

INSIDE

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Inside:

- UMBI News
- Furlough Plan Finalized
- European FP7 Grant
- MBC at Stem Cell Summit
- 20 Years and Counting
- MBC Happenings

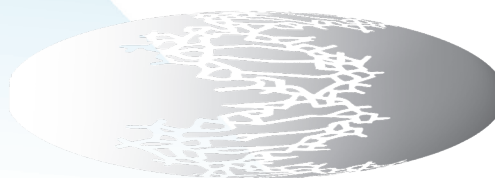
It's Official!

The MOU moving MBC to UMB became official on October 6th when the USM Board of Regents formally accepted the document presented to them by UMB. As MBC Director W. Jonathan Lederer had been keeping the faculty updated as the MOU was developed, there were no surprises in the final document. Both Dr. Lederer and MBC Assistant Director Tim Hughes had read earlier drafts and their suggestions had been incorporated into the final version. The only surprise was the implementation date, which was given as November 1, 2009. This does not mean that MBC faculty and staff will be immediately made UMB employees or that all administrative functions must go through UMB on that date these are impossibilities. The real work of actually moving administrative functions for personnel, grants, IT and equipment to UMB systems will now begin, but is expected to take several months before being fully implemented. The systems in use at UMBI are not compatible with any of UMB's systems, and there will undoubtedly be glitches in such a complex undertaking.

MBC to become BioMET

The MOU accepted by the Board of Regents moves MBC to UMB as a whole unit, making it an "organized research center" (ORC) within UMB under the Office of the President. While it will not be the first ORC, it will be the first ORC not under a specific school. More information on ORCs can be found at <http://cf.umaryland.edu/hrpolicies/section4/t40100Bsa.html>.

One of the ORC's primary objectives will be to integrate biomedical engineering into UMB, through partnership with UMCP's School of Engineering and its Department of Bioengineering headed by former UMBI CBR professor William Bentley. The name of the ORC is Biomedical Engineering and Technology, or BioMET. MBC Staff will move over as is. Faculty will be associated with academic departments for tenure purposes, but their primary appointment, and thus, their grants will remain with the ORC. The exact departmental assignments will be negotiated by each faculty member and their preferred departments. The degree of autonomy that is permitted



continued page 4

Just Ask Ed

UMBI staff and faculty will be able to ask UMBI Acting President Ed Eisenstein questions concerning the ongoing disaggregation of UMBI on an internal blog site. The questions will be anonymous, but the answers will be visible to everyone with a UMBI login. It is hoped that this will give UMBI staffer accurate information and stem some of the rumors.

Maryland Charity Campaign Kick-off

UMBI hosted a Maryland Charity Campaign kick off event on Tuesday, October 6th from 2:00 pm - 3:00 pm. Representatives from several of the charities represented gave presentations. UMBI's Campaign chair is Yvonne Cook. Pamela Wright is MBC's representative. The goal this year is \$23,000.

Furlough Plan Finalized

The UMBI Furlough plan was unveiled at the September Senate meeting and then sent to all staff and faculty on October 2, 2009. It was a graduated plan as before, with two differences. The furloughs will be taken as a temporary salary reduction in each paycheck, which should lessen the impact, and UMBI will actually be closed one day (December 24). Employees exempt from the furlough plan include those who are hourly or contingent I, graduate assistants, H1-B visa holders and employees funded entirely off of grants. The closure day will require those employees to take a leave day. Required furlough days range from 1 to 10, depending upon base annual salary. More information can be found at <http://www.umbi.umd.edu/human-resources/images/furlough-plan.pdf>.



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Back issues of *Inside MBC* are available on the web at:
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Congratulations!

Dr. Mariusz Karbowski was an invited contributor to the *Encyclopedia of Life Sciences* published by John Wiley and Sons. His entry was entitled "Mitochondria fusion and Fission". The latest edition of the *Encyclopedia* came out in September.

European Union FP7 Grant

The European Union is a major funding source for research outside the US. One of the largest modalities is called the Seventh Framework Programme for EU Research (FP7). It is the first to permit US researchers to partner with European researchers for projects, though on an exceptional basis only. MBC Director, Dr. W. Jonathan Lederer, is part of a project funded via FP7 at Georg August University in Goettingen. The principal investigator is Dr. Stephan Lehnart, a long standing collaborator of Dr. Lederer's originally at Columbia University. The project, is entitled "Identification and therapeutic targeting of common arrhythmia trigger mechanisms" and includes partners from 8 different European countries besides the US. The grant, using the acronym, EUTrigTreat, will include a web page and extensive communications between the partner institutions.



MBC at Stem Cell Summit

The first World Stem Cell Summit was held September 21-23 in Baltimore. As expected, the State's commitment to this research has already made Maryland a recognized world leader in the area. MBC's success in this area was on display at the summit with 6 posters:



"Expression of ubiquitin in human embryonic stem cells"

Valeria Albornoz, Shengyun Fang, Mervyn J. Monteiro

"Autofluorescence in Heart and other Tissues during Mouse embryogenesis"

Xuehong Xu, Bruce Vogel

"DPF2/REQUIEM is a ubiquitin ligase for Oct4"

Chao Liu, Shengyun Fang

"Mesenchymal Stem Cells Provide Benefit to Injured Cardiac Ventricular Myocytes Through a Paracrine Mechanism"

T.B. Rogers, A.Y. Khakoo, S. Pati, G. Hall, R. Wardlow, S. Gaa, D. Riley, C.A. Frederick, W.J. Lederer

"Mesenchymal Stem Cells Stimulate Protective Genetic Reprogramming of Injured Cardiac Ventricular Myocytes"

T.B. Rogers, A.Y. Khakoo, S. Pati, G. Hall, S. Gaa, D. Riley, C.A. Frederick, W.J. Lederer

"Treatment with normal prion protein delays differentiation and helps to maintain high proliferation activity in human embryonic stem cells"

Young Jin Lee, Ilia V. Baskakov

More information, along with reports on progress in stem cell research, can be found at <http://www.worldstemcellsummit.com/>.

MBC Happenings

Comings and Goings

Dr. George "Blair" Williams from George Mason University is a visiting postdoctoral fellow in Dr. Lederer's Laboratory. Post-doctoral Fellow Dr. Julio Altamirano has left Dr. Lederer's laboratory for a faculty position at Instituto Tecnológico y de Estudios Avanzados de Monterrey, Monterrey, Mexico. Dr. Chao Liu has left Dr. Fang's laboratory. Kristin Brueckner is no longer with Dr. Monteiro. Gustavo Weiland has joined Dr. Monteiro's laboratory as a Research Assistant.

Grants and Contracts

Dr. W. Jonathan Lederer, 10/1/2009, Georg-August University (European Commission), "Identification and therapeutic targeting of common arrhythmia trigger mechanisms," \$ 139,671, yr 1 of 5.

Dr. Mariusz Karbowski, 9/1/2009, NIH-NIGMS, "The Role of Mitochondria-associated RING finger Proteins in Mitochondria Quality," \$ 270,000, yr 2 of 5.

Dr. Iia Baskakov, 9/1/2009, Maryland Technology Development Corp (TEDCO)/MSCRF, "Design of Self-assembling peptide scaffold for controlling neural stem cell state and fate," \$ 115,000, yr 2 of 2.

Dr. Mervyn Monteiro, 9/1/2009, Maryland Technology Development Corp (TEDCO)/MSCRF, "Role of Ubiquitin in Regulating Proliferation and Differentiation of Human Stem Cells Monteiro," \$ 115,000, yr 2 of 2.

Publications

Burks SR, Barth ED, Halpern HJ, Rosen GM, Kao JP. Cellular uptake of electron paramagnetic resonance imaging probes through endocytosis of liposomes. *Biochim Biophys Acta*. 2009 Oct;1788(10):2301-8.

Salnikov V, Lukyanenko YO, Lederer WJ, Lukyanenko V. Distribution of ryanodine receptors in rat ventricular myocytes. *J Muscle Res Cell Motil*. 2009;30(3-4):161-70.

Aslan K, Geddes CD. Metal-enhanced chemiluminescence: advanced chemiluminescence concepts for the 21st century. *Chem Soc Rev*. 2009 Sep;38(9):2556-64.

Lim PJ, Danner R, Liang J, Doong H, Harman C, Srinivasan D, Rothenberg C, Wang H, Ye Y, Fang S, Monteiro MJ. Ubiquitin and p97/VCP bind erasin, forming a complex involved in ERAD. *J Cell Biol*. 2009 Oct 19;187(2):201-17.

Lukyanenko V, Chikando A, Lederer WJ. Mitochondria in cardiomyocyte Ca^{2+} signaling. *Int J Biochem Cell Biol*. 2009 Oct;41(10):1957-71.

Rossignol R, Karbowski M. Editorial of the directed issue on mitochondrial dynamics in biology and medicine. *Int J Biochem Cell Biol*. 2009 Oct;41(10):1748-9.

Shen J, Sood R, Weaver J, Timmins GS, Schnell A, Miyake M, Kao JP, Rosen GM, Liu KJ. Direct visualization of mouse brain oxygen distribution by electron paramagnetic resonance imaging: application to focal cerebral ischemia. *J Cereb Blood Flow Metab*. 2009 Oct;29(10):1695-703.

Talks and Travels

Dr. Ben Prosser, Seminar Speaker, Department of Physiology, University of Maryland, Baltimore, "SI00A1 and Calmodulin Regulation of Skeletal Muscle Excitation-Contraction Coupling,"

BioMET continued

under this arrangement should go far in allaying many of the fears that the move to UMB has engendered.

Little, if any, effect will be noticeable in the laboratories in the near term. Differences in the status of postdoctoral fellows will eventually be felt, as UMB actually has postdoctoral fellows and UMBI does not. How the differences will be handled will be part of the administrative move that is just getting under way. Traditionally, contractual terms are grandfathered in for current personnel.



20 Years and Counting!

Dr. Mervyn Monteiro arrived at the MBC in September of 1989, the fourth faculty member hired at the then three-year old center. Other than Tim Hughes, he is the longest serving employee here, and now that Dr. John Collins has retired, he is the longest serving active faculty member. Now a full professor, his work on neurodegenerative diseases is recognized worldwide. He also maintains one of the premier training laboratories, drawing students from a number of programs at the University of Maryland, Baltimore but most from the Molecular and Cellular Biology program, of which he was associate director for many years. Originally focused on Alzheimer's Disease, his work has now expanded to include Parkinson's Disease and Huntington's Chorea.



October 23, 2009.

Dr. W. Jonathan Lederer, Professor Rounds, Integrative Membrane Biology Program, University of Maryland, Baltimore October 23, 2009.

Newsfeed Articles

9-8-09: Scott Burks Successfully Defends Ph.D. Dissertation

9-18-09: Dr. Mervyn Monteiro Celebrates 20 Years with UMBI

9-25-09: Dr. Lederer Travels Europe Presenting Research

10-16-2009: MBC Scientists Display Posters at 2009 World Stem Cell Summit

10-27-09: Dr. Mariusz Karbowski Selected as an International Member of the ERI-ICP