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## CEO message: CEO Updates

1 message

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To: CEO <education.outreach@lists.berkeley.edu>

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*CEO Updates, January 25, 2016*

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### Spotlight

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**CEO MEETING—Funding for education and outreach projects.** Tues, Feb 9, noon to 1:30 pm, 303 Doe. Featured presenters: **Dave Trinkle, Matt Andrews, Kate Spohr**, Berkeley Research Development Office. Despite an increasingly competitive funding climate, the National Science Foundation and other funders remain committed to funding programs that increase STEM literacy/skills and expand the diversity of the engineering and scientific workforce. This session will provide both newcomers and seasoned education and outreach professionals with an overview of the shifting trends and priorities within the largest federal STEM funding agencies, tips on how to find funding opportunities that are tailored to your project, and guidance about how best to position E&O projects as broader impacts components within a research proposal. The session will include a hands-on demo of Pivot, a powerful funding opportunity database system that is accessible to campus users. Pivot's intuitive interface enables users to conduct and save targeted funding searches, track and share funding opportunities, and set up personalized funding alerts. Participants are invited to bring their funding questions and share their funding experiences in our Q&A session. [View list of upcoming CEO meetings and events-->](#)

**Cal State East Bay receives \$1M for STEM education endowment** The Malavalli Family Foundation has pledged a gift of \$1 million in support of a STEM education and outreach endowment, with particular emphasis on early math literacy in grades K-3. Stephanie Couch, CSUEB's Interim Assoc. VP for Research and Professional Development, explained the importance of laying the groundwork for STEM learning at an early age. "We know from research that early math literacy is key to young people's future success in STEM fields. The gaps we see in who is good at math and who is not, is a reflection of current inequities in STEM learning opportunities."

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## Funding & Awards

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**Research and Practice Travel Fellowships** Deadline: 2/12. This funding opportunity supports increased exchange and collaboration among STEM educators and educational researchers. R+P Fellows receive up to \$2000 to attend a 2016 educational conference in order to meet and learn from other STEM educators and researchers. [More-->](#)

**Dept of Ed: Educational Technology, Media, and Materials for Individuals With Disabilities** - Deadline 2/22. This funding opportunity addresses the challenge of ensuring that educational materials are accessible to students with hearing and/or vision impairment. Funding will be provided for the establishment and operation of an Accessible Learning Center to oversee the selection, acquisition, captioning, and distribution of educational media through a free loan service for students, including English learners, in preK-12 classroom settings, as well as teachers, parents, and paraprofessionals. Annual budget is \$2,000,000; estimated duration is 36 months. [More-->](#)

### **Presidential Awards for Excellence in Mathematics and Science Teaching**

(PAEMST) Nomination deadline: 4/1/16. The PAEMST is the nation's highest award for science and mathematics teachers. Awardees serve as models for their colleagues, inspiration to their communities, and leaders in the improvement of STEM education. [More-->](#)

**Duke Science & Society Post-Doctoral Fellowship.** Deadline: 3/5/16. This fellowship is intended for individuals with a doctoral degree (PhD, MD, JD) who are interested in an academic or policy career in science communication. The [Duke Initiative for Science & Society](#) fosters innovation in research, education, and engagement at Duke by adopting an interdisciplinary approach to understanding how science and human endeavors intersect with a specific focus on ethical, legal, and social implications for science. [More-->](#)

**L'Oréal USA Women in Science fellowships.** Deadline: 3/20. This program recognizes US-based women researchers for their outstanding contributions to STEM and provides support for their postdoctoral research. [More-->](#)

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## Events & opportunities

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**1/30 - Workshop: Digital design and laser cutting/engraving for educators**, OakLabs-1721 Broadway, Oakland. Jointly presented by SEM Link Math and Science Career Academy and OakLabs. Attendees will learn the basic concepts of digital design, laser engraving and project development, and will leave the workshop with ideas for project-based activities to do with their students. Register by 1/27. Cost: \$50. [More-->](#)

**2/4, - Webinar: Measuring student learning with the engineering design process portfolio scoring rubric**, 11 am - noon. While design-based STEM experiences are growing in popularity, there are no commonly accepted frameworks to study student learning outcomes. This webinar addresses specific criteria to demonstrate students' understanding of key concepts, acquisition of skills, and persistence/motivation to pursue STEM. Registration is required. [More-->](#)

**3/5 - Bay Area STEM Career Fair**, Laney College, Oakland - The 6th annual STEM Career Fair exposes youth to STEM careers in a setting similar to a job fair where they visit the tables of STEM professionals and learn about STEM careers through hands-on activities. This is an excellent, no-cost outreach opportunity for UCB STEM departments. Sign up by Feb 25. [More-->](#)

**3/10-3/11 - Symposium: Undergraduate education in the public university**, sponsored by the UC Berkeley Center for Studies in Higher Education and the Chancellor's Office. The symposium will explore the advantages and challenges of offering an undergraduate education of the highest level of excellence at a public research university. Registration required. [Learn more & register here](#).

**Call for proposals: Engagement scholarship consortium conference - Deadline for proposals: 3/15.** The consortium's goal is to build strong university-community partnerships anchored in scholarship. The conference is now soliciting proposals for conference presentations and posters. The conference will take place in Omaha, NB, October 11-12. [More-->](#)

**3/23-3/24 - Mobile media: producing visual stories with the iPhone** - Sponsored by the Berkeley Advanced Media Institute. Cost: \$845 (less 10% early registration discount). This workshop focuses on creating high-quality video on the go, using just an iPhone to shoot, edit, and share. Participants will gain technical insights into video production and develop an understanding of what resonates with a mobile audience. [More-->](#)

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## Resources

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**Universal design in higher education: from principles to practice** This book includes a framework for making technology, instruction, services, and physical spaces welcoming and accessible to all students, including those with disabilities. The book's 40+ authors share a diverse set of applications that can serve to create more inclusive products and environments, including those offered online. [More-->](#)

**Science teachers' learning: enhancing opportunities, creating supportive contexts** - In the footsteps of NGSS and A Framework for K-12 Science Education, this report provides guidance for schools and districts on how best to support teachers' learning and how to implement successful professional development programs. It includes actionable recommendations for science teachers' learning that take a broad view of what is known about science education, how and when teachers learn, and education policies that directly and indirectly shape what teachers are able to learn and teach. [More-->](#)

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## News & views

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**Undergraduate research experiences: impacts and Opportunities** In this article, published in Science in Feb 2015, UC Berkeley researchers Marcia C. Linn, Erin Palmer, Anne Baranger, Elizabeth Gerard, and Elisa Stone, reviewed 60 empirical investigations published during the last 5 years and found that the research on the benefits of Undergraduate Research Experiences (UREs) and/or Course-based Undergraduate Research Experiences (CUREs) is not conclusive, making it difficult to justify the substantial resources they require. The most convincing studies show benefits for mentoring and for communicating the nature of science, but the ideas that students learn are often isolated or fragmented rather than integrated and coherent. The authors conclude that rigorous research is needed to identify ways to design research experiences so that they promote integrated understanding. [More-->](#)

**Reinventing the flagship university ideal** A new book, *The New Flagship University: Changing the Paradigm from Global Ranking to National Relevancy*, by John Aubrey Douglass of the UC Berkeley Center for Studies in Higher Education (CHSE), provides an expansive vision for leading national universities and an alternative narrative to global rankings and the notion of World Class Universities that dominate the attention of many universities, as well as government ministries. The New Flagship model explores pathways for universities to re-shape their missions and academic cultures, and to pursue organizational features intended to expand their relevancy in the societies that give them life and purpose. [More-->](#)

**Immigrants play increasing role in US STEM workforce** - From 2003 to 2013, the number of scientists and engineers residing in the US rose from 21.6 million to 29 million. This increase

included significant growth in the number of immigrant scientists and engineers, from 3.4 million to 5.2 million. According to a new report from the NSF, immigrants went from making up 16% of the STEM workforce to 18%. [More-->](#)

**Student achievement gap wider than ever** In an article commemorating the 50th anniversary of "Equality of Educational Opportunity"—also known as The Colman Report—produced by the Department of Education following the Civil Rights Act of 1964, achievement gaps remain nearly as large as they were when the report was published. [More-->](#)

**Inside the Every Student Succeeds Act** The year-end passage and signing of the Every Student Succeeds Act (ESSA) represents more than just a rare bipartisan agreement on the part of the nation's chronically polarized policymakers. For the first time in more than a decade—and a half-century after enactment of the country's main K-12 law—Congress has redefined the federal role in elementary and secondary education. [More-->](#)

**Percentage of high schools offering AP courses declines** The percentage of high schools offering Advanced Placement (AP) courses declined between 2008 and 2012. The declines are largely focused in small, rural, and high-poverty schools. [More-->](#)

**Three ways white students benefit most from racially diverse schools** - The academic and social advantages white students gain in integrated schools have been consistently documented by a rich body of peer-reviewed research over the last 15 years. Many social scientists—and, increasingly, leaders in the business world—argue that diverse schools actually benefit white students the most. [More-->](#)

**Equity pathways in informal STEM learning** - Informal STEM learning experiences can provide youth with rich, innovative, and transformational ways to engage with and learn about the world around them. But not all STEM experiences are as equitable as they could be. This article examines field-wide equity issues in informal education, including who can access informal STEM resources and whose voices, interests, and goals are included. [More-->](#)

**Education could be a big election issue — so who's getting the most money from higher ed?** Not for decades have national issues that affect colleges and universities – such as financial aid allocation, student loan debt and campus diversity – been as prominent in a Presidential race as they are this year. While it's too early in the game to declare a higher-ed favorite, so far Clinton, Sanders, and Bush have received the most donations from higher ed. [More-->](#)

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## About us

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**CEO Updates** is the newsletter of the [Coalition for Education Outreach](#) (CEO), an informal working group of organizations, departments, and individuals on the UC Berkeley campus and in the community engaged in STEM education and outreach (E&O). Our mission is to further professional development, facilitate best practices, and encourage information exchange among CEO members. [Kate Spohr](#) and [Dan Zevin](#), CEO co-chairs, welcome your questions, comments, and ideas. [More-->](#)

Commonly used acronyms: E&O (education and outreach); STEM (Science, Technology, Engineering, Mathematics); NGSS (Next Generation Science Standards); NSF (National Science Foundation); K-12 (kindergarten through 12th grade).

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