



# 2007-2008

# Materials Council Seminar Series

## Georgia Institute of Technology

## *Mauro Ferrari*

Brown Institute of Molecular Medicine  
Department of Biomedical Engineering  
University of Texas Health Science Center

## “NANOMEDICAL LANDSCAPES...”

**Tuesday, November 20, 2007**  
**Verco Classroom 299 – LOVE Bldg.**  
**3:00-4:00PM**

### ABSTRACT

... complete with lush scenery, celebrated landmarks, the majestic scenarios at a distance, and the small places that only you and I would care about - this is my metaphorical plan for the talk. More technically speaking, I believe that the great breakthrough directions for nanotechnology in medicine are in the field of early detection of disease from biological fluids, and the delivery of therapeutic action to the right place at the right time. Thus, the focus of the presentation will be on these themes. More specific keywords are: Silicon, mathematics, cancer, rational design - and Alliance for NanoHealth, the latter being the consortium of institutions we have established in the Houston area to help morph great nanotechnologies into great nanomedicines.

### BIOGRAPHY

Dr. Mauro Ferrari is a founder of biomedical nano/micro-technology, especially in their applications to drug delivery, cell transplantation, implantable bioreactors, and other innovative therapeutic modalities. In these fields, he has published more than 150 peer-reviewed journal articles and six books. He is the inventor of more than 20 issued patents, with about thirty more pending in the US and internationally. His contributions have been recognized by a variety of accolades, including: the Presidential Young Investigator Award of the National Science Foundation; the Shannon Director's Award of the National Institutes of Health; the Wallace H. Coulter Award for Biomedical Innovation and Entrepreneurship; and the Marzio Tremaglia Italiani nel Mondo Award from the Italian Ministry of Foreign Affairs. His career research and development portfolio totals over \$50 million, including support from the NCI, NIH, DoD, NASA, NSF, DARPA, DoE, the State of Texas, and the State of Ohio, The Ohio State University, and several private enterprises. He began his academic career at the University of California, Berkeley, where he tenured in Material Science, Civil Engineering, and Bioengineering. Upon recruitment to the Ohio State University, he served as the Edgar Hendrickson Professor of Biomedical Engineering, Professor of Internal Medicine, Mechanical Engineering, Materials Science and Associate Vice President, Health Sciences Technology and Commercialization, Associate Director of the Dorothy M. Davis Heart and Lung Research Institute and Director of the Biomedical Engineering Center.

Host: Prof. Rina Tannenbaum, 5-1235; [rina.tannenbaum@mse.gatech.edu](mailto:rina.tannenbaum@mse.gatech.edu)