Community-Engaged Research: A Catalyst for UC Merced Impact from the Region to the World

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A. Executive Summary of Initiative

Community-engaged research is an approach to scientific and scholarly work that aims to improve the process and products of research through greater academic-community collaboration toward mutual goals. Academic research in the USA and internationally is being challenged to more quickly and cost-effectively produce innovations with greater and more immediate community benefits. These challenges may be overcome through the meaningful and stronger academic-community relationships required for and nurtured by community-engaged research. Governmental, business and philanthropic grantmakers are increasingly interested in and supportive of community-engaged research. Community partnerships have been critical to establish and grow UC Merced (UCM) in the San Joaquin Valley. These partnerships, coupled with the need to expand research with limited resources have helped UCM to establish a strong foundation and leadership for community-engaged research in the UC system and nationally (especially among research universities). This early work has been led by the Resource Center for Community Engaged Scholarship (ReCCES) and, more recently, through the UCM Blum Center for Developing Economies, which is strongly integrated with ReCCES. The ReCCES-Blum Center collaborative proposes that Community-Engaged Research serves as a strategic academic focusing initiative (SAFI) for UCM. Community-Engaged Research as a theme for UCM will continue and strengthen its impact on its service region, attract faculty and graduate students drawn to this theme through the growing recognition of community-engaged research as "cutting-edge" in higher education, and distinguish UCM among grantmakers, legislators and key decision makers in higher education. The ReCCES-Blum Center collaborative will lead the SAFI on Community-Engaged Research by managing a cross-School/Unit committee in a novel hiring and training plan, through on- and off-campus training, funding and technical assistance, through Community Stations (a novel way to create and expand community research infrastructure), and through a newly proposed undergraduate minor on Community Research and Service. Specific goals are indicated for the number of new faculty and existing faculty to be supported under the Community-Engaged Research SAFI. Programmatic needs for this SAFI include coordinating staff, basic supply costs, and partial support for off-campus space (also to be supported by existing ReCCES-Blum Center initiatives). Community-engaged research is an existing UCM strength that is essential to successful impact on the region and can propel UCM's national and international distinction among research universities.

B. Definition of Thematic Area

A new thematic area is proposed that cuts across all proposed themes and is aligned with most if not all of the proposed SAFI: Community-Engaged Research. Community-Engaged Research is formally included in four round-two SAFIs: the Center for Education; Diversity, Equity and Representation; Human Health Sciences; the School of Innovation, Management, and Economics. Community-engaged research is an approach or framework for conducting research, not a methodology in and of itself.[1] Its premise is that scholarly and scientific inquiry is enriched and leads to greater societal impact when it aims to benefit the academy and the community jointly, when both the academy and community take responsibility for ensuring such mutual benefits. Community is defined by the people (academic and non-academic) sharing a geographic region, a concern or interest, or both. Community-engaged research assumes some level of meaningful

interaction between academic and non-academic stakeholders to shape, conduct and apply discovery. As a framework, it can be applied across all scientific and artistic disciplines and is not limited to the social sciences and applied fields of study. Leading professional associations in physics and engineering have embraced community-engaged research,[2] as have public health and humanities programs.[3] Nationally and internationally, universities are incorporating community-engaged research as a means to improve the quality and effectiveness of research, teaching and service while ensuring greater relevance and impact to the geographic and topical communities they serve.

C. Intellectual Components of the Initiative

The escalation of community-engaged research over the past decade has been fueled by a growing recognition and findings from investigative reports that the products of higher education overall and research specifically are not benefitting society well enough and fast enough.[1, 4] A contributing realization is that the growing gap in relationships between those conducting research and the communities served by research is leading to less direct engagement in science, scientific studies, and scholarly work, reductions in funding for research and other scholarly activities, and decisions by governments and industry that deter the positive growth and impact of higher education. Closing this gap requires efforts by universities and communities, hence the emphasis on collaboration and mutual responsibilities in all aspects of community-engaged research. Therefore community-engaged research aims to build the capacity and infrastructure of universities (e.g., faculty and student development; organizational policies, programs and practices) and communities (e.g., training and education of partnering organizations and leaders; allocation of space and resources to support research).

The key intellectual components of community-engaged research reflect the two principles that distinguish it from research on and for communities. Clearly, research on behalf of communities (society) and engaging humans as research subjects are not the novel elements of community-engaged research. The distinguishing principles of community-engaged research are *mutual benefit* and *mutual responsibility*. Scholarly discovery and public efforts center on the application of these two principles. The principle of mutual benefit poses that the results or end products of community-engaged research must reflect the scholarly discovery traditionally sought by institutes of higher education as well as the contribution to goals and concerns most beneficial to community stakeholders. Adherence to the principle of mutual benefit ensures that community-engaged research aims for the highest standards of scientific rigor or validity for a given field while also seeking social validity if not direct application of the research for societal good. The intellectual cornerstone of this principle goes beyond identifying whether and how research benefits the community, towards establishing and negotiating shared goals among community stakeholders and faculty, students and other academic partners.

The principle of mutual responsibility means that both academic and community leaders must strive for, create, and attain mutual benefits. This principle indicates joint accountability and recognition of equity between academic and non-academic stakeholders that are not common within universities and communities. The intellectual efforts needed to apply this principle include a greater understanding between academic and community partners (e.g., faculty, students, academic and community administrators) of their systems of work, contingencies and drivers. Specific efforts are needed to help each partner understand why they need each other and how to work together toward the common good. This principle offers an opportunity for co-teaching and co-learning between academic and community partners, and offers a safety net through which neither partners is left alone or solely responsible for the mutual benefits of community-engaged research.

The principles of mutual benefit and mutual responsibility – when practiced sincerely – are why community-engaged research is sought after as a mechanism for improving the process and outcomes of learning, discovery and service. Community-engaged research is a crucial ingredient for successful research universities at a time when the value of higher education is being questioned

by many – ranging from communities with longstanding inequities, to billionaire-innovators, and legislative leaders. In the years ahead, two national (and international) movements will influence the demand and development of professionals and deliverables regarding community-engaged research: translational sciences and public scholarship. Translational sciences or research is now clearly articulated as a priority across all federal funding (e.g., NIH, NSF, DOE, DOD) and most non-governmental grantmaking. Translational research emphasizes the need to better connect work across the continuum of basic and applied sciences in order to produce greater societal benefits (e.g., innovative technology and services) faster and more cost-effectively. Federal funding for translational research is among the few areas that have seen an increase since 2011.[5] The nation's largest investment and infrastructure for translational research (i.e., over 400 academic centers funded by Clinical and Translational Science Awards) require community-engaged research faculty and programs. In a parallel manner, initiatives for engaged humanities and public scholarship are revitalizing the function and impact of humanities in academic and community settings.[6] Federal and philanthropic funding is contributing to academic-community collaborations for humanities research and teaching to advance democracy, social justice, and the public good. The growing emphasis on translational sciences and public scholarship will drive the application and evolution of community-engaged research and will reward institutions that demonstrate leadership in community engagement.

D. UCM's Role

UCM, as the first research university of the 21st century, is in many ways uniquely positioned to lead the way in developing community-engaged research as a hallmark for research universities in the 21st century. UCM was established in the one of the poorest regions in the nation. The region's poverty is not just economic – it includes an extremely poor college-going culture and poor (usually absent) understanding by lay and professional community members of the purpose and value of a research university. This placement was by design to serve as a socio-economic engine for a region which most statewide leaders consider to be the lynchpin of California's demographic and economic future. However, few could have imagined that its launch would occur during the severe economic challenges, which have disproportionally affected the UCM service region. Furthermore, UCM's location represents a research-desert lacking the community and industry partnerships that surround and nurture most other UC campuses. Within this research-desert, we have a large proportion of junior faculty and new faculty with few and weak community relationships to support their research and general quality of life. These contextual and environmental factors contribute to a greater sense of urgency within our region and our campus to use community-engaged research.

These conditions have set UCM apart from other UC's and other research universities in the level of speed and effectiveness of supporting community-engaged research. Civic, industry and legislative leaders along with campus faculty, student and staff leadership have collaborated on several programs and initiatives to continue UCM's leadership and distinction in community-engaged research. Here is a short list of some of the more important ones.

2003 – Chancellor Tomlinson-Keasey and her administrative team collaborated with community leaders to develop and submit the first-ever Community Pledge committing to ongoing partnership in research and engagement for the region's most pressing social, economic and environmental concerns.

2006 – Faculty within SSHA and NS and staff from the Chancellor's office begin early work on community-engaged research, developing key relationships with local, regional and national leaders to understand and adapt best practices.

2009 – A team of UCM faculty, administration and staff along with local community leaders are selected through a competitive national Department of Education FIPSE program to participate in a charrette to design a formal plan for developing community-engaged research at UCM. A new UCM Chancellor's Task Force on Community Engaged Scholarship is funded to organize faculty from all schools and a community advisory board is established to refine and implement

the plan for faculty development and capacity building on and off campus.

2011 – UCM's Task Force receives competitive funding from The California Endowment's Building Healthy Communities Initiative for a 2-year program to build campus and community capacity for community-engaged research. The program launches several new faculty-community projects and builds the momentum and infrastructure for community-engaged research on and off campus. The Task Force faculty and community leaders are added to new UCM grants and projects and are an important contributor to funding success (e.g., NIH-funded Center on Excellence for Health Disparities; NIH Pre-BUILD). Faculty and students are showing a greater interest in community-engaged research.

2012 – UCM Task Force converts into the Resource Center for Community Engaged Scholarship (ReCCES) with continued support from the Chancellor's Office and allocation of funds to manage faculty mini-grants to stimulate Community-Engaged Research and graduate student stipends.

2013 – ReCCES is funded in the General Budget under the Office of Research.

2013 – ReCCES PI's (DeLugan and Roussos) are competitively awarded UCOP grant (2013) to study community-engaged research across the UC system in order to stimulate campus-level and system-level support for community-engaged research (final report to be submitted in 2014). UCM visits all UC campus and develops recognition as a leader in community-engaged research within the UC system.

2013 – ReCCES play key role in winning competitive UCOP award to establish a new Blum Center for Developing Economies, a cross-campus initiative to focus the strengths of the UC system toward transforming poverty into prosperity in the state and with global analogues. UCM's community-engaged research is praised a vehicle capable of impacting the region's severe poverty and offering a model to other UC campuses and research universities.

2014 – ReCCES and the Blum Center initiate collaborations to establish Community Stations, off-campus sites, that foster and promote academic-community partnership to incubate new and to support existing research and innovations for nonprofit and industry goals. Partnerships in Merced, Fresno, Modesto, and Yosemite National Park are eager to launch Community Stations to grow the research infrastructure for UCM. Community Stations will support faculty and student research and research training across all three schools, with a strong emphasis on the translational research to move basic science innovations to technological and civic applications within and outside UCM's service region..

2014 – The Blum Center's affiliated faculty leaders submitted a proposal for a new undergraduate minor called Community Research and Service. The decision to start this minor in Fall 2014 is pending. The minor will require faculty-mentored community-engaged research for undergraduates and offer supporting training opportunities for graduate students. Our team has incorporated support for other SAFIs to buy-out time for new and existing faculty who are willing to offer community-engaged research opportunities as part of student training.

2014 – UCM faculty, staff and students along with community members submitted a proposal to the Carnegie Foundation for the Advancement of Higher Education for their national competition for an Elective Community Engagement Classification. The year-long development of this proposal clarified the numerous strengths, resources and accomplishments for Community-Engaged Research throughout UCM and our campus commitment to leadership in this field. If selected, UCM will become the second UC (after UCLA in 2008) and one of fewer than 30 research universities to gain this elite recognition (274 institutions have achieved this classification since 2006). The classification is provided to institutions with measurable indicators of community-engagement and clear commitment and plan for mutually beneficial academic-community efforts to improve the impact of higher education. The Carnegie classification is acknowledged as a mechanism to attract top ranking faculty and graduate students seeking an "engaged institution" and to draw financial and human support from philanthropy and industry.

This brief historical illustration underscores the substantial and growing power for Community-Engaged Research at UCM. Although lacking an explicit count over the years, dozens of faculty and graduate students looking to join UCM's three Schools have reached out to ReCCES and expressed their valuing of Community-Engaged Research when seeking an academic home. Among the visiting faculty at UCM, this was true for both more junior and senior candidates. In ReCCES's UCOP-funded study of community-engaged research across the UC campuses, faculty and research staff reported that graduate students were highly attracted to community-engaged research as an approach to strengthening their overall research capacity and their competitiveness for top academic and industry positions.

Research areas with strong opportunities for expansion include 1) innovations to incorporate community-engaged research within the more basic and "hard" sciences, 2) innovations to establish and demonstrate effectiveness of community partnerships, and 3) advances in promoting and teaching community-engaged research across the disciplines. NIH, NSF and DOE funds are currently available in these three areas, many of which are "first-ever" requests for proposals in this field. The "science" of Community-Engaged Research is seeking talented faculty to develop and employ evidence-based methods that go beyond anecdotal reports of community outreach and traditional service learning. This is particularly true for later-stage translational sciences that illustrate the adaptation and adoption of evidence-based innovation at the population-level (e.g., national, global). National thought leaders in higher education as well as funders within government, industry and philanthropy understand and see the importance of community-engaged research for the future of higher education and for impacting national success and global competitiveness. UCM is uniquely positioned with the UC system and among research universities nationwide to continue and grow its leadership in Community-Engaged Research.

E. Participation by Bylaw Units/Grad Groups

Community-Engaged Research is applicable to and open to all UCM Bylaw Units, ORUs and Graduate Groups. This is currently promoted through the ReCCES-Blum Center collaboration. Our team has partnered with other SAFIs to incorporate Community-Engaged Research within their round-two proposals. Because Community-Engaged Research cuts across schools and disciplinary boundaries to enhance the process of learning and discovery campus-wide, we feel this separate SAFI proposal is justifiable. ReCCES-Blum Center would continue to support the initiative by identifying and supporting incoming and existing faculty in the following ways.

1. Community-Engaged Research Hiring and Teaching Plan. Our aim by 2020 is to have active Community-Engaged Research among at least 20% of new/incoming faculty (e.g., with explicit commitment to engaged research) and least 40% penetration of existing faculty. We will support and facilitate a hiring and teaching plan that leverages external resources to significantly impact UCM's excellence in: (1) basic research and graduate student training, (2) community engagement, and (3) innovative undergraduate programming. That this approach will simultaneously achieve all three goals represents outstanding opportunity for the campus to achieve a very high return on investment. Furthermore, this proposed highly innovative Community-Engaged Research hiring approach will place UCM firmly at the forefront of emerging models of high impact research universities in the 21st century. The proposal is to hire over a period of time (e.g., 15 FTE in 5 years) a certain number of faculty FTEs that are consistent with the emphasis on Community-Engaged Research. We will organize and maintain a Community-Engaged Research Faculty Development Workgroup to identify and nurture engaged-research across Bylaw Units. The Workgroup will request hiring proposals from any Bylaw Units that seek to hire world leading scholars who will: (1) contribute to strengthening existing or planned graduate programs, and (2) will engage with the community in their research and teaching. External resources will be secured to provide Community-Engaged Research faculty with a course swap out. The course swap out will provide each school hosting a Community-Engaged Research FTE

with sufficient funding to hire a lecturer to staff an undergraduate course that would be typically taught by that FTE. The course swap out allows the Community-Engaged Research hire to develop and offer undergraduate community engaged research experiences as part of the new Community Research and Service Minor. The Community-Engaged Research hire will also be provided with seed funding to conduct their community relevant research, teaching and service. In addition, summer graduate student fellow positions will be created to allow masters and doctoral students to assist with Community-Engaged Research faculty research, consequently training the next generation of community-engaged scholars.

This plan has a number of strengths. First, it is inclusive and bottom up. Any Bylaw Unit (or combination of Units) that would like to submit a Community-Engaged Research hire proposal can do so. Second, it will achieve campus distinction in graduate training and research, community engagement, and undergraduate programming at the same time. One goal does not have to be achieved at the expense of the other. Third, it relies on external donor-provided resources. Potential donors often express frustration that the seemingly arcane and obscure topics of basic research are disconnected from community needs or undergraduate teaching. That the Community-Engaged Research focus breaks down walls by bringing basic research to bear on important problems has substantial donor appeal. Fourth, it will support the campus by providing students with the unique hands-on community engaged learning experience of the Community Research and Service Minor. At a time when many bricks-and-mortar institutions are struggling to adapt to the new environment, the first research university of the 21st century can point the way to the future with an undergraduate experience that cannot be replicated on-line. Last, this Community-Engaged Research approach is flexible and scalable, allowing hiring and programming to adjust to available resources and demand.

2. <u>On-Campus Training and Support.</u> The ReCCES-Blum Center collaboration will continue to provide training and technical assistance to faculty and students on Community-Engaged Research as an approach to be integrated into NS, SSHA and SE disciplines and majors. These trainings have focused on how to integrate Community-Engaged Research into grant proposals, IRB, and measurement development and implementation. The new minor in Community Research and Service will also help to support this type of education and technical assistance. A competitive grant mechanism will support faculty research and teaching reflecting innovations and adoption of best practices in Community-Engaged Research across schools and disciplines. A version of this funding mechanism was pilot-tested in Spring 2014 with the Inaugural Blum Center Seed Grants. Proposals were received across the three Schools including several interdisciplinary proposals across academic Units, many with specific plans for community-engagement in the design and implementation of research.

3. <u>Off-Campus Training, Support and Capacity-Building.</u> Similar training and educational opportunities as on-campus will continue to be offered to off-campus partners. These trainings focus on needs and skills of community-based organizations. The ReCCES-Blum Center PI's have recently published a paper articulating these areas for Community-Engaged Research skills and professional development. The Community Stations to be established through the Blum Center will play an important role in creating physical, financial and human infrastructure off-campus that can support SAFIs and general campus research and research training.

F. Special Programmatic Needs

The ReCCES-Blum Center collaborative includes a growing base of staffing and financial resources to support Community-Engaged Research. New SAFI resources can enhance our base support to serve a larger number of faculty by 2020 and beyond. Anticipated programmatic needs include the following:

Personnel
- Community research liaison (1 FTE for each of three schools). 1) This position is a master's level (doctoral preferred) with training and capacity to articulate and work with and advocate for faculty research and needs at each school related to Community-Engaged Research. 2) This person would promote and generate enthusiasm for Community-Engaged Research within each school with anticipation of generating new faculty lines aligned with Community-Engaged Research. 3) Serve as relationship builder and broker between each school and their appropriate community partners. By 2020 we anticipate that each school would have two community research liaisons.
- Administrative support staff (1 FTE) for overall operational and secretarial responsibilities.
- Communications staff (1 FTE) responsible for developing public announcements, managing relationship databases, managing websites and social media. Public relations and communications capacity is critical to establishing strong community-academic relationships and requires a dedicated staff member with experience working with underrepresented communities.
- Graduate Student Researcher (2 per school)
- Undergraduate work-study students (4 per school)
- Community Station Coordinators: (8 FTE) One community station per San Joaquin Valley (SJV) county (8); managing the activities, volunteers and events related to Community Stations (described below). Someone hired from the community and provided training in how to be a representative for Community-Engaged Research.

Facilities
- On-campus space appropriate to this level of initiative e.g., 3,000 sq. ft. with private offices and conference space and appropriate computing and conferencing technology. Currently, ReCCES-Blum Center is sharing approximately 1,000 sq. ft.
- Off-campus facilities: Community Stations that are within existing trusted organizations also allowing for private offices and conference facilities and appropriate computing and conferencing technology; one Community Station in each of the eight SJV counties. We are examining partnership with SBDC (UC-led small business development) to share space, and possibly a space in Yosemite National Park (in partnership with SNRI).

Other Necessary Resources
- Funding for events including at least one conference per year; workshops; space costs; food and equipment for community events; community participant stipends; travel reimbursement for UC and community members; stipends to support grant writing and pilot and feasibility studies; appropriate transportation (e.g., vans for student research teams).

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