

# BIG ideas

When two students — one in Berkeley's MBA program, the other in mechanical engineering — showed up at **Thomas Kalil's** office several years ago and announced plans to start a nanotechnology club, he was intrigued. As special assistant to the Chancellor for science and technology, Kalil was on the lookout for new ways to spark multidisciplinary collaboration. But he had no inkling the students' proposal would quite literally inspire the next Big Idea on campus.

Kalil found \$13,000 to support the club the first year. "In short order, they had hundreds of members and had organized a fantastic conference with 500 attendees and Nobel laureate and CEO-level speakers," he says. "The winner of their business plan competition went on to win an Intel-sponsored global competition."

When the University received an unrestricted grant of \$20,000 through a program created by eBay founder Pierre Omidyar, the money was used to replicate the experience on a campus-wide scale. Richard Newton, the late dean of engineering, shared Kalil's enthusiasm for student-led initiatives and immediately matched the funding.

The Big Ideas @ Berkeley Initiative was launched in July 2005 to provide seed funding and encouragement to interdisciplinary teams of Berkeley students with **creative, high-impact ideas — and the energy and passion to make them happen.**

Kalil came to Berkeley in 2001 after serving as the deputy assistant to President Clinton for technology and economic policy, where he worked to get compelling ideas into the State of the Union address. "I want to give Berkeley students permission to think at a larger scale as well," he says.

## **BEARS BREAKING BOUNDARIES**

At first the program was ad hoc, but with additional funding from research centers across the campus, Kalil and the Associated Students of the University of California held the first Bears Breaking Boundaries contest in 2006.

From 91 entries, 29 teams of students won more than \$100,000 for initiatives related to issues including global poverty reduction, clean energy, green cities, curricular innovation, social entrepreneurship, and beautifying Berkeley.

Student ingenuity and collaboration help green the world

# @ Berkeley

Because of the number of worthy proposals, the University launched the Big Ideas Marketplace in December 2006. This allows companies, foundations, alumni, and students to make tax-deductible donations to individual projects, many of them initially supported by Big Ideas and in search of additional funding.

The 2007 Bears Breaking Boundaries contest is under way, this time with nearly \$140,000 in prizes. And many of the 2006 winners are going strong: Companies and foundations such as AT&T, CommerceNet, and the Deshpande Foundation have jumped in to support various student initiatives, and Executive Vice Chancellor and Provost George Breslauer committed \$100,000 in additional funds.

**“Our goal is to have successful, high-profile student projects that begin to change the culture at Berkeley,”** Kalil says. “Whenever people are thinking about how to launch a new initiative, they should immediately invite students to participate.

A creative student with a burning desire to change the world can get a lot done with modest resources, and their initial results can serve as a catalyst for major new research, education, and service initiatives.”

Energy is a hot topic at Berkeley, and through Big Ideas, students have moved their proposals off paper and into practice.



*William Coleman M.B.A. '06*

## CENTER FOR ENERGY INNOVATION

When **William Coleman M.B.A. '06** arrived at Berkeley, he couldn't wait to tap into the University's wealth of resources on clean energy. The problem? "It's hard to figure out what exactly does exist," says Coleman, who will receive his M.S. in energy and resources this spring. "Berkeley can be a sprawling place."

To help navigate, he co-founded ➤



# BIG Ideas @ Berkeley

the Berkeley Energy Resources Collaborative (BERC). With seed funding from Big Ideas, the Chancellor's Office and an engineering fellowship program, BERC started hosting energy-related forums and roundtables. Last year, BERC — which now has more than 200 members — won \$4,000 in the Bears Breaking Boundaries contest for an even bigger idea: The Center for Energy Innovation.

Launched this year, the center will facilitate **multilayered collaboration among students studying business, engineering, law, public policy, and environmental science, as well as the Lawrence Berkeley National Laboratory.**

The center's dual mission is to develop curricula to train the next generation of business leaders in clean energy while bridging the gap between academia and the private sector.

"What we're faced with now is a church-and-state mentality between academia and the private sector," Coleman says. "In energy, those two groups are really going to have to work together."

Coleman and his colleagues have already designed two new interdisciplinary courses for the University, and in March

BERC hosted an energy symposium that drew more than 500 attendees. Kalil, for one, isn't surprised at the group's resounding success.

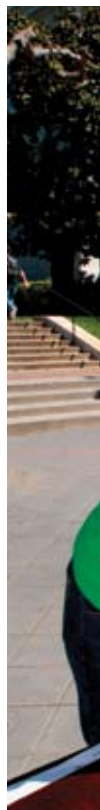
"They are offering a commercialization counterpart to all the major energy initiatives we are launching, such as Helios and the Energy Biosciences Institute," he says. "There were over 100 venture capitalists and investors at the symposium. That gives you an idea of how much interest there is in commercializing Berkeley's clean-energy technologies."

## STUDENTS FOR A GREENER BERKELEY

Materials science Ph.D. student **Becca Jones** was surprised to discover that when it came to environmental sustainability on campus, Berkeley students lagged behind their peers: UC Santa Cruz students had voted to use 100 percent green energy; Santa Barbara students raised fees \$10 a year to create a clean energy fund; Cal State Humboldt will be off the grid by 2020.

**"When people think of environmental sustainability, people think of Berkeley.**

It's important that we reflect that," says Jones, who co-organized an



# Students have moved their proposals off paper and into practice.



*Becca Jones, material sciences Ph.D student*

environmental referendum in April to increase student fees.

Students overwhelmingly voted — 69 percent in favor — to pay an extra \$5 a semester, which will bring in \$200,000 annually for the Green Initiative Fund. It's enough money to make a noticeable dent in the campus's environmental footprint. "You'd need a \$4 million endowment to generate an equivalent income stream," Kalil says.

The referendum was funded solely through the University's Big Ideas online marketplace, which raised almost \$3,500 in donations.

The fund identified a number of ways the money could be used: Buying solar panels and electric vehicles; configuring computers to be on energy-saving settings; repairing a steam heating plant — all projects the University might otherwise be unable to fund. Anyone affiliated with Berkeley can propose initiatives; a student-majority committee will allocate the money.

The fund, says Jones, "gives the student community a direct role in making Berkeley a national leader in sustainability. And it lets students make the powerful statement that they care enough about the environment to put their money where their mouth is."

For more information, see [bigideas.berkeley.edu](https://bigideas.berkeley.edu) or contact Tom Kalil at [tkalil@berkeley.edu](mailto:tkalil@berkeley.edu). ●