CEILS Newsletter

Center for Education Innovation & Learning in the Sciences | UCLA Bi-Monthly Newsletter | March 4, 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:

March 4, 2016 | Kristin McCully, Teaching Fellow for the Life Sciences Core Education Department, will present the following paper: S. Hester, S. Buxner, L. Elfring, and L. Nagy (2013) "Integrating Quantitative Thinking into an Introductory Biology Course Improves Students' Mathematical Reasoning in Biological Contexts." CBE-Life Sci. Educ. 13(1):54-64

March 11, 2016 | No Meeting Today

March 18 & 25 | No Meetings during Finals and Spring Break

April 1, 2016 | Presenter TBD

2016 Teaching and Learning Technology Conference

March 17-18, 2016 | Rolla, Missouri

The 2016 Teaching and Learning Technology Conference hosted in Rolla, Missouri is now open for registration! The registration period will **close at midnight on Friday, March 11, 2016**. The event will feature presentations by keynote speakers:

- Linda B. Nilson, Ph.D -- Founding director of the Office of Teaching Effectiveness and Innovation (OTEI) at Clemson University
- Anthony Petroy, Ph.D -- Assistant Vice Chancellor of Global Learning at Missouri S&T

2016 National Academies Special Topics Summer Institute on Quantitative Biology

The Quantitative Undergraduate Biology Education and Synthesis (QUBES) project is now accepting applications from individuals and teams to the Summer Institute. Participants from all STEM fields are welcome.

The goals are the workshop are to:

- Develop supportive communities of colleagues
- Increase awareness of resources and methods for teaching quantitative biology
- Share materials and experiences with other participants and the broader faculty community

The institute will be from June 19-24, 2016 and take place at North Carolina State University in Raleigh. Applications for the workshop are now open and be accepted until **March 28, 2016** and applicants will be notified regarding their status of their application by April 4. <u>Apply Now!</u>

2016 Transforming Undergraduate STEM Education: Call for Proposals Information

Link to more information

November 3-5, 2016

Boston, Massachusetts

Proposals Due Thursday, March 24, 2016

The Association of American Colleges and Universities (AAC&U) and Project Kaleidoscope (PKAL) invite proposals for concurrent sessions and poster presentations at the 2016 conference *Transforming Undergraduate STEM Education: Implications for 21st Century Society.* Please note that all session presenters are responsible for conference registration fees, travel, and hotel expenses.

2016 PKAL Summer Leadership Institute for STEM Faculty

Link to more information

July 12, 2016 to July 31, 2016 | The Claggett Center, 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 I: July 12 – July 17, 2016 Institute II: July 19 – July 24, 2016 Institute III: July 26 – July 31, 2016

National Academies Summer Institutes on Undergraduate Education

Link to more information

West Coast Summer Institute Evergreen State College June 13-17, 2016

The Howard Hughes Medical Institute and the National Academies invite college and university faculty and instructional staff to develop teaching skills at five-day workshops to transform the undergraduate classroom. The Summer Institutes on Undergraduate Education model the scientific teaching principles they teach. They draw on the expertise of participants and presenters. Current research, active learning, assessment, and diversity are woven into the week, creating a forum to share ideas and develop innovative instructional materials to be implemented upon returning home.

First Annual Higher Education Flipped Learning Conference

Link to more information

June 8-10, 2016 | University of Northern Colorado

The conference will allow higher education flipped classroom practitioners to exchange information, highlight faculty engaged in assessment of flipped classrooms, and discuss the future of flipped learning in higher education. It is for instructors, faculty, and graduate students from universities, colleges, community colleges and any other post-secondary institution. Previous experience with flipped classrooms is not required. The conference will be a blend of novice and experienced flipped educators to share best-practices and research.

2016 APS Institute on Teaching and Learning (ITL)

Link to more information

June 20-24, 2016 | Madison, Wisconsin

Please join us for the 2016 APS Institute on Teaching and Learning (ITL), June 20-24, 2016 in Madison, Wisconsin. The Institute on Teaching and Learning will engage educators (from 2-year and 4-year colleges & universities and professional schools) in interactive sessions on evidence-based, student-centered practice in teaching, learning, and assessment. Whether you are an experienced educator or relatively new to teaching, it will challenge you to gain skills in designing and implementing educational research in your classroom and in learning how to share your findings with colleagues.

Teaching and Learning National Institute: Using Evidence for Improvement

Link to more information

July 31 to August 3, 2016 | Evergreen State College
Applications are now being accepted for the first annual Teaching and Learning

National Institute: Using Evidence for Improvement. The institute is an opportunity for campus teams to work together to develop evidence-based action plans aimed at improving instructional practices, student engagement, and student learning and success. Teams might, for instance, tackle concerns about attainment and achievement gaps, explore strategies to raise the quality of senior writing, or work to build students' quantitative reasoning skills across disciplines. Participants will be supported in using assessment results and research to design action plans to address specific issues, while also developing the skills and know-how to support a broader campus culture of learning-centered, evidence-based improvement.

Broadening Participation: Summit 2016

Link to more information

April 20-22, 2016 | University of Pennsylvania

Early-bird registration rates end **March 4, 2016!** A full docket is planned with exciting speakers from the National Science Foundation, the University of Pennsylvania, and conference tracks including the theme of broadening participation, professional development, and time set aside for networking.

Newsworthy

Executive Vice Chancellor and Provost Scott L. Waugh Announces Initiatives to Strengthen Campuswide Attention on Pedagogy and Student Learning, Drawing from New Report "Enhancing Student Success and Building Inclusive Classrooms at UCLA"

New initiatives include a collaborative effort with deans and department chairs to discuss report findings, convening a working group for implementing recommendations, and developing detailed data dashboards to improve transparency for enrollment, performance, climate, and retention.

Excerpt from the executive summary:

The University of California Los Angeles (UCLA) faces a number of external pressures that require a renewed commitment to excellence and diversity in undergraduate education. For example, California Governor Brown has urged campuses to decrease the overall time-to-degree attainment and explore how undergraduates may complete the baccalaureate in three years. Businesses and government agencies also are calling for college graduates with skills to function in a more diverse workforce. In the wake of the Moreno Report, which was commissioned by Chancellor Gene Block and found faculty discrimination and bias in academic units, California Attorney General Harris has asked the campus to address the climate for diversity and disparities in completion rates for underrepresented groups within a specified time frame. In comparison with other national universities, UCLA has yet to adopt inclusive excellence initiatives that make use of many advances in teaching, student learning, and assessment. Further, UCLA needs to focus more efforts on transforming education in science, technology,

engineering and math (STEM) fields to meet national goals (PCAST, 2012). If UCLA is committed to providing all students an equitable and inclusive learning experience in every discipline, it is important to address these issues, especially in light of increased undergraduate enrollments (~600-700) in the near future. At the request of Executive Vice Chancellor and Provost Scott Waugh, a working group was tasked to identify areas of attention where UCLA could start to make changes that would have an immediate impact on improving the success of all students in the classroom. This self-study report and its recommendations are a first step towards building inclusive classrooms so that each student has an equal opportunity to succeed at UCLA.

View the Full Report

HBCUs: an Unheralded Role in STEM Majors and a Model for Other Colleges, By Ken Leichter

Published in The Chronicle of Higher Education

In this article Leichter outlines the benefits and successes that historically black colleges and universities (HBCUs) have achieved for supporting African American students in completing majors that lead to higher paying jobs - particularly in the STEM disciplines. He contrasts this success with research evidencing the challenges and poor retention outcomes seen at other colleges and universities. He offers the HBCU model as one that should be preserved because of its success, but also as a leader from which other institutions can learn from in order to better address their own disparities in outcomes and service to African American students.

Death Valley is Experiencing a Colorful 'Superbloom'

Published in the New York Times

Many UCLA students, post-docs, and faculty are packing up their cars and heading to Death Valley to experience the 'Superbloom' of wildflowers before it is too late. Can you leverage this experience to teach about floral carpets, ecological systems, and climate in your classroom?

Climate Confusion Among U.S. Teachers, Plutzer et al.

Published in Science

This paper describes their study which collected data from 1500 public middle- and high-school science teachers from all 50 U.S. states, representative of the population of science teachers in terms of school size, student socioeconomic status, and community economic and political characteristics. The resulting data showed gaps in teacher knowledge and resources and also discusses social and political pressures impacting teaching.

To address these issues the paper concludes by highlighting the need for middle-school and high-school teachers to have access to training on current research in climate change. "College

and university instructors will need help reaching teachers and teachers-in-training who bring diverse political and value commitments to the classroom—particularly in avoiding "boomerang effects," in which attempts to promote a particular view can instead harden opposition. This may entail acknowledging and addressing conflicts that teachers (and their students) may feel between their values and the science. Such instruction will promote understanding of the science as well as the pedagogy that future teachers will need to promote climate science literacy."

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

4/5/2016 – Exploring Careers in Sustainability for Graduate Students and Post-Docs, CNSI Auditorium 8:30am – 10:30am.

<u>CIRTLCast Series</u>: March Theme: Creating an Inclusive STEM Research Environment

Online weekly events | 10am Pacific time

Note: You can also access archived webinars from past events from their website.

3/9 - Creating an Inclusive Research Environment - Overview

3/16 – Creating Inclusive STEM Research Labs in Engineering

3/23 – Creating Inclusive STEM Research Labs in Biology

3/30 - Creating Inclusive STEM Research Labs in Chemistry

Job Opportunities in STEM

Postdoctoral Research Scholars Program in Bioethics Harvard Medical School

Application Deadline: 5/2/2016

► http://bioethics.hms.harvard.edu/postdoctoral-program

Postdoctoral Scholar Position in Mycology and Microbial Community Ecology

UC Berkeley

Application Deadline: 4/30/2016*

- *Applications received after this date will be considered if the position had not already been filled
- ► https://aprecruit.berkeley.edu/apply/JPF00971#sthash.usiq1IVA.dpuf

Learning Specialist Position(s) Arizona Health Sciences Center

Application Deadline: Open Until Filled

► https://uacareers.com/postings/8838

Director of the Center for Research on Learning and Teaching in Engineering Position

University of Michigan

Application Deadline: Open Until Filled

► http://umjobs.org/job_detail/121609/director_of_crlt_in_engineering

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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!