Notes from the Chair

Dear Alumni:

Greetings and happy (belated) New Year. This last year has been both productive and eventful for the Biology Department. Professor William Hagar was selected to serve as Interim Dean of the College of Science and Mathematics. A national search for a permanent dean for the college is currently underway. Professor Kenneth Campbell continues to serve as the Associate Dean of CSM since his appointment in fall 2005. Two of our young and talented faculty - Dr. Adán Colón-Carmona and Dr. Alexia Pollack - received tenure. We commend them for their hard work, excellent teaching, and dedication.

I am pleased to report that our department also secured a record number of awards during the 2005-2006 academic year. During the June commencement ceremony, Chancellor Michael Collins presented three of the top University awards to members of the Biology and Biochemistry Departments. The John F. Kennedy Award was given to an outstanding biochemistry graduate, Catherine Reyes Spencer, who, as class valedictorian, gave an inspiring commencement speech. The Chancellor's Distinguished Teaching Award was bestowed upon Professor John Ebersole, and Professor Kamal Bawa was honored with the Chancellor’s Distinguished Service Award. In addition, Biology Department faculty were the recipients of three out of five of the CSM Dean's Awards for Excellence for 2006; see next page for more details. Last but not least, one of our graduating students, Timothy Menz, earned a Fulbright Scholarship to study and conduct research in India. It was a memorable year for the department, and one that sparkled with many accolades.

Our new faculty, Professor Alexey Veraksa, whose research interests lie in the area of cell signaling is hard at work setting up his new lab. He and his research students are mapping the Notch signaling network with Tandem Affinity Purification-Mass Spectrometry. One of the new Notch pathway interactors identified by the TAP-MS analysis is Kurtz, a Drosophila homolog of mammalian non-visual beta-arrestins. All our faculty have been maintaining vigorous research programs and continue to enhance classroom and laboratory instruction with innovative use of information technology and intergration with research. It has been an exciting time for the department. I am hoping that all of you also had a wonderful year.

Best wishes for you and your family.

Manickam Sugumaran
Chairman, Professor of Biology
Dr. Kenneth Campbell, Professor of Biology, has been serving as Associate Dean to the College of Science and Mathematics since September 2005. He also continues to teach Endocrinology and to direct graduate students’ research.

Dr. William Hagar was appointed by the Vice Chancellor for Academic Affairs to serve as the Interim Dean for the College of Science and Mathematics. He has been serving the College in this capacity since September 1, 2006. The search for a new CSM Dean is ongoing, and we can expect the appointment of a new Dean by the end of the summer.

Chancellor Michael Collins presented Dr. John Ebersole with the Chancellor’s Distinguished Teaching Award and Dr. Bawa with the Distinguished Service Award during the June 2006 Commencement Ceremony.

We are pleased to announce that two of our young faculty, Dr. Adán Colón-Carmona and Dr. Alexia Pollack, were awarded tenure in the summer of 2006.

Garrison Wilkes was awarded the Oak Medallion in recognition of his two decades of contributions to the Seed Savers Exchange (SSE). Seed Savers, a non-profit organization based in Decorah, Iowa, currently maintains a repository of over 25,000 rare varieties of vegetables and fruits.

At the CSM Faculty Reception on October 12, 2006, Dean Hagar presented Outstanding Achievement Awards to three Biology faculty: Dr. Ron Etter (Outstanding Scholarship), Dr. Robert Guimond (Outstanding Teaching), and Dr. Steven Ackerman (Outstanding Service). During the reception, Dr. Alexey Veraksa gave an informative talk on the “Regulation of Signaling Networks by Multifunctional Adaptor Proteins.”

Dr. Kamaljit Bawa, a distinguished conservation biologist, co-authored and published the beautifully illustrated book “Sahyadris: India’s Western Ghats - A Vanishing Heritage” in 2005. All proceeds from the sale of the book will go to support conservation efforts in the Western Ghats. For more details about the book and the wonderful work in which Dr. Bawa is engaged, please visit: www.atree.org or www.gorgassciencefoundation.org.
Dr. Brian White, along with co-author Michelle Mischke, published “A Problems Approach to Introductory Biology,” a 266-page book with a focus on computer-based problem solving that includes a CD-ROM. It was published by the American Society for Microbiology Press in May 2006.

**Biology Research Grants**

Dr. Linda Huang has received funding from the National Science Foundation for her research project “Regulation of Morphogenesis During Sporulation.” Her research is focused on understanding how cells regulate the organization of their internal architecture. She is also funded for the next three years by the National Institute of Health for her U56 project “Examination of Sporulation-Specific Spliceosome Recruitment.”

Dr. Jeffrey Dukes received five-year funding from the National Science Foundation entitled “CAREER: The Boston-Area Climate Experiment: A Gradient-Based Approach for Characterizing Ecosystem Responses to Warming and Precipitation Change.” He is building infrastructures that will expose patches of old-field ecosystems to twelve possible future climates.

Dr. Michael Shiaris was funded by the National Institute of Health for a Bridges to the Baccalaureate Grant to support and enhance students from underrepresented minorities toward the B.S. degree in the area of biomedical science. Professors Shiaris and Robert Chen (ECOS) were awarded a grant by the Massachusetts Technology Transfer Center to develop a prototype fluorescence-based bacterial DNA sensor embedded within a coastal environmental sensor network.

In January 2007, the Developmental Systems Cluster Division of NSF awarded a three-year grant to further Professor Kleene’s research that focuses on the control of mRNA translation during spermatogenesis.

The **Boston Science Partnership**

Biology Professors Adán Colón-Carmona, Rachel Skvirsky, and Jeff Dukes, along with colleagues from other science departments, participated in a six-week intensive professional development course through the Boston Science Partnership that was funded by the National Science Foundation. The BSP works with middle and high schools in the Boston public school systems to enhance the methods by which students are taught science, math and engineering.
Congratulations to all of our 2006 Biology and Biochemistry Graduates!
Ninety-four Biology and Biochemistry students earned a Bachelor of Science degree in 2005-2006.

Catherine Reyes-Spencer (BS/06), a biochemistry major with a 4.0 grade point average, was the keynote student speaker at the 2006 Commencement and the recipient of the prestigious John F. Kennedy Award for Academic Excellence. Chancellor Collins presented her with the award at the commencement ceremony. During her senior year, she traveled to South Africa to work in an AIDS clinic. Catherine plans to attend Harvard Medical School.

Tim Menz (BS/06) was awarded a Fulbright grant! He will be working in New Delhi, India with Dr. Siddharth Ramji, of Naulana Azad Medical College and Dr. Santosh Bhargava, of Sunder Lal Jain Hospital, researching and studying methods designed to improve the high infant mortality rate in both urban and rural settings. He was recently accepted at Tuft’s University Medical School.

The following students defended their research in a public forum and a written thesis. They have received a B.S. Honors in Biology.

Anthony Dendler
Christopher Enwonwu
George Galileos
Derick Hoskinson
Marilyn Gomez
Mine Kimura
Hallie Lee

Jon Marino
Autumn McEuen
Panisa Nan Pochanard
Catherine Reyes-Spencer
Lori Schneider
Nicole Syngajewski
Bonnie White-Washington

2006 Biology Department Undergraduate Awards
Kimberly Carroll: The Biology Department Service Award
Cynthia Kalkwarf: The Bettina Hall Harrison Award for Exceptional Teaching and Mentoring Skills
Hallie Lee: The Biology Department Research Award

The following students were inducted into the Beta Beta Beta (TriBeta) Biological Honors Society in 2006
Kathleen Campbell, Kimberly Carroll, Valerie Chin, Cody Choate, Adaugo Eluwa, George Galileos, Cynthia Kalkwarf, Hallie Lee, James Luke, Autumn McEuen, Timothy Menz, Panisa Pochanard, Ravi Ramdeo, Emilie Rioux, Nicole Syngajewski, Jessica Thomas, Yin Wong, Selamawit Yohannes
Lee Timms (MS/04), who worked at our DNA sequencing facility, has moved on to managing the Genetic Analysis & DNA Sequencing Facilities for the Center for Applied Genomics, The Hospital for Sick Children, in Toronto, Ontario.

Erin Valentine (MS/05) , who worked for her M.S. with Dr. Ackerman, is currently employed as Staff Biologist at Merck Research Labs in Boston.

Dr. Merianne Alkio, after two years of postdoctoral research in Dr. Adán Colón-Carmona’s lab, has taken a faculty position in the Section of Fruit Science at the Institute of Biological Productions Systems at the University of Hannover, Germany.

Marion Mealey-Ferrara (BS/97) is currently the Senior Coordinator for Lab Safety at the University of Kansas Medical Center.

Ellen Pritham (Ph.D/02) is a faculty member of the Department of Biology at the University of Texas, Arlington.

Patricia Szczys (Ph.D/02) is an Assistant Professor at Wayne State University in Nebraska.

Peter Flannery (BS/76) remains involved with UMB through the Sustainability and Students for Socially Responsible Impact Club. He maintains a “green” website with links and information on environmental issues at www.flannerysgreenguide.com.

Hallie Lee (BS/05) is on active duty in the Naval Reserve. We wish her good luck in her service to our nation.
Dr. Alexey Veraksa and Dr. Alevtina Guseva welcomed their son, Artyom, into the world on Saturday, December 16, 2006. Artyom’s sister, Dasha, is happy to have a little brother. Congratulations to the Veraksa family!

Professors Jeff Dukes and Julia Verville, along with their daughter, Maya, celebrated son Jeremy’s first birthday on December 15, 2006.

Shirley Micallef, a doctoral candidate, and her husband, became new parents on June 18, 2006 when daughter Mireya arrived.

On November 21, 2006, faculty and staff took time out to enjoy the “Chancellor’s Years of Service Celebration” in the Campus Center Ballroom. Among those recognized from the Biology Department for years of service were:

- Dr. Robert Guimond 35 years
- Dr. Michael Shiaris 25 years
- Dr. Ron Etter 15 years
- Dr. Rachel Skvirskey 15 years
- Ms. Maria Mahoney 10 years
We offer our congratulation to our Bachelor of Science in Biology December 2006 graduates! Cody Choate, Lori Schneider, Carlton Thurston and Selamawit Yohannes.

The Biology Club

The Bio Club’s commodious new headquarters are located on the second floor of the Campus Center. Ezra Star, club president, organized a trip to the Nantucket Field Station over Labor Day weekend. Club members went birdwatching, dug for worms, and scouted for injured harbor seals. Biology Professor Solange Brault presented a lecture/slide show on whales. Dr. Sarah Oktay, Managing Director, discussed the on-going environmental and conservation research efforts with the students.

Spotlight on Undergraduate Research:
Dr. Adán Colón-Carmona’s Lab

More than a dozen undergraduates are currently hard at work in the Biology Research Labs. Undergraduates continue to make significant contributions in the laboratory of Professor Adán Colón-Carmona. Current students in the lab represent nine different countries. Asav Dharia, an international student from India, has worked in the lab since his freshman year. He is finalizing his Honors project on the characterization of a plant kinesin microtubule-associated motor protein that may be involved in centromeres movements. Akielia Dumornay, a McNair Fellow in her third-year of undergraduate studies, who is originally from Trinidad, has joined the kinesin team and is working on a KK1-related kinesin. Both Asav and Akielia utilize genetic and molecular biology methods, and hope to attend graduate school in the near future. Yewande Adepoju who is from Nigeria and a McNair Fellow, is doing her Honors project on the role of glucosinolates-plant secondary metabolites-to change the biodiversity of bacterial communities in an area just outside the root system of plants called the rhizosphere. She hopes to do biomedical research after graduation, and plans to attend a MD/PhD program. Finally, the newest member of the lab, Aster Ahmed, a biochemistry major originally from Ethiopia, is studying the role of auxin-regulated transcription factors in root development. Aster plans a career in the biotechnology industry.
Dear Alumni, 2006 Graduates, Faculty, Staff and Students,
We would love to hear from you! Please keep us updated and informed by emailing Bonnie or Gorette.
Bonnie.Campbell@umb.edu.
Gorette.Sousa@umb.edu