



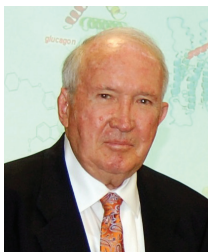
ROBERT M. MAHONEY
is President and Chief Executive Officer of Belmont Savings Bank.

Mahoney received his M.B.A. from Columbia Business School in 1971. He is a 1970 graduate of the University of Massachusetts, where he earned a Bachelor of

Science degree in Chemistry. He received the 1996 Distinguished Alumnus Award from the University of Massachusetts, and the 2006 Columbia University School of Business Leadership Award. He is the recipient of the 2009 Henry L. Shattuck Boston City Champion Award and the 2011 USS Constitution Museum's Charles Francis Adams Award for public service.

In February 2014, Mahoney was named the "most-admired CEO of a small or mid-sized company in Massachusetts" by the Boston Business Journal. The award follows the bank's significant recent success, doubling its assets in the past three years, surpassing one billion dollars, and opening three new in-store branches. In addition the bank created the Belmont Savings Bank Foundation, which has become a financial partner to many local non-profit groups, institutions, and schools operating within the communities where the bank operates. Since its inception two years ago, the Foundation has donated over \$150,000 to local organizations.

Mahoney has held several community leadership positions in Massachusetts. He is Past Chairman of the United Way Board of Directors and Executive Committee, and serves on the University of Massachusetts Amherst Foundation board. He is also a cofounder of Community Gems, a collaboration of non-profit agencies that work together with community partners to meet the diverse needs of Greater Boston's youth and families. He is a board member of the Sitel Corporation, a \$1.5B worldwide customer-service firm in Nashville and International Data Group, a \$3B technology media and research group based in Boston. Mahoney also sits on the Archdiocese of Boston Finance Council and chairs the Council's Finance and Real Estate Steering Committee.



WILLIAM E. MAHONEY
is a 1955 alumnus of the Department of Chemistry at the University of Massachusetts, Amherst. Professor Mahoney was Vice Chairman and Chief Operating Officer, as well as Chairman of the Executive Committee of the Board of Directors, of Witco Corporation (now Chemtura Corporation), a Fortune 500 manufacturer of specialty chemical and petroleum products.

After retiring from Witco in 1996, Professor Mahoney diverted his energies to developing the next generation of leadership in science and industry. Professor Mahoney was a longtime adjunct faculty member in the UMass Chemistry Department. He taught a highly successful seminar series entitled "The Business of Science: Contemporary Practices" for several years. Through this seminar series, students were introduced to topics in the management of science and technology by speakers from the business management communities. Professor Mahoney also chaired the Natural Sciences and Mathematics Advisory Council. In recognition of his distinguished achievements, the University of Massachusetts conferred to him the Chancellor's Medal in 1996. In 2006 he received the Distinguished Achievement Award. This award honors individuals for exceptional achievements in a chosen profession, demonstrated leadership, and exemplary accomplishments that merit special recognition by the campus. Professor Mahoney has served as director on several corporate boards, and was until recently the director of Harbor Acquisition Corporation. Currently, Professor Mahoney serves on a non-profit board.

Previous Mahoney Speakers

Professor Joanne Stubbe, 2017-2018
Professor Stuart Schreiber, 2016-2017
Professor Prashant Kamat, 2015-2016
Professor Paul Alivisatos, 2014-2015
Professor Peter Schultz, 2013-2014
Professor Richard DiMarchi, 2012-2013
Professor Hagan Bayley, 2011-2012
Professor Harry Gray, 2010-2011
Chancellor Marye Anne Fox, 2009-2010
Dr. Patricia Dehmer, 2008-2009
Professor Roald Hoffmann, 2007-2008
Dr. Ioannis Miaoulis, 2006-2007
Dr. Madeleine Jacobs, 2005-2006
Professor Richard Zare, 2004-2005
Professor Lawrence Krauss, 2003-2004
Professor Bassam Shakashiri, 2002-2003
Professor Dudley Herschbach, 2001-2002
Dr. Henry Lee, 2000-2001

William E. Mahoney
*Annual Lecture
in Chemistry*

Thursday, October 11, 2018
11:30 a.m.
S330-340
Life Science Laboratories

“THE SURPRISING CHEMISTRY OF NONENZYMATIC RNA REPLICATION”

JACK W. SZOSTAK

Professor of Genetics
Harvard Medical School
Professor of Chemistry and Chemical Biology
Harvard University



Dr. Szostak is an Investigator of the Howard Hughes Medical Institute, Professor of Genetics at Harvard Medical School, Professor of Chemistry and Chemical Biology at Harvard University, and the Alex Rich Distinguished Investigator in the Dept. of Molecular Biology and the Center for Computational and Integrative Biology at Massachusetts General Hospital. Dr. Szostak's early research on telomere structure and function, and the role of telomere maintenance in preventing cellular senescence was recognized by the 2006 Albert Lasker Basic Medical Research Award and the 2009 Nobel Prize in Physiology or Medicine. In the 1990s Dr. Szostak and his colleagues developed in vitro selection as a tool for the isolation of functional RNA, DNA and protein molecules from large pools of random sequences. Dr. Szostak's current research interests are in the laboratory synthesis of self-replicating systems and the origin of life.

ABSTRACT

Abstract- The RNA genomes of the first cells are thought to have emerged from the nonenzymatic replication of short RNA strands, which allowed the first ribozymes to evolve, followed by the evolution of ribozyme catalyzed replication. However, no process for the replication of a nucleic acid genome, independent of evolved enzymatic machinery, has yet been described. I will discuss our recent progress towards the realization of an efficient and accurate system for the chemical replication of RNA. Mechanistic and structural studies have led to new chemical replication systems that are both more prebiotically plausible and more accurate, efficient, and general.

