

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



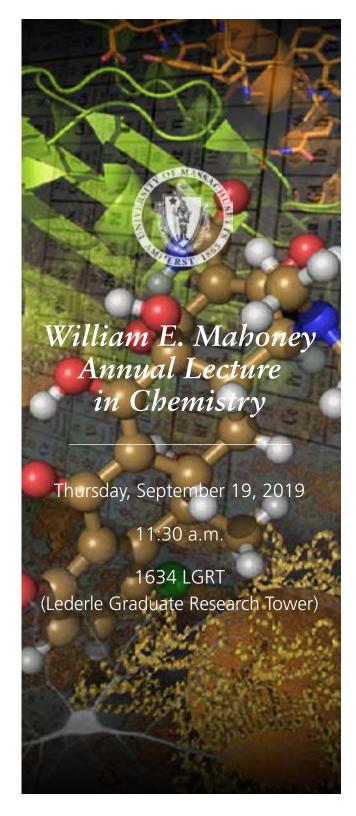
is a 1955 alumnus of the Department of Chemistry at the University of Massachusetts, Amherst. Professor Mahoney was Vice Chairman and Chief Operating Officer, as well as Chairman of the Executive Committee of the Board of Directors, of Witco Corporation (now Chemtura Corporation), a Fortune 500

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 Jack W. Szostak, 2018-2019 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



"SYNTHESIS & ANALYSIS OF BIOPOLYMERS"



GEORGE M. CHURCH

Professor of Genetics Department of Genetics, Blavatnik Institute, Harvard Medical School Director of HMS NHGRI-Center of Excellence in Genomic Science Director of the Personal Genome Project Broad Institute & Wyss Harvard Inst. of Biologically Inspired Engineering

George M. Church, PhD '84, is professor of genetics at Harvard Medical School, a founding member of the Wyss Institute, and director of PersonalGenomes.org, the world's only open-access information on human genomic, environmental, and trait data. Church is known for pioneering the fields of personal genomics and synthetic biology. He developed the first methods for the first genome sequence & dramatic cost reductions since then (down from \$3 billion to \$600), contributing to nearly all "next generation sequencing" methods and companies. His team invented CRISPR for human stem cell genome editing and other synthetic biology technologies and applications – including new ways to create organs for transplantation, gene therapies for aging reversal, and gene drives to eliminate Lyme Disease and Malaria. Church is director of IARPA & NIH BRAIN Projects and National Institutes of Health Center for Excellence in Genomic Science. He has coauthored 450 papers, 105 patents, and one book, "Regenesis". His honors include Franklin Bower Laureate for Achievement in Science, the Time 100, and election to the National Academies of Sciences and Engineering.

ABSTRACT

We have improved technologies for reading and writing nucleic acid and proteins 10 million fold since 2001. We can design and test millions to trillions of engineered genomes, gene therapy capsids, and combinatorial protein mixtures. But this progress is not limited to linear polymers nor to biology, but enables analysis, synthesis, and high throughput functional testing of a variety of complex, yet atomically precise 3D structures including novel chiralities, high density data storage, nanopores etc.

