEILS office in Hershey Hall (Rooms 122 & 126). If you wish to be added to the CEILS mailing list, please send your request to media@ceils.ucla.edu. Thanks!