



Leveraging UC's research enterprise for  
value:  
President Napolitano's initiatives that involve  
research

November 7, 2014

# Leveraging UC's research enterprise for value:

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## Getting to the tee:

- What is the compelling reason to collaborate?
- What is the best structure for the collaboration?
- Who should/must/will be on the team?

## Negotiating the sand traps and water hazards:

- What are the barriers to success?
- Who do you need to engage with in advance?
- Who can help you if you get into difficulties?

## Hitting the green:

- What processes will we use or need to develop?
- What are the deliverables and timelines?
- Are we on track to meet our objectives?

## Sinking the put:

- Did we achieve our goal?
- How should/will we recognize the achievement?
- Where will our success take us?

# 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

## **Enterprise and Innovation**

President's Challenge Grant

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

**ALLOCATION:** \$5 million in additional one-time funding from the Mortgage Original Program (MOP) to be allocated over the next three years to cover start-up costs of **PPFP faculty hires (\$2.4M)**, hiring incentive for **salary support (\$2.1M)** and resources for mentoring, training and development encompassing **diversity and inclusion (\$475K)**.

**MAJOR ACHIEVEMENT TO DATE:** Awarded start-up support to three new faculty hired into STEM fields at UC San Diego and UC Irvine.

**MAJOR UPCOMING ACTIVITY:** A number of awards and activities are slated for FY 15-16:

- Hiring incentive awards for salary and start-up support available with FY 15/16 and 16/17 hiring cycles;
- Systemwide memberships with the National Center for Faculty Development and Diversity (NCFDD);
- A Faculty Success Program for intensive coaching over the next two years;
- Diversity and inclusion-focused leadership seminars for campus academic administrators in 2014 and 2015.

**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 and share best practices to help facilitate academic doctoral student success

ALLOCATION: \$5 million, from excess reserves from the Mortgage Origination Program (MOP) to be allocated over the next three years:

- **\$2 million** to provide fellowships for former interns of the **UC-HBCU Initiative** who are admitted to UC PhD programs
- **\$3 million** to increase the number of **Eugene Cota-Robles Awards** (a systemwide diversity fellowship)

ACHIEVEMENT TO DATE: President's Initiative fellowships have facilitated the successful recruitment of 7 former UC-HBCU interns who will begin UC PhD programs in Fall 2014

MAJOR UPCOMING ACTIVITY: President Napolitano will host a luncheon and networking opportunity for UC-HBCU Initiative fellows enrolled in UC PhD programs, Fall 2014

RESEARCH REPRESENTATION: UCOP Graduate Studies Director Pamela D Jennings

# 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 President's 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 within the UC System.

ALLOCATION: None; options are being explored.

#### MAJOR ACHIEVEMENTS TO DATE:

- Creation of Applied Research Working Group with representation across campuses, national laboratories and Agriculture and Natural Resources division.
- Systemwide research strategy setting workshop at UCSB (October, 2014)

RESEARCH REPRESENTATIVE: VCR Sandra Brown (UCSD)

# Global Impact

## UC-MEXICO

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

- Enhance student and faculty exchange
- Provide opportunities for collaborative research in a number of key identified areas including education, health, science, agriculture/sustainability, arts and culture.
- Enhance educational programs
- UC will work with Mexico to address issues facing our shared populations, environment and economies. Through sustained, strategic and equal partnership between UC and educational institutions in Mexico, increase student and faculty exchange and provide opportunities for collaborative research in key areas,

ALLOCATION: \$10k/year to for working group meetings A budget request has been submitted to provide each working group with seed funds.

MAJOR ACHIEVEMENT TO DATE: Several trips to Mexico by President Napolitano, Provost Dorr, & campus leadership. Established important relations with Mexican universities , government officials and agencies. Two Assistant Directors have been hired, at UCR & UCOP. Advisory Council and two Working Groups (Energy, Education) have been established.

### MAJOR UPCOMING ACTIVITY:

- Campus and consul visits by new Assistant Directors (Fall 2014)
- UCSD to host Mexican Diaspora event (Oct. 13)
- Berkeley Lab to host Mexican energy officials (Oct. 30-31)
- UCLA & UCR to host working meetings of UC faculty & Conaculta representatives (Nov. 2014)
- UC-Mexico Initiative Advisory Committee meeting (Spring 2015, in Encinada)

RESEARCH REPRESENTATIVE: Lab Deputy Director Horst Simon (LBNL)

# Global Impact

## GLOBAL FOOD

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### Explore how UC can leverage its resources to improve food production

- Expanding experiential learning (e.g., demonstration gardens);
- Leveraging food purchasing power to encourage sustainable farming practices and to serve nutritious fare in dining halls and cafeterias;
- Data mining to help develop insights and action plans for agriculture and climate change;
- Developing policies to better enable small growers to become suppliers;
- Integrating food issues into curriculum.

ALLOCATION: \$75K total to fund three President's Global Food Initiative Student Fellowships on each campus. Other funding options being explored.

### MAJOR ACHIEVEMENTS TO DATE:

- A systemwide food kick-off event (June 2014)
- The Global Food Initiative Working Group (GFIWG) established with representatives from each campus, Berkeley Lab and ANR, in five areas: curriculum, operations, policy, research, and service/outreach.

### UPCOMING:

- The goal for the project teams is to develop toolkits for the expansion of a best practice that could be exported to other locations across the state and across the country. Each of the project teams should have an implementation plan in place for their project (Dec. 2014)

RESEARCH REPRESENTATION: VP Barbara Allen-Diaz, (UC-ANR)



# Enterprise and Innovation

PRESIDENT'S CHALLENGE GRANT

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

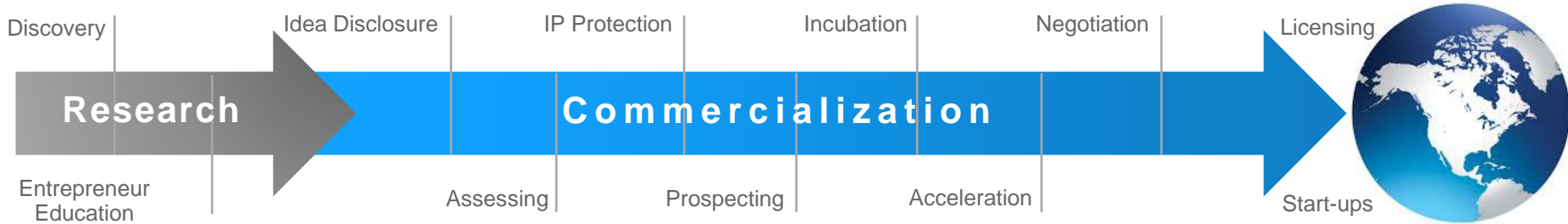
- Make targeted, strategic investments in UC faculty-led research that strengthens the UC research enterprise and benefits CA and the world
- Engage the California public more directly in the support and benefits of UC's research enterprise
- Promote research and collaboration that enhances access to, and takes advantage of, UC's comprehensive system of 10 campuses and 5 medical centers

MAJOR UPCOMING ACTIVITY: President is planning to announce the Challenge Grant initiative scope and goals in November 2014.

ALLOCATION: Pending (information will accompany President's November announcement)

RESEARCH REPRESENTATIVE: UCRI Director Kathleen Erwin (UCOP/ORGS)

# Enhance all aspects of technology commercialization to create a vibrant innovative & entrepreneurial ecosystem across UC



## Learn

Engage with an external advisory board to guide the initiative

## Communicate

Enhance communication and recognition of UC's technology commercialization successes

## Streamline

Streamline existing processes and systems to increase efficiencies & interactions

## Support

Increase financial support and flexibility for campus-priority programs and offices that make up the entrepreneurial ecosystem

## Invest

Invest in UC inventors, early-stage UC technologies, and UC start-up companies

# Enterprise and Innovation

INNOVATION, ENTREPRENEURSHIP, & TECHNOLOGY COMMERCIALIZATION

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## Enhance all stages of the UC's innovation ecosystem

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

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

## MAJOR ACHIEVEMENTS TO DATE:

- UC Innovation Council formed and 1st meeting held in August 2014.
- Regents approved development of a \$250M arms-length investment.

## MAJOR UPCOMING ACTIVITY:

- Pilot program of 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. (Sept/Oct 2014)
- Planning for facilitated systemwide discussions on best practices in entrepreneurship (Oct 2014)
- Reconvene Innovation Council (Jan. 2015)
- Incubation and venture development (Spring 2015)

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

