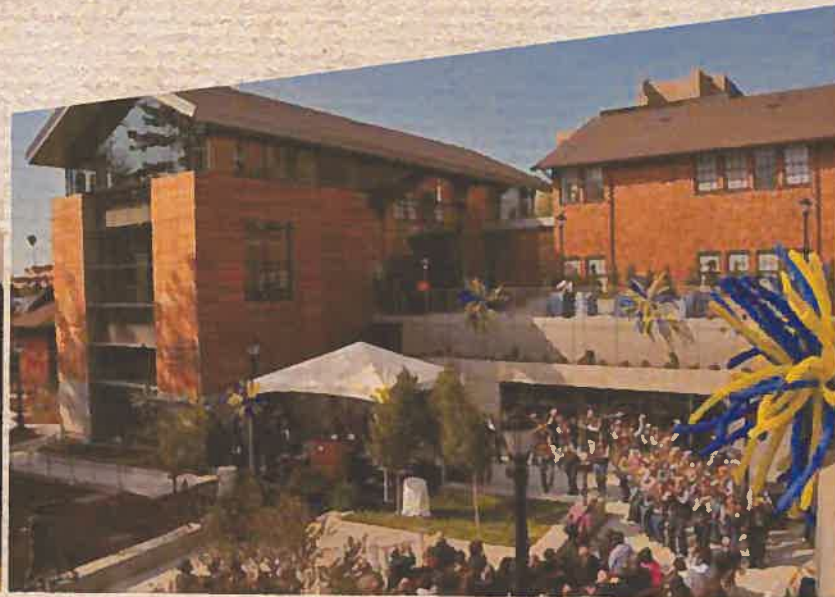


Blum Center for Developing Economies

UNIVERSITY OF CALIFORNIA, BERKELEY



ANNUAL REPORT 2010/2011



“An undergraduate education is meant to provide the beginnings of a life path, and being a part of the Blum Center has been instrumental in showing me that my future, whatever else it may bring, is meant to include public service.”



- *Ruwani Ekanayake*
Public Health Major
GPP Minor

BERKELEY
STUDENTS
AND FACULTY ARE
CHANGING
THE WORLD

MESSAGE FROM THE FACULTY DIRECTOR



S. Shakar Sastry

Greetings from the Blum Center, where we've had a truly wonderful year! A new home, great progress throughout our innovation initiative portfolio, honors for our faculty and students, and so much more you'll read about in this annual report. For this, we owe a huge thanks to our generous supporters, including Peter Kwok, Arthur H. Rosenfeld, Coleman Fung, Andrew and Virginia Rudd, The Friend Family and The Osher Foundation. Of course, a very special thanks goes to Richard Blum for championing the financing for our new home. The building is brimming with energy and enthusiasm – with nearly 400 undergraduates in our Minor, 75 faculty associated with our education and innovation initiatives, 200 student winners of our Big Ideas @ Berkeley competition, and more than 60 graduate students from a variety of disciplines who meet throughout the building. This interdisciplinary collaboration is both unique and effective. We believe that our university community, especially the current generation of entrepreneurial youth, has an important role in developing scalable and sustainable solutions to a landscape of constantly changing hard problems – especially those problems that require the expertise of many disciplines to solve. The Blum Center provides the support necessary to bring together these novel combinations of people and ideas – and to focus the talent and energy of this great campus on the important challenges facing the planet. We hope you'll write, call or stop by to give us your thoughts on our work!

MESSAGE FROM THE EDUCATION DIRECTOR



Ananya Roy

This year marks the graduation of the fourth cohort of Global Poverty and Practice Minors. Over a hundred students from majors ranging from Economics to Engineering to Public Health are part of the GPP Class of 2011. Not surprisingly, our young alumni are embarking on ambitious careers, enrolling in high-powered graduate programs, starting their own organizations, and above all putting into action the ethics of global citizenship. They remind us of why it is important to nurture and support the work of undergraduates. At the Blum Center we do so in numerous ways. Fellowships and travel grants make it possible for students to undertake their global practice experiences and to present their work at venues such as the Clinton Global Initiative University. Our new courses enrich the learning experience of our students, which this year included offerings on social enterprises, methods of evaluating poverty interventions, the use of digital media for social change, and law and development. In addition, we have hosted lectures by distinguished practitioners including Jonathan Lewis, Raj Patel, Anasuya Sengupta and Thomas Tighe. Finally, thanks to the Rudd Family Foundation, the Big Ideas @ Berkeley Competition ensures that we have a platform for student innovation, tapping the creativity and energy of our youth to address the grand challenges facing the world. Together these various elements have ensured that the Blum Center is home to a unique undergraduate program that makes change in the world by supporting young change-makers.

GRAND OPENING OF BLUM HALL



Richard Blum and Chancellor Robert Birgenau look on as former Secretary of State George Shultz praises Cal students.



Blum Hall provides a space for students to interact with mentors who are interested in supporting student innovation.



GPP Minor Student Carolyn Orson, Senator Dianne Feinstein, Secretary of State George Shultz and Richard Blum.

On October 8, 2010 the UC Berkeley campus came together to celebrate the grand opening of Richard C. Blum Hall. The highlight of the event was a speech by Blum Center Trustee and former Secretary of State George Shultz.

Previously, the center's operations, innovations teams, and undergraduate students were scattered across campus. But now they share what Richard Blum, the center's founder, intends to be a collaborative workspace for student innovators and their faculty mentors.

“This building is for the students who remind us every day that Cal can be a driving force for positive change in the world.”

- Richard C. Blum



The Center leads the university's efforts to develop practical solutions to alleviate poverty.



The Center is a home to student entrepreneurs, providing leadership development, business training, and programs such as this poster session where students showcase their work.



The Center's 2011 Distinguished Lecture Series included Wang Jin-pyng, President of the Legislative Yuan of the Republic of China.

“Something big time has happened on the Berkeley campus. It has happened very quickly. and for something to happen in four years, of this proportion, is simply unbelievable...”

- *George Shultz, Former Secretary of State
Blum Center Trustee*

THE LARGEST MINOR ON CAMPUS GLOBAL POVERTY & PRACTICE



Blum Center Board Chair Laura Tyson talks with undergraduates in the Center's GPP Minor about their effort to provide safe water in Bangladesh.

Launched in 2007, the program has grown from 55 to 450 current students, with 230 alumni.

The Global Poverty and Practice (GPP) Minor provides undergraduates from a wide variety of majors the knowledge and the hands-on experience to become dynamic participants in the fight against global poverty.

NEW UNDERGRADUATE COURSES

The Center has a continuously evolving portfolio of courses designed to educate undergraduates about global poverty, while providing the basic skills and experiences they need to take action. The efforts of a multidisciplinary faculty committee have yielded a wide variety of new courses taught by both distinguished Berkeley faculty and successful practitioners. Examples include:

- **Markets & Missions: A Practicum on Entrepreneurial Solutions to Poverty**
- **Selecting Successful Strategies to Reduce Global Poverty**
- **Field Reporting in the Digital Age: Using Media Tools for Social Justice**
- **Global Health: A Multidisciplinary Examination**
- **Law & Development**
- **Water & Development**



GPP Student Babalola Ogunbiyi, Betty Wong and Saad Karamat talk about their fieldwork.



Ryan Ballard (center back row) participated in a program providing education and training to at-risk youth in India.



As part of her fieldwork, Katherine Rathbun conducts HIV tests in Uganda and works to educate school children about diseases.

FIELDWORK

The signature element of the Minor is a self-defined practice experience, which provides an opportunity for students to connect the theory and practice of poverty and its alleviation. Students spend a minimum of five weeks working with non-governmental organizations, government agencies, social movements, community projects, or development initiatives to address a particular aspect of poverty alleviation. **Over 300 undergraduates have completed their practice experience in 52 countries since the program began.** To ensure that the Minor is accessible to all, students can apply for fellowships to support their field work. Generous donors have enabled 130 of these students to participate with average fellowships of \$2,600 to support their work.

“I have become more confident in myself and in my ability to find meaning in failure, to endure uncomfortable circumstances, to establish inspiring relationships, to improvise and be flexible.”

– Katherine Rathbun
Anthropology Major
GPP Minor

INNOVATION INITIATIVES



Students build a water testing lab in Hubli, India.



Arsenic researcher Susan Addy meeting with Grameen Bank founder and Nobel Laureate Muhammed Yunus.

- Blum Center multidisciplinary teams approach poverty alleviation in a unique way. We partner with corporations and non-profits outside the university as early as possible in the design and development process so that **working together our solutions are sustainable in the long term, helping not just hundreds of people but thousands or millions.**
- We focus on developing the next generation of effective and affordable technologies and services that are specifically **designed to respond to the needs of developing economies.**
- Innovation teams are now working to deliver safe water and sanitation solutions in eight countries; life-saving mobile services throughout Africa and Asia; and new energy technologies that emphasize efficiency while reducing negative environmental impacts.

WHERE WE WORK





A rollout of the Mesita Azul for household water disinfection has been accompanied by a comprehensive survey on user perceptions and disease reduction.



A health education campaign supported by the Blum Center in primary schools in La Paz, Mexico is now scaling in other regions of Mexico.



A Berkeley student group conducts a workshop about sanitation at a primary school in Dharavi, Mumbai, India.

“The faculty and students at the Blum Center can change the world. Their efforts can have a truly significant impact on global poverty for years to come.”

- Al Gore
Former Vice President
Nobel Prize winner

SAFE WATER AND SANITATION

Lack of access to safe water and poor sanitation practices are fundamental causes of debilitating disease and death in developing countries. The Blum Center is developing the next generation of effective and affordable water treatment technologies that remove biological and chemical contaminants. Our innovations are specifically designed to respond to the needs of users in developing countries. Our efforts incorporate cross cutting methodologies – including needs assessments, consumer preference/ marketing studies and epidemiological impact assessments – that guide the technology

development and business plans necessary to bring the technologies to scale.

The Electrochemical Arsenic Removal (ECAR) project aimed at removing arsenic from drinking water, continues to probe important chemistry questions while simultaneously preparing for field-testing a prototype device in Bangladesh. The Ultraviolet Tube project (Mesita Azul) in La Paz, Mexico, a rollout of the technology accompanied by a rigorous evaluation survey, has begun to deploy in primary schools and to develop projects in other regions of Mexico.



Researchers test a prototype ambient gas plasma device to sterilize medical equipment and reduce the transmission of diseases.



In rural Uganda, the use of "smart phones" is enabling more people to receive timely diagnosis and treatment.



Students working in the lab to prototype a new solar LED lantern for the SmartLight project.

MOBILE SERVICES AND TECHNOLOGIES

It is estimated that there are 5 billion mobile phones in the world, and the development of networks and penetration within developing countries has been breathtaking. Most new subscribers in developing countries will effectively be connected to the internet through wireless devices long before being connected to the internet through a computer.

The Blum Center works to develop new technology approaches that bring innovation in services to the poor through leveraging

low cost mobile solutions. The Blum Center is currently focusing on deploying health-care related applications that can bring affordable and scalable solutions to expand access to health innovations.

In 2011 the Cellscope project on mobile tele-microscopy moved forward into piloting in Uganda and India. A new project on neglected diseases seeks to incorporate micro-fluidics into a mobile device to test for schistosomiasis and perform emergent disease mapping

in China. A team working on Ambient Gas Plasma seeks to incorporate a handheld power supply with a plasma generator to provide low cost portable disinfection.



In Darfur refugee camps, women must either buy expensive fuelwood (often paying with food rations) or leave the camp to look for fuelwood and risk exposing themselves to violence. Engineers designed the Berkeley-Darfur stove with significant input from the Darfuri women to require much less fuelwood.

The Berkeley-Darfur Stove is assembled in Sudan by local workers, creating jobs for residents of the refugee camps.

ENERGY EFFICIENT TECHNOLOGIES

Lack of access to safe, affordable energy is one of the greatest challenges in developing countries. Options available for light, heat and cooking can be expensive and often involve considerable negative health and environmental impacts. Working in conjunction with the Rosenfeld Fund for Global Sustainable Development, the Blum Center supports innovative technological solutions to help the poor with their energy needs in a way that is both efficient and environmentally conscious.

These efforts are focused in the area of delivering LED lighting as a substitute for kerosene lighting, and improved cookstoves to replace cooking on an open hearth.

In 2011 the Darfur Stoves Project is distributing the Berkeley-Darfur cookstoves while carrying out studies to improve marketing and measure impact. The WECARE Solar Suitcase project is designing the second generation of its integrated solar panel, controller, and

power supply package, as well as piloting in a number of sites such as Nigeria and Liberia. The Lumina project is contributing to the development of standards in LED projects, and conducting research on using LEDs in agricultural enterprise in Kenya. A new project based at UC Davis is working to develop a new LED family lantern in Tanzania and Bangladesh.

A YEAR IN PHOTOS



Engineering graduate student Case van Genuchten with an Electro-chemical Arsenic Removal (ECAR) prototype device for removing arsenic from drinking water in Bangladesh.



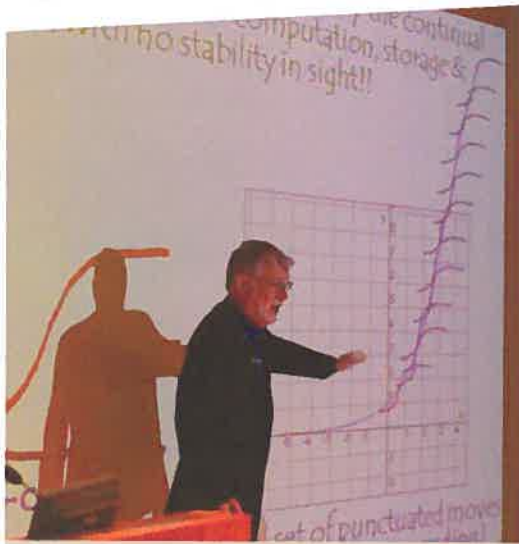
Richard Blum and Luis Moreno, President of the Inter-American Development Bank, after signing the first ever collaboration agreement between IADB and a university.



GPP Minor Alum Romina Juarez-Alvarez teaching a nutrition class in Oaxaca, Mexico.



Some recent alumni of the Global Poverty and Practice Minor gather to celebrate.



John Seely Brown gave the keynote address at the kick off of 2010-2011 Big Ideas Competition in November. He discussed how "student-led innovation is changing the world."



To reduce the spread of disease in the slums of Mumbai, Cal students promote the use of hand sanitizer in areas with very limited access to water.



Lauren Herman, GPP Minor student, conducts a loan signing process as part of establishing a microcredit program in Nakuru, Kenya.



Blum Center Education Director Ananya Roy speaking at the Global Poverty and Practice Minor graduation.



The "Student-Community Collaborative Design Team" was a winner of the Big Ideas @ Berkeley competition, with their proposal for designing better community spaces in under-served areas.



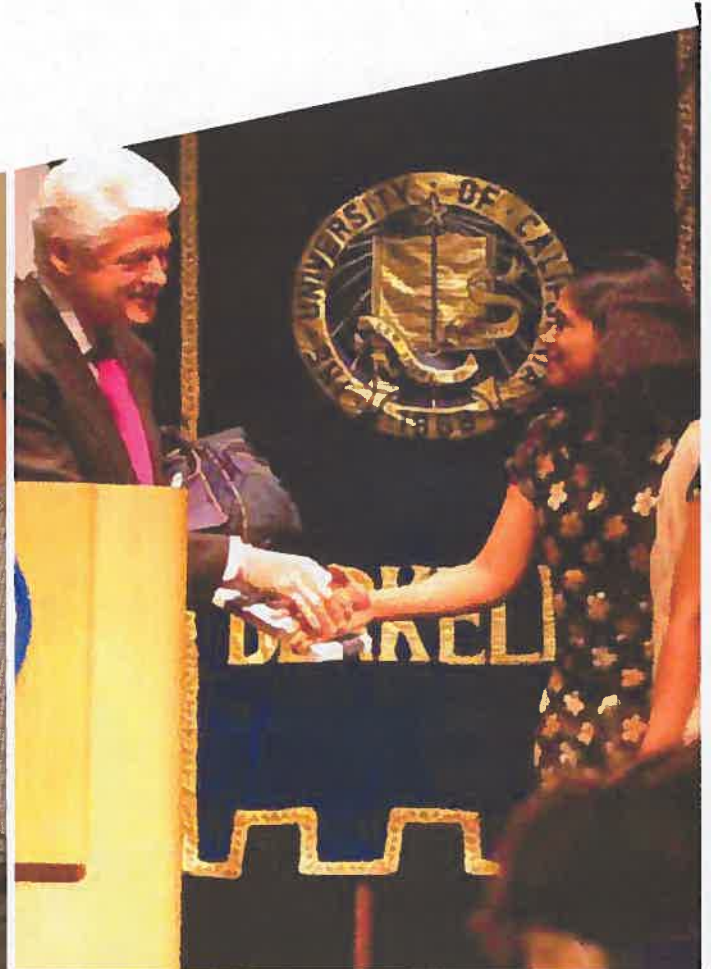
President Bill Clinton mingled with students at Zellerbach Hall after his speech entitled "Turning Good Intentions Into Positive Actions."



GPP Minor Alum Jacob Seigel-Boettner, helps distribute specially-designed cargo bicycles to rural coffee farmers in Rwanda, allowing them to more sustainably and efficiently transport their crops.



Iris Shim, MBA Candidate (center) celebrates winning the Big Ideas @ Berkeley Contest with sponsors Virginia and Andrew Rudd.



President Bill Clinton receives a thank you gift from GPP Minor student Farzana Abed after his speech to students.

JOIN US IN CHANGING THE WORLD

MESSAGE FROM THE FOUNDER



Dear Friends,

I write from our new home on the Berkeley campus to tell you how proud I am of what we've accomplished so far. Thanks to all of you, our center has fast become a reality at the only place I could have ever wanted it to be – the University of California, Berkeley.

With incredible student and faculty enthusiasm combined with world-class technical innovations in the field, we have already achieved more than I could have ever imagined.

Over 5,500 students have enrolled in our courses in a little over four years. We are the largest and fastest growing minor at Berkeley ever – and there are overflow crowds at Wheeler Auditorium thanks to our amazing professors such as Ananya Roy and Bob Reich. This past year, we expanded our curricula to include more courses at the Haas Business School focused on innovation and at Berkeley Law School to explore the importance of governance in developing countries.

Our innovation teams are working to deliver safe water and sanitation solutions in eight countries; life-saving mobile services throughout Africa and Asia; and new energy technologies that emphasize efficiency while reducing negative environmental impacts.

But we still have a lot left to do in order to bring even greater systemic change for the three billion people on our planet who live on \$2 a day or less. There are just too many people with hopes and aspirations that without our help have little opportunity to achieve them.

The faculty and students at Berkeley are eager to keep working on the challenges, but they need our help to do so.

I hope you'll join me in supporting the amazing work of the faculty and students at the greatest public university on the planet.

Best Regards,
Richard C. Blum

BOARD OF TRUSTEES

- Richard C. Blum**, Founder
Chairman Blum Capital Partners; Honorary Consul of Nepal
- Laura D'Andrea Tyson**, Chair
Professor, Haas School of Business, Former
Chair of the President's Council of Economic Advisors
- Senator Thomas A. Daschle**
Senior Policy Advisor, DLA Piper, LLP
- Coleman Fung**
Chairman and Founder, OpenLink Financial Inc.
- Dr. John B. Hardman**
President and Chief Executive Officer, The Carter Center
- Vinod Khosla**
President, Khosla Ventures
- Caio Koch-Weser**
Vice Chairman, Deutsche Bank Group, Former Deputy
Finance Minister, Federal Republic of Germany
- John J. Moores**
Trustee Emeritus, The Carter Center
- Robert B. Reich**
Professor, Goldman School of Public Policy,
Former Secretary of Labor
- Andrew and Virginia Rudd**
Trustees of The Rudd Family Foundation
- Arun Sarin**
Former CEO, Vodafone Group
- Weijian Shan**
Chairman and CEO, PAG Capital
- Erica Stone**
President, American Himalayan Foundation

HONORARY TRUSTEES

- Jimmy Carter**
Former President of the United States
- George Shultz**
Former United States Secretary of State
- His Holiness the Dalai Lama**

STEERING COMMITTEE

- Paul Alivisatos**
Director, Lawrence Berkeley National Laboratory
Professor, Department of Chemistry
- Alain de Janvry**
Professor, Agriculture & Resource Economics
- Ananya Roy**
Education Director, Blum Center for Developing Economies
Professor, City and Regional Planning
Co-Director, Global Metropolitan Studies
- Haile Debas**
Executive Director, Global Health Sciences (UCSF)
- J. Bradford DeLong**
Professor, Department of Economics
- Christopher Edley**
Dean, Berkeley School of Law
- Carla Hesse**
Dean, Division of Social Sciences
- Tu Jarvis**
Associate Dean, College of Agriculture & Environmental Sciences
(UC Davis)
- Catherine P. Koshland**
Vice Provost, Teaching, Learning, Academic Planning and Facilities
- Rich Lyons**
Dean, Haas School of Business
- Maryanne McCormick**
Executive Director
- S. Shankar Sastry**
Dean, College of Engineering
Faculty Director, Blum Center for Developing Economies
- Steve Shortell**
Dean, School of Public Health
- Laura D. Tyson**
Professor, Haas School of Business