

Inside:

- UMBI News
- MBC Continues to Attract Stem Cell Grants
- 5 LIVE Finally Arrives
- The Next Move
- Stimulating
- IoF: Is it or isn't it?
- MBC Seminar

RFP Results

As reported in the last edition of *Inside MBC* (Vol 12, No. 2), the fate of UMBI was to be determined by a Request for Proposal (RFP) process. The Ad Hoc Committee set a May 8 date for submission of the RFPs. Meanwhile, the Committee called a public meeting for May 7, to gather comments from any interested party. The Chancellor's office arranged for a bus to be available from Baltimore City to take the many interested UMBI staff and faculty to the meeting which was held at USM headquarters in Adelphi, Maryland.

After the RFPs were submitted, each group then presented their proposal to the Committee. While there has been no formal confirmation, it is believed that at least four RFPs are being considered: one from UMCP, one from UMB, one from UMBC and UMCES, and one from the UMBI Vice Presidents. The exact nature of these proposals were not made public.

In the meantime, the originally scheduled May 18 visit by the Committee to MBC was held June 1. While there has been little outside publicity about the process, the Baltimore Business Journal did run an article on May 22, primarily in response to the announcement of Dr. Jennie Hunter-Cevera's move to RTI immediately after she steps down as president (see next page).

With the public announcement due out on June 19, Chancellor Kirwan met personally with each center on June 18. That he arranged to meet centers individually was the clue that each center had a different

Continued page 3

Inside MBC 50th Issue

As the editor of *Inside MBC*, this will be my 50th published issue, if you include six Retreat Issues and one Retrospective Issue. Since the first May-June 2001 issue, I have tried to make *Inside MBC* both informative and interesting, highlighting both the exciting science and the achievements of the faculty and staff. There was always more material than there was space, and I have had to curtail or eliminate stories, much to my own dissatisfaction. However, the most important things were discussed and celebrated.

It has been my privilege and pleasure to be editor, designer and head writer. *Inside MBC* has given me good reason to get to know everyone, to be slightly nosy, and to come to work in the spirit of celebrating good science and good people. I have enjoyed it all.

As MBC travels into an uncertain future, I hope that the newsletter will continue to celebrate who we were, who we are and who we will be. Thank you for the stories and thank you for reading.

Pamela Wright, Editor

Hunter-Cevera Joins RTI

Dr. Jennie Hunter-Cevera has left UMBI to become executive vice president of Discovery and Analytical Sciences and Corporate Development at RTI International in North Carolina on July 1. She resigned her presidency in February (*Inside MBC*, Vol. 12, No. 1), effective June 30. RTI International made the announcement May 21. However, no announcement was made by UMBI.

MBC Continues to Attract Stem Cell Grants

The third year of stem cell funding from the State of Maryland saw two more exploratory grants and a postdoctoral fellowship awarded to MBC faculty. Drs. Mariusz Karbowski and Xuehong Xu both received word that their proposals on “Maintenance of Mitochondrial Fusion and Fission as a Critical Factor in Stem cell viability, Differentiation Capacity and Differentiation-induced Mitochondrial Biogenesis” and “P-QD hESC Labeling and Its Application on Cell Transdifferentiation,” respectively, would be funded. The first postdoctoral fellowship received by UMBI will go to Dr. Julio Altamirano for “Calcium signaling in cardiac hESC-derived myocytes and their functional interactions with acutely isolated rat ventricular myocytes in primary cultures.”

This brings the total number of stem cell grants for the MBC to seven with total funding (all years) of \$2.9 million. Dr. Shengyun Fang, who received a grant the first year, is finishing up his exploratory grant just in time for the onset of NIH funding for stem cell research.

5 LIVE Finally Arrives

The long awaited, latest state-of-the-art confocal microscope, the Zeiss LIVE 5, has finally arrived. Funded by an NIH grant to Dr. W. Jonathan Lederer since 2007, the scope is expected to revolutionize real-time imaging at the MBC. The delay was caused by customization problems. The entire process of setting up the complex system is expected to take several weeks. Zeiss technicians have been at the MBC since mid-June. Once they have finished, an additional laser and photolysis system will be added to make a unique system. It will be able to take complete advantage of the caged signalling molecules that Dr. Kao pioneered that are activated intracellularly with pinpoint accuracy via laser. With the high data acquisition capability of the confocal system, the signaling cascade triggered by the uncaged molecules can be

followed in real time. In addition, the system is expected to be able to advance three dimensional reconstruction of subcellular structures.



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RFP continued

fate. Predictably, MBC will be given to UMB. Later that day, the entire Ad Hoc Committee report was sent around. CARB will be given to UMCP, with some access for UMB. CBR will go to UMCP. COMB will go to UMBC, with access for UMCES and UMB. The IoF (see the story on page 4) will not follow MBC to UMB, but will go to UMBC. Towson University will get the educational component of UMBI. Thus, everyone will get a piece of UMBI. The entire Board of Regents accepted the recommendations quickly on June 19 at their regular meeting as evidenced by an email sent around within hours of the meeting's end. All of the arrangements will be made operational via Memoranda of Understanding (MOUs) that are to be completed by December 31.

There was one leftover piece of business that was not completed by the Board of Regents meeting. Chancellor Kirwan did not name the acting President, even though there was less than 2 weeks until Dr. Hunter-Cevera's departure. The announcement finally came on June 26. Dr. Ed Eisenstein, former CARB director, was named acting President. The overall sentiment at the MBC to this announcement was very positive.

The Next Move

With MBC being organizationally realigned with UMB, the next step will be to define the exact nature of the relationship and how to effect the move. In some ways this will parallel the process done when the IHV moved to UMB from UMBI two years ago. The exact nature of the relationship will be worked out via a Memorandum of Understanding (MOU) between the MBC and UMB, though the Committee Report indicated that UMCP would be involved in some unspecified way. The MOU is to be completed by December 31. In the words of the Cancellor, UMBI will be officially "disaggregated" as of July 1, 2010. It will be up to MBC Director Dr. W. Jonathan Lederer, President Ramsey of UMB, USM Chancellor Kirwan, and possibly someone to represent UMCP's interests to negotiate an MOU. One supposes that the RFP that UMB submitted to the Board of Regents will form the basis of the negotiations, but it is not clear that there is any stipulation that the proposal be implemented even partially. Until the MOU is finalized, the future of MBC is still uncertain.

Stimulating

MBC, along with the other UMBI centers and USM institutions, scrambled to put together grant proposals for the NIH portion of the federal governments stimulus package called the American Recovery & Reinvestment Act of 2009 (ARRA). The types of grants being offered differed significantly from the usual funding opportunities in form, content and budgets. Many of them were short-term, high budget (\$500,000+ per year), and narrowly focused. While each institute could apply their portion differently, two major types of grants predominated: The Challenge Grant and the GO (Great Opportunity) Grant. The Challenge Grants focused on "novel research in areas that address specific knowledge gaps, scientific opportunities, new technologies, data generation, or research methods that would benefit from an influx of funds to quickly advance them in significant ways." The GO grants focused on "support for high impact ideas that lend themselves to short-term funding and may lay the foundation for new fields of investigation" that each institute decided to target. In addition to these two funding opportunities, several institutes included additional funding for existing grants and/or funding of previously reviewed proposals that scored well but could not be funded.

In 2004, NIH developed a "roadmap" to "address roadblocks to research and to transform the way biomedical research is conducted by overcoming specific hurdles or filling defined knowledge gaps." ARRA has significantly enhanced NIH's ability to fulfill its goals .

The time between the announcements of these new sources of funding and the submission date was uncommonly short, less than three months. Many researchers were unable to take advantage of the opportunities, having already committed themselves to projects. MBC scientists managed to submit a Challenge Grant and an additional funding request.

MBC Happenings

Comings and Goings

Kyleen Graham is no longer with the MBC. Dr. Jun Zhao has left Dr. Kao's Laboratory. Dr. Nuria Montalban Gonzalez joined Dr. Baskakov's laboratory as a Research Associate and Dr. Guiling (Laura) Zhao has joined Dr. W. Jonathan Lederer's laboratory as a Research Associate. Hirdyesh Mishra is a Research Associate with Dr. Geddes. Stephanie Sarbanes returned for another summer in Dr. Monteiro's laboratory as a Laboratory Helper. See-Yin So is a visiting student with Dr. Kao. Angela Wright, daughter of Pamela Wright, is working the front desk for the summer.

Grants and Contracts

Dr. Ilia Baskakov, NIH "Self-propagating Mechanism of Prion Diseases," 06/01/2009, \$300,000, yr 3 of 5.

Dr. Chris Geddes, University of Cincinnati, NIH, "Point of Care Center for Emerging Neurotechnologies (POC-CENT)" 6/2/2009, \$201,547, yr 1 of 1.

Publications

Vernazza C, Lingard B, Flick-Smith HC, **Baillie LW**, Hill J, Atkins HS. Small protective fragments of the *Yersinia pestis* V antigen. Vaccine. 2009 May 11;27(21):2775-80.

Aslan K, Zhang Y, **Geddes CD**. Surface plasmon coupled fluorescence in the visible to near-infrared spectral regions using thin nickel films: application to whole blood assays. Anal Chem. 2009 May 15;81(10):3801-8.

Makarava N, Ostapchenko VG, Savtchenko R, **Baskakov IV**. Conformational Switching within Individual Amyloid Fibrils. J Biol Chem. 2009 May 22;284(21):14386-95.

Tondera D, Grandemange S, Jourdain A, **Karbowski M**, Matzenberger Y, Herzig S, Da Cruz S, Clerc P, Raschke I, Merkwirth C, Ehses S, Krause F, Chan DC, Alexander C, Bauer C, Youle R, Langer T, Martinou JC. SLP-2 is required for stress-induced mitochondrial hyperfusion. EMBO J. 2009 Jun 3;28(11):1589-600.

Aslan K, Zhang Y, **Geddes CD**. Sonication-assisted metal-enhanced fluorescence-based bioassays. Anal Chem. 2009 Jun 15;81(12):4713-9.

Trafford AW, **Lederer WJ**, Sobie EA. Keeping the beat: life without SERCA--is it possible? J Mol Cell Cardiol. 2009 Aug;47(2):171-3.

Talks and Travels

Dr. Mariusz Karbowski, University of Maryland School of Medicine, Center for Vascular and Inflammatory Diseases (BioPark 1), "Role of the Ubiquitin Conjugation System in the Control of Mitochondrial Functional Integrity," 6/3/2009

Dr. W. Jonathan Lederer, European Atrial Fibrillation Research Alliance Annual Meeting, Berlin, Germany, "Status of Atrial Research," 6/25/2009

Newsfeed Articles

Articles can be found at <https://intranet.umbi.umd.edu/computing/rss/motd.php>. This does require a UMBI login.

5/1/2009: Monteiro Lab Presents Research at Alzheimer's/Parkinson's Conference

IoF: Is it or Isn't It?

The Institute of Fluorescence (IoF), one of MBC's eight programs, seems to have become separated. Soon after Dr. Jennie Hunter-Cevera announced her resignation, she announced in an email dated March 13 that the IoF had become "UMBI's [sic] 5th center of scientific excellence in research." This made it seem as if the IoF was now MBC's equal. A clarification made the next day "that IoF is not being recognized as a fifth center on an administrative level with the existing four centers but will be administratively overseen by the president's office. The IoF is recognized as an additional signatory program.... UMBI currently has four other signatory programs residing within our existing centers." Though no one is sure what the other signatory programs are and there is no other research program administered directly from the President's office. Though the IoF was given a direct link on the front of the UMBI web page, none of the other supposed signatory programs are listed with it. Given Dr. Hunter-Cevera's lame duck status, the exact nature and future of the IoF was confusing until the outcome of the restructuring was announced. It seems that the separation from the MBC will be formal, at least on July 1, 2010, as the IoF was given to UMBC and will not follow the MBC to UMB.



MBC Seminar

Dr. Jia Luo, a professor in the Department of Internal Medicine, University of Kentucky College of Medicine, presented his work entitled "Interaction between Rax and PKR Modulates the Effect of Ethanol on Protein Synthesis and Survival of Neurons" on June 3, 2009. Dr. Shengyun Fang arranged to have Dr. Luo visit the MBC while he was in Washington, D.C. for an NIH study section meeting.

5/5/2009: Delegate Jon Cardin Tours IoF Facilities

5/8/2009: Dr. Mariusz Karbowski Presents Research at BioMed Seminar in Spain

5/14/2009: Dr. W. Jonathan Lederer and U.K Scientists Publish Cover Story in *Circulation Research*

6/9/2009: Kim Collins and Czech Scientists Use Computer Simulations to Study Unusual Amino Acid Pairing

6/23/2009 MBC Receives Three Stem Cell Awards from MSCRF

6/29/2009: Dr. Chris Geddes Publishes Latest Edition of Fluorescence Directory