

5 Million Milestone

Inside:

- UMBI News
- Burn, Badges, Burn
- Odds and Ends
- MBC Happenings

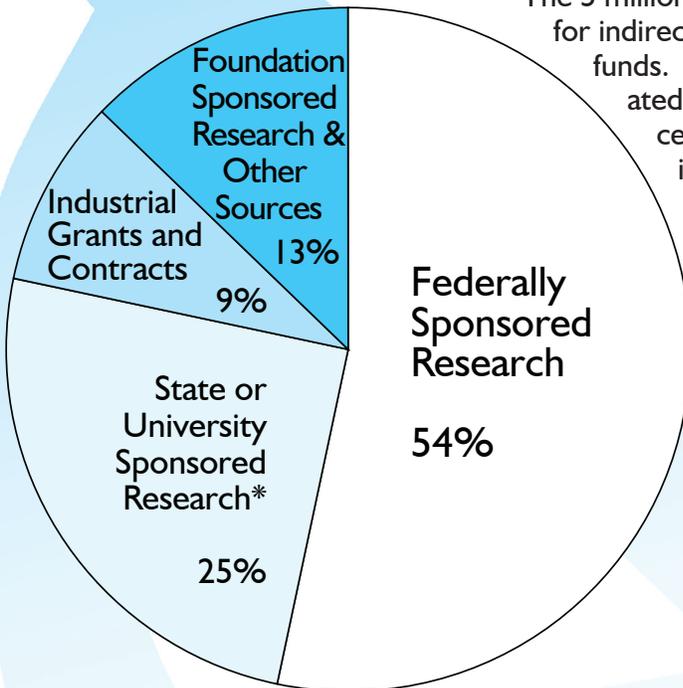
\$5,166,212 was the final tally for MBC awards in the fiscal year that ended June 30, 2006 (FY06). That includes 26 different awards to 11 different MBC faculty members. This is the first time that the MBC has topped the five million dollar mark in the 20 years it has existed, though it has come close in the previous two years. Considering the difficult funding climate, this is truly remarkable. It is a great way to celebrate it's twentieth anniversary.

The most awards went to Dr. Chris Geddes with seven, but Dr. W. Jonathan Lederer brought in the most dollars with four awards totaling \$1,276,495; followed by Dr. Mervyn Monteiro (3 awards, \$888,816) and Dr. Geddes (\$865,378).

The pie chart shows the sources for the awards. Federally sponsored research, entirely from NIH, is the greatest source of awards, with the second source being from state and other universities. Most of this, however, is federally sponsored research as well, but the award to MBC is through a subcontract with another university. MBC has partnered with the University of Maryland Baltimore, Columbia University and Imperial College, London.

The 5 million includes both direct and indirect costs. The rates for indirect costs vary, depending upon the source of the funds. Generally, the rate is 48.5%, which is the negotiated federal rate for two of UMBI's Baltimore based centers, though foundations and some other funding instruments may have lower rates or no indirect costs at all.

continued page 2



The source breakdown for MBC FY06 awards.

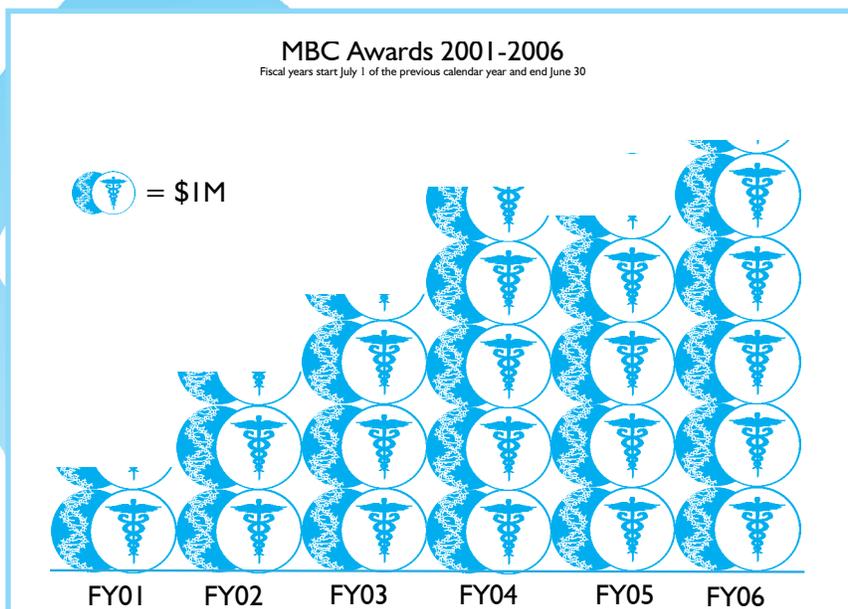
*Includes Federally sponsored research administered as subcontracts with other universities

CBR Director Steps Down

Dr. Donald Nuss, from the Center of Biosystems Research (CBR), stepped down as Director, effective August 1. CBR Associate Director, Gregory Payne, has been appointed Acting Director. Plans for a permanent replacement have not been announced.

Milestone cont.

As the graph shows, MBC awards have quickly and dramatically increased in the last 6 years, more than quadrupling the amount of money brought in since 2001 (FY01). Most of this increase is from NIH grants, though MBC researchers continue to broaden funding sources since NIH grants are increasingly more difficult to get.



Oops!

Congratulations should have gone out in the May-June issue to David Freilich who defended his thesis entitled "Developing a System for Photoactivated Gene Expression" on May 8, 2006. David finished in time to go through the commencement ceremony the end of May. Dr. Joseph P.Y. Kao was David's mentor.

Congratu

Diana For
ratory, defenc
tion of Ubiqu
action with P

Editor and Designer: Pamela B. Wright
Assistant Editor: Tim Hughes

Publisher: W. Jonathan Lederer, Director MBC
Assistant Publisher: Joseph Kao, Assoc. Director MBC

Contact us at: wrightp@umbi.umd.edu
or 1-410-706-8181

Medical Biotechnology Center
725 West Lombard Street
Baltimore, MD 21201 USA

Back issues of *Inside MBC* are available on the web at:
<http://www.umbi.umd.edu/~mbc>

©Medical Biotechnology Center, University of Mary-
land Biotechnology Institute. All rights reserved.

Burn, Badges, Burn

In the Fall of 2005, the University of Maryland Baltimore started the process of replacing badges that would be necessary for the new security system that would be installed. Called UMB1One Card, it would not only open doors, but would also include library and garage access and even act as a money card, especially for students. Since MBC uses UMB for identification badges and security, we were to get new badges as well. So in October of 2005, most MBC staffers got new badges and began using them for the parking garage but kept the old card to use for building access until the new

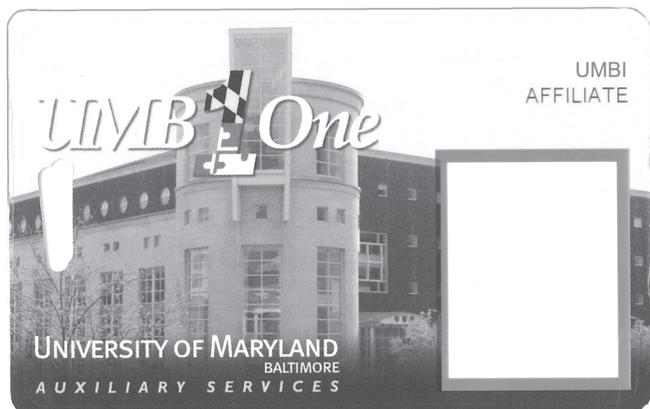
readers were installed. However, the process came to a sudden halt with out explanation, though rumors attributed it to a complaint over the use of the health science library as the cover image. UMB does include more than just the medical and health related schools, and the other areas may have objected to the blatant bias of the cover image. In the meantime, MBC and all the other buildings on the UMB campus used the old cards for building access.

With little fan fare, the process restarted this summer and buildings were rapidly converted to the new reader. Those individuals who had not gotten the new badge for whatever reason were

scrambling to replace their old badges. The MBC building was one of the last on campus to convert. On July 31, the first readers to be replaced were the ones between MBC's building and Allied Health, also known as the "back way"; but the loading dock and front door were quickly replaced a day or two later. There was just one little hitch. None of the new cards worked in any of the readers!

In the effort to get out the new cards, the transfer of access permissions was forgotten. In addition to that, the instructions given MBC for the new online card registration to get a replacement card did not work as promised. Mike McCrea, the facilities coordinator for UMBI's Medical Research Facility (MBC's building), had his hands full fielding questions, trying to find out the correct procedures and developing workarounds so that MBC personnel could get into the building. Critical areas, like the animal care facility and biohazard containment rooms, were especially impacted. Fortunately, Mike found a way to by-pass the advertised but dysfunctional trouble reporting mechanism and most individuals had their access restored with only a phone call. Without Mike, most staffers would have had to wait until the UMB office responsible got around to their complaint. This should give MBC a new appreciation of Mike and his ability to get things done.

It is not clear how much longer the glitches in the new system will keep surfacing or whether the worst is over.



lations!

rd, from Dr. Mervyn Monteiro's lab-
ded her thesis entitled "Characteriza-
ilin Dimers and Mechanism of Inter-
resenilins" on July 26.

MBC Happenings

Honors

Dr. Chris D. Geddes was re-elected to the editorial board of the Elsevier Journal: *Dyes and Pigments*.

Comings and Goings

Dr. Christine Harman joined Dr. Mervyn Monteiro's Laboratory as a Research Associate and **Rebecca Danner** is Dr. Monteiro's new Research Assistant.

Grants and Contracts

Dr. Shengyun Fang, NIH, "Novel Functions for gp78 in ER-associated Degradation," 7/1/06, \$290,021, yr 3 of 5.

Dr. Long-Sheng Song, AHA, "Mechanisms of Excitation-Ca²⁺ Release Uncoupling in Heart Failure," 7/1/06, \$260,000, 4-yr award.

Dr. Joseph Kao, NIH, "Caged Probes for Cellular Physiology," 8/1/06, \$94,050, yr 1 of 1.

Publications

Gryczynski I, Malicka J, Nowaczyk K, Gryczynski Z, **Lakowicz JR**. Waveguide-modulated surface plasmon-coupled emission of Nile blue in poly(vinyl alcohol) thin films. *THIN SOLID FILMS* 510 (1-2): 15-20 JUL 3 2006

Aslan K, Holley P, **Geddes CD**. Metal-enhanced fluorescence from silver nanoparticle-deposited polycarbonate substrates. *JOURNAL OF MATERIALS CHEMISTRY* 16 (27): 2846-2852 2006

Ray K, Badugu R, **Lakowicz JR**. Metal-enhanced fluorescence from CdTe nanocrystals: A single-molecule fluorescence study. *JOURNAL OF THE AMERICAN CHEMICAL SOCIETY* 128 (28): 8998-8999 JUL 19 2006

Porasuphatana S, Weaver J, **Rosen GM**. Inducible nitric oxide synthase catalyzes ethanol oxidation to alpha-hydroxyethyl radical and acetaldehyde. *TOXICOLOGY* 223 (3): 167-174 JUN 15 2006

Ray K, Badugu R, **Lakowicz JR**. Langmuir-Blodgett monolayers of long-chain NBD derivatives on silver island films: Well-organized probe layer for the metal-enhanced fluorescence studies. *JOURNAL OF PHYSICAL CHEMISTRY B* 110 (27): 13499-13507 JUL 13 2006

White C, Yang J, **Monteiro MJ**, Foskett JK. CIB1, a ubiquitously expressed Ca²⁺-binding protein ligand of the InsP(3) receptor Ca²⁺ release channel. *JOURNAL OF BIOLOGICAL CHEMISTRY* 281 (30): 20825-20833 JUL 28 2006

Raines KW, Cao GL, Lee EK, **Rosen GM**, Shapiro P. Neuronal nitric oxide synthase-induced S-nitrosylation of H-Ras inhibits calcium ionophore-mediated extracellular-signal-regulated kinase activity. *BIOCHEMICAL JOURNAL* 397: 329-336 Part 2, JUL 15 2006

Tikhonov I, Deetz CO, Pacal R, Berg S, **Lukyanenko V**, Lim JK, Pauza CD. Human V gamma 2V delta 2 T cells contain cytoplasmic RANTES. *INTERNATIONAL IMMUNOLOGY* 18 (8): 1243-1251 AUG 2006

Zhu JS, **Luther PW**, Leng QX, Mixson AJ. Synthetic histidine-rich peptides inhibit *Candida* species and other fungi in vitro: Role of endocytosis and treatment implications. *ANTIMICROBIAL AGENTS AND CHEMOTHERAPY* 50 (8): 2797-2805 AUG 2006

Xi LF, Kiviat NB, Hildesheim A, **Galloway DA**, Wheeler CM, Ho J, Koutsky LA. Human papillomavirus type 16 and 18 variants: Race-related distribution and persistence. *JOURNAL OF*

Odds and Ends

Kudos to....Dr. Iliia Baskakov, who was asked to write a review of prion research for *Europe Bioforum*, a popular science magazine. The article appeared in the June 2006 issue which came out in July.

Kudos to....Dr. Chris Geddes, whose work on glucose sensing contact lens garnered UMBI a mention in the Baltimore Sun online (<http://www.baltimore-sun.com/business/bal-bz.drugs27aug27,0,5930483.story?page=1>).

Finishing touches.... Summer came and went and so did two students. Dushon Riley, a UMB graduate student, finished a summer rotation in Dr. Lederer's laboratory and Elena Havilo, a Villa Julie undergraduate, finished a summer internship in Dr. Mervyn Monteiro's laboratory. Both students have indicated that they would like to return.



THE NATIONAL CANCER INSTITUTE 98 (15): 1045-1052 AUG 2 2006

Fitzhenry R, Dahan S, Torres AG, Chong Y, Heuschkel R, Murch SH, Thomson M, Kaper JB, Frankel G, Phillips AD. Long polar fimbriae and tissue tropism in *Escherichia coli* O157 : H7. *MICROBES AND INFECTION* 8 (7): 1741-1749 JUN 2006

Dong C, Muriel JM, Ramirez S, Hutter H, Hedgecock EM, Breydo L, Baskakov IV, Vogel BE. Hemicentin assembly in the extracellular matrix is mediated by distinct structural modules. *JOURNAL OF BIOLOGICAL CHEMISTRY* 281 (33): 23606-23610 AUG 18 2006.

Zhang YX, Aslan K, Malyn SN, Geddes CD. Metal-enhanced phosphorescence (MEP). *CHEMICAL PHYSICS LETTERS* 427 (4-6): 432-437 AUG 31 2006

Talks and Travels

Dr. W. Jonathan Lederer, Vice-chair (co-organizer), Gordon Research Conference - Cardiac Regulatory Mechanisms, Colby-Sawyer College, New London, NH, July 16-21, 2006.

Dr. Long-Sheng Song, Invited speaker, "Local excitation-contraction coupling in normal and diseased hearts," Center of Translational Medicine, Thomas Jefferson University Jefferson College of Medicine, July 12, 2006.

Dr. Long Sheng Song, Oral presentation, "Transverse tubule remodeling, orphaned ryanodine receptors and Ca²⁺ instability in failing hearts," Gordon Research Conference, Colby-Sawyer College, New London, NH, July 16-21, 2006.

Dr. Iliia Baskakov, Plenary lecturer, "Prions: what makes the protein infectious?" Joint Funders' Transmissible Spongiform Encephalopathies Workshop 2006, University of Warwick, UK, August 30 - September 1, 2006.