MBC Wows Stem Cell Commission

The Maryland Stem Cell Commission announced its choices for
grant awards on May 18, 2007. The MBC, which had put in five
grant requests (Inside MBC, Vol. 10, No. 1), was amply rewarded for
its efforts, having two of the five recommended for funding. Dr. W.
Jonathan Lederer and Dr. Shengyun Fang both received notice that their
submissions had been selected for funding in FY08.

The grants were divided into two categories, a substantial three-
year one for work that had preliminary data and a smaller two-year
grant for novel, but unsupported ideas. Of the 24 funded grants, 7
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New VP for ORD

Dr. Ted Roumel has joined UMBI as Vice President for Asset Protection and Chief Commercialization Officer. He will also oversee the Office of Research and Development. Dr. Roumel was formerly Director of Technology Transfer at NIH. He replaces Dr. Claude Nash, who held the position with a slight change in title.

The first UMBI-wide town hall meeting was held June 1 at COMB and via video conferencing. UMBI President Dr. Jennie Hunter-Cevera discussed the upcoming move of IHV, new opportunities for collaboration, and then addressed staff questions submitted by email, as well as those posed during the meeting. Two more town hall meetings are planned. MBC will be the site for the December 14 meeting.

Faculty Meeting Visitors

The May and June faculty meetings included guests. Dr. William F. Koch, Deputy Director Chemical Science and Technology Laboratory, National Institute of Standards and Technology (NIST) spoke at MBC’s May faculty meeting. NIST is a long-time collaborating institution at UMBI’s Center for Advanced Research (CARB) in Biotechnology, supporting many of the CARB faculty. NIST is looking to expand its collaboration with UMBI to include the other centers. Dr. Koch explained what NIST was interested in pursuing and how it is organized. He was also given a brief overview of some of the research at the MBC. The long term prospects for NIST support at the MBC are very encouraging.

The June meeting included two UMBI Central VP’s. Dr. Ted Roumel (see above) came to introduce himself to the faculty. He indicated that he is very excited at the prospects for UMBI’s future with regard to licensing intellectual property. The second visitor was Mr. David Bobbitt, VP for Institutional Advancement. UMBI has redone its logo and is developing a unified visual presentation across centers. This process is known as “branding” and it is expected to increase UMBI’s name recognition. Mr. Bobbitt introduced the new logo and discussed the next steps in the process.

Congratulations!

Andrew Ziman, mentored by Dr. W. Jonathan Lederer, donned cap and gown for UMB’s graduation ceremonies, which includes a formal “hooding,” where he received the hood symbolizing his receiving a PhD. He had defended his thesis in April.

Graduate Student Darryl Auston defended his thesis on May 18. Darryl was mentored by Dr. Joseph Kao. His thesis was entitled “Intracellular Calcium Regulation in Vagal Sensory Neurons.”
Hitting the Slopes?

UMBI held its first off-site faculty retreat June 18-19 at the Wisp Resort in western Maryland. While Wisp is better known as a ski resort, it does have year round facilities, including a golf course and trails, all overlooking Deep Creek Lake. The retreat was held off site to increase faculty interaction.

The retreat was centered on three broad research themes. The first session called Protein Folding/Misfolding/Interactions was held the first afternoon. MBC Associate Professor Ilia Baskakov talked about “Protein Misfolding, Prions, Amyloids,” and MBC Assistant Professor Dr. Shengyun Fang discussed his work on protein degradation pathways entitled “Identification of SVIP as the First Endogenous Inhibitor of ER-Associated Degradation.” Two other speakers rounded out the first session. It was followed by happy hour and poster presentations. MBC presented five posters.

The next day the morning session on Innate Immunity was followed by the afternoon session on Pathobiology, chaired by MBC Director Dr. W. Jonathan Lederer. MBC Professor Mervyn Monteiro spoke on “Using Ubiquilin to Eliminate Misfolded Proteins Involved in Human Pathology.” The retreat broke up late in the afternoon, allowing participants time to get home for dinner.

In addition to the speakers mentioned above, MBC attendees included Andria Apostolou, Dr. Kadir Aslan, Petek Ballar, Dr. Giovanni Benard, Timothy Hughes, Dr. Joseph Kao, Dr. Mariusz Karbowski, Dr. Valeriy Ostapchenko, Dr. Michael Previte, Dr. Ying Sun, Dr. Bruce Vogel, Dr. Hongmin Wang, Pamela Wright, Dr. Xuehong Xu, Dr. Hui Yang, Dr. Yongxia Zhang, and Dr. Yongwang Zhong.

Some participants took advantage of the location to come up early and enjoy a mini-vacation, including family in the outing. Others managed to get in 9 holes before the second day’s talks started. A bonfire with s’mores brought the group together for the evening of the 18th. Even pets were included. Participants seemed to enjoy both the science and each other. The organizers, including MBC’s Dr. Fang, should be congratulated on a successful event.
**MBC Happenings**

**Comings and Goings**

Ms. Caroleann Aitken is a new Accounting Associate assigned to the Institute of Fluorescence. High school student, Andrew McClain, is a summer student in Dr. Mervyn Monteiro’s laboratory. Ms. Regina Savtchenko joined Dr. Ilia Baskakov’s laboratory as a Research Assistant.

**Grants and Contracts**

Dr. Joseph Kao, 1/1/07, UMB/USM Nanobio, “Optical Nanoprobes of In Vivo Lipid Signals,” $60,000, yr 1 of 1.

Dr. W. Jonathan Lederer, 4/1/07 Columbia University/NIH, “Intracellular Calcium and Sudden Cardiac Death,” $381,918, yr 1 of 5.


Dr. W. Jonathan Lederer, 5/1/07, NIH, “Confocal High Speed Imaging System,” $737,850, yr 1 of 1.

Dr. Chris Geddes, 5/1/07, NIH, New Award, “Plasmonic Detection of Free-Bilirubin in Neonates,” $177,702, yr 1 of 2.

**Publications**


Gover TD, Moreira THV, Kao JPY, Weinreich D. Calcium homeostasis in trigeminal ganglion cell bodies. CELL CALCIUM 41 (4): 389-396 APR 2007

Stem Cells, continued were three year grants and 15 were two year grants. MBC got one of each. Dr. Lederer will receive $1,724,988 over three years for his grant entitled “Human Mesenchymal Stem Cell Treatment for Heart Damage,” while Dr. Fang will receive $219,420 over two years for a grant entitled “Ubiquitination-dependent regulation of Oct-4 Activity.” Dr. Lederer was the only researcher from the entire University System of Maryland to be awarded a three-year grant. Dr. Fang was one of seven from USM to be funded with the smaller grant. Johns Hopkins University received the rest of the grants, with one three-year grant going to a Maryland biotech company. The actual start dates for these grants have not been announced as of yet.

Dr. Lederer’s grant uses adult stem cells to look at the possible benefits for repairing damaged areas in heart. The preliminary work was done in conjunction with Dr. Terry Rogers of UMB and Dr. Aarif Khakoo at the University of Texas at Houston, with the help of a local high school student Rushi Talati (Inside MBC Vol. 8, No. 3). Dr. Rogers and Dr. Khakoo are also participating in the proposed studies. Preliminary work revealed that there are benefits that appear to depend on stem cell production of interesting “factors.” If supported by future findings, these factors could be therapeutically useful, even if stem cell grafting is not effective.

Dr. Lederer was extremely pleased when he confirmed that he had indeed been selected. “While our current work is preliminary, it shows the scientific strength of the MBC and UMBI and also emphasizes the importance of collaborative science when conducting cutting edge research.”

With an announced $23 million in funding available for 2008, stem cell research in Maryland will continue. Undoubtedly, UMBI researchers will continue to compete in this expanding research area.


**Talks and Travels**

