



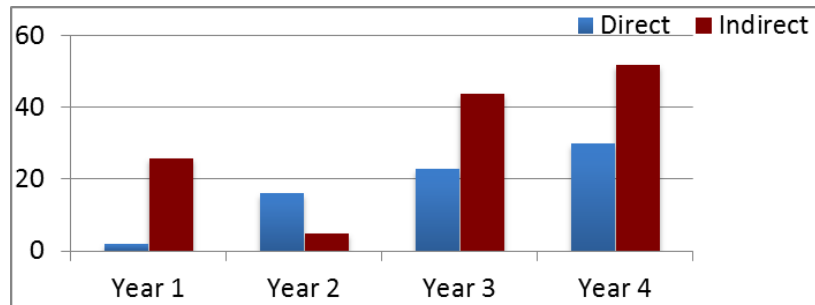
CICEP

INNOVATION AND ECONOMIC PROSPERITY UNIVERSITIES
AWARDS PROGRAM

CASE
STUDY
2014

The U54 Partnership

Funded by the National Cancer Institute in September 2010, the [U54 Minority Institution/Cancer Center Partnership Grant](#) brings together UMass Boston and the Dana-Farber/Harvard Cancer Center (DF/HCC) to collaborate on research that addressed issues of cancer health disparities in disenfranchised populations. Capitalizing on the strengths of both institutions, the partnership serves to improve research, training, and outreach opportunities for underrepresented minority (URM) students, fellows, and scientists and to develop information and resources toward closing the cancer health disparities gap. To date, the award has supported 13 collaborative and innovative research projects and three cores (survey, training, and outreach); leveraged \$22.5M in additional external funding; and trained 22 early stage investigators and 93 postdocs and student trainees.



Manuscripts Published Since 2010. Total = 210 (Direct = 71; Indirect = 127)

CANCER TRAINING AND CAREER DEVELOPMENT

U54’s comprehensive approach to training and career development has institutionally transformed UMass Boston and DF/HCC. There have been more research grants submitted and received by early stage investigators, students exposed to research, and training opportunities for seasoned faculty than ever before. In addition, U54 has facilitated career promotions of early stage investigators at both institutions.

Efforts in UMass Boston’s College of Nursing are particularly noteworthy. As part of U56 (NIH-funded precursor to U54), the team launched an accelerated nursing [PhD program](#). The program’s success led to the more recent U54 Nursing Postdoc Program, a national model for recruiting, retaining, and promoting the careers of nursing scientists. Thus, U56 and U54 combined have significantly increased the number of nursing undergraduates, graduate students, and postdocs (particularly URMs) pursuing cancer and cancer disparities research at UMass Boston and DF/HCC. Additionally, since DF/HCC does not have a nursing program, UMass Boston students progress through the pipeline to fill that void in the Cancer Center’s training portfolio.

Through the Training Core and the Continuing Umbrella for Research Experiences (CURE) program, students are exposed to renowned basic and population science research mentors, have access to state-of-the-art facilities, and gain practical research experience in a driven and demanding, yet supportive environment. For example, Olivier Dantiste, an African American UMass Boston graduate student, received basic science training at the Dana-Farber Cancer Institute (DFCI) Lurie Imaging Center; and Cheyenne Foxtree-McGrath, a Native American UMass Boston undergraduate student, received training in psychosocial population research in cancer disparities at Massachusetts General Hospital.

CAPACITY BUILDING FOR RESEARCH

The U54 award has been critical to promoting basic biomedical and cancer research at UMass Boston. Most recent evidence is the establishment of the Center for Personalized Cancer Therapy (CPCT), a \$10M effort funded by the [Massachusetts Life Sciences Center](#) (MLSC). The CPCT, a joint venture between UMass Boston and DF/HCC, will synergize efforts to foster and facilitate biomedical and cancer-focused research, sustain training efforts at all levels, and leverage investments to broaden the scope of cancer research over diverse disciplines such as biology, chemistry, public policy, sociology, nursing, mathematics, economics, and physics.

Since U54's initiation, research funding received by UMass Boston faculty increased by approximately 16% (\$49.6M in 2010 to \$57.3M in 2013). To manage this growth, institution-wide trainings in grant management for business managers and department administrators added infrastructure to support a burgeoning research culture. In addition to the increasing financial capital, U54 provides access to state-of-the-art research facilities, cores, and networks for UMass Boston affiliated faculty. The Survey and Statistical Methods Core helps both U54 and non-U54 faculty members with research development, compilation of grant proposals, and data analysis for publications. The Training Core helps U54 investigators select and train undergraduates and pre- and post-doctoral fellows in biomedical and cancer research. The Outreach Core helps UMass Boston-DF/HCC research teams engage underserved populations.



The ISC will feature the Center for Personalized Cancer Therapy, research labs, and an interdisciplinary sandbox teaching lab. It will promote collaboration among students, faculty, staff, and visitors while opening doors to strategic partnerships and funding opportunities.



The construction of the Integrated Science Building (ISC), opening in fall 2014, stems from the UMass Boston-DF/HCC partnerships expanded research and funding. Our Labor Resource Center leads PGTI, a regional policy collaborative to create access to living wage jobs for women and people of color in the construction trades. PGTI has been instrumental in making the ISC the most diverse public construction project in Massachusetts history.

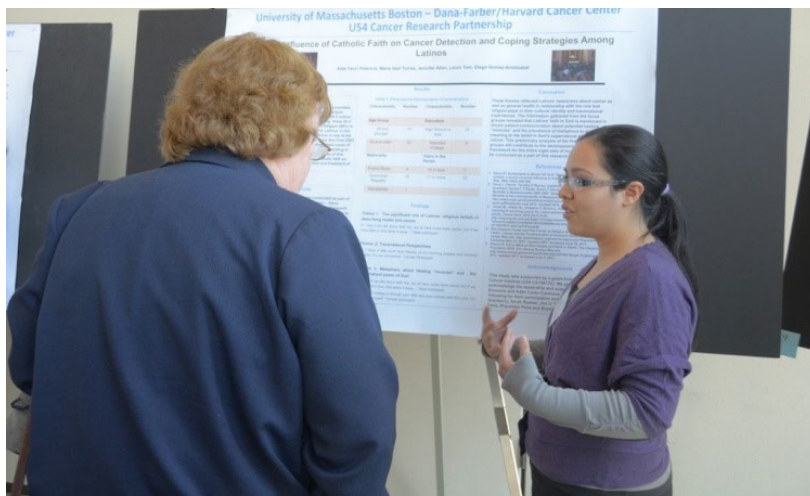
IN THE COMMUNITY

Through UMass Boston's leadership, the partnership has increased opportunities for DF/HCC and UMass Boston faculty to gain knowledge and expertise in conducting culturally-sensitive cancer disparities research with low socio-economic status populations. Resulting research connected to the Outreach Core has already led to meaningful impacts in the affected communities. As part of the U54 Outreach Core, CRUZA, the Alliance for Latino Health through Faith and Action, built the capacity of thirty-four Latino churches in Massachusetts to provide culturally-relevant cancer-related health education and resources to parishioners. Eighteen UMass Boston students, all bilingual in Spanish, played integral roles. Aida, a first-generation UMass Boston student from El Salvador, reflected on her experience conducting population research through CRUZA, "It's not easy because you have to adapt...community members want to help change their community and they need partnerships to (reflect their) voices." Now an alumna, Aida is working as a nurse at a local community health center utilizing the skills she learned through the U54 training core.

Building off the network it created, CRUZA is leading an innovative biobanking awareness initiative to increase knowledge and change attitudes about personalized medicine. Partnerships with six Latino churches, and three housing developments and community centers have engaged 190 individuals from communities of color and medically-underserved populations. Additionally, the Gastón Institute is working with the CRUZA network to enroll Spanish- and Portuguese- speakers in the Affordable Care Act in communities across Massachusetts. This project was awarded by the U.S. DHHS Office of Minority Health.

The UMass Boston and DF/HCC partnership has also developed a resiliency program for medical interpreters who play an integral role in conveying critical information to cancer patients during moments of heightened distress. The research team found that the intervention positively impacted job satisfaction, coping skills, and reduced the number of sick days taken. Yilu Ma, Director of Interpreter Services for Brigham and Women's reported that "the project is invaluable because medical interpreters now have a tool that they can use to relieve the stresses that are inflicted upon them when interpreting for trauma, end-of-life and terminally-ill patients and their families." The statistical significance of this pilot prompted a planning team to strategize the implementation of the program in sites across Massachusetts.

In summary, U54's benefit to both UMass Boston and DF/HCC is clear and compelling. Most importantly, the capacity building, cancer training, and career development synergistically advances community and economic development.



Aide Palencia presents findings from U54's outreach project with CRUZA's network of Latino parishes. As an undergraduate, Palencia honed research and employability skills through the U54 training core.