



# Research Dimensions of UC President's Initiatives

APRIL 2015

# Public commitment.

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It's what the University of California delivers each and every day via dedication to an idea: Teach for California, research for the world.

President Napolitano has launched a series of initiatives over the last year meant to reinforce this mission and the university's commitment to honoring its historic social contract. In doing so, President Napolitano and the university will demonstrate UC's public value in a highly visible way and continue to build public support for its work.

# President's Initiatives with Research Dimensions

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## **Academic Pipeline**

Academic doctoral education

President's post-doctoral fellowship program

## **Global Impact**

Carbon neutrality

Food

Mexico

Research Catalyst Awards

## **Enterprise and Innovation**

Technology commercialization

# Academic Pipeline

PRESIDENT'S POST-DOCTORAL FELLOWSHIP PROGRAM (PPFP)

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## Continue to enhance academic excellence through support for new & future faculty members

- Increase faculty hiring incentive awards by five.
- Provide matching support for start-up costs of PPFP faculty hires in STEM disciplines.
- Offer new programming to support the mentoring and professional development of current fellows and former fellows hired into faculty roles.

**ALLOCATION:** \$5M in additional one-time funding from the Mortgage Original Program (MOP) over 3 years:

- start-up costs of **PPFP faculty hires (\$2.4M)**,
- hiring incentive for **salary support (\$2.1M)** and
- mentoring, training & development resources encompassing **diversity and inclusion (\$475K)**.

## MAJOR ACHIEVEMENT TO DATE:

- PPFP's 30<sup>th</sup> Anniversary Oct 9-10<sup>th</sup>, 2014
- Diversity and inclusion-focused leadership seminars
- Start-up support to three new faculty hired into STEM fields
- Seven campuses enrolled in National Center for Faculty Development and Diversity (NCFDD)

## MAJOR UPCOMING ACTIVITY, FY 15-16:

- Hiring incentive awards for salary and start-up support, FY 15/16 and 16/17 hiring cycles
- Faculty Success Program for intensive coaching over the next two years
- Additional diversity and inclusion-focused leadership seminars, 2014-15

RESEARCH REPRESENTATIVE: Vice Provost Susan Carlson (UCOP)

# Academic Pipeline

## ACADEMIC DOCTORAL EDUCATION

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### Enhance the pipeline of underrepresented minority students who earn advanced degrees

- Increase enrollment of former UC-HBCU interns in UC PhD Programs
- Increase the diversity of UC PhD students
- Encourage campus development of pilot retention efforts for PhD students; share best practices to help facilitate academic doctoral student success

**ALLOCATION:** \$5 million from Mortgage Origination Program (MOP) excess reserves, for next three years:

- **\$2 million** for UC PhD fellowships for former interns of **UC-HBCU Initiative**
- **\$3 million** to increase **Eugene Cota-Robles Awards**

### ACHIEVEMENT TO DATE:

- Graduate Studies has already processed multiple President's Initiative funding fellowship requests for fall 2015 and there are UC-HBCU alumni PhD admits across 5 UC campuses. (This process will continue through mid-April.)

### MAJOR UPCOMING ACTIVITY:

- Continue to identify UC-HBCU alumni applicants/admits to UC PhD programs eligible for the President's Initiative funding. Provide admitted students with these cost-share fellowships to help facilitate their recruitment to UC. (Spring 2015)
- Solicit campus annual reports on Eugene Cota-Robles activities, due June 2015.

RESEARCH REPRESENTATION: UCOP Graduate Studies Director Pamela D Jennings

# Global Impact

## UC-MEXICO

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### Develop a sustained, strategic, and equal partnership between UC /institutions in Mexico

- Increase academic exchange programs and research collaborations
- Foster collaborative research and scholarly activity on critical issues in the areas of arts and cultures, education, energy, environment and health.

### MAJOR ACHIEVEMENTS TO DATE:

**UC-Mexico Advisory Board:** Inaugural meeting held in Ensenada, Baja California, on February 26- 27, 2015. Members discussed strategies to support the Initiative and leverage resources. Event included participation by chairs of the 5 working groups of the Initiative and the student mobility task force with counterparts from UNAM to discuss priorities for the Initiative.

**ONGOING:** Strategic framework for the Initiative in development. **Working groups:** The UC-Mexico Initiative's five working groups and the student mobility task force are actively engaged in discussions to identify their top priorities for collaboration with Mexican partners; defining activities; and developing proposals and agreements accordingly. Chairs have been expanding membership among UC faculty as well as representatives from higher education institutions and government agencies in Mexico.

**MAJOR UPCOMING ACTIVITIES in 2015:** *April 2015:* Release of third UC-Mexico Bulletin / Launch of UC-Mexico Expert Directory /draft of UC-Mexico Initiative Strategic Framework to be shared with Advisory Board. *May 2015:* Submission of Working Groups and Task Force proposals and budgets to UC President for consideration and recommended action. *June 2015:* Renewal of formal agreement UC- CONACYT. *Summer 2015:* MOU signing between UC- Mexico Space Agency and UC-Univ. of Guadalajara, Colima, and UNAM/ delivery of Advance Certificate in Energy Law to 40 Mexican professors by UC Davis/UCB (tentatively August 2015). *September 2015:* Second meeting of the Advisory Board in Berkeley. *November 2015:* Participation by President Napolitano at Sunnylands retreat on US-Mexico cooperation on higher education. Proposed meeting with NGO's, foundations and business leaders to be convened by the Annenberg Foundation (date TBA).

**POINTS OF CONTACT:** Initiative liaisons are Asst. Directors Alberto Diaz (UCOP) and Veronique Rorive (UCR)

# Global Impact

## CARBON NEUTRALITY

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### **Become the first major research university system to achieve climate neutrality by 2025**

- Develop the applied research agenda of the UC Global Climate Leadership Council's (GCLC) Carbon Neutrality Initiative;
- Establish a set of grand challenges that address the goal of carbon neutrality by 2025;
- Review relevant UC research currently being conducted and identify important gaps and/or areas that need to be strengthened in UC's current research portfolio; and
- Recommend means for funding relevant applied research and stimulating collaboration across UC.

**ALLOCATION:** \$250K has been awarded to four Carbon Neutrality Implementation projects for the remainder of FY 2014-15 and for 2015-16, intended to establish pilot research and deployment pilot projects in targeted “grand challenge” areas and to leverage larger awards from Federal, State and private/philanthropic sources.

**MAJOR ACHIEVEMENT TO DATE:** Creation of Carbon Neutrality Initiative's Applied Research Working Group with representation across campuses, national laboratories and Agriculture and Natural Resources division. *January 2015:* Carbon Neutrality Research Workshop report identifies four “research grand challenge” areas: 1) renewable alternatives to natural gas; 2) renewable power/integrated systems; 3) energy efficiency; 4) policy, economics and behavior. *March 2015:*, four research grand challenge teams have formed in preparation for a Fall/Winter Carbon Neutrality Research and Deployment Summit.

**MAJOR UPCOMING ACTIVITY:** *April 2015:* mini-workshop on Deep Energy Efficiency Benchmarking with the initial participation of five campuses and Berkeley Lab. *May 28/29, 2015:* A Joint UC-US DOE Energy-Water Nexus Workshop will be held on the UCI campus. *Fall/Winter 2015:* A Carbon Neutrality Research and Deployment Summit is currently being planned for late 2015.

RESEARCH REPRESENTATIVE: VCR Sandra Brown (UCSD) and GCLC member David Auston

# Global Impact

## GLOBAL FOOD

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**Align the university's research, outreach and operations to develop, demonstrate and export solutions — throughout California, the U.S. and the world — for food security, health and sustainability.**

Now in Phase 1, working groups are underway developing best practices, and the toolkits to implement them, that, once successfully deployed systemwide at UC can be offered to schools and communities nationwide.

Activity highlights include:

- President Napolitano sent a letter to all UC Chancellors informing campuses of a one-time allocation of \$75,000 per campus to support food security and access efforts for students. Each campus is asked to create a Food Security Working Group and to submit a clear plan for how these funds will be utilized and how their impact will be measured.
- GFI Student Fellows from all UC campuses will gather on April 19-20 at Mas Masumoto Family Farm near Fresno for a tour and discussions with the President
- GFI Urban Disparities working group arranged a tour of the Ocean View Growing Grounds with the President, UC San Diego Chancellor Khosla, students and community leaders to learn more about this thriving community garden that was one a vacant lot
- GFI Success Stories on Fisheries working group hosted the Food from the Sea Summit which convened experts from UC Davis, UC San Diego, UC Santa Cruz, UC Santa Barbara and beyond to share research, spark new projects and inspire systemwide collaborations in support of sustainable food production
- GFI K-12 Dining Options working group teamed with the Urban School Food Alliance representing the six largest school districts in the U.S. to introduce more nutritional options for students and coordinate menus to improve purchasing power

RESEARCH REPRESENTATION: Campus team leads for each of six research project areas, including data mining (2); best practices (2); research catalogue (1); and urban agriculture & food disparities(1).

POINT OF CONTACT: Project Manager Deanna Geddie



# Global Impact

## UC PRESIDENT'S RESEARCH CATALYST AWARDS

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### **Stimulate research and discovery in areas of strategic importance that benefit California and the world, and improve human lives, the environment and the economy**

- In the first quarter of 2015 (Jan – March), the initiative staff team developed a draft plan for Round 2 of the Catalyst Awards. This plan was approved by the President's Executive Office, and additional stakeholder input on the plan and draft RFP are underway. Total available funding for Round 2 will be \$7 million. The draft RFP has been developed, and will be circulated for comment in the first 2 weeks of April 2015. The final RFP will be issued mid-April.
- A key component of the Catalyst Award selection process is a rigorous review of LOIs. A maximum of 30 proposals, or \$25 million in funding requests, will be invited to submit full proposals. The composition of the LOI review panel is under development. Full proposals will undergo peer review. Second round awards are expected to be announced, after the completion of a competitive review, by December 2015.

**ALLOCATION:** \$10 million, of which \$3.1 million has already be allocated to 5 inaugural Catalyst Awards (Jan. 2015). Remaining allocation to support research in response to a forthcoming RFP in 2015.

**MAJOR ACHIEVEMENTS TO DATE:** Five highly ranked proposals from the UC Multi-campus Research Programs and Initiatives (MRPI ) competition have been identified to receive special recognition as inaugural awards for the President's Research Catalyst Awards.

**MAJOR UPCOMING ACTIVITY:** RFP and competition for Round 2 – 2016 Catalyst Awards

**RESEARCH REPRESENTATIVE:** UC Research Initiatives Director Kathleen Erwin

# Enterprise and Innovation

## TECHNOLOGY COMMERCIALIZATION

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### Enhance all stages of technology commercialization

- Invest in UC inventors, early-stage UC technologies, and UC start-up companies
- Increase financial support and flexibility for campus-priority tech transfer activities
- Streamline existing processes and systems to increase efficiencies & interactions
- Enhance communication and recognition of UC's technology commercialization successes

**ALLOCATION:** \$100K to host GoBiz/UC Innovation meetings; \$250M UC Venture Investment Fund. Other funding options being explored.

### MAJOR ACHIEVEMENTS TO DATE:

- UC Innovation Council held its second meeting (Feb 2015) and reported back their observations and opportunities for enhancing innovation and entrepreneurship across UC.
- UC QuikStart program, is making it easier for startups and small businesses to access UC technologies.
- Pilot program established for accepting equity from faculty startup companies in exchange for use of University facilities and services. Program to be phased in over several months as details are worked out in consultation with campus leaders and Academic Senate.
- Regis Kelly appointed (Dec. 2014) as senior advisor to UC President for Innovation and Entrepreneurship.
- Entrepreneurial Culture Workshop (Nov. 2014): representatives from 10 UC campuses, Berkeley Lab, and UC Hastings gathered to identify opportunities to enhance UC's entrepreneurial culture.
- Regents approved (Sept 2014) development of a \$250M arms-length investment vehicle: UC Ventures.

### MAJOR UPCOMING ACTIVITY:

- Systemwide Startup Showcase, hosted by QB3, slated for Fall 2015

**RESEARCH REPRESENTATIVE:** Interim VP William Tucker (UCOP/ORGS)

# Contact Information for Presidential Initiatives: Research Dimensions

Initiative	Executive Sponsor	Project Lead	Contact Info	Research Representative	Contact Info
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<b>Global Impact</b>					
Carbon Neutrality	Rachael Nava Wendell Brase	Matt St. Clair	Matthew.StClair@ucop.edu	Sandra Brown David Auston	SandraBrown@ucsd.edu Auston@iee.ucsb.edu
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