

Chair's Column

Dear BMB colleagues,

We have had a busy and exciting month of January, and February promises to be just as exciting.

Announcements from my office

I have two announcements to make regarding administration of Department duties.

1. I have asked Jim Lee to take the post of vice-chair of the education mission of the department and he has accepted. He will work to oversee and coordinate all educational activities of the department.
2. I have asked Tom Wood to take the post of vice-chair of institutional affairs and he has accepted. His mandate will deal with the interactions of BMB with other institutional entities at UTMB (e.g., shared facilities). Additionally, Tom will be in charge of coordinating the visits for our External Advisory Committee (Jack Johnson, Lynne Maquat and Patrick Sung).

I was completely honest with both and made it clear that these posts were primarily service positions to help me deal with the many administrative duties that I have. I am very grateful to them for accepting the tasks.

As supported by the unanimous vote of the faculty I have invited Mike Harris and Eric Wagner to return to UTMB for second visits and this week my office will start the arrangements. Meanwhile we still have a few more candidates coming for first visits, which promise to present us interesting talks and science.

Departmental news (these are some highlights)

In January several publications listed BMB members as co-authors – I mention here: Zandarashvili, L., and Iwahara, J. (2015) Temperature dependence of internal motions of protein side-chain NH₃⁺ groups: Insight into energy barriers for transient breakage of hydrogen bonds. *Biochemistry* 54, 538-45.

Several of BMB colleagues were recognized internally and externally - for example John Wiktorowicz has joined PREMIER Biosoft's (<http://www.premierbiosoft.com>) scientific advisory board, and Cheryl Watson was given the Graduate Student Organization Teaching Excellence Award here at UTMB.

New section: Departmental equipment

I am proposing that we initiate a discussion re how we can better share equipment in our laboratories with our BMB colleagues. While I know that there are reasonable arguments in favor and against a more open system of sharing, I am driven by a few basic principles that I consider evident. First, most, if not all, of 'our' equipment is not really ours (that is we did not buy it with our own money) but rather belong to the institution as dictated by the granting agencies. Indeed, as mentioned by Wlodek Bujalowski during a recent chalk talk (and I paraphrase) 'science is a privilege' and this privilege includes our ability to use sophisticated equipment, which is made available to us via funding from taxpayers and donors. Second, our equipment is essential for our work and must be handled expertly and carefully. Third, reasonable individuals can achieve a reasonable compromise between the first two principles.

I thank the Internal Advisory Committee and specifically Kota Ramana for bringing this issue up and for suggesting that we initiate a new section in the newsletter and in the website dedicated to highlighting equipment present in laboratories within BMB that can be useful to other laboratories. The first of these can be found below.

-Mariano



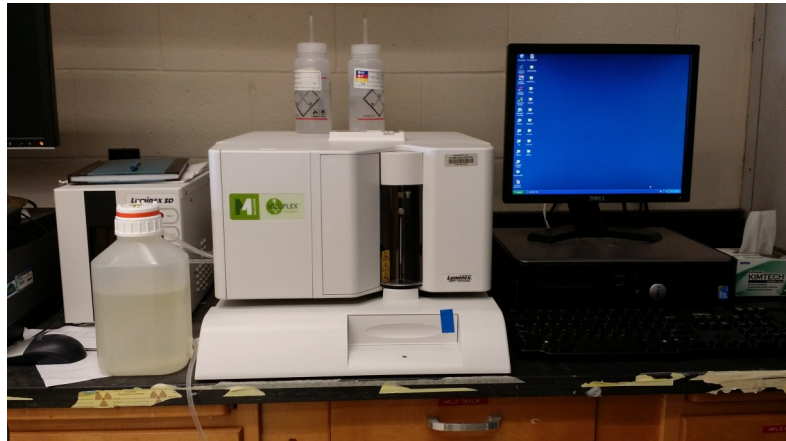
Dr. Mariano Garcia-Blanco

Spotlights

Dr. Cheryl Watson was given Teaching Excellence Award by the UTMB Graduate Student Organization. This award recognizes graduate faculty members who have made exceptional contributions to graduate classes. Also considered are faculty teaching contributions to BBSC courses and exceptional mentoring.

John Wiktorowicz has joined PREMIER Biosoft's scientific advisory board.

Millipore Multiplex System in Dr. Srivastava's Lab (6.644, Basic Science Building) can be used for the analysis of multiple inflammatory cytokines, cell signaling proteins, phosphorylated and non-phosphorylated protein kinases from a single sample of serum, cell lysates or tissue homogenates. Millipore's Luminex system using xMAP technology performs discrete bioassays on the surface of color-coded beads known as microspheres, which are then read in the compact analyzer. Using multiple lasers and high-speed digital-signal processors, the analyzer reads multiplex assay results by reporting multiple colors on each individual microsphere magnetic bead. Exclusive Luminex 3.1 xPONENT data acquisition and analysis software will provide data analysis and graphical presentation. If anyone wants to use this system, please contact Dr. Kota

**Publications**

Arijit Dutta, Chunying Yang, Shiladitya Sengupta, New paradigms in the repair of oxidative damage in human genome: mechanisms ensuring repair of mutagenic base lesions during replication and involvement of accessory proteins, *Cell. Mol. Life Sci.*,

Liu, P., Zhang, M., Shoeb, M., Hogan, D., Tang, L., Wang, C.Z., Syed, M.F., Campbell, G. and **Ansari, N.H.** Metal chelator combined with permeability enhancer ameliorates oxidative stress in rat eyes with elevated intraocular pressure. **Free Radical in Biochemistry and Medicine**, 69, 289-299, 2014.

Zandarashvili, L., **Iwahara, J.** (2015) Temperature dependence of internal motions of protein side-chain NH₃⁺ groups: Insight into energy barriers for transient breakage of hydrogen bonds. *Biochemistry* 54, 538-45.

Takayuki Iriyama, Kaiqi Sun, Nicholas F. Parchim, Jessica Li, Cheng Zhao, Anren Song, Laura A. Hart, Sean C. Blackwell, Baha M. Sibai, Lee-Nien L. Chan, Teh-Sheng Chan, M. John Hicks, Michael R. Blackburn, Rodney E. Kellems, and Yang Xia, Elevated Placental Adenosine Signaling Contributes to the Pathogenesis of Preeclampsia *Circulation* published December 23, 2014, doi:10.1161/CIRCULATIONAHA.114.013740 [Abstract]

February Research Seminars

Feb 12	Thu	4:00pm - 5:00pm Biochemistry Seminar Doug Black <i>"Neuronal Mechanisms and Programs Regulating Alternative Pre-mRNA Splicing"</i>
		12:00pm - 1:00pm BMB Student Seminar Justin Drake "TBA"
Feb 13	Fri	4:00pm - 5:00pm Keck Seminar Xiaodong Cheng <i>"Exchange Protein Activated by cAMP: Structure, Function and Therapeutics"</i>
Feb 16	Mon	All Day Holiday President's Day
		12:00pm - 1:00pm Infectious Disease Colloquium Raul Andino <i>"RNA virus population dynamics: mechanisms and biological consequences"</i>
Feb 17	Tue	4:00pm - 5:00pm Biochemistry Seminar Andrew Routh <i>"Next-generation Sequencing to Study Recombination and Evolution in RNA Viruses"</i>
Feb 18	Wed	
Feb 19	Thu	4:00pm - 5:00pm Biochemistry Seminar Christopher Nicchitta <i>"The (Sub)Cellular Architecture of mRNA Translation and How It Is Remodeled During Cell Stress"</i>
		12:00pm - 1:00pm BMB Student Seminar Rahul Pal "TBA"
Feb 20	Fri	4:00pm - 5:00pm Keck Seminar Cindy Farach-Carson <i>Rice University</i>
Feb 23	Mon	4:00pm - 5:00pm Biochemistry Seminar Masato Kato <i>"Hidden Biological Functions of Low Complexity Sequences"</i>
Feb 24	Tue	
Feb 25	Wed	12:00pm - 1:00pm NCB Seminar Dr. Saluja
Feb 26	Thu	4:00pm - 5:00pm Biochemistry Seminar Wenqian Hu <i>"Regulation of Erythropoiesis by Long Noncoding RNAs and mRNA-binding Proteins"</i>
		12:00pm - 1:00pm BMB Student Seminar Michaela Huynh "TBA"
Feb 27	Fri	4:00pm - 5:00pm Keck Seminar Erez Aiden <i>BCM</i>