

August M. Watanabe

Dr. August M. Watanabe was a renowned physician, researcher, professor, entrepreneur, and venture capitalist. He was the founding Chairman of BioCrossroads, and developed the initial strategic plan that established the organization. Dr. Watanabe was Executive Vice President of Science and Technology and a member of the Board of Directors at Eli Lilly and Company from 1996 to 2003. He joined Lilly in 1990, and became President of Lilly Research Laboratories in 1994. Under his leadership, Lilly launched 11 important new pharmaceutical products. Prior to joining Lilly, Dr. Watanabe was a full-time faculty member of the Department of Medicine at the Indiana University School of Medicine from 1971 to 1990. In 1978, he became the youngest Professor of Medicine at the university, and from 1983 to 1990, he was the Chairman of the Department of Medicine. Dr. Watanabe served as co-founder of Marcadia Biotech, partner in Twilight Venture Partners, and a director of Ambrx, Endocyte, QuatRx, and Kalypsys. He was also a senior advisor to Frazier Healthcare Ventures. He also remained active in the community, serving as a director of the Indiana University Foundation, the Regenstrief Foundation, Christel House International, and the Indianapolis Symphony Orchestra. During his academic and research career, Watanabe co-authored more than 100 scientific publications and book chapters and served on the editorial boards of scholarly journals and as an officer in several national academic organizations, including the American College of Cardiology and the American Heart Association. Dr. Watanabe received his B.S. from Wheaton College and his MD from the Indiana University School of Medicine.

# The First Annual

# August M. Watanabe Symposium in Biotechnology

Indiana University
Bloomington
Saturday, October 9, 2010
Chemistry 122

**Sponsored By:** 







## Jeffery W. Kelly

Dr. Kelly is currently the Lita Annenberg Hazen Professor of Chemistry in the Skaggs Institute for Chemical Biology and Chair of the Department of Molecular and Experimental Medicine at the Scripps Research Institute in La Jolla, CA. Dr. Kelly received his PhD in Organic Chemistry from the University of North Carolina. After postdoctoral training at the Rockefeller University, he moved to Texas A&M University where he rose to a full



professorship. The central theme of Dr Kelly's research is to understand the mechanism(s) of protein folding and misfolding, and to determine how these processes are related to normal physiology and disease using chemical, biophysical, and cell biological approaches.

## Laura L. Kiessling

Dr. Kiessling is currently a Hilldale Professor of Chemistry and the Laurens Anderson Professor of Biochemistry at the University of Wisconsin-Madison. Dr. Kiessling received her PhD in Organic Chemistry from Yale University. After completing postdoctoral training at the California Institute of Technology, she began her independent career at the University of Wisconsin-Madison. Her research group



develops and implements synthetic methods that provide access to biologically active compounds for hypothesis-driven and discoverydriven research. Much of their research is targeted at understanding the chemistry and biology of protein-saccharide interactions.

#### Thomas V. O'Halloran

Dr. Thomas V. O'Halloran is widely known for his interdisciplinary research program, which involves chemical synthesis, analytical chemistry, biochemistry, molecular biology and cell biology. He is the Director of the Chemistry of Life Processes Institute, administering and leading teams of interdisciplinary biomedical researchers. He also serves as the Associate Director for the Basic Sciences Research Division of the Robert



H. Lurie Comprehensive Cancer Institute. Dr. O'Halloran is the Morrison Professor in the Department of Chemistry and in the Department of Biochemistry, Molecular Biology and Cell Biology at Northwestern. His research centers on the assembly of novel agents for treatment of infectious diseases and cancer, especially those which alter the regulatory biology of transition metal receptors involved in signaling and trafficking pathways. Most recently, he has discovered nanoscale processes for targeted delivery of multifunctional therapeutic agents for treatment of hematological cancer and solid tumors: these agents are moving rapidly towards clinical trials.

### **Ronald T. Raines**

Dr. Raines is the Henry Lardy Professor of Biochemistry and Professor of Chemistry at the University of Wisconsin-Madison. He earned his degrees at MIT and Harvard University, and was a postdoctorate at UCSF. Using techniques that range from synthetic chemistry to cell biology, he is illuminating in atomic detail both the chemical basis and the biological purpose for protein structure and protein function. His efforts have



led to fundamental insight into the relationship between amino-acid sequence and protein function (or dysfunction), as well as to the creation of novel proteins with desirable properties. For example, he has discovered an RNA-cleaving enzyme that is in a human clinical trial as an anti-cancer agent, demonstrated that stereoelectronic effects play a key role in the stability of nearly all proteins and used that knowledge to create hyperstable collagens, and developed chemical processes to synthesize proteins and convert crude biomass into useful fuels and chemicals.