Conference Co-Chairs:

Martine Rothblatt, Ph.D.
Présidente directrice générale, Unither Biotech, Inc.

Baruch S. Blumberg, M.D., Ph.D.
Senior Advisor to the President, Fox Chase Cancer Center

Tuesday, February 23, 2010 – Friday, February 26, 2010

Tuesday, February 23, 2010

4:00 - 11:00 PM Hotel Check-in / Conference Check-in
6:30 - 9:30 PM Buffet Reception

Wednesday, February 24, 2010

7:00 - 7:45 AM Buffet Breakfast
7:45 - 8:00 AM Opening Remarks - Martine Rothblatt, Ph.D., Conference Co-Chair
8:00 - 9:30 AM Session 1 – Telemanagement of Very Small In Vivo Devices

8:00 - 8:20 AM Robert C. Bourge, M.D. – Chairman & Director, Division of Cardiovascular Disease: University of Alabama at Birmingham, “Future Potential of Telemedical Devices to Monitor and Enhance Patient Health.”


9:00 - 9:20 AM Sinan Haliyo, Ph.D. – Associate Professor: Université Pierre et Marie Curie, “Artificial Helical Nanobelt Robots for Biomedical Applications”

9:30 - 10:00 AM Coffee Break

10:00 - 12:00 PM Session 2 – Technology Development Pathways for Medical Nanobots

10:00 - 10:20 AM Sylvain Martel, Eng., Ph.D., FCAE – Associate Professor: Institute of Biomedical Engineering, École Polytechnique de Montréal, “Travelling From the Arteries to the Microvasculature with Different Typés of Nanobots”

10:30 - 10:50 AM Ralph C. Merkle, Ph.D. – Senior Research Fellow: Institute for Molecular Manufacturing, “Medical Nanorobots and Their Development”

11:00 - 11:20 AM Tad Hogg, Ph.D. – Research Fellow: Institute of Molecular Manufacturing, “Chemical Power for Microscopic Robots in Capillaries”

11:30 - 11:50 AM Stephen C. Lee, Ph.D. – Associate Professor: The Ohio State University, “Protein Engineering to Solve Problems at Nanoscale”

12:00 - 1:00 PM Buffet Lunch

Sponsored by: United Therapeutics Corporation

1040 Spring Street; Silver Spring, MD 20910
1:00 – 2:00 PM  **Keynote Speaker**  

2:00 – 2:30 PM  **10S2SKQA** Ray Kurzweil – Q & A Discussion

2:30 – 3:00 PM  Coffee Break

3:00 – 5:00 PM  **Session 3 – Nanomedical Structures and Devices in Development Today**

3:00 – 3:20 PM  **10S3P1** Ennio Tasciotti, Ph.D. – Assistant Professor: University of Texas Health Sciences Center, “BioNanoScaffolds for Personalized Post-Traumatic Osteoregeneration”

3:30 – 3:50 PM  Shuyi Li, M.D., Ph.D. – Research Scientist: Medical College of Georgia, “Porous-wall Hollow Glass Microspheres as Novel Potential Nanocarriers for Biomedical Applications”

4:00 – 4:20 PM  **10S3P3** Francine Goulet, Ph.D. – Professor: CHA, Hopital de l’Enfant-Jesus, “Nanomedical Biological Device in Development for Torn ACL Replacement”

4:30 – 4:50 PM  **10S3P4** Mark Kester, Ph.D. – Professor: Pennsylvania State Hershey College of Medicine, “Dihydrosphingosine-1-Phosphate Triggers Lineage Switching of Myeloid-Derived Suppressor Cells to Antitumor Immune Effectors During Photoimmuno-Nanotherapy”

7:00 – 9:00 PM  Dinner at Manoir des Sables

Thursday, February 25, 2010

7:45 – 8:45 AM  Buffet Breakfast

9:00 – 9:30 AM  **10S4OR** Opening Remarks – Baruch S. Blumberg, M.D., Ph.D., Conference Co-Chair

9:30 – 10:30 AM  **Session 4 – Nano-Bio Interfaces & Hybrids**

9:30 – 9:50 AM  **10S4P1** William Dynan, Ph.D. – Professor & GRA Eminent Scholar: Institute of Molecular Medicine and Genetics; College of Georgia, “Understanding and Re-engineering Nucleoprotein Machines to Cure Human Disease”

10:00 – 10:20 AM  **10S4P2** Professor Yechzekel Barenholz, Ph.D. – Professor: Hebrew University of Jerusalem, “Phospholipid Liposomes as Potential Biolubricant Agents for Friction and Wear Reduction in Cartilage of Human Synovial Joints: The Role of Phospholipid Physical Chemistry and Nanoism”

10:30 – 11:00 AM  Coffee Break

11:00 – 12:00 PM  **Session 5 – Use of Systems Biology to Accelerate Nanomedical Therapies**

11:00 – 11:20 AM  **10S5P1** Eberhard O. Voit, Ph.D. – Professor: Georgia Institute of Technology, “The Role of Systems Biology in Drug Delivery and Predictive Health”


12:00 – 1:00 PM  Buffet Lunch

Sponsored by: United Therapeutics Corporation 1040 Spring Street; Silver Spring, MD 20910
1:00 – 1:30 PM  **Keynote Speaker**


1:30 – 2:00 PM **10S5SKQA Q & A on Regulation of Nanomedical & Telemedical Technology**

2:00 – 2:30 PM  **Coffee Break**

2:30 – 4:30 PM  **Session 6 – Nanomedical Pharmaceuticals**

2:30 – 2:50 PM  **10S6P1** Professor Yechezkel Barenholz, Ph.D. – Professor: Hebrew University of Jerusalem, “From Nanotechnology to Nano-drugs: Our DoxifPM Experience”

3:00 – 3:30 PM  **10S6P2** Harvey E Smith Presenting for Bradley K. Weiner, M.D. – Associate Professor: Weill Cornell Medical College, “Nanoporous Silicon Particles (NSP) as a Delivery System for the Treatment of Musculoskeletal Disease”

3:30 – 3:50 PM  **10S6P3** Molly S. Shoichet, Ph.D., FRSC – Professor: University of Toronto, “Polymeric Nanoparticles for Targeted Delivery in Cancer”

4:00 – 4:20 PM  **10S6P4** Christian Schafmeister, Ph.D. – Associate Professor: Temple University, “Using Molecular Lego for Nanomedicine”

4:30 – 4:45 PM  **Closing Remarks**

7:00 – 10:00 PM  **Closing Banquet at Cavallini Restaurant; 101 Rue du Moulin, Magog, QC**

**Friday, February 26, 2010**

12:00 PM  Hotel Check Out