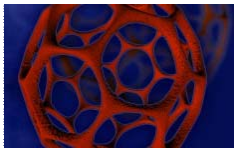
ASME Nanotechnology Institute

NanoEngineering for Medicine and Biology (NEMB) Workshop Series



The **NEMB Workshop Series** complements ASME's NEMB Congress. The NEMB Congress addresses the use of engineering and computational approaches in the emerging field of NanoEngineering for Medicine and Biology (NEMB). The intent of the workshop is to educate participants on NanoEngineering advances to aid in the resolution of medical problems. Current medical challenges and nano-based engineering methods will be presented by acclaimed specialists in the areas of diagnosis and nano-based therapy of cancer, biomaterial platforms for cancer treatment, imaging platforms, tissue engineering amongst others. The Workshop will precede the **6th Frontiers in Biomedical Devices Conference** on **Sunday, September 25th, 2011** in Irvine, CA.

Workshop Program Outline:

8:00-8:30 Welcome and Introduction
ASME NEMB Steering Committee

8:30-9:00
Topic: *Nanodiamond-Based Therapeutic Delivery Agents For Enhanced Cancer Treatment*

Presented by Dean Ho, Ph.D.
AssociateProfessor, Departments of Biomedical Engineering and Mechanical Engineering, Robert R. McCormick School of Engineering and Applied Science
Director, Laboratory for Nanoscale Biotic-Abiotic Systems Engineering (N-BASE), Robert H. Lurie Comprehensive Cancer Center, Northwestern University

9:00-9:30
Topic: *Cancer: Nano-Engineered Strategies for Cellular Interrogation*

Presented by Michael A. Teitell M.D., Ph.D.
Departments of Pathology and Laboratory Medicine and Pediatrics
Chief, Division of Pediatric and Developmental Pathology
Co-Director, Cancer Cell Biology Program Area, Jonsson Cancer Center

9:30-10:00
Topic: *Novel biomaterial platforms for cancer treatment and tissue engineering*

Presented by Benjamin Wu, D.D.S., Ph.D.
Professor and Chair
Department of Bioengineering, Department of Materials Science
Division of Advanced Prosthodontics, Biomaterials, and Hospital Dentistry
UCLA Engineering

10:00-10:30
Topic: *Implantable Drug Delivery Platforms*

Presented by Nicole Moore, Sc.D.

PS-OC Project Manager
Office of Physical Sciences-Oncology
National Cancer Institute

10:30-11:00
Topic: *How biomaterials interact with the immune system, visualizing the response in vivo and developing methods to mitigate inflammation for regenerative medicine and tissue engineering*

Presented by Wendy Liu, Ph.D.
Assistant Professor
Edwards Lifesciences Center for Advanced Cardiovascular Technology
Department of Biomedical Engineering University of California, Irvine

11:00-11:30
Topic: *Targeted Drug Delivery*

Presented by Daniel Kamei, Ph.D.
Associate Professor and Vice Chair
Department of Bioengineering
UCLA Engineering

11:30-12:00
Topic: *Modeling/Simulation of Cancer in Nanomedicine*

Presented by Vittorio Cristini, Ph.D.
The Victor and Ruby Hansen Surface Professor of Molecular Modeling of Cancer, UNM Cancer Center
Professor and Director of Computational Biology, Dept of Pathology Professor, Dept of Chemical and Biomedical Engineering
The University of New Mexico

AFTERNOON (1:30PM-5:30PM)
NEMB Poster Session

1:30pm-2:00pm Poster Introduction
2:00pm-3:30pm Talks by selected investigators presenting posters
3:30pm-5:30pm Poster Session