Dear Alumni and Friends of Biology,

We have had a very busy year with many exciting events, some of which are partly responsible for our delay in sending this letter out to all of you. I will mention a few of these major events below.

Integrated Science Complex is Open: The biggest event was the move to the new Integrated Science Complex (ISC) which began in January 2015 and continues today. The ISC is the first new academic building on the campus since our founding. It houses most of the Biology research labs and faculty offices as well as research spaces for Physics, Chemistry, the School for the Environment and some Psychology. The labs are wonderful and are this new “open lab” style.

Multiple research groups with common interests are located adjacent to one another with access to many common, multiuser spaces. This style facilitates interactions among faculty and students working in related fields. It also allows us to expand and contract easily to accommodate the space needs of different groups. The overwhelming feeling within the Department is one of excitement. The ISC also houses new freshman biology labs and these too are spectacular and spacious. The students love these new facilities and these will most certainly help us maintain what I have been calling our “brand” in biology; provide to all of our students the hands-on laboratory experiences that they will need to pursue their choice of careers and to be marketable whether they aim at research, a medical profession, teaching, environmental or biotech profession or careers in policy. Come visit us and see for yourself all the changes taking place on your campus.

Best wishes,
Rick Kesseli
Chairman, Biology Department
We had three new faculty members join us in the last 2 years:

**JILL MACOSKA**

Dr. Jill Macoska joined the University in April 2013 and serves as the Alton J. Brann Distinguished Professor in Science and Mathematics and Director of the Center for Personalized Cancer Therapy (CPCT). The CPCT is a joint program of the University of Massachusetts Boston and the Dana Farber/Harvard Cancer Center (DF/HCC), with the goal of providing a means for undergraduate and graduate students to become the next generation of well-trained biomedical workforce talent and the future leaders of life sciences research in academia and industry. A scientific focus of the center is to develop and validate RNA- and protein-based biomarkers useful for tumor sub-typing and predicting early tumor response to therapy. In addition to her work at CPCT, Dr. Macoska has led peer-reviewed and funded research for the past 20 years focused on elucidating the molecular genetic alterations and dysfunctional inter- and intra-cellular signaling mechanisms that promote prostate pathobiology. She has achieved national recognition in the area of basic research in aging and urologic disease.

**TODD RILEY**

Dr. Todd Riley joined the Biology department in Fall 2013 as Assistant Professor of Computational and Systems Biology. His research focuses on understanding the mechanisms of transcriptional and translational gene regulation in the cell. In addition, he studies how those mechanisms go awry in gene regulatory diseases such as cancer. His research also focuses on biophysical sequence-to-affinity models of protein-DNA and protein-RNA interactions using high-throughput microarray and sequencing data. He uses these affinity models in a Systems Biology approach to find TF-markers of cancer phenotypes.

**DOUGLAS WOODHAMS**

Dr. Doug Woodhams is the newest Assistant Professor of Disease Ecology to join the Biology department in Fall 2014. His research focuses on the immunological ecology of infectious disease, and the evolution of symbiotic microbiota. This includes aspects of host-symbiont-pathogen biology, environmental physiology, and conservation medicine. His research seeks to advance probiotic strategies to mitigate the effects of chytridiomycosis on wild amphibian populations, and to reduce the risk of arbovirus transmission by mosquitoes. The development of novel biotherapies to stabilize beneficial microbial communities is one application linking ecology to public health.
Kenneth Kleene:

Dr. Kenneth Kleene, Professor of Biology and Director of the Biotechnology program in Molecular and Developmental Biology, retired after 29 years of dedicated service to the University in Fall 2013. His research at UMass Boston focused on two interrelated topics, the mechanisms of translational regulation and the atypical patterns of gene expression in spermatogenic cells in mice. His work used comparative genomics of the vast amount of sequence information from mammalian genomes to identify conserved and novel regulatory elements and sequences that exhibit strong positive and negative selection.

At the University, Dr. Kleene taught several undergraduate and graduate courses, and mentored many Masters and PhD candidates. Faculty, staff and graduate students gathered in November 2013 to wish him a happy retirement.
Faculty & Staff Honors, Awards, & Distinctions

Tara Ashok
Recognized at the 2014 Chancellor’s Years of Service Celebration for 10 years of service.

Kamal Bawa
Received the 2014 MIDORI Prize in Biodiversity, awarded for outstanding local and global contributions to biodiversity conservation and sustainability. He received the prize in October 2014 in Pyeongchang, South Korea, for his contributions to research in ecology of tropical forests, sustainable use of tropical forests, climate change in the Himalayas; for promoting engagement of civil society in conservation efforts; and for his leadership roles in setting up and serving as president of ATREE, a research institute whose mission is to promote socially just environmental conservation and sustainable development.

In collaboration with conservation photographer, Sandesh Kadur, Dr. Bawa published *Himalaya: Mountains of Life* in March 2013. The book focuses on the Eastern Himalaya, portraying the Eastern Himalayas as a melting pot of ancient cultures, languages, and religions and documenting for the first time the region’s threatened biodiversity and cultures.

Jennifer Bowen
Received the Award for Excellence in Face-to-Face Teaching at the University of Massachusetts Boston's Conference on Teaching, Learning, and Technology Innovation

William Hagar
Recognized at the 2014 Chancellor’s Years of Service Celebration for 40 years of service.

Maureen Kelly
Won the 2014 Chancellor’s Achievement Award for contributions to the University by classified staff.

Maria Mahoney
Received an Honorable Mention for the 2014 Chancellor’s Award for contributions by professional staff.

Michael Rex
Elected as Fellow for the American Associate for the Advancement of Science (AAAS) for “distinguished pioneering contributions to understanding patterns and causes of biodiversity in the deep sea, Earth’s largest ecosystem, and the evolutionary origin of its fauna.”
Manickam Sugumaran
Recognized at the 2014 Chancellor’s Years of Service Celebration for 35 years of service.

Brian White
Appointed as UMass Boston’s first Provost Fellow for Teaching and Technology in 2013. In this role, Dr. White collaborates with IT’s Educational Technology services, the Office of Faculty Development, and other units, and reaches out to faculty and staff to offer opportunities for exploring technology-supported teaching strategies. He also advise on the design and use of classrooms and other teaching/learning spaces.

(top) Recipients of Chancellor’s Service Award, Maureen Kelly and Deborah Cohen pose with the Chancellor.
(right) Dr. Ashok at the Chancellor’s Years of Service Celebration.

Alumni Corner

Philip Michaels, class of 2014, is now working at Novartis.

Lucy Sahagian, who graduated with a Bachelors in Biology in 2013, is currently pursuing her Master’s degree in Biology from the Eastern Illinois University.

Chris Willems, of the class of 1997, was awarded the 2014 Robert E. Yager Foundation Excellence in Teaching Award for Connecticut, Massachusetts and Rhode Island. Willems teaches science at the Metropolitan Business Academy in New Haven, Connecticut.

Ling Xu, who graduated with a Bachelors in Biochemistry in 2013, was accepted to the PharmD program at the Massachusetts College of Pharmacy and Health Sciences.
Scott Paulissen - Received the 2014 Doctoral Dissertation Research grant in the sum of $5,000 for his project, “The Ste20-like Kinase SPS1 and Its Genetic Interactor, SPO77, Regulate Membrane Size and Shape during Sporulation in S. Cerevisiae”.

Uttam Shrestha - His work on the overharvesting of Yarsagumba, popularly known as the ‘Himalayan Viagra’ fungus, in Himalayan countries (India, Nepal, China and Tibet) was published in the journal Nature in December 2012 and January 2013.

Alexa Wilson - Was one of the 20 U.S. recipients of the 2013 RISE Award from the Indo-U.S. Science and Technology Cooperative Program. The award enabled Alexa to work on climate change in the Himalayas, providing expenses to travel to India, and a summer stipend to do field work there. She conducted most of her research in Darjeeling from June-September 2013 and was hosted by the Ashoka Trust for Research in Ecology (ATREE).
The Biology department participated in the Gingerbread House Making Competition, a part of the 2013 Winter Wonderland festivities on campus. Our creative team fashioned a one-of-a-kind Gingerbread Greenhouse, constructed with gingerbread, assorted candies and glass made out of sugar!

(right) The Gingerbread Greenhouse!


On June 18th 1964, the Massachusetts legislature and the state’s governor, Endicott Peabody, passed and approved a bill establishing the University of Massachusetts Boston, to provide access to higher education “equal to the best” for residents of Boston and beyond. Since then, the university has moved from Park Plaza to Columbia Point, expanded enrollment to more than 16,000 students in 11 colleges and graduate schools and grown to become a respected and cherished institution. In honor of this important milestone, the University’s Office of Communications put together a visual tribute to the past, present, and future of the University of Massachusetts Boston, which can be accessed from http://www.umb.edu/the_university/50.

Many of our Biology staff and faculty have served the department since its infancy: Thomas Duran attended Bay State College and transferred to UMass Boston in 1978, finishing his undergraduate degree in Chemistry and English in 1992. He currently works as a Laboratory Technician, supporting the operations of various biology labs.

Dr. Robert Guimond joined the university in August, 1971 and has taught several courses both at the Bay State College and UMass Boston campuses. He currently serves as the Coordinator of the Anatomy & Physiology Program and the Departmental Director of Undergraduate Advising.

Charles King transferred to Bay State College in 1969, and completed his undergraduate degree in History at UMass Boston in 1986. Since 1974, he has served as a Buyer for the Biology department.
Dear Alumni, 2013/2014 Graduates, Faculty, Staff and Students,

We love to hear about where you are, what you are doing and your latest achievements. Please send us a letter or an email to share your news with us and your fellow alumni in the Alumni Newsletter.

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