

INSIDE

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Annual Retreat Issue

MEDICAL BIOTECHNOLOGY CENTER - UNIVERSITY OF MARYLAND BIOTECHNOLOGY INSTITUTE

Turf's Up!

The weather for MBC's Annual Retreat was fair but slightly damp, but it was not enough to dampen the enthusiasm of the participants. The retreat was held at the Turf Valley Resort for a second year. The program this year was done a little differently than previous years, allowing more time for interaction during the breaks and at lunch. Comments from participants and the difficulty in getting everyone to stop talking and reconvene for the speakers suggests that this

worked very well. The program started with a welcome from MBC Director W. Jonathan Lederer, followed by three speakers from the MBC. Drs. Didier Brochet and Brian Hagen, both Research Associates from the Institute of Molecular Cardiology, spoke on the work they are doing on calcium signalling in heart. Assistant Professor Shengyun Fang, head of the Program in Cancer Biology, talked about a new protein recently discovered in his laboratory. After a 45 minute break, the participants reconvened to hear MBC Professor Joseph Kao, head of the Program in Nanobiology, give the group an update on his work with Dr. Gerald Rosen on a new way to do bioimaging. Research Associate Natallia Makarava from the Program in Prion Biology discussed the program's latest work on prions. Next was our first guest speaker, Dr. Mordecai Blaustein from the University of Maryland Baltimore, who spoke on his work in calcium signaling. Dr. Blaustein is a long time collaborator of Dr. Lederer's and was the person who originally recruited Dr. Lederer to work in Maryland.

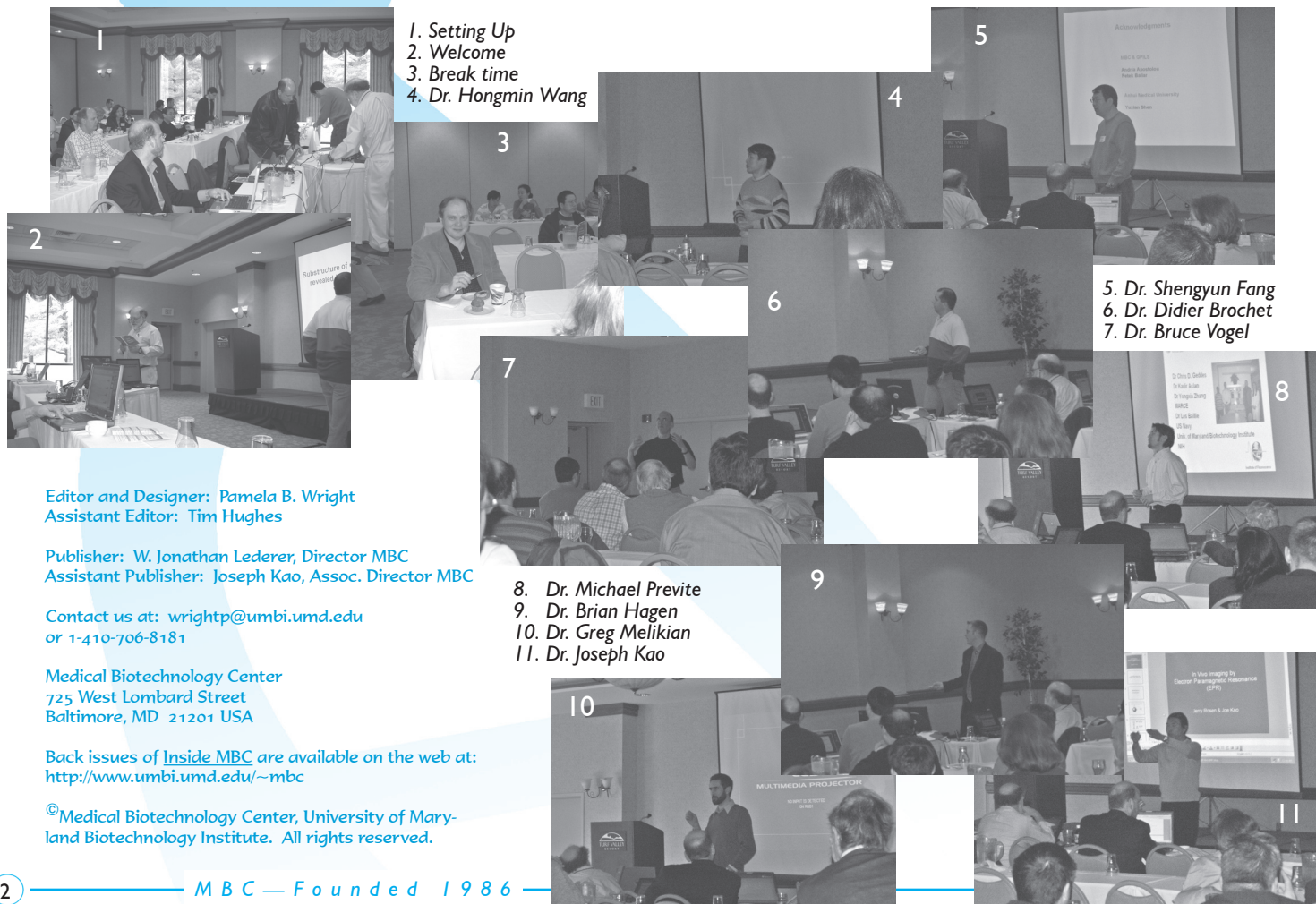
A lingering lunch with an dazzling array of desserts continued the conversations started after the interesting presentations from the morning sessions. Upon reconvening, Dr. Lederer discussed the new imaging equipment that has

recently been funded and some that is only in the planning stage for the MBC. He was followed by Dr. Michael Previte from MBC's Institute of Fluorescence who detailed a new, faster approach to Western blotting, a standard but time consuming technique in molecular biology laboratories. That brought up our second guest speaker, Dr. Greg Melikian from the Institute of Human Virology who spoke on his work on viral membrane fusion with an emphasis on bioimaging. After a break for cookies and fruit, the last session started with Dr. Hongmin Wang from the Institute for Neurodegenerative Diseases who is looking at the effect of the protein ubiquitin on diseases like Huntington's and Dr. Bruce Vogel, head of the Program in Cell Structure and Development who stressed the future directions his work on extracellular matrix proteins might take. The session was to close with a talk from Dr. Al Place from UMBI's Center of Marine Biotechnology, but he was delayed and could not make it in time. Rather than wait well beyond the expected end time, it was decided to have Dr. Place come for a regular seminar at the MBC at a later date.



MBC Retreat 2007 Schedule

Time	Presenter	Title
8:00-8:50am	Arrival/Continental Breakfast	
8:50-9:00	W. Jonathan Lederer	Welcome
9:00-9:20	Didier Brochet	"Substructure of calcium sparks revealed by calcium blinks"
9:20-9:40	Brian Hagen	"Arrhythmogenic Ca^{2+} waves initiated by local activation of ryanodine receptor channels through photolysis of $BiNiX$ "
9:40-10:00	Shengyun Fang	"Silencing The Expression Of SUPRESIN, A Secreted and ER Stress-Upregulated Protein, Increases Cell Proliferation And Sensitizes Cells To ER Stress-Induced Cell Death"
10:00-10:45	Break (45 min)	
10:45-11:05	Joseph Kao	"In vivo imaging by electron paramagnetic resonance"
11:05-11:25	Natalia Makarava	"Prions, strains, species barrier"
11:25-12:05	Mordecai Blaustein, UMB	"Microdomains and Local Calcium Signals: How 'Fuzzy' is 'Fuzzy Space'?"
12:05-1:30	Lunch (85 min)	
1:30-1:50	W. Jonathan Lederer	"New Imaging at MBC: 2007 and the Future"
1:50-2:10	Michael Previte	"Microwave focused Chemiluminescence: Progress Towards Ultra fast and Sensitive Western Blots"
2:10-2:50	Greg Melikian, IHV	"Functional studies of viral protein-induced membrane fusion."
2:50-3:35	Break (45min)	
3:35-3:55	Hongmin Wang	"Reduction of polyglutamine- and polyalanine-induced toxicity by Ubiquilin"
3:55-4:15	Bruce Vogel	"Extracellular matrix proteins in development and disease"
4:15-4:55	Al Place, COMB	"Karlodinium veneficum, the little Chesapeake Bay Dinoflagellate with a big bite."



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