CEO Updates is a biweekly newsletter designed to inform and engage the UC Berkeley STEM education and outreach (E&O) community and our off-campus partners. Please scroll to the end of this message for additional information about CEO.

Coming up at CEO

9/10/15, CEO beginning-of-year social, 4:30-6:00 pm. Usher in the new academic year with CEO colleagues and friends in an informal, relaxed setting. Light snacks and no-host bar. RSVP here. Location: Celia's Mexican Restaurant, 1841 Euclid (on north side of UC Berkeley campus).

10/13/15 CEO monthly meeting, 12:00 to 1:30 pm. Richard Freishtat and Jenn Weaver from the Center for Teaching and Learning (CTL) will discuss how the Center works with Berkeley faculty and departments to enhance teaching and learning effectiveness in the areas of pedagogy, curriculum, and assessment. They will also discuss two recent NSF-funded projects for which CTL provided consultation in program design, curriculum development, and training. Joining Richard and Jenn will be Catherine Halversen and Lynn Tran from the Lawrence Hall of Science (LHS) who worked with CTL on the Redefining the College Lecture project; and Jo Yuen from the Center for Energy Efficient Electronics Science (E3S) who worked with CTL on a Research Experiences for Teachers (RET) program that teaches context-based learning to community college faculty. Location: 303 Doe Library.

View the complete CEO event and meeting schedule.

Funding opportunities
EHR Core Research (ECR) Fundamental Research in Science, Technology, Engineering and Mathematics (STEM) Education—Deadline: 9/10/15. The National Science Foundation Directorate for Education & Human Resources (EHR) seeks proposals that will help synthesize, build, and/or expand research foundations in the following focal areas: STEM learning, STEM learning environments, STEM workforce development, and broadening participation in STEM. The program supports efforts to develop foundational knowledge in STEM learning and learning contexts, both formal and informal, from childhood through adulthood, for all groups, from the earliest developmental stages of life through participation in the workforce, resulting in increased public understanding of science and engineering. Program guidelines: NSF 15-509.

American Honda Foundation requests applications to support programs focused on youth and scientific education. Limit: Organizations may only submit one request in a 12-month period (see campus process instructions below). Deadlines: 9/17/15 campus applications due to VCRO. 11/2/15 selected application due to American Honda Foundation. Summary: The American Honda Foundation (AHF) seeks out programs that are: 1) innovative and creative that propose untried methods which ultimately may result in providing solutions to the complex educational concerns currently facing the American society; 2) broad in scope, intent, impact and outreach; 3) possess a high potential for success with a relatively low incidence of duplication of effort; 4) dedicated to improving the human condition of all mankind; 5) operate from a position of financial and administrative soundness; and 6) in urgent need of funding from a priority basis (not necessarily financial need). Budget and Duration: The grant range is from $20,000 to $75,000 for a period of one year. Average AHF’s grants is $45,000. AHF will allow up to 12% indirect costs. Campus Process: Organizations may only submit one request in a 12-month period. Send campus applications to Limited Submissions by 5:00 pm on 9/17/15. Campus applications should be sent as a single PDF file that includes: 1) Limited Submission Cover Sheet, using the form here. 2) Project description (3-5 pgs, including references). 3) Summary budget (1 pg). 4) Curriculum vitae or biosketch (2 pgs) for each PI and co-PI. Campus limited submission contact: Matthew Andrews, ltdsubs@berkeley.edu.

National Educational Association accepting applications for learning and leadership grants—Deadline: 10/15/15. Grants of up to $5,000 will be awarded to support the professional development of public school teachers, public education support professionals, and/or faculty and staff in public institutions of higher education. Funding will be provided to: 1) Individuals for high-quality professional development experiences, such as summer institutes, conferences, or action research; 2) Groups for collegial study, including study groups, action research, lesson plan development, or mentoring experiences for faculty or staff.

Lowe's Charitable and Education Foundations accepting applications for Toolbox for Education grants. Deadline: 10/16/15. Grants of up to $5,000 will be awarded to projects such as facility enhancement or landscaping/clean-up projects with the potential to have a permanent impact on a K-12 school community.

National Council of Teachers of Mathematics (NCTM) accepting proposals for teacher professional development grants. Deadline: November 6, 2015. Grants of up to $3,000 will be awarded in support of professional development efforts that improve the classroom competence of middle-school mathematics teachers.

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**NSF STEM + Computing Partnerships (STEM+C)—Deadline: 3/8/16.** The STEM+C Partnerships program seeks to significantly enhance the learning and teaching of science, technology, engineering, mathematics (STEM), and computing by K-12 students and teachers, through research on, and development of, courses, curriculum, course materials, pedagogies, instructional strategies, or models that innovatively integrate computing into one or more STEM disciplines, or integrate STEM content into the teaching and learning of computing. In addition, STEM+C seeks to build capacity in K-12 computing education with foundational research and focused teacher preparation. Projects in the STEM+C Partnerships program should build on research in STEM education and prior research and development efforts that provide theoretical and empirical justification for proposed projects. Pre-service and in-service teachers who participate in STEM+C projects are expected to enhance their understanding and teaching of STEM and computing content, practices, and skills. Program guidelines: NSF 15-537.

**Opportunities**

The [Association of Science and Technology Centers (ASTC)](http://community.astc.org/home) hosts Youth Development and Programming Community of Practice, an open forum for discussion, resource-sharing, and connections with informal education professionals around the world. Sign up at: http://community.astc.org/home.

National College Attainment Network (NCAN) annual conference, Sept 28-30, Orlando. Drawing on the expertise of hundreds of organizational members in almost every U.S. state, NCAN is dedicated to improving the quality and quantity of support that underrepresented students receive to apply to, enter, and succeed in college. Registration is now open. Download the conference brochure and agenda [here](https://mail.google.com/mail/u/0/?ui=2&ik=1698398da7&view=pt&search=inbox&th=1475b89a95a7f58&siml=1475b89a95a7f58).

**New & noteworthy**

In elite schools' vast endowments, Malcolm Gladwell sees 'obscene' inequity—A new opinion piece in The New York Times by law professor Victor Fleischer criticizes some of the nation’s top schools for spending vast amounts on endowment management but little on financial aid. Fleischer's op-ed grabbed the attention of author Malcolm Gladwell, and [NPR](http://www.npr.org/) has posted a few of his most striking thoughts on the issue. New York Times, 8/19/15.

Lumina Foundation proposes college affordability benchmark—Efforts to make higher education affordable for all Americans requires a shared definition of affordability that helps policy makers work with institutions and makes it easier for students and their families to understand and plan for the financial realities of college. The Lumina Foundation's white paper, A Benchmark for Making College Affordable: The Rule of 10, proposes that, under the "Rule of 10," the amount deemed "affordable" would be based on students' individual circumstances, with students paying no more than 10 percent of their families' discretionary income over ten years as well
as their own earnings from a ten-hour a week job while they are in school.

Billions in Pell dollars go to students who never graduate—Since 2000, the U.S. has allocated $300 billion in taxes for Pell grants without ever collecting data on how many of its recipients complete their college degree. This information would be useful, particularly for low-income students trying to pick a school where they would be most likely to succeed. In January 2014, Congress gave the Department of Education 120 days to produce, for the first time, Pell grant graduation rates for every university and college in the country. DOE finally released the months-overdue report in November, but did not break down the information by institution, citing problems with the data, and was only able to analyze 70 percent of Pell recipients. Only 39 percent of the 1.7 million students in its sample earned a bachelor’s degree in six years. Hechinger Report, 8/17/15.

Five facts about American students The Pew Research Center visually displays data on the country’s 53.5 million K-12 students. Although the entire population is more racially diverse than ever, many students attend schools with a majority of classmates who share their race or ethnicity. Pew Research Center, 8/10/15.

In the balance—Data from the Federal Reserve Bank of St. Louis shows that the payoff from a college degree remains strong, even with tuition expenses at record highs. This data also demonstrates that while black and Hispanic college graduates fare better financially than those of the same race without a degree, their education has not been a guarantee of financial security as it has been for white and Asian students.

Disrupting tech’s diversity problem with code camp for girls of color—Silicon Valley is great at disrupting business norms — except when it comes to its own racial and gender diversity problem. One nonprofit group, Black Girls CODE, isn’t waiting around for more diversity reports. The group is taking action with regular weekend coding camps for girls of color. NPR, 8/17/15.

At hands-on program, black and Latino boys aim for selective colleges—New York Chalkbeat posted a piece on Urban Ambassadors, a selective mentorship program with its sights set on getting more black and Latino males into competitive colleges and universities. "In my school," said participant Leo Herrera, "I personally have distractions that take me off sometimes. But luckily I've got these guys that always keep me on track and remind me where I want to go."—Chalkbeat, 8/14/15.

About CEO
The **Coalition for Education & Outreach (CEO)** is an all-volunteer community of practice for staff, faculty, postdocs, and students who work in science, technology, engineering, and math (STEM) education and outreach at Berkeley and in our surrounding communities. Our mission is to further professional development, networking, and information exchange within our community of over 270 subscribers. Membership is free and open to all. [Click here](https://mail.google.com/mail/u/0/?ui=2&ik=1698398da7&view=pt&search=inbox&th=1475b89a95a7f58&siml=1475b89a95a7f58) to subscribe or unsubscribe to the CEO e-list and newsletter. Visit the [CEO website](https://mail.google.com/mail/u/0/?ui=2&ik=1698398da7&view=pt&search=inbox&th=1475b89a95a7f58&siml=1475b89a95a7f58) for information about CEO's members and programs, or to access past issues of this newsletter. CEO co-chairs Kate Spohr or Dan Zevin welcome your comments, questions, and ideas.