

ROBERT SAMUEL LANGER

Curriculum Vitae

EDUCATION

1974 Sc.D., Chemical Engineering, MIT

1970 B.S. (with distinction) Chemical Engineering, Cornell University

AWARDS

- 2026 Jan Czochralski Award Laureate, European Materials Research Society, Warsaw, Poland
- 2026 Presidential Fellow (National Academy of Inventors)
- 2026 Bioactive Materials Lifetime Achievement Award (*Bioactive Materials*)
- 2025 Collaborating for Novel Solutions (CNS) Summit Leadership Award
- 2025 Honorary Doctorate, University of Michigan
- 2025 Sir Hans Krebs Prize Lecture (University of Oxford)
- 2025 Plastics Hall of Fame Award
- 2025 Ellis Island Medal of Honor
- 2025 Camurus Lipid Research Foundation Award, Lund, Sweden
- 2025 World Chemical Engineering Congress Lifetime Achievement Award
- 2025 Honorary Doctorate, University of Oxford
- 2025 Honoris Causa, Nova Medical School, Lisboa Portugal
- 2025 Double Helix Medal, Cold Spring Harbor Laboratory, Long Island New York
- 2024 Honorary Doctoral Degree Chiba Institute of Technology, Narashino, Japan
- 2024 Elected Foreign Honorary Member, The Norwegian Academy of Science and Letters
- 2024 Cato T. Laurencin Regenerative Engineering Society Founder's Award
- 2024 Kavli Prize Laureate in Nanoscience, The Kavli Foundation/Norwegian Academy of Science and Letters, Oslo Norway
- 2024 Doctor of Science, Honoris Causa, Elmezzi Graduate School of Molecular Medicine at Northwell Health
- 2024 Doctor of Medicine Honoris Causa, Macau University of Science and Technology
- 2024 Honoris Causa Doctorate, Universidad Alfonso X el Sabio Madrid, Spain
- 2023 Dr. Paul Janssen Award for Biomedical Research (Johnson and Johnson), New York Academies of Science, New York, NY
- 2023 Nano Research Award, *Nano Research*/ Tsinghua University Press, Beijing, China
- 2023 Industrial Pharmacy Section Medal, Federation Internationale Pharmaceutique, The Hague, Holland
- 2023 Lund University Spring Symposium Distinguished Service Award, Lund, Sweden
- 2023 Hamilton Lecture Award Medal, Queen's University Belfast, Northern Ireland, UK
- 2023 Cornell University Distinguished Alumni Award, Ithaca, NY
- 2023 BioAsia Genome Valley Excellence Award, Hyderabad/New Delhi India
- 2023 Honorary Doctorate, Maastricht University, Maastricht Netherlands
- 2022 Henri A. Termeer Innovative Leadership Award MassBio, Cambridge MA
- 2022 Balzan Prize for Biomaterials for Nanomedicine and Tissue Engineering, Fondazione Internazionale Premio Balzan, Milan, Italy
- 2022 Medalla de Oro, Honoris Causa, Universidad de Santiago de Compostela
- 2022 Honorary Doctorate, Alfred University
- 2021 Foundation Frontiers of Knowledge Award, BBVA Foundation
- 2021 Elected Foreign Associate, Chinese Academy of Engineering
- 2021 Biomaterials Global Impact Award
- 2021 Falch Lecture Prize, University of Bergen, Norway
- 2021 John P. Merrill Award
- 2021 Honorary Doctor of Engineering, Olin College of Engineering
- 2021 Honorary Doctorate, Ohio State University
- 2020 Medalha da Ciência, Highest Distinction for Scientists, Government of Portugal
- 2020 Excellence in Biomaterials Science Award (Surfaces in Biomaterials Foundation)

2020	Elected Fellow, American Association for Cancer Research
2020	Maurice-Marie Janot Award Laureate
2019	Dreyfus Prize in the Chemical Sciences
2019	Honorary Degree, Columbia University
2019	National Library of Medicine (Friends) Distinguished Medical Science Award
2019	Hope Funds for Cancer Award of Excellence in Basic Sciences
2018	Named Number 1 Translational Researcher in the World (Nature Biotechnology)
2018	Elected International Fellow of the Royal Society of Canada
2018	Alpha Omega Dental Fraternity Achievement Medal Award
2018	Inducted into Hall of Fame, Advanced Materials
2018	Honorary Doctorate, Université Laval, Canada
2018	Leadership Award for Historic Scientific Advancement (American Chemical Society CME)
2018	Honorary Doctorate, University of Limerick, Ireland
2018	Honorary Doctorate, University of Illinois
2017	Named Number 1 Translational Researcher in the World (Nature Biotechnology)
2017	Kabiller Prize in Nanoscience and Nanomedicine
2017	Honorary Doctorate, National Institute of Astrophysics, Optics and Electronics, Mexico
2017	Memorial Sloan Kettering Medal for Outstanding Contributions to Biomedical Research
2017	Honorary Degree, Gerstner Graduate School, Memorial Sloan Kettering Cancer Center
2017	Tetelman Fellow, Yale University
2016	Honorary Degree, Karolinska Institutet, Sweden
2016	Honorary Degree, Hong Kong University of Science and Technology, Hong Kong
2016	Raymond and Beverly Sackler Award for Sustained National Leadership (Research!America)
2016	Benjamin Franklin Medal in Life Science (Franklin Institute)
2016	Irving Weinstein Foundation Distinguished Lecture Award (American Association for Cancer Research)
2016	Honorary Degree, Carnegie Mellon University
2016	European Inventor Award, Non-European Countries (European Patent Office)
2015	Queen Elizabeth Prize for Engineering
2015	Hoover Medal (American Society of Mechanical Engineers)
2015	Scheele Award (Swedish Pharmaceutical Society)
2015	Kazemi Award for Research Excellence in Biomedicine
2015	Honorary Degree, University of Maryland
2015	Honorary Degree, Hanyang University (South Korea)
2015	Honorary Degree, University of New South Wales (Australia)
2015	Cornell Entrepreneur of the Year
2014	Kyoto Prize in Advanced Technology
2014	Breakthrough Prize in Life Sciences
2014	Biotechnology Heritage Award (Chemical Heritage Foundation)
2014	Chemical Pioneer Award (American Institute of Chemists)
2014	Honorary Degree, Drexel University
2014	Honorary Degree, University of Western Ontario (Canada)
2014	ETH Zurich Chemical Engineering Medal
2014	Elected a Foreign Corresponding Member of the Austrian Academy of Sciences
2014	Mack Memorial Award (Ohio State University)
2013	Wolf Prize in Chemistry (Wolf Foundation)
2013	United States National Medal of Technology and Innovation (for 2011)
2013	RUSNANOPRIZE International Prize in Nanotechnology
2013	Fellow, American Association for the Advancement of Science
2013	Distinguished Investigator Award (American College of Clinical Pharmacology)
2013	Honorary Fellow Award (American College of Clinical Pharmacology)
2013	Honorary Degree, Boston University
2013	Honorary Degree, Tel Aviv University
2013	Honorary Degree, Ben Gurion University
2013	Julio Palmaz Award for Innovation in Healthcare and the Biosciences (BioMed SA)
2013	Industrial Research Institute Medal

2013 IEEE Medal for Innovations in Healthcare Technology
 2013 Founders Award (Society of Biomaterials)
 2013 MDEA Lifetime Achievement Award
 2012 Scientist of the Year (R&D Magazine)
 2012 Elected to National Academy of Inventors (Charter Fellow)
 2012 Priestley Medal (American Chemical Society)
 2012 Perkin Medal (Chemical Heritage Foundation)
 2012 Terumo International Prize (Japan)
 2012 Wilhelm Exner Medal (Austria)
 2012 Fellow, American Institute of Chemical Engineers
 2012 Feodor Lynen Award (Nature Biotechnology)
 2011 Economist Innovation Award for Bioscience
 2011 Warren Alpert Foundation Prize (Warren Alpert Foundation/Harvard Medical School)
 2011 Walker Prize (Boston Museum of Science)
 2011 Apple Award (American Spinal Injury Association/Shepherd Center/Thomas Land Publishers Inc.)
 2011 Honorary Degree, Bates College
 2011 Frontier of Science Award (Society of Cosmetic Chemists)
 2011 Fellow (American Chemical Society)
 2010 Elected International Fellow (Royal Academy of Engineering)
 2010 Founders Award (National Academy of Engineering)
 2010 Honorary Degree, Rensselaer Polytechnic Institute
 2010 Honorary Degree, Willamette University
 2010 Robert Fletcher Award (Thayer School of Engineering, Dartmouth College)
 2010 EMBS Academic Career Achievement Award (IEEE Engineering in Medicine and Biology Society)
 2010 Elected to the Controlled Release Society College of Fellows
 2010 Founding POLY Fellow (Division of Polymer Chemistry, American Chemical Society)
 2009 Honorary Degree, Harvard University
 2009 University of California at San Francisco Medal
 2009 Honorary Degree, Mount Sinai School of Medicine
 2009 Distinguished Chemist Award (New England Institute of Chemists)
 2009 Biomedical Research Leaders Award (Massachusetts Society for Medical Research)
 2008 Millennium Technology Prize
 2008 Max Planck Research Award
 2008 Prince of Asturias Award for Technical and Scientific Research
 2008 Elected Foreign Academic Member (Royal Academy of Pharmacy of Spain)
 2008 Founders Award (American Institute for Chemical Engineers)
 2008 Innovation in Health and Technology Award (Boston History and Innovation Collaborative)
 2008 Acta Biomaterialia Gold Medal (Acta Materialia)
 2008 Named one of the 100 Top Chemical Engineers of the 20th Century (AIChE)
 2007 United States National Medal of Science (for 2006)
 2007 Chemistry of Materials Award (American Chemical Society)
 2007 Herman F. Mark Award (American Chemical Society, Polymer Chemistry Division)
 2007 Honorary Degree, Yale University
 2007 Wenig Memorial Award for Outstanding Achievement in Drug Delivery
 2007 First Prize of Scientific Award (BMW Group)
 2007 Elected to the Biotechnology Hall of Fame
 2006 Elected to the National Inventors Hall of Fame
 2006 Honorary Degree, Northwestern University
 2006 Honorary Degree, Albany Medical College
 2006 Bailey Award (American Institute of Chemical Engineers)
 2005 Von Hippel Award (Materials Research Society)
 2005 Albany Medical Center Prize in Medicine and Biomedical Research
 2005 Dan David Prize (Materials Science)
 2005 Honorary Degree, Uppsala University
 2005 Honorary Degree, Pennsylvania State University

2005 Honorary Degree, University of Nottingham
 2005 Lifetime Achievement Award (Society for *In Vitro* Biology)
 2005 Rainer Hoffmann Product through Science Award (Controlled Release Society)
 2005 Technology Innovation and Development Award (Society of Biomaterials)
 2005 Washington Award (Western Society of Engineers)
 2004 Charles F. Kettering Prize (General Motors Cancer Research Foundation)
 2004 Nelson Taylor Award (Pennsylvania State University)
 2003 Heinz Award for Technology, Economy and Employment
 2003 Harvey Prize in Science and Technology and Human Health
 2003 John Fritz Medal (American Association of Engineering Societies)
 2003 Elected to the Academy of Achievement (Golden Plate Award)
 2003 Honorary Degree, University of Liverpool, England
 2002 Dickson Prize for Science (Carnegie Mellon University)
 2002 Charles Stark Draper Award (National Academy of Engineering)
 2002 Othmer Gold Medal (Chemical Heritage Foundation)
 2002 Nagai Innovation Award (Controlled Release Society)
 2002 Honorary Degree, Hebrew University of Jerusalem
 2002 Herman Schwan Award (University of Pennsylvania)
 2001 Harrison Howe Award (American Chemical Society)
 2000 Honorary Degree, Catholic University of Louvain, Belgium
 2000 Glaxo Wellcome International Achievement Award (Royal Pharmaceutical Society of Great Britain)
 2000 Millennial Pharmaceutical Scientist Award (Millennial World Congress of Pharmaceutical Sciences)
 2000 First Pierre Galletti Award (American Institute of Medicine & Biological Engineering)
 2000 Wallace Carothers Award (American Chemical Society, Delaware Section)
 1999 American Chemical Society Award in Polymer Chemistry
 1999 Esselen Award (American Chemical Society, Northeast Section)
 1999 Ebert Prize (American Pharmaceutical Association)
 1999 G.N. Lewis Medal (University of California at Berkeley)
 1998 Outstanding Pharmaceutical Paper Award (Controlled Release Society)
 1998 Lemelson-MIT Prize for Invention and Innovation
 1998 The Nagai Foundation Tokyo International Prize
 1997 Killian Faculty Achievement Award (MIT)
 1997 Wiley Medal (U.S. Food and Drug Administration)
 1997 Honorary Degree, Technion - Israel
 1996 Canada Gairdner International Award (Canada Gairdner Foundation)
 1996 Honorary Degree, Eidgenossische Technische Hochschule-ETH, Switzerland
 1996 William Walker Award (American Institute of Chemical Engineers)
 1996 Society of Plastics Engineers International Award
 1996 Ebert Prize (American Pharmaceutical Association)
 1996 Elected a Fellow of Biomaterials Science and Engineering
 1996 Avis Distinguished Visiting Professor (University of Tennessee)
 1995 International John W. Hyatt Service to Mankind Award (Society of Plastics Engineers)
 1995 Ebert Prize (American Pharmaceutical Association)
 1995 Elected a Fellow (American Association of Pharmaceutical Scientists)
 1995 PEL Associates Award (PEL Associates, Groton, Connecticut)
 1994 Elected to the American Academy of Arts and Sciences
 1994 Elected a Fellow, Society of Biomaterials
 1993 Distinguished Pharmac. Scientist Award (Highest Honor of the Amer. Assoc. of Pharm. Scient.)
 1992 Elected to the National Academy of Sciences
 1992 Elected to the National Academy of Engineering
 1992 American Chemical Society Award for Applied Polymer Science (Phillips Award)
 1992 Elected a Founding Fellow, American Institute of Medical and Biological Engineering
 1992 Outstanding Pharmaceutical Paper Award (Controlled Release Society)
 1992 Perlman Memorial Award (American Chemical Society, Biochemical Technology Division)
 1991 Organon Teknika Award (European Society for Artificial Organs)

1991 Charles M.A. Stine Award in Materials Science and Eng. (American Institute of Chemical Engineers)
 1990 Professional Progress Award (American Institute of Chemical Engineers)
 1990 Clemson Award for Basic Research (Society for Biomaterials)
 1990 Outstanding Pharmaceutical Paper Award (Controlled Release Society)
 1989 Elected to the National Academy of Medicine
 1989 Creative Polymer Chemistry Award (American Chemical Society, Polymer Division)
 1989 Outstanding patent in Massachusetts and one of the twenty outstanding patents in the U.S. (Intellectual Property Owners, Inc.)
 1989 Founders Award for Outstanding Research (Controlled Release Society)
 1988 Elected to the Gordon Conference Research Council
 1988 Elected Chairman, Gordon Conference on Drug Carriers in Biology and Medicine
 1986 Food, Pharmaceutical and Bioengineering Award (American Institute of Chemical Engineers)
 1983 Outstanding Paper, Institute of Electrical and Electronic Engineering
 1982 Paper Listed as One of the Outstanding Papers of the Year, CHEMTECH
 1982 Recipient of the first Dorothy W. Poitras Chair, MIT
 1982 Outstanding Teacher Award, MIT Graduate Student Council

AWARDS IN DR. LANGER'S NAME

2026 Langer Prize (AIChE)
 2026 Langer-Sanberg Mentorship and Innovation Leadership Award (National Academy of Inventors)

NAMED LECTURES

2025 Kam Family Award Lecture, University of Texas Southwestern
 2025 Coleman Seskind Lecture, University of Chicago
 2025 Sir Hans Krebs Lecture, Oxford University
 2025 President's Lecture Series, Rice University
 2025 Ana Lazaro Commencement Address, NOVA Lisbon
 2025 Dervan Distinguished Lecturer, University of Texas - Austin
 2024 Maurice Hilleman Lecture, American Society of Virology Annual Symposium
 2021 Falch Prize Lecture-Faculty of Medicine (University of Bergen, Norway)
 2021 British Pharmacological Society President's Lecture
 2021 Li Dak-Sum Lecture (University of Hong Kong)
 2021 Ohio State University Commencement Address
 2021 Olin College Commencement Address
 2021 Cornell Tech Recognition Ceremony
 2020 St. Jude's Dr. Vincent Kidd Memorial Lecture
 2020 Dean's Distinguished Lecture, ASU Ira A. Fulton School of Engineering, Tempe, AZ
 2020 Baxter Distinguished Lectureship 2020, Stanford University, Stanford, CA
 2019 Chemistry in Support of Human Health (Dreyfus Foundation Award Lecture)
 2018 Ferenc Jolesz Memorial Lecturer (12th Interventional MRI Symposium)
 2018 Suslick-Sessler Lecture in Materials Chemistry, University of Illinois
 2018 Henry Louis Smith Lecturer (Davidson College)
 2017 Tetelman Lecturer (Yale University)
 2017 Stetson Lecturer (University of Vermont Larner College of Medicine)
 2017 Deloitte Endowed Lecturer (Dana-Farber Cancer Institute)
 2017 Alfred Stracher Memorial Lecturer (SUNY Downstate Medical Center)
 2017 Bernal Distinguished Lecturer (University of Limerick)
 2017 Commencement Address (Gerstner Graduate School, Memorial Sloan Kettering Cancer Center)
 2017 Anderson Distinguished Lecturer (University of Virginia School of Medicine)
 2016 Inaugural Distinguished Lecturer in Bioengineering (University of California - Berkeley)
 2016 AACR-Irving Weinstein Foundation Award Distinguished Lecturer (American Association for Cancer Research)
 2016 Inaugural Frank and Grace Yin Distinguished Lecturer (Washington University)
 2016 Hunt Lecturer (Wound Healing Society Foundation)
 2015 Robert E. Gross Lecturer (American Pediatric Surgical Association 46th Annual Meeting)
 2015 Ørsted Lecturer (University of Copenhagen)

2015 Eli Ruckenstein Lecturer (University at Buffalo, State University of New York)
 2015 Baker Symposium Lecturer (Cornell University)
 2015 Lerner Lecturer (Cleveland Clinic)
 2015 Barre Lecturer (University of Montreal)
 2015 Amundson Lecturer (University of Houston)
 2015 Irving Shain Lecturer (University of Wisconsin – Madison)
 2014 Lindahl Lecturer (Napa Pain Institute)
 2014 Pittcon Lecturer/Analytical Seminar Series (University of Pittsburgh)
 2014 Novartis/Drug Discovery Institute Lecturer (University of California – San Diego)
 2014 Commencement Address (University of Western Ontario)
 2014 Commencement Address (Drexel University)
 2014 Darsh Wasan Lecturer (Illinois Institute of Technology)
 2014 52nd Robbins Lecture Series Lecturer (Pomona College)
 2014 George S. Hammond Lecturer (Bates College)
 2014 Edward Mack, J. Memorial Award Lecturer (Ohio State University)
 2013 Axalta Lecturer (University of Pennsylvania)
 2013 Inaugural Thomas H. Chilton Lecturer (DuPont Central Research and Development)
 2013 BC² Annual Lecturer (Wellesley College)
 2013 Warren L. McCabe Lecturer (North Carolina State University)
 2013 Commencement Address (Boston University School of Engineering)
 2013 Lucas Lecturer (Colorado School of Mines)
 2013 Reed Izatt and James Christensen Lecturer (Brigham Young University)
 2013 Prof. Dame Julia Polak Inaugural Lecturer (Imperial College)
 2012 Gladstone Distinguished Lecturer (Gladstone Institutes/University of California-San Francisco)
 2012 Eliahu Caspi Memorial Lecturer (University of Massachusetts Medical School)
 2012 Kavli Foundation Innovation in Chemistry Lecturer (American Chemical Society)
 2011 Commencement Address (Johns Hopkins Business School)
 2011 Commencement Address (University of California Berkeley School of Chemistry)
 2011 Commencement Address (Bates College)
 2011 Class Day Speech (EPFL, Switzerland)
 2011 Kroc Lectureship (Joslin Diabetes Center)
 2011 Knight Lectureships (University of Akron)
 2011 Bullard Lectureship (Uniformed Services University)
 2011 Dean's Lecturer (University of Maryland)
 2010 Herman S. Bloch Memorial Lecture (University of Chicago)
 2010 Investiture Lecturer (Thayer School of Engineering, Dartmouth College)
 2010 Judah M. Folkman Lecturer (Children's Hospital, Boston)
 2010 Allan S. Hoffman Lecturer (University of Washington)
 2010 Storer Life Sciences Lecturer (University of California, Davis)
 2010 Dohlman Visiting Professorship Lecturer (Massachusetts Eye and Ear Institute)
 2009 Cecil Brown Lecturer (American Chemical Society)
 2009 Melvin L. Samuels Lecturer (University of Texas MD Anderson Cancer Center)
 2008 Isadore Rosenberg Lecturer (Metrowest Medical Center)
 2008 Invitrogen Lecturer (University of California, San Diego)
 2008 Rohm and Hass Lecturer (University of California Berkeley)
 2007 Findling Lecturer (Mayo Clinic)
 2007 W.M. Keck Distinguished Lecturer (Lehigh University)
 2007 Alexander Rich Lecturer (Massachusetts Institute of Technology)
 2007 William Shucart Lecturer (Tufts University)
 2007 Ford Lecturer (Case Western University)
 2006 Commencement Address (Albany Medical College)
 2006 Distinguished Lecturer (University of Pennsylvania School of Medicine)
 2006 Weiss Lecturer (Northeastern University)
 2006 Commencement Address (Northwestern University)
 2005 Hodgins Lectureship (McMaster University)

2005 John and Donna Hall Lectureship (Vanderbilt University)
 2005 Keewaunee Lecturer (Duke University)
 2005 Gavel Clinical Research Lecturer (The Forsyth Institute)
 2005 Talamo Lecturer (Harvard Medical School)
 2005 Commencement Address (Uppsala University)
 2005 Commencement Address (Pennsylvania State University)
 2005 Commencement Address (University of Nottingham)
 2004 Presidential Lecturer (University of Texas Health Science Center, San Antonio)
 2004 Pirkey Lectureship in Chemical Engineering (University of Texas, Austin)
 2004 Evans Memorial Award Lectureship (Ohio State University)
 2004 Benjamin Zweifach Distinguished Lecturer (City College of New York)
 2004 Nelson Leonard Lecturer (University of Illinois)
 2004 Donald Katz Lecturer (University of Michigan)
 2003 Founders Lecturer (University of Wisconsin)
 2003 Rohm and Hass Lecturer (Stanford University)
 2003 Tripathy Endowed Memorial Lecture (University of Massachusetts, Lowell)
 2003 Skinner Memorial Lecture (Northwestern University)
 2003 Maurice and Yetta Glicksman Lecturer (Brown University)
 2003 FMC Lecturer (Princeton University)
 2003 Seymour J. Kreshover Lecturer (National Institutes of Health)
 2003 Whitaker Lecturer (American Society of Artificial Organs)
 2002 Feigenbaum - Levine Lecturer (Beth Israel Hospital at Harvard Medical School)
 2002 Distinguished Lecturer (University of Louisville)
 2002 Institute Lecturer (American Institute of Chemical Engineers)
 2001 Ulliot Lecturer (Chemical Heritage Foundation)
 2001 Clapp Lecturer (Brown University)
 2001 Julian Smith Lecturer (Cornell University)
 2001 Mason Lecturer (Stanford University)
 2001 Distinguished Lecturer (Carnegie Mellon)
 2000 Herman Beerman Lecturer (Society for Investigative Dermatology)
 2000 Millennial Lecturer (University of Liverpool)
 2000 Bayer Lecturer (University of Pittsburgh)
 2000 Bayer Stein Honorary Lecture (University of Massachusetts at Amherst)
 2000 William G. Lowrie Lectureship (The Ohio State University)
 2000 Frank T. Gucker Lecturer (Indiana University)
 2000 First Patten Distinguished Lectureship (University of Colorado at Boulder)
 1999 Beckman Lecturer (University of Illinois at Urbana)
 1999 Reilly Lectureship (Notre Dame University)
 1998 Wagner Lectureship (University of Michigan)
 1998 Ewing Halsell Foundation Lectureship (University of Texas Health Center, San Antonio)
 1998 Robert R. Linton Distinguished Lecture; New England Society for Vascular Surgery
 1998 Marcus Memorial Lecturer (Washington University, St. Louis)
 1998 Joseph Stokes, Jr. Lectureship (University of Pennsylvania)
 1997 William J. Rashkind Memorial Lecture (American Heart Association)
 1997 Rohm and Haas Lecturer in Materials Chemistry (University of North Carolina)
 1996 The Berkeley Lecturer (University of California, Berkeley)
 1995 Distinguished Medical Scientist Lecturer (Ohio State University)
 1995 Lacy Lecturer (California Institute of Technology)
 1995 Ralph Peck Memorial Lecturer (Illinois Institute of Technology)
 1994 Whitaker Distinguished Lecturer (Biomedical Engineering Society)
 1994 Miles Lecturer (Cornell University)
 1994 Feigenbaum Memorial Lecturer (Beth Israel Hospital, Harvard Medical School)
 1993 Kurt Wohl Memorial Lecturer (University of Delaware)
 1993 Priestley Lecturer (Penn State University)
 1992 Kelly Distinguished Lecturer (Purdue University)

1992 Miles Distinguished Lecturer (University of Pittsburgh)
 1991 Louis W. Busse Lecturer (University of Wisconsin)
 1991 Sidney Riegelman Lecturer (University of California, San Francisco)
 1991 Ashton-Cary Lecturer (Georgia Institute of Technology)
 1991 Sandoz-Dorsey Lecturer (Ohio State University)
 1989 Walter F. Enz Lecturer (University of Kansas)
 1988 Robert Rushmer Lecturer (University of Washington, Seattle)
 1988 1st Presidential Lecturer, Controlled Release Society (Basel, Switzerland)
 1987 Biomedical Research Council Lecturer (University of Michigan)
 1986 Elmer L. Linseth Lecturer (Case Western Reserve University)
 1983 Merck, Sharpe and Dohme Lecturer (University of Puerto Rico)

EMPLOYMENT

7/09-present David H. Koch Institute Professor, Massachusetts Institute of Technology
 2/05-6/09 Institute Professor, Massachusetts Institute of Technology
 7/88-1/05 Kenneth J. Germeshausen Professor of Chemical and Biomedical Engineering, MIT Department of Chemical Engineering; Whitaker College of Health Sciences, Technology, and Management; and the Harvard-MIT Division of Health Sciences and Technology
 7/99-present Senior Lecturer on Surgery, Harvard University, Harvard Medical School
 7/85-6/88 Professor of Biochemical Engineering, MIT, Department of Applied Biological Sciences, Whitaker College of Health Sciences, Technology, and Management, and the Harvard-MIT Division of Health Sciences and Technology
 7/81-6/85 Associate Professor of Biochemical Engineering, MIT, Department of Nutrition and Food Sciences and the Whitaker College of Health Sciences Technology, and Management, and the Harvard-MIT Division of Health Sciences and Technology
 7/78-6/81 Assistant Professor of Nutritional Biochemistry, MIT, Department of Nutrition and Food Sciences
 7/77-6/78 Assistant Professor of Nutritional Biochemistry, MIT (Visiting), Department of Nutrition & Food Sciences
 7/74-present Research Associate, Children's Hospital Medical Center, Harvard Med. School, Boston, MA
 9/72-6/74 Research Assistant, MIT
 9/72-8/73 Chairman, Math and Science Departments, The Group School, Cambridge, MA

PROFESSIONAL AND ACADEMIC ORGANIZATIONS

Controlled Release Society (Elected President, 1991-1992) (Elected to Board of Governors, 1981-1985; Chairman, Regulatory Affairs Committee, 1985-1989).
 Biomedical Engineering Society (Elected to the Board of Directors, 1991-1994)
 American Institute of Chemical Engineers (Food, Pharmaceutical and Bioengineering Division)
 American Chemical Society (Polymer Division)
 American Society of Artificial Internal Organs (Program Committee 1984-1987; Membership Committee (1991-93)
 International Society of Artificial Internal Organs
 Scientific Advisory Board, Department of Chemical Engineering, Georgia Institute of Technology (1992-2000)
 Society for Biomaterials (Elected a Fellow, 1994)
 American Association of Pharmaceutical Scientists (Elected a Fellow, 1995)
 American Institute of Medical and Biological Engineers (Elected Founding Fellow, 1992; Elected Chair, College of Fellows, 1995)
 The Science Board, the United States Food and Drug Administration (FDA) (highest Advisory Board of the FDA), 1995--2002 (Chair from 1999 -- 2002)
 Scientific Advisory Board, Schepens Eye Institute, Harvard Medical School (1995-1998)
 Board of Scientific Counselors, National Institutes of Health Center for Research Resources (1996-2001)
 Scientific Advisory Board, Division of Chemistry and Chemical Engineering, California Institute of Technology (1999-2012)
 Scientific Advisory Board, Department of Chemical Engineering, Princeton University (1999-2004)
 Board of Overseers, Othmer Research Institute, Brooklyn Polytechnic Institute (2001-2008)
 Board of Directors, McGovern Institute, Massachusetts Institute of Technology (2001-)
 Board of Directors, Whitehead Institute (2003-2021)
 Chair, Killian Award Committee (2004)

World Economic Forum, Technology Pioneers Selection Committee (2010-2014)
 Board of Trustees, Cornell University (2010-2018)
 Chair, Boston Children's Hospital Board Research Committee (2020-)
 Board of Trustees, Boston Children's Hospital (2015-)

COURSES TAUGHT

20.002U	(1977 - 1988)	Laboratory in Applied Biology
20.S35	(1979 - 1988)	Pharmacological Engineering
20.11G	(1979 - 1988)	Analytical Practices in Biochemistry
HST 110	(1979 - 1981)	Renal Pathophysiology
20.113	(1987 - 1988)	Problems in Biotechnology
10.02J	(1989 -)	Biotechnology and Engineering
10.361	(1989 -)	Integrated Chemical Engineering
10.13	(1989 -1991)	Thermodynamics
10.984	(1990 -)	Biomedical Applications of Chemical Engineering
10.26	(1992 -)	Senior Chemical Engineering Project Laboratory

MIT ACTIVITIES

1972-73, 80-	Board of Trustees, MIT Community Service Fund
1972-74	Committee on Preprofessional Advising and Education, MIT
1972-74	Steering Committee, Urban Action, MIT
1977-85	Freshman Advisor
1978-	Undergraduate Advisor
1980-	Premedical Advisory Council, MIT
1977-80	Seminar Committee, Department of Applied Biological Sciences, MIT
1978-80	Asinari Committee, MIT
1979-88	Undergraduate Affairs Committee, Department of Applied Biological Sciences, MIT (Chairman, 1981-1985)
1980-84	MIT-Wellesley Upward Bound Joint Steering Committee
1981-82, 84-85	Financial Aid Committee, Department of Applied Biological Sciences, MIT
1981-86	Admissions Committee, Harvard-MIT Division of Health Sciences and Technology
1983-87	Curriculum Committee, Dept. of Applied Biological Sciences (Chairman, 1985-1987)
1983-87	Radiation Committee, MIT
1983-97	Sea Grant Committee, MIT (Chairman, 1993-1997)
1985-87	Admissions Committee, Harvard MD-POD Program
1986-92	Admissions Committee, MIT Medical Engineering-Medical Physics Program
1986-	Harvard-MIT Joint Committee on Health Sciences and Technology
1988	Search Committee for Department Head, Department of Chemical Engineering
1988-1992	Admissions Committee, Department of Chemical Engineering
1989-1991	Undergraduate Committee, Department of Chemical Engineering
1991-1993	Seminar Chairman, Department of Chemical Engineering
1993-	Board of Advisors, MIT Industrial Summer Session Program
1994-1995	Selection Committee for Co-Director of Harvard-MIT HST Program
2000-	Harvard MIT Division of Health Sciences and Technology Advisory Council
2013-	Karl Taylor Compton Lecture Series Committee

EDITORIAL BOARDS

1983-2002	Biomaterials- Editor
1987-	Biomaterials, Artificial Cells, and Immobilization Technology (Associate Editor, 1991-)
1983-92	Selective Cancer Therapeutics (Cancer Drug Delivery)
1983	Methods of Enzymology-Drug Delivery Systems
1984-98	Journal of Controlled Release
1985-	Biomedical Polymers
1986-	Advanced Drug Delivery Systems

1987-	Drug Design and Delivery
1990-	Marine Biotechnology
1991-94	Chemistry of Materials
1991 -	Cell Transplantation
1991 -	Polymers for Advanced Technologies
1991 -	Drug Targeting and Delivery
1992-	International Journal of Drug Targeting
1992-	Journal of Bioactive and Compatible Polymers
1994-98	Cancer Biotherapy and Radiopharmaceuticals
1994-2025	Journal of Pharmaceutical Science
1995-	Tissue Engineering
1995-	Encyclopedia of Controlled Drug Delivery
1996-	Birkhauser: Synthetic Biodegradable Polymer Scaffolds
1996-98	Chemical and Engineering News
1997-99/2008	Proceedings of the National Academy of Sciences
1997-	Annual Reviews of Biomedical Engineering
1997-	Biomedical Microdevices
1998-	Diabetes Technology and Therapeutics
1999-	Journal of Polymer Science, Polymer Chemistry
1999-	Pharmaceutical Science
1999-	Regenerative Medicine
1999-	Methods of Tissue Engineering
1999-	Angewandte Chemie
2000-	European Journal of Pharmaceutical Sciences
2002-	Journal of Investigative Dermatology-Associate Editor
2004-	Mechanics and Chemistry of Biosystems
2006-	Journal of Biopharmaceutics and Biotechnology
2006-	Bioconjugate Chemistry
2006-	Biomacromolecules
2007-	Nano Letters
2008-	Molecular Therapy
2009-	Science Translational Medicine (Scientific Advisory Board)
2015-	Regenerative Therapy
2016-	Technology and Innovation, Journal of the National Academy of Inventors
2016-	Oncogene
2017-	Journal of Design and Science
2023	Chem
2025-	Journal of Nanobiology