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Thank you, for all you do! p. 30
At the University of Massachusetts Boston, we are dedicated to rigorous, open, critical inquiry—a gateway to intellectual discovery in all branches of knowledge, and a crucible for artistic expression.

Our campus culture fosters imagination, creativity, and intellectual vitality. Responsive to the call of diverse disciplines, schools of thought, and public constituencies, we expect and welcome divergent views, thus honoring our shared commitment to expanding, creating, and disseminating knowledge.

As an institution, we are evolving rapidly. The worlds of teaching, research, and service; the many communities our university serves; and the university itself all face different challenges than they did when it was created. So as Boston’s only public university, while we honor our origins as a teaching institution and our tradition of public service, we must also move forward as the increasingly sophisticated research university that we are and continue to become.

By 2025, we envision our faculty and students as conductors of research that has both local and global reach, that creates new knowledge in all major areas of human concern, and that helps our students acquire the refined and complex knowledge, values, and skills of inquiry that the highest levels of research foster and the globalized world requires. Our scholars will conduct funded and unfunded research and scholarship across a broad range of intra- and interdisciplinary areas. We have risen within the ranks of institutions designated by the Carnegie Foundation as a “RU/H: Research Universities (high research activity)” having achieved this standing through requisite increases in student enrollments, program offerings, advanced degrees granted, sponsored research support, and scholarly productivity.

By 2025, our university will have fulfilled our aspiration to become an “outstanding public urban research university with a teaching soul.”
Today’s Celebration

The 2014 8th Annual Celebration of Faculty, Research Staff, and Students for Their Contributions to Research, Innovation, Scholarship, and Creativity

Thursday, December 11, 2014
12 - 2 pm
Ballroom, Campus Center

Master of Ceremony: Zong-Guo Xia, Vice Provost for Research and Strategic Initiatives & Dean of Graduate Studies

Program of Speakers

1. Brief Remarks of Chancellor J. Keith Motley

2. Brief Remarks of Provost Winston Langley

3. Martin H. Quitt, Professor Emeritus of History, current Chair of the Retired Faculty Council, and the former Vice Provost for Research and Dean of Graduate Studies for five years and Chair of the Faculty Council for two terms, will reflect on where we started, where we have been and where we are today, and envision the endless possibilities for the future of our beloved institution and help us interpret the inspirational vision of UMass Boston as a distinguished public urban research university by our founders.

4. Jeff Burr, Chair of Gerontology, will highlight the major accomplishments of the Department of Gerontology and its graduate programs and introduce one of their most distinguished alums - R. Turner Goins.

5. R. Turner Goins, a graduate of Ph.D. in Gerontology in 1997 and the Western Carolina University’s first Ambassador Jeanette Hyde Distinguished Professor of Gerontological Social Work, will reflect on what the Ph.D. in Gerontology at UMass Boston meant for her scholarly pursuit and extraordinary accomplishments.

6. Kamal Bawa, (with one of his current students - Tenzing Ingty), Elected Fellow of the American Academy of Arts & Sciences, Recipient of the First Gunnerus Sustainability Gold Medal from the Royal Norwegian Society of Science and Letters in 2012 and the MIDORI Prize in Biodiversity in 2014 from the UN Convention on Biological Diversity and the AEON Environmental Foundation of Japan, and Distinguished Professor of Biology, will reflect on his forty years of experience as a dedicated mentor and a highly accomplished research scholar at UMass Boston.

7. Jill S. McDonough (recipient of the 2014 Lannan Literary Fellowship in Poetry) and Danielle Jones-Pruett (winner of the Rona Jaffe Foundation Writers’ Award) of English will read each other’s poems and share their inspirations.

8. Alice Carter (unable to attend), Abbey Eisenhower and Frances Martinez Pedraza of Psychology will discuss how a collaborative effort between student and mentor has blossomed to spur large-scale, federally-funded research to help families.

9. Crystal L. Schaaf of the School for the Environment will share her experience in mentoring award-winning students and staying productive as a research scholar at UMass Boston.
Pioneering Biologist Earns Major International Honors

Kamaljit Bawa, distinguished professor of biology and faculty fellow at the Center for Governance and Sustainability, accepted the AEON Environmental Foundation’s 2014 MIDORI Prize in Biodiversity in South Korea. The biennial prize for contributions to the conservation and sustainable use of biodiversity adds to two noteworthy 2012 honors: the Royal Norwegian Society of Science and Letters bestowed upon him its first Gunnerus Sustainability Award, the first major international award for work on sustainability, and he was elected to the American Academy of Arts and Sciences.

A tropical biology and international conservation pioneer, Bawa explores the role of institutions and market-based approaches to conservation, focusing on their relationships with poverty and community-based conservation. He joined UMass Boston’s biology department in 1974 and to this day remains true to his pioneering ethos. He cites as his primary interests “new paradigms that take into account the need to alleviate poverty in biodiversity-rich areas through sustainable use of biodiversity,” sustainable use of provisioning services, and the impact of land use and land cover change on biodiversity. In 2006 he received the Chancellor’s Distinguished Service Award in recognition for his work internationally in tropical biology and his service on campus in mentoring, program development, and sponsored research.

Bawa’s work on sustainable livelihoods in the Eastern Himalayas tests whether integrated improvements in conservation and biodiversity can also alleviate poverty. His approach is to quantify changes in economic and social parameters resulting from economic and institutional interventions, analyze the data, and integrate his findings with results from similar projects. His Himalayan projects include cutting-edge research with PhD candidate and center Research Associate Uttam Shrestha on declining populations of the Nepalese fungus yarsagumba, published in 2013 in Biological Conservation. This “caterpillar fungus,” so-called for its lethal effect on moth larvae, is prized in China as a medicine and aphrodisiac. The resulting over-harvesting has led to a major population decline that could have devastating consequences for the Himalayan ecosystem.

Bawa, the founding president of the Ashoka Trust for Research in Ecology and the Environment (ATREE), a non-governmental organization devoted to research, policy analysis, and education in India, has earned the highest honors from the two major professional societies in his field: the Association for Tropical Biology and Conservation elected him an Honorary Fellow in 2003, and in 2009 he earned the Society for Conservation Biology’s Distinguished Service Award.
Schaaf awarded $2.5M in grants since her arrival in September 2011

Contributing to the next generation of weather satellites

Using remotely sensed data via satellite for environmental modeling and monitoring has been Crystal Schaaf’s research focus for more than 25 years. Land use management; urban land cover assessment; ecological, agricultural, and hydrological monitoring; and atmospheric and environmental forecasting are among the practical applications of her research.

Schaaf, professor of environmental, earth, and ocean sciences, has published nearly 100 articles. She has also served as the principal or co-principal investigator of research grants totaling nearly $24 million from NASA, the National Oceanic and Atmospheric Administration, and the National Science Foundation.

In February 2013, a group of UMass Boston graduate students and Professor ZongPing Lee along with Schaaf watched at Vandenberg Air Force Base in California the launch of a NASA satellite that is now churning out data for them to use in a project funded by the U.S. Geological Survey. The project already has collected more than 40 years of information about land and ocean surfaces, cloud cover, and temperatures. In addition to using the data for short-term weather forecasting and longer-term climate models, researchers are also able to monitor wildfires, view storm damage, assess snowpack for water and irrigation, and track deforestation.

UMass Boston graduate student Yun Yang is working alongside Schaaf, using satellite data to study how soil moisture affects dissolved carbon in salt marshes, rivers, and estuaries, improving our knowledge of how the coastal ecosystem works. Yang’s study focus is the Boston area, particularly the Neponset River Watershed.

Fulbright Fellowship Sends Ellen Douglas to Australia to Research Environmental Sustainability

Water, that ubiquitous and increasingly precious commodity of life, is the chief passion of Ellen Douglas, associate professor of hydrology. She spent the year in Australia, eight months of it in Adelaide and Canberra, where she continued her work on hydrology and climate change impacts.

Douglas worked with Australia’s national science agency, the Commonwealth Scientific and Industrial Research Organization, to assign an economic value to the Murray-Darling Basin (pictured at right), a 400,000-square-mile agricultural area named for two major rivers that run through it. Douglas calls the river basin Australia’s “bread basket.”
PhD Program in Green Chemistry Leads the Way
Program pursues ecologically sustainable practices

Arming scientists with the tools and education needed to pursue chemical research, development, and manufacture in an ecologically sustainable context: that is the goal of the green chemistry track in the chemistry PhD program. The first in the world when it was launched in 2004, this transdisciplinary program is bolstered by UMass Boston’s unique complement of faculty in chemistry, biology, and environmental, earth, and ocean sciences.

Heading the UMass Boston Center for Green Chemistry is Wei Zhang, associate professor of chemistry. A leading authority in fluorous and green chemistry, he is noted for:

- Publishing in 138 peer-reviewed publications, including three Chemical Reviews and three Tetrahedron Reports.
- Occupying the top one percent of cited authors in life sciences journals, with more than 2,800 citations.
- Winning more than $4.5 million in external grants.
- Being the third most published author in fluorous chemistry.

Zhang creates organic compounds that affect biological activity for specific uses, typically pharmaceutical. As a green organic chemist, he focuses not just on the products of chemical processes, but also on the processes themselves. Take the Grignard reaction. This chemical reaction, essential for producing various medicines, occurs via an unsafe chemical process. In 2011, the American Chemical Society/Green Chemistry Institute awarded Zhang a grant to develop a greener way to run this reaction. In June 2012, he presented his findings at an international green chemistry conference in Washington, DC. “If you can make this process greener as well as efficient,” he says, “then it will be more attractive, because it’s sustainable.”

Zhang is also principal investigator on two collaborative projects with Dana Farber/Harvard Cancer Center biologists under the university’s U54 grant from the National Institutes of Health. He is working to fulfill their research need for target molecules and compound libraries. His co-edited book, Green Technologies for Organic Synthesis and Medicinal Technologies, was released in June 2012.

Maria Ivanova Appointed to Newly Established
U.N. Scientific Advisory Board

In September 2013, Assistant Professor of Conflict Resolution, Human Security and Global Governance Maria Ivanova, an internationally recognized expert on governance and sustainability, was appointed to the new United Nations Scientific Advisory Board by U.N. Secretary-General Ban Ki-moon.

Ivanova, a Boston resident, is one of 26 members appointed to the new Scientific Advisory Board of the U.N. Secretary-General, which is comprised of experts from the natural, social, and human sciences. The advisory board is designed to “strengthen the interface between science and policy, so that the latest scientific findings are reflected in our high-level policy discussions,” said a press release issued by Secretary-General Ki-moon’s office.

Congratulations are also due Maria for her recent promotion to the rank of associate professor!
School for the Environment Established in 2012

UMass Boston is “The Environmental Campus” of the five-campus University of Massachusetts system, and the School for the Environment (SFE) is UMass Boston’s premier interdisciplinary environmental school. SFE, together with departments across the university and in collaboration with research institutes such as the Urban Harbors Institute, the Collaborative Institute for Oceans, Climate, and Security, and the Provincetown Center for Coastal Studies, promotes and energizes the university’s vision for national pre-eminence in environmental research and academic programs.

The SFE integrates the natural and social sciences to generate and apply new knowledge about the quality of our environment and the sustainable use of its resources. It focuses on promoting integrated science, planning, policy, and education for understanding earth-system processes and managing complex interactions between human activities (e.g., urbanization) and natural processes (e.g., carbon cycling) in linked watershed and coastal marine systems. The school’s strong transdisciplinary makeup (natural and social sciences within the same department) and its focus on linked watershed-coastal systems are unique in the country.

School facilities include the Environmental Analytical Core Laboratory, the Center for Coastal Environmental Sensor Networks, the Laboratory for Urban & Coastal Environmental Science, and others. In addition, the school houses specialized laboratories for earth, ocean, and environmental sciences, including state-of-the-art facilities for hydrogeology, coastal geology, environmental toxicology, benthic ecology and zooplankton analysis, and remote sensing as well as inshore/near shore research vessels.

UMass Boston’s First IGERT Grant from the National Science Foundation Funds Coasts and Communities Fellowships

Ask an environmental scientist, a policymaker, and the head of a nonprofit to name today’s biggest global environmental issues and they’ll probably give you a similar list: rapid urbanization, dwindling biodiversity, climate change and its effects. Ask them for solutions, and their answers would likely be steeped in their own academic disciplines and in the experiences of their home countries.

UMass Boston is playing a vital role in developing these solutions, thanks to a five-year, $3.1 million Integrative Graduate Education and Research Traineeship (IGERT) grant from the National Science Foundation. This funding has enabled UMass Boston to implement an interdisciplinary, transnational approach to studying global environmental issues.

The grant funds the new IGERT Fellows program entitled “Coasts and Communities: Natural and Human Systems in Urbanizing Environments.” Fellows are studying urban coastal management across disciplines—and across nations—with a special focus on the Horn of Africa.

“Environmental problems don’t acknowledge national or academic borders, so neither can our students,” said Robyn Hannigan, dean of the School for the Environment in the College of Science and Mathematics, and co-principal investigator along with Maria Ivanova of the program.

In September 2014, eight IGERT fellows were selected from students admitted to PhD programs in Environmental Science; Environmental Biology; Global Governance and Human Security; and Business Administration: Organizations and Social Change.
Established in fall 2004 and led by Arthur Eisenkraft, Distinguished Professor of Science Education, the Center of Science and Math in Context (COSMIC) prepares students for a wide spectrum of careers in science, technology, engineering and mathematics. An essential requirement of MSP projects is that they develop strategies to ensure that students are prepared for, have access to, and are encouraged to participate and succeed in challenging mathematics and/or science courses.

Thanks to $14.6M in Math and Science Partnership grants awarded to Hannah Sevian, associate professor of chemistry, UMass Boston leads the way in Massachussetts in science and math education and learning research. The key to its success is the vertically integrated approach of the Boston Science Partnership (BSP), developed through the MSP program. The partnership, led by UMass Boston, provides intensive, year-round support to Advanced Placement (AP) science classrooms throughout the Boston Public Schools to assist in district-wide growth of student enrollment in AP science programs. Supplemental grants, totaling $712,000, to the initial award led to adding partner institutions Bunker Hill and Roxbury Community Colleges to the BSP.

**Leading the Way in Boston and Beyond**

Through the Math and Science Partnership (MSP) program of the National Science Foundation (NSF), UMass Boston faculty are collaborating with faculty from other institutions and public school teachers to raise the standard of teaching in the STEM disciplines: sciences, technology, engineering, and mathematics. An essential requirement of MSP projects is that they develop strategies to ensure that students are prepared for, have access to, and are encouraged to participate and succeed in challenging mathematics and/or science courses.

About the Boston Science Partnership

The Boston Science Partnership is a teacher development program to improve science education in Boston from middle school through graduate school. A key feature of this program is its vertical approach, which defines outcomes encompassing the entire science curriculum from grade 6 through university.

Success strategies include workshops and institutes for teachers, university-based laboratory programs for students and teachers, summer “bridge” programs for entering AP students, classroom volunteer support, and a full-length practice exam for students. The partnership recruited experienced AP teachers to help; the long-term goal is to develop them into endorsed College Board consultants. Core partners UMass Boston and Northeastern University are working in collaboration with the College Board and Harvard Medical School on this initiative.

Reaching for the Stars at Home and Beyond

Established in fall 2004 and led by Arthur Eisenkraft, Distinguished Professor of Science Education, the Center of Science and Math in Context (COSMIC) prepares students for a wide spectrum of careers in science, technology, engineering and mathematics.

On another front, COSMIC provides support for science teachers beginning with their teacher training at UMass and continuing with professional development through their teaching career path as novice teachers, experienced teachers, and as teacher leaders.

“We’ve created a model that we can export to other communities, and that will reach many, many students.”

— Arthur Eisenkraft, Distinguished Professor of Science Education & Director of COSMIC
Wipro Science Education Fellowship
Improving teacher practice and student achievement in science

Wipro, an IT solutions company based in India, has given $3.4 million to start pilot fellowship programs in Boston and New Jersey. An additional $1.7 million has been allocated to begin a teacher training program in New York. Wipro chose UMass Boston as its first partner university to administer these training programs.

The Wipro Science Education Fellowship is based upon the success of the Boston Science Partnership’s Science Education Fellowship, which was supported through the National Science Foundation Math Science Partnership Program from 2009 to 2012. The Fellowship is a two-year-long program for experienced teachers. The program uses a model of teacher support and development to increase the quality of teaching and leadership in science throughout several districts. This model includes a comprehensive set of activities designed to improve teacher practice, focusing on the outcome of increased achievement in science for all students.

Arthur Eisenkraft, director of the Center of Science and Mathematics in Context and a distinguished professor of science education, hopes to see the Wipro SEF program expand across the country. “We’ve created a model that we can export to other communities, and that will reach many, many students,” he said.

Building Teaching and Learning Capacity through Community-Based Engineering

Kristen Wendell, assistant professor of curriculum instruction in the Graduate College of Education and Human Development, was awarded a five-year $598,269 CAREER grant by the National Science Foundation. In tune with recent changes to K-12 science education, this project seeks to develop a community-based engineering module, as well as assessment tools, which can be used to benefit novice elementary school teachers.

The grant will provide the opportunity to investigate the current engineering abilities and practices of three cohorts of 30 novice teachers. A subset of 48 of 90 teachers will be followed into their first year of in-service teaching, allowing for researchers to document how these teachers bring this experience into their new position at the head of their own classroom.

Multimedia Engineering Notebook Tools to Support Engineering Discourse in Urban Elementary School Classrooms

In this work-in-progress, supported by a three-year $262,806 National Science Foundation grant, Kristen Wendell, assistant professor of curriculum and instruction, and Patricia Paugh, associate professor of curriculum and instruction, are developing and studying multimedia engineering notebook tools that support urban elementary students’ engagement in engineering practices, particularly those that involve reflective decision-making with fellow students. They work in close collaboration with elementary teacher researchers, and they are in the first phase of this three-year project.
Robert Chen’s world revolves around collaborations in research and outreach. Whether designing with engineers a new data-gathering sensor, working with district science coordinators on a new curriculum, or supporting K-12 or community college science teachers, Chen’s raison d’être is collaboration.

A chemical oceanographer with a research interest in inorganic chemistry, Chen is known for his successes in K-12 science education and outreach. “Whether it’s for researchers and educators, or physicists and biologists and earth scientists, or administrators and faculty members, being able to bridge two different cultures and facilitate interaction effectively has increased my capacity,” says Chen. “I’ve gained respect and trust from K-12 teachers because now I can say the right thing, I can speak their vocabulary.”

At first, obtaining sponsored funding was a fruitless effort for Chen. Following the rejection of several dozen proposals, his vision and perseverance finally paid off and the funding has flowed nearly unabated for the past ten years. Listed to the right are just a few of his successes, with the earlier grants helping him, and his collaborators, build the necessary capacity to increase UMass Boston’s scale and application of STEM teaching and learning research, most notably the Boston Science Partnership.


Robert Chen, Environmental, Earth and Ocean Sciences, Arthur Eisenkraft, Science Education: $2,100,000 from the NSF for the project “Boston Energy in Science Teaching (BEST),” 2010-2013.

Robert Chen and Xuchen Wang, Environmental, Earth and Ocean Sciences: $49,400 from the NSF for planning the “Centers for Ocean Sciences Education Excellence Workshop in China,” 2010-2011.


Improving the Teaching of Math, Science, and Literacy in the Boston and Randolph Public Schools

Lisa Gonsalves’ extensive work with the Boston Public Schools has also led to recognition on a national scale: a $3.5 million Teacher Quality Partnership grant from the U.S. Department of Education and a $750,000 Phase II grant from the Noyce Foundation. Robert Noyce, cofounder of Intel, started the Noyce Foundation to improve the teaching of math, science, and literacy.

Thanks to a recent $1.25 million grant from the National Science Foundation, Gonsalves, associate professor of curriculum instruction in the Graduate College of Education and Human Development, and Brian White, associate professor of biology in the College of Science and Mathematics, in partnership with the Boston Public Schools and Randolph Public Schools, are able to support additional additional cohorts of STEM professional Noyce scholars in the Teach Next Year (TNY) program. The funding supports 50 STEM professionals total (in 5 cohorts), to complete the year-long TNY residential teaching program that culminates in a master’s degree, licensure in secondary science or math, and additional certification in either teaching students with moderate disabilities or teaching English language learners.

Training Researchers in Phylogenetics Methodology

Liam Revell, assistant professor of biology, uses computational methods for studying evolutionary relationships among organisms (phylogenetics), which help him draw inferences about the evolutionary process. With the National Science Foundation’s five-year CAREER award of $852,556, he is creating two educational programs to train researchers to do the same.

In July 2014 he launched an annual four-day mini-course in Latin America for researchers on using phytools, the scientific computing software he developed for data analysis. He is also planning a young developers’ workshop for graduate students who want to learn how to create their own tools to study the evolutionary process. The first is tentatively scheduled to take place at UMass Boston’s Nantucket Field Station in 2015; the second will take place during the fourth year of the grant.

Improving Security Awareness in Cyberspace

Ping Chen, associate professor of engineering, is part of a nationwide collaborative effort to build national capacity to develop a workforce well trained in computer security, thanks to a $146,078 grant from the National Science Foundation.

This multi-institutional project enables researchers like Chen to develop and share the latest knowledge in the field of information assurance: machine learning, data mining, natural language processing, and statistics techniques as they relate to computer security. They are developing interactive courseware and workshops to advance and share national knowledge on how to identify and counter cyber-attacks. The project website disseminates course modules, articles, and presentations explaining information assurance, and advising how to tackle various security threats. The project also aims to incorporate security topics and increase awareness of information assurance in a broad range of computer science curricula as well as other STEM disciplines.

Boosting Math Teaching in Early Childhood Education

Lisa Van Thiel, senior early childhood specialist at the Institute for Community Inclusion, received grants from the Massachusetts Department of Education relating to early math education in two communities.

With a grant of $116,480 per year for three years, Van Thiel is spearheading Chelsea Achieves in Mathematics, UMass Boston’s partnership with the Chelsea Public Schools and Community Action Programs Inter-City, Inc., Head Start, to improve teachers’ knowledge of math and math pedagogy. Her three-year Higher Order Teaching partnership with the Lowell Public Schools, funded with a $147,374 per year grant, is enabling her to investigate whether teacher training in higher order thinking—learning critical thinking and problem solving skills—improves pupils’ skills in mathematics.
Inclusion and Social Development

Realizing Big Dreams: UMass Boston Establishes the School for Global Inclusion and Social Development

The Institute for Community Inclusion (ICI) transforms into program and policy creation this philosophy: that people with disabilities have the same rights and self-determination with respect to their preferences, choices, and dreams.

And now the ICI has become the well-spring for the just established the first-of-its-kind School for Global Inclusion and Social Development.

Considered the national leader in the area of policy, research, and practice in the employment of persons with disabilities, the ICI works to ensure that people with disabilities have the same opportunities to dream big, and make their dreams a fully integrated and welcomed reality. For 46 years, the institute has been committed to creating a world where all people with disabilities are wholeheartedly included in valued roles in all settings: school, workplace, volunteer group, home, and elsewhere in the community.

Since the ICI became part of UMass Boston in 2001, it has brought in more than $190M in grants and external funds. In FY 2011, the institute was awarded an impressive $17.1M, and in FY 2014 earned its second highest annual award total of $16.8M. Serving as a model for helping to solve societal problems with research findings gleaned from multiple disciplines, the institute enjoys a growing circle of influence among local, state, national, and international constituents.

A joint venture of UMass Boston and Children’s Hospital Boston, the ICI has been designated by the U.S. Department of Health and Human Services Administration of Developmental Disabilities as a University Center for Excellence in Developmental Disabilities Education, Research, and Service.

Facets of Empowerment

Employing people with disabilities in community settings

Supporting children and young adults with special health care needs

Accessing general education and effecting transition from school to adult life

Expanding local recreation and school activities to include people with disabilities

Promoting technology that aids participation in school/community/work activities

Building organizations’ ability to serve culturally diverse people with disabilities

Revealing the impact of national and state policies on people with disabilities and their families
The Power of Advocacy

“There are clear messages coming from the self-advocates and students with disabilities that employment and getting out of poverty are a goal for them.”

—William Kiernan, Founding Dean of the School for Global Inclusion and Social Development

“The evolution of the self-advocacy movement has again shown that persons with disabilities do not want to live in poverty, work in segregated settings, or be told what they have to do,” stated William Kiernan, then director of the Institute for Community Inclusion, during his March 2011 testimony before the U.S. Equal Opportunity Employment Commission.

“Many in the self-advocacy movement seek to be involved and have adopted the mantra ‘Nothing about us without us’....There are clear messages coming from the self-advocates and students with disabilities that employment and getting out of poverty are a goal for them.”

From FY 2005 to FY 2014, Kiernan is directly responsible for bringing to the ICI more than $80M in sponsored grants and contracts. In 2010, he was awarded a $16.8M, five-year grant by the U.S. Department of Education, the largest in UMass Boston’s history, to help state agencies help people with disabilities find paid work in their communities. Under his leadership, project staff are creating a national model, will train agencies to implement it, and will ultimately evaluate its effectiveness.

Kiernan, the author of six books and more than 125 articles and reports on employment and public policy development in adult disability services, is considered a national expert on inclusion. He has worked extensively with state and national public and private organizations, served as an international consultant in seven countries, provided training and technical assistance in more than 45 states, and has testified on Capitol Hill in Washington, DC.

Institute for Community Inclusion in Historical Context

Established in 1967 at Children’s Hospital Boston by Dr. Allen Crocker, the Institute for Community Inclusion (ICI) was originally known as the Developmental Evaluation Center. The Center was one of the first in the country, established as a direct result of President John F. Kennedy’s recognition of the national need for increased support and training for citizens with mental retardation. Through the years ICI has expanded its scope, and today the ICI’s services focus on the entire life-span of people with all types of disabilities.
Strategic Partnerships

UMass Boston – IBM Collaborative Innovation Center

A Base in Cambridge, Massachusetts for a Smarter Planet, Industry Frameworks Expertise and a Link for Fostering Community Collaboration

On December 3, 2013, UMass Boston and IBM announced a new research initiative to advance accessible technology solutions for people with disabilities, the growing elderly population, those with low literacy, and novice technology users.

As part of IBM’s Academic Initiative, IBM will provide access to technology and industry expertise to students, professors, and researchers at UMass Boston’s newly formed School for Global Inclusion and Social Development.

Working together, IBM and UMass Boston will work with state and federal government agencies as well as local and global non-governmental organizations to advocate for key policies and legislation related to technology accessibility. Additionally, the collaboration will explore new ways to integrate assistive technologies into the design of mobile devices, applications or websites that enable access for people with disabilities and improve the overall user experience.

Liberated Learning Consortium

In 2013, the School for Global Inclusion and Social Development became the host for the Liberated Learning Consortium. This global research network of university, industry, and non-profit partners pursues a joint mission to make learning more accessible in higher education through the development and effective use of assistive technologies. Specifically, the consortium is dedicated to advancing speech recognition technology and techniques to foster barrier-free learning environments to improve accessibility.

The Consortium conducts research and development on two interrelated applications: using speech recognition to automatically caption spoken language and display it as readable text, and using speech recognition to produce and disseminate accessible, multimedia transcripts. As the host institution, UMass Boston is responsible for support systems, communications, and distributing and managing technologies. Learn more at liberatedlearning.com.
Some New Grants

Robert McCulley (Program Manager, Northeast Regional Center for Vision Education, Institute for Community Inclusion) was awarded a three-year $500,000 grant by the Boston Public School System. These funds will support the collaboration between UMass Boston with each of the New England State Departments of Education to proceed with the development of a New England Regional Center for Distance Education of Low Incidence Teachers of Students with Visual Impairments.

Myra Rosen Reynoso (Research Associate, Institute for Community Inclusion) was awarded a five-year $900,000 grant by Langston University to provide capacity-building expertise to the Langston Rehabilitation Research and Training Center. The prime sponsor is the National Institute on Rehabilitation Research.

Cynthia Thomas (Coordinator of Employment Services, Training, and Technical Assistance, Institute for Community Inclusion) was awarded a $701,408 grant by the Massachusetts Department of Developmental Services (DDS) to coordinate and implement a comprehensive set of employment capacity-building activities that will support the DDS Employment First initiative to increase integrated employment outcomes and phase out the use of sheltered workshop services.

Maria Paiewonsky (Transition Specialist, Institute for Community Inclusion) was awarded a $220,000 grant by the Massachusetts Department of Elementary and Secondary Education to provide multiple sections of three cost-free online graduate courses in content skills, knowledge and instructional strategies related to secondary transition and that address the needs of all transition-age learners in safe and supportive, inclusive environments.

Julisa Cully (Resource Manager in the Institute for Community Inclusion) was awarded a three-year $598,769 grant by the U.S. Department of Education for the project “Explore Vocational Rehabilitation: Increasing Adoption and Utilization of a Web-Based Open Share Public Portal of Survey Data on Vocational Rehabilitation and Other Employment Service Providers.”

Cynthia Thomas (Coordinator of Employment Services, Training, and Technical Assistance, Institute for Community Inclusion) was awarded a $675,188 grant by the Massachusetts Department of Developmental Services for the project “FY 2014 Employment Outcomes.”

Cynthia Thomas (Coordinator of Employment Services, Training, and Technical Assistance, Institute for Community Inclusion) was awarded a $900,000 grant by the Massachusetts Department of Developmental Services for the project “FY 2015 Employment Outcomes.”

John Butterworth (Senior Research Fellow and Director of Employment Systems Change, Evaluation and Institute for Community Inclusion) was awarded a $134,587 grant by the Alaska Mental Health Trust Authority, Division of Revenue, State of Alaska, for the project “Alaska Beneficiary Employment Policy and Data Review.”

Meg Grigal (Senior Research Fellow, Institute for Community Inclusion) was awarded a two-year $2,375,777 grant by the U.S. Department of Education for the project “Think College Transition: Developing an Evidence-based Model of Inclusive Dual Enrollment Transition Services for Students with Intellectual Disabilities and Autism.”

Some Ongoing Projects

The Boston Ready research project helps Boston four-year-olds learn by supporting high-quality teaching. This three-year, $3.5 million grant is testing the effectiveness of professional development supports and three curricula on child outcomes. Mary Lu Love (Program Director/Instructor) and Lisa Van Thiel (Senior Early Childhood Specialist).

In October, 2010, Think College was selected as the National Coordinating Center by the Office of Postsecondary Education, US Department of Education to provide support, coordination, training and evaluation services for 27 Transition and Postsecondary Education Program (TPSID) grantees as well as other programs for students with intellectual disabilities around the country. Debra Hart (Educational Coordinator), Meg Grigal (Senior Research Fellow), Nancy Hurley (Training Associate).

Disability and Rehabilitation Research Project on Emerging Disability and Systems Change. After decades of innovation and systems change, public human service agencies face two challenges. First, a problem of measurement and impact: Data currently collected are inadequate to monitor the employment status of people with disabilities, or to determine the relationship between employment outcomes and systems change activities (such as workforce consolidation, interagency collaboration, new reimbursement mechanisms for state systems, and work incentive legislation). Second, a problem of audience: The population of people with disabilities is broader than that served by traditional public disability agencies. Susan Foley (Senior Research Fellow) and Jennifer Sulewski (Senior Research Fellow).

The Northeast Regional Center for Vision Education (NERCVE) is New England’s only academic center for preparing Teachers of Students with Visual Impairments and Orientation and Mobility Specialists, two key specialties that help people with visual impairments achieve their goals of high quality education, employment, and independent travel. Robert McCulley (Director of NERCVE), Laura Bozeman (Associate Professor/Director of Vision Studies), and Sandy Smith (Professional Development Curriculum Coordinator for NERCVE).

The National Service to Employment Project (NextSTEP) create tools and materials, conducts research, provides technical assistance, and creates demonstration projects focusing on people with disabilities in volunteer and community-service roles. Funded by the Corporation for National and Community Service (CNCS), NextSTEP strives to identify effective practices and promote service as a step towards improving employment outcomes for people with disabilities. CNCS provides opportunities for Americans of all ages and backgrounds to engage in structured service programs around specific community needs through its three major programs: AmeriCorps (including AmeriCorps Vista and AmeriCorps NCCC), Senior Corps, and Learn and Serve America. Sheila Fesko (Program Manager), Allison Cohen Hall (Research Associate), and Jaimie Ciulla Timmons (Research Associate).

The Children’s Hospital Boston Leadership in Education in Neurodevelopmental Disabilities (LEND) program at the Institute for Community Inclusion focuses on public policy, advocacy, diversity, stigma, human rights, and new designs in the developmental disabilities field. The program provides graduate-level interdisciplinary training to health and counseling professionals to improve their knowledge of policy issues and team collaboration in developmental disabilities. Trainees develop their leadership potential to improve the status of infants, children, and adolescents with (or at risk for) neurodevelopmental disabilities and to enhance systems of care for these children and their families. David Helm (Director of Interdisciplinary Training), and Angela Lombardo (LEND Family Faculty).
Co-principal investigators of the UMass Boston-DF/HCC U54 project are Adán Colón-Carmona, professor of biology at UMass Boston; and Karen Emmons, professor and associate dean of research at the Harvard School of Public Health, and deputy director of the Center for Community-Based Research at the Dana-Farber Cancer Institute. Emmons is now president for research and director of the Kaiser Foundation Research Institute.

thanks to the unique public-private partnership begun in 2004 by UMass Boston and the Dana-Farber/Harvard Cancer Center (DF/HCC) Partnership, our world-class faculty researchers and scientists are on the cutting edge of the national effort to reduce—and eventually eliminate—health disparities in underserved populations. Priorities include cancer cell biology, cancer disparities during end-of-life care among Latinos, and cancer interventions and prevention within faith-based organizations primarily in Latino communities.

University biologists, psychologists, nurses, sociologists, chemists, exercise and physical sciences experts, gerontologists, and health literacy experts work in tandem as they partner with historically disenfranchised groups. Their aim is to increase health awareness as well as the representation of these populations in the biomedical, health, and life sciences.

In 2010, in recognition of its impressive accomplishments, the UMass Boston – DF/HCC partnership received a prestigious $13.7M grant from the National Institutes of Health. Its grant proposal achieved the highest score of all proposals submitted from across the country, and a prestigious $13.7M grant, or U54 grant, to the UMass Boston-Dana Farber/Harvard Cancer Center Partnership. The projects (listed below) funded by this and other NIH grants illustrate our transdisciplinary approach to addressing health disparities.

NIH-Funded Transdisciplinary Projects Addressing Health Disparities

Current Pilot Projects

Design and Optimization of Molecular Photoacoustic Contrast Agents for In Vivo Imaging of Breast Cancer Tumors, led by Chandra Yelleswarapu (physics), UMass Boston; Jonathan Rochford (chemistry), UMass Boston; and Jen-Chieh Tseng (in vivo scientist)

Developing a Resiliency Program for Medical Interpreters in Cancer Care, led by Jan Mutchler (health disparities in later life), UMass Boston; and Elyse Park (behavioral health research), Massachusetts General Hospital

Assessing the Familial Financial Burden of Hematopoietic Stem Cell Transplantation, led by Randy Albelda (labor economics); and Gregory Abel (hematologic oncology), Dana-Farber Cancer Institute

A National Faith Community Atlas on End-of-Life Spiritual Care: Informing a Religious Community Educational Intervention to Address End-of-Life Cancer Disparities, led by Michael Balboni (psychosocial oncology and palliative care), Dana-Farber Cancer Institute; Tracy Balboni (radiation oncology) Dana-Farber Cancer Institute; and Amy Rex Smith (nursing in the spirituality and health in the acute-care setting), UMass Boston.

Integrated Modeling of Post-Transcriptional Regulatory Networks of the Tumor Suppressor Gene PTEN, led by Rahul Kulkarni (modeling gene expression), UMass Boston; and Pier Paolo Pandolfi (genetics and biology of cancer), Beth Israel Deaconess Medical Center

Current Full Projects

Nursing Post-Doctoral Program in Cancer and Health Disparities, led by Patricia Reid Ponte (oncology nursing), Dana-Farber Cancer Institute; and Laura L. Hayman (nursing education and health care policy), UMass Boston

Synthesis and Screening of Chemical Libraries for Discovery of Novel Bromodomain Inhibitors, led by James Bradner (medical oncology), Dana-Farber Cancer Institute; and Wei Zhang (fluorous and medicinal chemistry), UMass Boston
A Research Milestone: The Center for Personalized Cancer Therapy

In FY 2012, the Massachusetts Life Sciences Center (MLSC), as part of a planned $10M investment, awarded UMass Boston a $2M capital grant to establish the Center for Personalized Cancer Therapy (CPCT), an initiative of the UMass Boston – Dana-Farber/Harvard Cancer Center Partnership. And in FY 2014, the MLSC approved the remaining $8M.

This investment represents a significant research milestone: an on-campus scientific facility to engage in translational research, partner with industry, build capacity for basic biomedical science, provide new workforce development opportunities, and deliver new products that will make an impact in the clinical market. Most important, however, is that the new center will help the university address our communities’ needs for access to cutting-edge cancer treatments.

A Founding Director for the CPCT

The collaboration with the Dana-Farber/Harvard Cancer Center has brought a whole host of resources to UMass Boston students involved in cancer research—including Jill Macoska (pictured above), Alton J. Brann Endowed Distinguished Professor in Science and Mathematics, and founding director of the CPCT. Some of these resources include experienced faculty, over 1,000 researchers, the best technology, research funding, and a large tumor collection. Students also have access to the research done at the Dana-Farber/Harvard Cancer Center’s seven member institutions: Beth Israel Deaconess Medical Center; Boston Children’s Hospital; Brigham and Women’s Hospital; Dana-Farber Cancer Institute; Harvard Medical School; Harvard School of Public Health; and Massachusetts General Hospital.

For her part, Macoska is a proven researcher and mentor in the field of cancer research. Just prior to joining UMass Boston in the July 2013, she was a professor of urology, associate director of the Graduate Program in Cellular and Molecular Biology, and faculty in the Programs in Cancer Biology and Computational Medicine and Bioinformatics at the University of Michigan. She has been awarded more than $5M in research grants from the National Institutes of Health alone; published 58 peer-reviewed publications; 3 book chapters; served as peer reviewer for 22 journals, most recently for Cancer Research, Cytokine, Molecular Cancer Research, Nature, and the Journal of Urology.

At the Intersection of Biophysics and Cancer Biology

Jonathan Celli, assistant professor of physics, was awarded a three-year $715,422 grant by the National Cancer Institute to continue conducting research on mechanism-based therapies for pancreatic cancer informed by stromal microrheology. The opportunities provided by this award are allowing Celli to pursue potentially ground-breaking research.

“My research resides at the intersection of biophysics and cancer biology. In my lab we use concepts and technologies from the physical sciences, alongside more traditional techniques in cancer research to inform new therapeutic strategies.” For example, Celli and his research team use photodynamic therapy (PDT), a light-based treatment modality, usually a laser source, in which wavelength-specific activation of an otherwise non-toxic compound can achieve targeted tumor destruction. The Celli lab is developing new PDT-based treatment strategies targeting not only cancer cells themselves but also stromal interactions which contribute to drug resistance in the clinic.

Also, Celli was recently awarded a two-year $363,905 grant by the Massachusetts General Hospital for the study “Low-Cost Enabling Technology for Image-Guided Photodynamic Therapy.”
Nursing Scholar Jacqueline Fawcett

Jacqueline Fawcett, professor of nursing, was recently named one of the top 20 most influential nursing professionals by Masters In Nursing Online. Colleagues agree she is one of the most influential scholars in the nursing profession.

Fawcett, one of five editors of the international Journal of Advanced Nursing, is an internationally recognized authority on conceptual models of nursing and nursing theory. Her 1984 book Analysis and Evaluation of Conceptual Models of Nursing has been translated into Japanese, Finnish, and German. Her ongoing research focuses on functional status in normal life transitions and serious illness, and women’s responses to cesarean birth.

Public Health Expert Laura Hayman

All that Laura L. Hayman, professor of nursing, has accomplished in life she has done with great purpose, leading to her current destination as the university’s associate vice provost for research and senior associate dean of graduate studies.

Since her days as a student at the University of Pennsylvania during a clinical rotation in community nursing, Hayman has been involved in the field of public health. “I saw the potential for making a real difference in the health and health care for children and families beyond the hospital environment.”

Hayman is a recipient of the prestigious American Heart Association Distinguished Achievement Award, issued by the Council on Cardiovascular Nursing. Given every three years, the award recognizes individuals who have made “substantial professional contributions to the field and to the mission and goals of a specific Council.”

Epidemiologist Suzanne Leveille

Throughout her research career Suzanne Leveille, professor of nursing, has explored the challenges facing older people with disabilities, as well as strategies for promoting healthy aging. She was recently identified by OnlineLPNtoRN.org as one of the 100 Inspiring Nurses to Watch in 2014.

An epidemiologist with a background in gerontological nursing, she is currently focused on the epidemiology of chronic pain and its functional consequences among older persons. In 2010, the National Institute on Aging awarded Leveille a $3.1M grant to support her five-year study, “Attentional Demands of Chronic Pain and Risk for Falls in Older Adults.”

In the past year, Leveille and her UMass Boston colleague Tongjian You, assistant professor of exercise and health sciences, were awarded a two-year $402,575 R21 grant by the National Institute on Aging for their study “Helping Elders Living with Pain.”

A member of the City of Boston’s Commission for Persons with Disabilities, Leveille leads a team of researchers from Beth Israel Deaconess Medical Center, Boston Veteran’s Administration Medical Center, Spaulding Rehabilitation Hospital, Hebrew SeniorLife, and the UMass Boston College of Nursing and Health Sciences.
GoKids Boston
Empowering Kids to Grow Up Healthy

Life-changing programs, groundbreaking research, exceptional training opportunities, and dedication to the community: this has been GoKids Boston’s formula since 2007. The outcome of a partnership between UMass Boston and Boston Children’s Hospital, it embodies innovation and leadership in youth health.

GoKids promotes exercise and healthy habits in local youth, advances exercise science, and links research to practice. Its translational focus draws top researchers and clinical investigators committed to developing breakthrough programs that combat sedentary lifestyles and obesity in urban youth. This living laboratory engages undergraduate and graduate students in exercise science, nursing, education, psychology, and other disciplines. Students carry the GoKids mission into the community and schools as fitness leaders and educators to share their knowledge. In this way, GoKids inspires health change throughout the commonwealth and the nation.

Exercise Physiologist
Ronald Iannotti

Ronald Iannotti’s (professor of exercise and health sciences) primary interests are in health promotion and disease prevention with a particular focus on transdisciplinary studies of children and adolescents. Research interests include social and environmental influences on the development of children’s eating and exercise patterns and their relationship to obesity and cardiovascular risk factors and improving management of childhood chronic illnesses. In 2000, he was elected a Fellow of the American Psychological Association in for his contributions to developmental psychology. He is also the recipient of two National Institutes of Health Merit Awards (2007 and 2009).

Exercise Physiologist
Richard Fleming

Richard Fleming (associate professor of exercise and health sciences) received a four-year $1.72M grant from the National Institutes of Health (NIH) to study a family-based weight-loss and weight-maintenance approach for adolescents and young adults with intellectual disabilities. The NIH-funded program, which could serve as many as 48 families, grew out of pilot studies completed between 2005 and 2011 that tested variations to the current study. Parents must typically take the lead in helping young people with intellectual disabilities to adopt healthier habits. “The parent needs to be an effective coach and change agent,” says Fleming. “They learn that from our study staff and by doing what amounts to ‘homework’ each week.”

Exercise Physiologist
Julie Wright

Julie Wright (assistant professor of exercise and health sciences) studies computer-assisted, self-care interventions that target energy balance behaviors (i.e., healthy diet and regular physical activity). She designs interventions that are theory driven, tailored, and delivered at home and/or connected to the primary care setting. Currently, Wright is developing a pre-office visit questionnaire to assist pediatric providers with assessment of energy balance behaviors and anticipatory guidance related to healthy weight management.
Simply stated, Ed Tronick’s “still-face” experiment has revolutionized our understanding of children’s first relationships and their critical importance to normal social-emotional development. “For me, how individuals make meaning is related to growth and development, creativity and pleasure, as well as to fixedness (failure to change), lifelessness, and suffering,” says Tronick.

A world-class researcher and teacher, he is recognized by his peers for his work on the neurobehavioral and social-emotional development of infants and young children, parenting in the U.S. and other cultures, and infant-parent mental health.

An infant’s exposure to “good, bad, and ugly” interactions with the mother, as repeatedly communicated by her facial expressions or lack thereof (a “still face”) has tragic long-term consequences for the infant’s confidence and curiosity, or social and emotional development. The infant may feel helpless and become apathetic, withdrawn, and depressed; or become angry, hyper-vigilant, and emotionally brittle.

Tronick’s research has produced several critical translational pieces of work. His co-authored book, NICU Network Neurobehavioral Scale, identifies pre- and full-term infants at risk due to prenatal substance exposure. And still-face videos are used in hundreds of training programs in infant and child mental health, family court, and community policing across the country.

A University Distinguished Professor of Psychology, Tronick is also chief of the Child Development Unit at Children’s Hospital Boston, but he is not a pure researcher. Everything he does bespeaks his passion to achieve broad impact. He became a tenured member of UMass Boston’s psychology faculty specifically to work with urban families lacking mental health resources. In that spirit, he started the UMass Boston Infant-Parent Mental Health Post-Graduate Certificate Program for training multi-disciplinary professionals.

Tronick’s The Neurobehavioral and Social-Emotional Development of Infants and Children, is a “tour de force,” according to a review in The New England Psychologist.
**NIH $3.9M Funds Alice Carter’s Ongoing Research on Early Autism Spectrum Disorders Identification and Treatment**

Alice Carter, professor of clinical psychology, who studies the development of children with autism spectrum disorder (ASD), has received a $3.9 million grant from the National Institute of Mental Health.

One in 68 American children has ASD. Researchers have shown that early intervention is critical, but poor children, children of color, and English language learners often experience delays in getting a diagnosis and access to ASD-specific care.

Massachusetts has a strong track record in diagnosing autism early, but there are still health disparities that disadvantage children from underserved families in the commonwealth. Carter and her team, which includes co-Principal Investigator Chris Sheldrick at Tufts Medical Center, use innovative methods to change how these families access care for ASD.

Working with three early intervention centers across the city, Carter and her group train providers to use a two-stage screening process that meets the needs of families in particular Boston communities. When a child screens at-risk for ASD, the group provides a diagnostic evaluation in either English or Spanish, and follows up with at-home visits that are designed to accommodate the schedules of working parents.

“Children are referred to early intervention for many different reasons, but they aren’t always screened specifically for autism,” Carter said. “Language delay could be one indicator of autism spectrum disorder, but if the screening is only offered in English, then a child with ASD from a Spanish-speaking family will be missed.”

The research group will next work with Boston pediatricians to find out how they decide whether to refer a child to an early intervention center.

“Some pediatricians are comfortable making a diagnosis on their own,” says Carter, “But others send parents to diagnostic centers. We’re going to find out when and why doctors refer families for more testing.”

**Social Psychologist Receives APA Visionary Grant to Study Possible Factors Behind Widening Racial and Ethnic Health Disparities**

The American Psychological Foundation’s Visionary Grants program has an ambitious goal: to support psychological research aimed at solving major societal problems, such as prejudice, violence and psychological distress in the aftermath of disasters. With grants up to $20,000, the program supports research, education and intervention projects.

In 2014, seven researchers received APF Visionary Grants and one of them was Kymberlee M. O’Brien (pictured to the right), PhD, a postdoctoral research fellow in psychology at UMass Boston, will explore one possible factor behind widening racial and ethnic health disparities: discrimination-related stress transmitted from mothers to infants.

“We want to understand the way certain social stressors might be transmitted intergenerationally,” says O’Brien, who uses physiological, psychological and behavioral measures to assess stress in moms and infants after the mothers are led to believe that they will soon interact with a racist. Ultimately, O’Brien hopes to offer emotional regulation strategies mothers can use to buffer their infants from this stress.
Championing Youth Mentoring Research: Jean Rhodes

“There is something incredibly inspiring about the students at UMass Boston,” says Jean Rhodes, MENTOR/National Mentoring Partnership Professor of Psychology, a globally recognized expert on youth mentoring research. “I can’t help but be moved by their motivation and commitment to improving their lives. And when I work on research projects with a team of incredibly smart and dedicated doctoral students, I am energized by their intellectual curiosity.”

Rhodes has published her findings in outlets ranging from scholarly journals to OpEds in The New York Times and The Boston Globe. Her trade book, Stand by Me: The Risks and Rewards of Mentoring Today’s Youth (Harvard University Press) galvanized an emerging field. She has, in essence, helped establish the study of the positive and negative effects on children of non-parent adult relationships as a serious academic subdiscipline, and fundamentally shaped public policy and practice in the field.

In January 2011, Rhodes was named the first MENTOR/National Mentoring Partnership Professor of Psychology and research director for UMass Boston’s new Center for Evidence-based Mentoring. This center, a joint venture of UMass Boston and the MENTOR/National Mentoring Partnership, is the first of its kind in its mission to advance youth mentoring.

Rhodes has authored three books and edited four, and has written 75-plus chapters and peer-reviewed articles. She has also been the principal or co-principal investigator on more than $6M in federal, state, and private grants.

Center for Evidence-Based Mentoring

The Center for Evidence-Based Mentoring is alliance between the National Mentoring Partnership and UMass Boston. The Center is dedicated to creating the open and efficient exchange of research and ideas. In doing so, the research team seeks to advance the production, dissemination, and uptake of evidence-based practice in ways that improve the effectiveness of practice and, ultimately, create stronger, more enduring mentor-mentee relationships.

Current Projects

- Development of Mentoring for Children of Incarcerated Parents, funded by the U.S. Department of Justice for $2.5M
- Evidence-Based Training, funded by the National Institute of Child Health and Human Development
- Mentoring Theory, funded by the WT Grant Foundation, NICHD, and the Edna McConnell Clark Foundation
- Natural Mentor, funded by the MacArthur Foundation
- School-Based Mentoring, funded by the Edna McConnell Clark Foundation and William T. Grant Foundation
- Youth Initiated Mentoring, funded by the Dare Mighty Things, Inc., MacArthur Foundation, and many other generous sponsors
- Diversity in Mentoring, funded by the Edna McConnell Clark Foundation
- Mentors’ motivations expectations, and commitment, funded by the William T. Grant Foundation
One in Four Gerontology PhD Holders in the Nation Earned Their Degree from UMass Boston

The nation’s second oldest and one of the most influential programs in aging, one in four gerontology PhD holders in the nation earned their degrees from UMass Boston. Our online Management of Aging Services program is the second largest program of its kind and has trained hundreds of aging services professionals. The Department of Gerontology and the Gerontology Institute help set the national agenda on aging with research and policy analysis across a variety of issues, including economic security for seniors, retirement and pensions, healthy aging, racial and ethnic disparities, risks for elderly drivers, long-term care, and volunteerism among elders. Most recently, the Institute collaborated on a new “Aging in Boston” report in concert with Mayor Martin Walsh and the City of Boston’s Commission on the Affairs of the Elderly.

The Gerontology Institute is home to the Center for Social and Demographic Research on Aging, which works with municipalities to understand the needs of their senior residents, and the Pension Action Center, which helps retirees and their families in seven states recover their earned benefits.

Gerontology is the study of social, psychological, economic, public health, and policy aspects of aging in populations and individuals. People are living longer than ever before and the demand for policy changes and services to support the aging population is increasing at a rapid rate. Our PhD graduates work as policy makers, researchers, professors, and policy analysts, as well as for non-profit and for-profit organizations. One of the first of its kind in the country, our Management of Aging Services program graduates administer elder care organizations, establish community-based services for the elderly, and work in the private sector.

Graduate Programs in Gerontology
Gerontology, PhD
Gerontology Research/Policy, MS
Management of Aging Services, MS
Gerontology, Graduate Certificate

Post-Doctoral and Employment Outcomes of Graduates

Graduates of the UMass Boston PhD Program in Gerontology have received post-doctoral fellowships at such prestigious institutions as Yale University, Duke University, University of Southern California, University of Michigan, University of Minnesota, National Institute on Aging, and the University of Texas Medical School, to name a few.

Graduates are also employed in a variety of academic, policy, and research positions at Duke University, University of Southern California, University of California Los Angeles, University of Georgia, Yale University, University of Massachusetts Medical School, West Virginia University, California State University, Tufts University, Boston University, American Association of Retired Persons, Administration on Aging, U.S. Department of Labor, Department of Veterans Affairs, Partners Healthcare, etc.
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Accomplished Alumni

Alumni of the PhD Program in Gerontology have produced more than 1,000 peer-reviewed articles, reports, book chapters, and books; 1,200 professional presentations; and $35 million in grants and contracts. While the vast majority of our graduates have already or will soon make major accomplishments on national and international scales to the study of the social, psychological, and policy aspects of aging in populations and individuals, here are three particularly successful alums who represent the ethos of our program and university.

Kelly Fitzgerald ('08) is vice chair of the United Nations NGO Committee on Aging. Appointed in June 2014, Fitzgerald works with fellow committee members to develop a society for all ages, promote a new older adults rights convention, and address intergenerational issues within the UN System. She has also dedicated herself to improving the lives of older adults in disaster relief situations.

According to one faculty member, “Kelly has been interested in international issues of aging since she was a PhD student at UMass Boston. Her research has always been very applied with partners from all sectors of the aging community. I have no doubt that her presence on this committee will help advance the UN aging agenda.”

Bei Wu ('00) was recently named a 2014 Duke Medicine Distinguished Professor. An expert on aging and global health, Professor Wu directs international research at Duke University’s School of Nursing and is a member of the Global Health Institute. Her research fields include dementia care, oral health disparities, long-term care, and cognitive health. She has held appointments at the University of North Carolina at Greensboro, the University of North Carolina at Chapel Hill, and at the West Virginia University School of Dentistry as well as adjunct professor/senior fellow positions in three academic institutions in China.

Marianne Matzo ('96) is the Frances E. and A. Earl Ziegler Chair in Palliative Care Nursing at the University of Oklahoma Health Sciences Center College of Nursing in Oklahoma City. In addition to her doctorate in Gerontology from UMass Boston, she also received and a master’s degree in Nursing from the Gerontological Nurse Practitioner Program at University of Massachusetts–Lowell. Her work has been published in Nurse Practitioner, Nurse Educator, Geriatric Nursing, Nursing Homes, Geriatric Psychiatry, The Journal of Gerontological Nursing, Gerontology and Geriatrics Education, Applied Nursing Research, Heart and Lung, Nursing Education Perspectives and the Geriatric Clinics of North America.
Life can bloom after fifty!
AY 2013-2014 Faculty Profiles

Jay Dee, Associate Professor of Leadership in Education

At any given time the EdD program has 60 to 65 students. Each of these students goes on to become an educational leader who seeks to transform the educational experience of students the world over. The program trains these leaders by providing a rich learning environment that emphasizes the dynamic connections among theory, research, and practice.

“This is the community,” says Jay Dee enthusiastically, “that produces new knowledge, and trains new leaders of higher education for a global society.” Dee should know because he has served as faculty adviser to more doctoral students than any member of the UMass Boston faculty—current or retired.

Sana Haroon, Assistant Professor of History and Asian Studies

It is in the details where Sana Haroon finds new inspirations for history and new ways of thinking about the past. Her goal as a historian is to dig deep into details, to open up the vaults of history to new methodologies, and, in her own words, “to try and be less conventional,” in order to discover the variety and the variations in history.

This is the kind of history, Haroon says, she writes; the kind that constructs large narratives that are informed and shaped by the small details. “Too often we communicate big patterns of historical change. But as a student in my Modern World History class remarked, ‘History is in the details.’” The nuance is good and a lot more fun.

Spencer Di Scala, Professor of History

Teacher, scholar, innovator, public intellectual—these words best describe the many contributions of Spencer Di Scala to the community, national, and international scenes since his arrival at UMass Boston as an assistant professor of history in 1970.

His scholarship, he insists, has not simply gone hand-in-hand with his teaching, but has been to a large extent inspired by his teaching. “I found that my students were curious about a certain event and always wanted to know more,” he explains. “So I went back further and put historical events in a longer context.” It was the need for good textbooks that has led him to write 12 books about Italian and European history, including his latest book, Europe’s Long Century: Society, Politics, and Culture 1990–Present (2013).

Jill Macoska, Distinguished University Professor of Science and Mathematics

“Sometimes just by looking at a tumor we can’t be sure how it is going to progress,” says Jill Macoska, Alton J. Brann Endowed Distinguished Professor in Science and Mathematics, and director of the UMass Boston Center for Personalized Cancer Therapy (CPCT). The CPCT’s chief aim is to develop biomarkers that will measure tumor progression in much quicker time. “Currently, no good tools exist for tumor subtyping,” explains Macoska. “If you’re looking at two tumors there is no way to tell which will respond to conventional therapy.” Crude imaging such as MRI, metastasis, and regression are the only ways to measure tumor progression. “But Cancer patients don’t have time. You want to know sooner if the treatment is working.”
AY 2013-2014 Faculty Profiles

Maria Ivanova, Associate Professor of Conflict Resolution, Human Security and Global Governance

Maria Ivanova is one of the world’s leading scholars of global environmental governance. Her research on the United Nations and its environmental institutions is particularly innovative in the way it bridges political science, organizational studies, and international law, and in the way it combines academic rigor with policy relevance and, notably, with effective policy involvement.

“I study institutions and the characteristics that make them functional or dysfunctional,” says Ivanova. “Engaging in institution building is therefore a privilege and a responsibility I take seriously.”

Zsuzsanna Kaldy, Associate Professor of Psychology

Zsuzsanna Kaldy attempts to understand how babies perceive the physical world around them, where they look, and how much visual working memory they possess.

“We know so little about the brains of babies,” says Kaldy. “But with improved technology and carefully designed experiments we can learn a lot more.” It was her pioneering spirit and ceaseless pursuit of learning more that led Kaldy to launch the first baby lab at UMass Boston in 2003 to begin asking some very pertinent questions about the development of human memory.

Mark Warren, Associate Professor of Public Policy and Public Affairs

Mark Warren, associate professor of public policy and public affairs at UMass Boston, likes to take on big issues. Warren is the author of nine journal articles, four books, and thirty other publications, but he says he prefers to write books. Books allow him the space to flesh out his ideas and data in more depth and comprehensiveness, and are also more accessible to the larger public than journal articles. The urge to reach a wider audience stems from Warren’s commitment as a sociologist who studies bottom-up approaches for building and revitalizing communities. Rather than seeing community members as passive victims of an unjust system, Warren sees them as active agents of change in their own lives and communities.

Karen Suyemoto, Associate Professor of Psychology and Asian Studies

Last year, the White House honored fifteen Asian American and Pacific Islander (AAPI) women as “Champions of Change.” Among them was Karen L. Suyemoto, associate professor of clinical psychology and Asian American studies.

A part of the White House’s observance of AAPI Heritage Month, this event recognized Asian American, Native Hawaiian, and Pacific Islander women who are doing extraordinary things to create a more equal, safe, and prosperous future for their communities and the country.
What tops the list of achievements that are a source of pride for Peter Kiang, director of the Asian American Studies Program? His answer: UMass Boston’s receipt of a five-year $2 million U.S. Department of Education grant award as an Asian American, Native American, Pacific Islander Serving Institution, the only award of this kind given to any research university in New England. Kiang calls the university’s perfect score on the application “a reflection of our program’s commitment and capacity, something the entire campus can be proud of.”

By studying the interactions of Cambodian, Vietnamese, and Lao refugees and immigrants within urban educational systems and settings, he has also drawn attention to some of the most underserved and under-researched of Asian American subgroups. He is now one of a handful of nationally recognized experts in that field.

Introducing students to engineering at a young age is the underlying principle behind Kristen Wendell’s research project that has won her the prestigious CAREER grant from the National Science Foundation. Wendell, assistant professor of curriculum and instruction in the College of Education and Human Development, bases her work on the hypothesis that engineering design experiences can contextualize young students’ learning of the science, math, and literacy. Engineering helps students develop their problem-solving skills and their creative thinking.

As humans introduce drastic changes into the environment, are we also affecting evolution? This is one of the many questions recent National Science Foundation CAREER grant award winner Liam Revell asks as an evolutionary biologist and an assistant professor of biology at UMass Boston.

One of the projects in Revell’s lab studies the rapid evolution of the Puerto Rican crested anole, a type of tropical lizard, in response to anthropogenic changes to the environment. Previously a forest species, the crested anole has successfully colonized urban areas—a drastically new environment for the lizard. Preliminary evidence suggests that this process may be causing evolutionary changes to populations of this species now found in urban areas.

Jennifer Bowen, Assistant Professor of Biology

Jennifer Bowen studies the big phenomenon of global climate change by examining its impact on the small creatures: the microbial communities in salt marshes and wetlands along coastal regions. Her research, both timely and imperative, has just earned her the prestigious Faculty Early Development Award (CAREER) by the National Science Foundation (NSF), providing early and clear evidence that the NSF places a very high value on her work and its potential for even greater success in the future.

“We can offset pollution and carbon emissions by restoring salt marshes and degraded wetlands,” explains Bowen. “The ecological benefits of this can be huge.”
22 External Sponsored Awards Received for $425,000 or More*

*For multi-year awards, the dollar amount provided is for FY 2014 only (or not the total dollar amount provided for the life of the award).

William Kiernan, Institute for Community Inclusion
$4,737,590 from the U.S. Department of Education to support the “Model Demonstration Project to Improve Outcomes for Individuals Receiving SSDI Served by State Vocational Rehabilitation Agencies.” (10/10-9/15)

David Sparks, Collins Center for Public Management
$2,500,000 from the Massachusetts Executive Office of Administration and Finance for “Mass GOALS in FY 2012.” (4/11-12/13)

William Kiernan, Institute for Community Inclusion
$1,500,000 from the U.S. Department of Education to support the “Research and Technical Assistance Center on Vocational Rehabilitation Program Management.” (10/9-9/14)

Arthur Eisenkraft, Center of Math and Science in Context
$1,368,974 from Wipro Limited to support the “Wipro Science Fellowships.” (9/12-8/14)

Deborah Boisvert, College of Advancing Professional Studies
$1,246,224 from the National Science Foundation to support “Broadening Advanced Technological Education Connections: A National Center for Advanced Technological Education.” (9/11-8/14)

Donaldo Macedo, Applied Linguistics
$774,316 from the U.S. Department of Education to support “English Language Categorical Training for Teachers.” (9/11-8/16)

William Kiernan, Institute for Community Inclusion
$727,185 from the U.S. Department of Education to support “Technical Assistance and Continuing Education Centers.” (10/08-9/14)

Arthur Eisenkraft, Center of Math and Science in Context
$712,330 from the National Science Foundation to support “Large -Scale Change in Science Education: Understanding, Professional Development and Adoption Variation Related to the Revised Advanced Placement Curriculum.” (9/12-8/16)

Arthur Eisenkraft, Center of Math and Science in Context
$689,821 from Wipro Limited to support the “Wipro Science Fellowships.” (9/12-8/17)

Susan Foley, Institute for Community Inclusion
$650,000 from the U.S. Department of Education to support “Rehabilitation Research and Training.” (10/12-9/17)

John Butterworth, Institute for Community Inclusion
$633,500 from the National Association of State Directors of Developmental Disabilities Services to support the “Statewide Employment Leadership Network.” (7/06-6/14)

Mary Grigal, Institute for Community Inclusion
$593,944 from the U.S. Department of Education for the project “Think College Transition: Developing an Evidence-based Model of Inclusive Dual Enrollment Transition Services for Students with Intellectual Disabilities and Autism.” (1/14-12/17)

Suzanne Leveille, Nursing
$569,106 from the National Institutes of Health for the project “Attentional Demands of Chronic Pain and Risk for Falls in Older Adults.” (7/11-6/14)

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$569,106 from the National Institutes of Health for the project “Attentional Demands of Chronic Pain and Risk for Falls in Older Adults.” (7/11-6/16)

Debra Hart, Institute for Community Inclusion
$499,999 from the U.S. Department of Education for the project “Think College Island: Promoting College and Career Readiness.” (10/13-9/16)

Winston Langley, Office of the Provost
$494,562 from the National Science Foundation for the “Urban Massachusetts Louis Stokes Alliance for Minority Participation.” (9/12-8/17)

Richard Fleming, Exercise and Health Sciences
$446,100 from the National Institutes of Health for the project “A Family-Based Weight Loss Intervention for Children and Youth with Intellectual Disability.” (2/13-4/16)

Joan Becker, Academic Support Programs
$437,402 GAANN grant from the U.S. Department of Education for the “UMass Boston Asian American Student Success Program.” (8/12-8/15)

Winston Langley, Office of the Provost
$500,000 from the National Science Foundation to operate the “Louis Stokes Alliance for Minority Participation” program in eastern Massachusetts. (5/12-4/13)

Joan Becker, Academic Support Services
$428,373 from the U.S. Department of Education to operate “Student Support Services” at UMass Boston. (9/11-8/12)

Anne Douglass, Curriculum and Instruction
$429,438 from the Massachusetts Department of Early Education and Care to support the “UMass Boston Post-Master’s Certificate Program in Early Education Research and Policy.” (6/12-12/14)
Thank you, for all you do!

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