

## SCET Broader Impact Activities for NSF and Other Proposals

**What we do.** The Pantas and Ting Sutardja Center for Entrepreneurship and Technology (SCET) is the premiere institution on the UC Berkeley campus for the study and practice of technology-focused entrepreneurship and innovation. SCET is known for developing the Berkeley Method of Entrepreneurship, an internationally recognized approach for teaching technology entrepreneurship for undergraduates, innovation for Ph.D. students, and technology firm leadership for professionals and executives. The Center is located within the UC Berkeley College of Engineering, and our academic home is the Department of Industrial Engineering and Operations Research. To learn more, please visit our website at [scet.berkeley.edu](http://scet.berkeley.edu).

**Our model aligns with BI goals.** SCET can offer PIs *three models* that will add depth to the Broader Impact (BI) plan of an NSF or other proposal. Each aligns with the NSF vision of advancing scientific knowledge and offering activities that contribute to the achievement of societally relevant outcomes. In addition, we can work with you to provide methods for evaluation, a requirement of the NSF Merit Review Criteria.

Our models integrate research and education, an NSF priority, and are appropriate for the following target BI audiences: *undergraduate and graduate students, postdocs, faculty and industry, and underserved communities including women, underrepresented minorities, persons with disabilities and veterans*. Further, the models align with the *BI goals* in the American Competes Reauthorization Act of 2010, adopted by NSF, by promoting:

- Increased US economic competitiveness
- Development of a diverse, globally competitive STEM workforce
- Improved STEM education and educator development

And, depending on your target audience:

- Full participation of women, persons with disabilities and underrepresented minorities in STEM
- Increased partnerships between academia, industry, and others, and
- Increased public scientific literacy and public engagement with science and technology

**Benefit to you.** By leveraging our programs and collaborating with us, your proposal can benefit from our existing curricula, staff experienced in program administration and participant recruitment, and proven evaluation tools to assess BI plan success. All faculty are busy. Collaborate with us to develop a practical BI plan that increases your proposal competitiveness and fits into your schedule.

## **Model 1: Graduate and faculty programs**

Collaborating PIs may reserve seats for their BI participants in one of two SCET technology innovation programs that seek to increase the commercial and societal impact of technical research areas.

### [MTI Master Class for New Venture Teams and Research Impact](#)

This course, the foundational class for SCET Management of Technology Innovation program graduate students, prepares students for technology-based innovation and entrepreneurship. Based on a variation of the Berkeley Method of Entrepreneurship, the curriculum is adjusted for deeper technology venture teams and to maximize research impact in an industry context. Students develop judgment through rigorous case study of innovation and business situations. Topics include opportunity recognition, ecosystem development, strategies for effective R&D, product management, market selection, direct and indirect sales, and funding models. The course also covers entrepreneurial and innovation mindset, risk and leadership styles.

To add a creative or unique element for your BI plan (per NSF Merit Review Criteria), we can expand this program to increase the number of mentors and advisors for a specific proposal research area. That variation will, in turn, lead to greater and more varied engagement between industry experts and the students.

### [Berkeley Method of Entrepreneurship Bootcamp \(BMoE\)](#)

The bootcamp is a bi-annual, 1-week immersive new venture creation workshop hosted by SCET. Scheduled for the beginning of spring and fall semester, participants enjoy a unique intense experience at one of Silicon Valley's premier institutions. Program participants attend sessions that weave together lectures and interactive game-based exercises, receive 1:1 mentoring from Sutardja Center faculty and industry experts, and learn in a collaborative environment. Participants join one of two tracks to work on an individual project or plan. Track 1 (for students and entrepreneurs) focuses on developing a new venture, and Track 2 (academics and researchers) teaches practical tasks to develop a start-up business.

During the bootcamp, participants will:

- Learn how to generate ideas, transform ideas into new ventures, and market new ventures while integrating success concepts. Those concepts include customer-focused design thinking and innovation in business models, and incorporating input and advice from real-life entrepreneurs, investors, and marketing specialists.
- Improve their individual skills by using case studies to facilitate and hone ideas, and attending special modules on ideation, sales pitch and funding.
- Collaborate with our experts
- Form startup teams, learn the mechanics of a start-up, and set major milestones
- Internalize the attributes that contribute to the entrepreneurial mindset
- Pitch their idea to an experienced panel of experts and potential investors

To add a creative or unique element to the plan, we might recruit new mentors and advisors to engage with participants. This variation will further enrich the BI participant experience via increased access to other viewpoints and by fostering greater collaboration.

## **Model 2: Undergraduate and graduate mixed programs**

PIs will be able to offer their BI participants meaningful hands-on laboratory experiences in our Challenge Lab or Innovation Collider Program.

### [Challenge Lab](#)

BI participants can take part in the Challenge Lab, a competition-based program in which students work in cross-disciplinary, lean start-up teams to create innovative products. Teams navigate realistic weekly challenges introduced via case studies. Through their lab experiences, students learn to understand real-world constraints, use rapid-iterative build, and validate development methods. Through frequent interaction with the sponsors and mentors, student teams develop a working prototype and a white paper. Program sessions occur in the fall and spring semesters, and a different challenge is offered each session.

### [Innovation Collider Program](#)

Our highly applied, dynamic lab combines education, research projects and diverse mixtures of people to create innovation. Derived from the SCET [#WhatsNext](#) List, project topics challenge students to develop innovative solutions to advance industry or technology or create new ventures or measurable social impact. Industry experts mentor students to provide valuable insight into new markets and opportunities while expanding personal and professional networks. All colliders are team-based and project-driven, and offer opportunities to sharpen teamwork and leadership skills in a multidisciplinary environment. Collider teams are notable for the diversity of their students, researchers, investors, entrepreneurs, and industry leaders.

The goal of both the Challenge Lab and Innovation Collider Program is to create new and challenging research student projects. Our projects typically involve topics intended to have broader impacts by improving the wellbeing of individuals on a large scale and increasing public engagement with science and technology.

## **Model 3: Industry, Undergraduate and Graduate Students, Postdocs, and Underserved Communities Programs**

### [The A. Richard Newton Lecture Series](#)

PIs are welcome to include attendance at our A. Richard Newton Lecture Series in their BI plan. We invite distinguished innovators, entrepreneurs, and Silicon Valley executives to share lessons from their own successes and failures. Through the speaker's experiences, students can explore entrepreneurship, innovation and career opportunities. Offered in the fall and spring semester, the series takes place on campus in early evening lectures that average one speaker

per week.

This popular class attracts over 250 attendees per series. Past speakers include: Diane Greene, founder and former CEO, VMware and board member, Google, [Alex Stamos](#), CSO, Facebook and John Hanke, founder and CEO, Niantic Labs (creator of Google Maps and Pokemon Go). The series has received significant press coverage due to the high caliber of our speakers.

Adding depth to BI plans, the lecture series promotes STEM, outreach to underrepresented communities, increased public scientific literacy and public engagement with science and technology, and fosters increased partnerships between academia, industry and others.

For further information on the SCET models, and to discuss collaboration with SCET on your BI plans, please contact:

Danielle Vivo  
Innovation Collider Program Manager  
Pantas and Ting Sutardja Center for Entrepreneurship & Technology  
M: [+1 408 209 4315](tel:+14082094315) // Skype: vivo.danielle // [Linkedin](#)  
Like us on [Facebook](#) // Follow us on [Twitter](#) // [www.scet.berkeley.edu](http://www.scet.berkeley.edu)

For assistance in developing your COE large and center grant proposals and, as time allows, individual and smaller team proposals, please contact:

Gail Easton  
Major Proposals Development Officer  
UC Berkeley, College of Engineering  
533 Cory Hall  
Berkeley, CA 94720  
Office: 510 664-7081  
[geaston@berkeley.edu](mailto:geaston@berkeley.edu)