



**MIT** Massachusetts Institute of Technology  
Program on the Pharmaceutical Industry (POPI)

The Future of the Pharmaceutical Industry Symposium  
*"Pharmacogenomics, Drug Development and the Cost of Health Care"*

December 9 - 10, 2003

New technologies are shifting the terrain of drug discovery and development. The world of healthcare is undergoing the first part of a major revolution. But will the tremendous advances in science and technology that have unfolded in recent years serve the goal of greater human health? What are the key challenges and issues facing scientists and the pharmaceutical industry? What might the future look like?

The 2003 symposium sponsored by the MIT Program on the Pharmaceutical Industry - "Pharmacogenomics, Drug Development and the Cost of Health Care" - brings together distinguished representatives from varying perspectives, including industry, science, government, and academia, to explore this revolution.

The concept of "personalized medicine" - the use of molecular markers to develop drugs targeted to serve the individual patient's particular condition and side effects profile, will be the framework for the symposium. In three sessions over two days, participants will join in an examination of some of the major advances that are changing the face of pharmaceutical R&D, including SNPs, complex biology, imaging, and tissue engineering. Distinguished experts will discuss what these developments mean for the future of pharmaceutical innovation. A session on disease mechanism and models will put the advances in the specific contexts of diabetes, cardiovascular disease, cancer, and infectious diseases, drawing from these examples important lessons that participants will be able to apply to situations in their own work.

Clinical trial design and health economics will be key topics in the session on "Driving Forces and Barriers," which will include a panel discussion that brings together the perspectives of consumers, the FDA, healthcare payers, and the biotechnology industry.

This important symposium will be a unique opportunity to gain deep insights into how the industry and society can realize the promise of more effective and better-tolerated therapies, and thus of more efficient use of society's healthcare resources.





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Wong Auditorium, Tang Center E51

**Tuesday, December 9, 2003**

Morning Session: **FRONTIERS OF SCIENCE AND TECHNOLOGY**

Chair: Charles L. Cooney, Ph.D.

- 8:30 Keynote (*Anthony J. Sinskey, Sc.D.*)
- 9:25 SNPs (*David E. Housman, Ph.D.*)
- 9:55 Systems Biology (*Douglas A. Lauffenburger, Ph.D.*)
- 10:25 Systems Biology (*Peter K. Sorger, Ph.D.*)
- 10:40 Break
- 10:55 Imaging (*Martha L. Gray, Ph.D.*)
- 11:25 Tissue Engineering (*Linda G. Griffith, Ph.D.*)
- 11:55 Discussion with Speakers

12:30 - 1:30 Lunch

Afternoon Session: **IMPACTING CLINICAL PRACTICE**

Chair: Robert H. Rubin, M.D.

- 1:30 Overview (*Kip Martha, M.D.*)
- 2:20 Diabetes (*Alan C. Moses M.D.*)
- 2:55 Cardiovascular (*Geoffrey S. Ginsburg, M.D., Ph.D. - Millennium Pharmaceuticals*)
- 3:25 Break
- 3:40 Oncology (*George D. Demetri, M.D., and Thomas G. Roberts Jr., M.D.*)
- 4:30 Discussion with Speakers



Wednesday, December 10, 2003

Morning Session:    **ADVANCING TECHNOLOGY AND THE EVOLVING HEALTH POLICY ENVIRONMENT**

**Chair:**    Thomas J. Allen, Ph.D.

- 8:00    Overview (*Stan N. Finkelstein, M.D.*)
- 8:35    Panel - Industry Perspectives
  - Biotech (*Robert N. McBurney, Ph.D. - Beyond Genomics*)
  - Big Pharma (*To Be Decided*)
  - Ex-Big Pharma (*Donald C. Anderson, M.D.*)
- 9:35    Clinical Trials (*Irving H. Fox, M.D., C.M. - Millennium Pharmaceuticals*)
- 10:05    Health Economics (*William H. Crown, Ph.D. - The MEDSTAT Group, Inc.*)
- 10:35    Payor's Perspective (*Norman C. Payson, M.D., Former CEO - Oxford Health Plan*)
- 10:50    Break
- 11:05    FDA Speaker - "Safe Harbor" (*Janet Woodcock, M.D.*)
- 11:35    Environment (*Kent Larson*)
- 12:05    Discussion with Speakers
  
- 1:00    Adjourn

