2014-2015
Update on
Initiatives
& Priorities
What have we done?
Where are we heading?
2014 was a year of great achievement for Berkeley, and as always there is a palpable sense that our excellence only grows each year. I am delighted to provide a sense of the highlights of the past year, while also reporting on the work we have done on the pillars I laid out for the university when I first arrived and took on the great honor of being UC Berkeley’s tenth Chancellor almost two years ago. Academically, Berkeley has made significant progress around undergraduate education, the research enterprise, global engagement, and the arts. Berkeley has also continued to be recognized, in ranking after ranking (whether of global universities, departments, schools, or programs), as one of the very best academic institutions in the world. And, although we continue to struggle with the effects of massive state disinvestment, Berkeley is thriving in other ways, continuing to excel in research across fields, while attracting ever growing numbers of applications for admission, and steadily improving our fundraising capacity and performance, setting the pace among public universities in attracting donor support. We have also continued to support and expand our role as a center not just of discovery and innovation, but also of entrepreneurship and public service.

At the same time, this past year was a time when some of our ongoing challenges came into clearer view not just for me, but for our campus, as our relationships with the University of California system and with the state of California continued to evolve in significant ways. We also understand that there is still much work to do when it comes to improving our campus climate, and we have recognized the need to do a better job of building our ties to the many constituencies that make up our university community. As we strengthen our ability to tell the real Berkeley story, we are strengthening as well our capacity to rely on old and new partners, sometimes for the kind of support we used to receive more directly from the state. And the good news is that as we make these and other adjustments, we are working towards a future that we know will be even brighter than our past.

—Chancellor Nicholas B. Dirks
Improving Campus Climate

While many of our students, staff, and faculty report great satisfaction in their experience here, the campus climate still needs to be improved. Events this Fall underscored both the national and local importance of tackling the climate issues facing the campus. In this respect, it is essential that all campus initiatives be undertaken with the goal of improving the equity and inclusiveness of the campus community.

In 2014, the Division of Equity & Inclusion (E&I) released the findings from the UC Berkeley campus climate survey administered to all faculty, students and staff. E&I shared the campus-wide results with various constituent groups, and distributed findings for every school, college, and division to the appropriate dean. The administration is encouraging faculty members to review the results with their school or college leadership and to take note of any differences among departments or programs in the division or among different populations (undergraduates, graduate students, faculty, and staff). Such variation may mean that exclusion is more pervasive in particular units or for specific constituencies. The campus is also emphasizing the importance of creating a respectful and inclusive environment in our classrooms, labs, workspaces, and offices. In 2015, E&I is launching a new set of initiatives in response both to the survey findings and ongoing and persistent campus climate issues. These include new curricula on intergroup dialogue, innovation grants for improving campus climate, GSI training, and staff professional development.

Significant improvement of the campus climate will only take place when every one of us embraces the full spirit of diversity in the context of a shared commitment to integration: all groups and every individual must be made to feel they belong to the campus community as a whole, not just to a particular subgroup defined by identity or interest. As with other cross-campus initiatives, campus climate is not something
that can be addressed in or by a single part of the university. Climate is not an issue that can be solved by
the “affected groups” but instead requires that all of campus participate in dialogue and the process of
change.

This year, many members of the Berkeley campus community joined others from throughout the Bay
Area in protesting police killings of unarmed black men in New York, Missouri, and elsewhere. In addition,
recent horrific outbreaks of violence, from the Middle East to Paris to Nigeria – as well as the backlash
against communities often unjustly blamed for these episodes – have led many members of our campus
community to feel a significant sense of embattlement. As a university, Berkeley remains unbendingly
committed to ensuring the right to free speech, but also recognizes that the way some people choose to
exercise this right can leave others feeling aggrieved. As always, Berkeley therefore encourages everyone
to practice, and to encourage others to practice, the art of listening, and to remind potentially aggrieved
parties that learning how to engage with opinions one disagrees with, even vehemently, is an essential
part of what a university is meant not only to teach its students, but to model for the wider society.
Improving the campus climate is not just about allowing and enabling free speech, but also about working
to help the excluded to feel heard. For that to happen, everyone in the community needs to make an
effort to listen, above all to voices that might discomfort or offend.

Finally, campus leadership on these topics is changing. Vice Chancellor for Equity and Inclusion Gibor
Basri has announced that he is stepping down after seven years of service, and a search committee
is currently at work to find a worthy replacement. That leader will be charged with building on the
significant accomplishments of Vice Chancellor Basri in institutionalizing and coordinating our efforts to
improve the climate and inclusiveness of the campus community.
Academic Investments

There are four key academic areas where Berkeley continues to make fundamental progress:

1. Sustaining the Research Enterprise

In 2014 Berkeley had yet another banner year of research breakthroughs, initiatives, awards, and extramural funding. Some of the highlights among new Berkeley research initiatives include:

- **Berkeley Institute for Data Science (BIDS):** Berkeley researchers will lead the way in “data science” that will accelerate scientific discovery. With a grant of $12.5m from the Moore and Sloan Foundations, a new multi-disciplinary Institute was launched with a mission to develop new approaches to aggregating and analyzing data for the benefit of fields as diverse as health care, astrophysics, genetics, business and public policy.

- **Global Change Biology:** The National Science Foundation awarded $3m to faculty affiliated with the Berkeley Initiative in Global Change Biology to support a traineeship program in “Environment and Society: Data Science for the 21st Century.” The parent Initiative in Global Change Biology was established several years ago with a seed grant from the campus. It has since generated $14m in support from private foundations and NSF.
• **Simons Institute for the Theory of Computing:** Sixty-five leading computer scientists from throughout the world were resident fellows at the Simons Institute, where they joined Berkeley colleagues to together explore deep unsolved problems about the nature and limits of computation. With a grant of $60m from the Simons Foundation, the Institute aims to promote fundamental research on the foundations of computer science, as well as to expand the horizons of the field by exploring other scientific disciplines (including mathematics, statistics, physics, astronomy, biology and economics) through a computational lens.

• **Social Science Matrix:** A new social science research institute—the “Matrix”— was launched, whose goals are to foster cross-disciplinary projects, generate new forms of scientific inquiry, and design more effective forms of social intervention. The Matrix is located in the completely renovated eighth floor of Barrows Hall.

• **Center for Long-Term Cybersecurity:** With a $15m grant from the Hewlett Foundation, the Center for Long-Term Cybersecurity (CLTC) was launched. CLTC is a multidisciplinary, campus-wide initiative supporting research, curriculum development, seminars, conferences, and outreach on the future of cybersecurity.

• **Digital Tools and Technologies in the Humanities:** With a $2m grant from the Andrew W. Mellon Foundation, UC Berkeley will be making major advances in the integration of digital tools and technologies in humanities scholarship and teaching. With the mass digitization of texts and artwork, digital tools and methods such as data visualization, GIS, statistics, and text mining can have a transformative effect on research and teaching in the humanities. The Mellon grant will assist humanities scholars unfamiliar with these techniques to integrate them effectively in their scholarship.

• **Li Ka Shing Center for Genomic Engineering:** In collaboration with UCSF, a new research center focused on engineering the genome was launched with a $10m grant from the Li Ka Shing Foundation. At the core of this new center is an initiative to advance a revolutionary technology, termed CRISPR/Cas9, discovered two years ago by Berkeley biologist, Professor Jennifer Doudna. The CRISPR technique offers a fast, easy, and efficient means for rewriting the genome, which allows for experiments that have until now been impossible. In making his gift, Mr. Li Ka Shing stated: “It is a great privilege for my foundation to engage with two world-class public institutions to launch the Innovative Genomics Initiative in this quest for the holy grail to fight genetic disease.”

• **SSL/ICON Project:** Berkeley’s Space Science Laboratory (SSL) received a grant of $132.6m from the National Aeronautics and Space Administration to launch and manage the “Ionospheric Connection Explorer (ICON).” The ICON mission will study how what happens in Earth’s upper atmosphere is connected to environmental conditions on the planet. The aim is to better understand space variations that contribute to disruptions in communications equipment, radar and Global Positioning Systems here on Earth.

• **Jacobs Institute of Design:** Construction began on a building to house the Jacobs Institute for Design Innovation at the College of Engineering. This project is made possible by a gift of $20m from the Paul and Stacy Jacobs Foundation.

• **Center for Maternal and Child Health:** A $12m bequest from Helen Wallace to the School of Public Health will provide funding for new and ongoing research.
In 2014 Berkeley faculty were the recipients of many distinguished and coveted prizes and awards. Among these were:

- Cosmologists led by Nobel Laureate Saul Perlmutter and biologists led by Jennifer Doudna were named Breakthrough Prize winners, in physics and biology, respectively.

- Minerals engineer David Sedlak was selected as the 21st recipient of the National Water Research Institute (NWRI) Athalie Richardson Irvine Clarke Prize for excellence in water research.

- Cognitive scientist Tom Griffiths won the Federation of Associations in Behavioral & Brain Sciences Foundation’s “Early Career Impact Award.”

- Emeritus botanist Alan R. Smith, received the 2014 Asa Gray Award from the American Society of Plant Taxonomists for outstanding lifetime achievement in the field of plant systematics.

- Biochemist Judith Klinman, an expert in enzyme catalysis, has won the National Medal of Science, the nation’s most prestigious scientific award. Of the 29 Berkeley scientists who have won the medal, only two have been women, Klinman, and nuclear chemist Darleane Hoffman.

- English professor Robert Hass received the Wallace Stevens Prize from the Academy of American Poets.

- Computer scientist and statistician Michael Jordan received the David E. Rumelhart Prize, a prestigious honor reserved for those who have made fundamental contributions to the theoretical foundations of human cognition.

- Don DePaolo, professor of earth and planetary sciences and LBNL researcher, received the Harry Hess Medal of the American Geophysical Union for groundbreaking research on the geochemical structure of Earth’s mantle, the isotopic and trace element chemistry of oceanic volcanoes, and the origin of granitic igneous rocks.

- Physics professor and LBNL scientist Marvin L. Cohen was awarded the 2014 Von Hippel Award, the highest honor of the Materials Research Society, for his work in solid state physics.

- Comparative Literature and Rhetoric professor Judith Butler was decorated “Chevalier des Arts & Lettres” by the French government for her contributions to philosophy, ethics, and political and literary theories.

- German and Comparative Literature professor Niklaus Largier won an Anneliese Maier Research Award from the Alexander von Humboldt-Foundation for his work on medieval mysticism.
2014 was also a very good year for Guggenheim Fellowships, with the following faculty securing the prestigious award:

- **Nezar AlSayyad**, professor of architecture and city and regional planning, and chair, Center for Middle Eastern Studies
- **Jacob Dalton**, associate professor of South and Southeast Asian studies and East Asian languages and cultures
- **Shannon Jackson**, professor of rhetoric and theater, dance and performance studies, Richard and Rhoda Goldman Chair in the Arts and Humanities and director of the Arts Research Center
- **Kent Lightfoot**, professor of anthropology
- **Michael Nylan**, professor of history
- **Austin Roorda**, chair, vision science graduate group and professor of optometry and vision science, School of Optometry
- **Stephanie Syjuco**, artist, assistant professor of sculpture
- **Ashvin Vishwanath**, professor of physics

2014 was also a banner year for research grants—both a basic precondition for our ability to do our work and a crucial barometer for assessing our performance.

Figure 1, below, displays the extramural research totals awarded in 2014, broken down by external sponsor, and Figure 2 provides a year to year comparison of awards received over a twelve-year period.
The award total of $738.5m for 2014 places Berkeley among the top three universities without medical schools in the United States. It also represents strong year-to-year growth. The award total for 2014 is 27 percent higher than the highest total award year (2004) ever achieved prior to the several years of unusually high federal funding associated with the Obama stimulus package and the BP half-billion dollar award in 2008. The 2014 total also represents a 7 percent increase over the total for 2013.

Accompanying this ongoing success are significant headwinds in terms of research funding. Federal support from the National Science Foundation, National Institutes of Health, Department of Energy, and other major funders is not only flat or in decline, but is also increasingly concentrated among the “Big Six” research universities. This means remaining at the apex of the research university hierarchy is more important than ever. It also means that Berkeley researchers will be increasingly relying on philanthropy, funding from nonprofits, and corporate partners, all of which offer much lower overhead recovery for the campus.

While Berkeley’s focus will continue to be on basic research, the campus is also planning significant incremental investments in programs designed to help our faculty and students translate, implement, and commercialize research findings. In line with this commitment, Berkeley will be providing funding for incubators and accelerators, new programs in entrepreneurship training, and expansion of our patent and licensing office. Some examples of this effort are:

- **The Bakar Research Fellows program**, which supports innovative research by early career faculty at UC Berkeley with a special focus on projects that hold commercial promise. The program enhances the efforts of UC Berkeley’s faculty to translate important scientific discoveries into practical solutions in fields of engineering and science. Bakar Fellows receive $50,000 per year for a maximum of five years.

- **SkyDeck**, a startup incubator and accelerator located on the top floor of the Chase building in downtown Berkeley, which provides Berkeley generated start-up companies with short-term rent-
free space, mentoring, and networking opportunities with potential funders. There are currently 24 companies growing within SkyDeck. Founders of two companies that were resident in SkyDeck during 2014 were named to the prestigious Forbes “30 Under 30” lists.

2. Improving Undergraduate Education

*Undergraduate education continues to be at the heart of how Berkeley, as the world’s leading public university, distinguishes itself. Berkeley has made major strides in recent years in the quality of undergraduate academic initiatives and advising. Important accomplishments in 2014 include:*

- The Center for Teaching & Learning in the Division of Undergraduate Education, in collaboration with the College of Letters & Sciences, implemented the Teaching Excellence Colloquium for faculty new to Berkeley, a year-long program that is now in its third year. Thirty-five faculty have completed the program since its inception, and another 21 are currently participating, representing 60 percent of the new faculty who joined the campus in this academic year.

- Berkeley reinforced its commitment to academic excellence by supporting the Presidential Chair Fellows Curriculum Enrichment Grant Program, also within the Center for Teaching and Learning. To date, the program has provided $200,000 to ten faculty team projects across the campus. One of the most successful of these is the College of Chemistry’s Teacher-Scholar program. This vertical learning community offers undergraduates who have completed general or organic chemistry a chance to be peer mentors in laboratory and discussion sections for credit, while also gaining leadership, communication, and teaching skills.

- Through the College of Letters & Sciences, in conjunction with the Dean of Undergraduate Studies, much work has been done to strengthen interdisciplinary and area studies programs, as well as Berkeley’s Washington, DC program. These improvements provide undergraduates with greater contact with faculty, as well as experts in the field, enabling Berkeley to keep up with student demand while ensuring quality in these very popular interdisciplinary programs. Faculty mentoring of senior theses has also been augmented.

- The Berkeley Connect mentoring program expanded in FY14 to cover eleven academic departments, serving more than 1,100 students.

- The campus, led by Educational Technology Services (ETS), rolled out a new learning management system, bCourses, that includes better and more student-friendly communication tools, a mobile app, and integration with lecture capture and CalCentral. In a recent survey, 87 percent of students were satisfied or very satisfied with the way bCourses supported their learning.

- The CalCentral portal was developed and launched in Spring of 2014 by ETS. It brings together student email, calendar, L&S Advising appointments, course and financial information. CalCentral receives hits from over 11,000 unique student users every week. CalCentral will continue to be the key way students will access the new Student Information System is rolled out in 2014.

- The launch of the online Academic Guide for all students, faculty, and staff provides a dynamic, user-friendly tool that assists undergraduates with decision-making as well as improves time-to-degree.

- The Academic Senate has passed new admission policies related to the review of prospective student athletes, aiming to reinforce the conclusions of Chancellor’s Task Force on Academics & Athlet-
• The ASUC Student Union has enhanced leadership training for all student organizations and fraternities and sororities. The LEAD Center is reviewing policy around Greek life and alcohol consumption that includes the Berkeley Police Department, UC Police Department, Student Conduct, and Bears that Cares offices. The focus of the review is to align all parties on what is possible and enforceable as it relates to consumption and accountability.

• The New Student Orientation process has been revamped to increase access for Pell Grant students and their families, enhance the advising function, and increase assessment. The orientation has also been moved from a 4-day welcome to a 3-week fall orientation schedule entitled ‘Getting Your Bearings.’

• Working closely with student leadership, activists, and survivors, the University has made major efforts to enhance sexual violence and assault prevention. This has included creating a new Director of Sexual Assault Prevention and Student Advocate position; enhancing student training for orientation, Greeks, and student organizations; implementing mandatory education for first-year students (freshmen and transfer); updating student conduct policies; partnering across campus to address questions and concerns from external audits, legislators, media; and working with the Office of the President to ensure the implementation of standard best practices across the entire University of California system.

**Berkeley remains the most accessible elite university in the world.**

Our 9000+ Pell Grant students exceed the total number of undergraduates at Stanford, and nearly matches the number of Pell Grant students in the entire Ivy League. Building on this commitment to making the best possible college education available to students from all socioeconomic backgrounds,
Berkeley has continued to make investments in 2014 designed to ensure continued access to the University for students from lower income families. This year, Berkeley:

- Lowered self-help aid to under $8000, improving undergraduate affordability.
- Created 35 new endowed scholarships for undergraduates, including those designed to support undocumented and middle-income students.
- Began the Ruth Johnson Scholarship match program in 2014, a $5M dollar program born out of an estate gift, to create 50 new $100,000 need-based endowments.
- Created the “Bears for Financial Success” financial literacy program, in which peer and staff educators in the Financial Aid and Scholarships Office assist students in making informed choices and developing increased knowledge regarding financial aid, literacy, and education.

Building on these accomplishments will make 2015 a crucial year for defining the contours of the Chancellor’s Undergraduate Initiative. Key foci include:

- For the first time in a generation, Berkeley is formally codifying some of the fundamental objectives of undergraduate education at Berkeley. Beyond a continued emphasis on the importance of liberal education for providing a foundation for lifelong productivity and citizenship, the steering committee has also specified the particular capabilities and dispositions which undergraduate education at Berkeley should cultivate (see Figure 1).

- Also under the auspices of the Chancellor’s Undergraduate Initiative has been a strong effort this Fall by an inter-disciplinary group of faculty to design a new Data Sciences curriculum. Data science is being embraced by myriad disciplines and industries, and this new program will ensure that all of Berkeley’s undergraduates are positioned to take advantage of this revolutionary change. The course will be piloted in Fall 2015, with the aim of rolling it out to the broadest possible extent by Fall of 2017.

Figure 1: Key Capabilities and Dispositions
• The undergraduate experience will benefit further from changes in our incentive structures across campus that encourage a greater focus on and integration of curricular, co-curricular, and residential life. Leading the initiative will be Executive Vice Chancellor and Provost Claude Steele and Vice Chancellor for Undergraduate Education Cathy Koshland, in close coordination with other relevant deans and vice chancellors. The group will be considering a variety of potential institutional structures, possibly including one or more new collegiate entities.

Another critically important project is the new Student Information System (SIS), which will debut later this year. Developing SIS has entailed the large-scale modernization of the underlying architecture and databases for all the information systems that connect students, faculty, and staff at Berkeley. The SIS project will have profound positive impact on the student experience, as well as help staff to serve students and allow faculty and administrators to gather data for decision-making.

Finally, the ASUC Lower Sproul Project will reach completion in the Fall of 2015, and will create a state of the art student union that will enhance all aspects of the student experience and provide a new geographic focal point for the campus as a whole.

3. Deepening Global Engagement

While Berkeley’s ranking among global universities is a testament to the fact that we have long been one of the world’s preeminent institutions of learning, we also realize that the future of great research universities lies in redoubling our global footprint and connectivity. To this end, Berkeley is pursuing the development of a “Global Campus” at our 130-acre facility at the former Richmond Field Station. This will be developed over the coming decades into the Berkeley Global Campus (BGC) at Richmond Bay, which will serve as a hub for a consortium of world-class international universities, providing a state of the art research and educational facility for the brightest minds from across the world.

• Our progress this last six months on developing the vision and generating enthusiasm for the Berkeley Global Campus at Richmond Bay has been inspiring. Numerous foreign universities, particularly in Asia and Europe, have stepped forward to express deep interest in partnering with us on this endeavor. A primary aim in 2015 is to conclude a formal legal agreement with at least one anchor academic partner that will allow us to begin the process of developing the BGC.

• In the context of the absence of state funding, developing the Berkeley Global Campus will undoubtedly require significant support from philanthropic and corporate partners. Thankfully, there appears to be great enthusiasm for the BGC in both communities. In particular, there is great support for putting a ‘Global College for Advanced Study’ at the heart of the BGC, centered on a studium in global citizenship—potentially anchored by a high-prestige fellowship program modeled after the Rhodes, Marshall, and Schwartzman scholarships.

In addition to the progress on BGC, Berkeley also signed an agreement in 2014 to become a Davis United World Campus Scholars partner - expanding both our global reach of talented undergraduates as well as the economic diversity of our global undergraduates. Berkeley became the first public university in California to be accepted into the partnership, and one of only six public Universities in the country who participate.
Another key push is the Arts Initiative, which will extend Berkeley’s commitment to integrating art encounter, art inquiry, artmaking, and design into the fabric of student life.

- The Arts Initiative will integrate closely with the undergraduate initiative: The arts and creative design fields provide opportunities for students of all majors to develop skills in project-based learning, group collaboration, critical thinking, performance and self-expression, and vicarious imagining as individuals and as global citizens. The arts provide a platform for students to engage in practical experiences and apprenticeship programs on and off campus, in programs that fulfill UC Berkeley’s public mission and simultaneously prepare a Millennial workforce for life after graduation.

- As a premier research university in the Bay Area, Berkeley has a special opportunity to address artistic and social questions of importance to national and international communities. Using our location within a technology hub and on the Pacific Rim, we will map a future for the arts and design in a globalizing, technologically complex world, where cultural differences remain challenging. With regard to our public mission, the Arts Initiative will also aim to reach emerging audiences reflecting class and ethnic diversity on a wide scale, making the arts a fundamental feature not just of our educational but of our social and cultural prerogatives as well. We are currently exploring the creation of a new Center for the Arts and Design to coordinate these and other efforts.

- Crucial to what we seek to do in this domain will be Cal Performances’ recently announced Berkeley RADICAL, a framework to cultivate public artistic literacy and create cultural access for diverse
future audiences in the context of the digital age and transitional generations. Berkeley RADICAL is a platform on which Cal Performances' artists will operate within and beyond the University, and instigate substantive interactivity between Cal Performances commissioning, creation and presentation, UC Berkeley learning and scholarship, and Bay Area public learning across a wide age range. Berkeley RADICAL at Cal Performances will contribute to determining a future for the performing arts. Broad dissemination of the process and results in contemporary digital forms will be key to this goal.

• Finally, since expanding and improving our arts facilities will be critical to all these efforts, we are looking forward to the opening of the new BAM/PFA in early 2016. Not only will it provide a beautiful new space for the display or art works and exhibitions, but also be a home for a wide range of other activities related to the arts, and will link the campus and downtown Berkeley in vital (and literal) ways.

Fundraising

Central to ensuring Berkeley’s long-term fiscal health must be continuing and indeed redoubling our fundraising efforts. Thanks in large part to our generous alumni, fundraising in 2014 continued to be robust even after the close of the $3.13B “Campaign for Berkeley.” In fiscal year 2013-14, the fundraising total was $366M; and for the calendar year 2014 we raised $390M, an astonishing high number for a university without a medical school. The number of donors was 61,600, the second highest number on record. Moreover, the first six months of the current fiscal year have been among the best in the last decade, and the gift count is the highest ever recorded for a six-month period. Above and beyond the many generous gifts highlighted earlier, the Big Give campaign was particularly successful: on November 20, 2014, the campus conducted its first-ever 24-hour fundraising blitz, raising $5.3m from 7,336 gifts. The Big Give represents the largest number of online gifts UC Berkeley has ever received in a single day. In addition, the 2014 Senior Gift Campaign raised more than $113,000. Between 2013 and 2015, student fundraising volunteers raised $789,007.09 and increased participation by 32 percent.

In addition to the many generous gifts highlighted elsewhere in this document, new endowed faculty chairs established in 2014 include:

• The Tom Siebel Presidential Chair in the History of Science (augmented by the UC presidential match for endowed chairs)
• The Quantedge Presidential Chair in Economics (augmented by the presidential match)
• The Paul R. Gray Distinguished Chair in the College of Engineering
• The Robert S. Cornish Endowed Chair of Regional Planning
• The George R. Johnson Chair in Law
• The James and Katherine Lau Distinguished Chair in Sustainability
• The Li Ka Shing Chancellor’s Chair in Biomedical and Health Sciences

Building on the University’s brand platform, University Relations, in conjunction with the Public Affairs office has also begun an external communications campaign designed to raise the profile of UC Berkeley as an innovation catalyst and to support the launch of the Berkeley Global Campus and other initiatives.