

# Gerald M. Edelman

## *Curriculum Vitæ*

### **Birth Date**

July 1, 1929, New York, New York

### **Marital and Family Status**

Married with three children: two boys and one girl

### **Educational Background and Degrees**

H.S., 1942-1946 - John Adams High School, Queens, New York

B.S., 1950 - Ursinus College, Collegeville, Pennsylvania

M.D., 1954 - School of Medicine, University of Pennsylvania, Philadelphia, Pennsylvania

Ph.D., 1960 - The Rockefeller Institute, New York, New York

D.Sc., 1973 - University of Pennsylvania

Sc.D., 1974 - Ursinus College

Docteur Honoris Causa (M.D.), 1974 - University of Siena, Siena, Italy

D.Sc., 1975 - Gustavus Adolphus College, St. Peter, Minnesota

Sc.D., 1976 - Williams College, Williamstown, Massachusetts

Docteur Honoris Causa, 1989 - Université Paris 7

Laurea Honoris Causa, 1989 - University of Cagliari, Sardinia

D.Sc., 1989 - Georgetown University School of Medicine

Laurea Honoris Causa, 1990 - Faculty of Medicine, Università degli Studi di Napoli Federico

D.Sc., Honoris Causa, 1991 - Tulane University, New Orleans, Louisiana

D.Sc., Honoris Causa, 1995 - Adelphi University, Garden City, New York

D.Sc., Honoris Causa, 1995 - University of Miami, Miami, Florida

Dottore "ad honorem" in Scienze Biologiche, 1998 - University of Bologna, Bologna, Italy

D.Sc., Honoris Causa, 2000 - University of Minnesota

Doctor Honoris Causa en Medicina, 2003 - Universidad de A Coruña, Spain

### **Medical Training and Experience**

Medical House Officer, 1954-1955 - The Massachusetts General Hospital, Boston, Massachusetts

Captain, U.S. Army Medical Corps, 1955-1957 - Assigned to 386th General Dispensary and 196th Station Hospital (American Hospital, Paris, France)

Assistant Physician, 1957-1960 - Hospital of The Rockefeller Institute

### **Research Experience**

Studies on cytochrome c peroxidase from mutant yeast. Johnson Foundation for Medical Physics, University of Pennsylvania, 1953-1954.

Graduate Fellow, studies on the structure of the gamma globulins. The Rockefeller Institute, 1957-1960.

Assistant Professor/Assistant Dean of Graduate Studies, The Rockefeller Institute, 1960-1963.

Associate Professor/Associate Dean of Graduate Studies, The Rockefeller Institute, 1963-1966.

Professor, The Rockefeller University, 1966-1974.

Vincent Astor Professor, The Rockefeller University, 1974-1992.

Scientific Chairman, The Neurosciences Research Program, 1980-present.

Director, The Neurosciences Institute, 1981-present.

Professor, The Scripps Research Institute, 1992-present.

Chairman, The Department of Neurobiology, The Scripps Research Institute, 1992-present.

### **Present Research Activities**

Studies of cell-cell interactions during embryonic development and of cell adhesion molecules (CAMs) and their role in embryonic induction. Studies of the molecular genetics of connective tissue defects in the nervous system. Analysis of the control of cell division cycle and of DNA replication in eukaryotic cells. Development of cell fractionation procedures. Analysis of the three-dimensional structure and sequence of proteins central to the immune response. Studies of transcriptional regulation and translational control in eukaryotic cells. Theoretical work on the organization of higher brain functions and on the construction of non-von Neumann machines and brain-based devices.

### **Honors**

Magna cum laude, Ursinus College, 1950

Phi Beta Kappa

The Spencer Morris Award, University of Pennsylvania, 1954

Eli Lilly Award in Biological Chemistry, American Chemical Society, 1965

Annual Alumni Award, Ursinus College, 1969

The Nobel Prize for Physiology or Medicine, 1972

D.Sc., University of Pennsylvania, 1973

Sc.D., Ursinus College, 1974

Albert Einstein Commemorative Award, 1974

M.D. (Hon.), University of Siena, Italy, 1974

D.Sc., Gustavus Adolphus College, 1975

Buchman Memorial Award, California Institute of Technology, 1975

The Linus Pauling Medal for Outstanding Contributions to Science, Stanford University, 1975/76

Sc.D., Williams College, Williamstown, Massachusetts, 1976

Rabbi Shai Shacknai Memorial Prize in Immunology and Cancer Research, Hebrew University-Hadassah Medical School, Jerusalem, Israel, 1977

Regents Medal of Excellence, New York State, 1984

Hans Neurath Prize, University of Washington, Seattle, 1986

Sesquicentennial Commemorative Award, National Library of Medicine, 1986

Cécile and Oskar Vogt Award, University of Dusseldorf, 1988

Docteur Honoris Causa, Université Paris 7, 1989

Laurea Honoris Causa, University of Cagliari, 1989

D.Sc., Georgetown University School of Medicine, 1989

Distinguished Graduate Award, University of Pennsylvania, 1990

Laurea Honoris Causa, Università degli Studi di Napoli Federico II, 1990

Personnalité de l'année, Distinction Internationale créée en 1970, Paris, 1990

D.Sc., Honoris Causa, Tulane University, New Orleans, Louisiana, 1991

The Warren Triennial Prize, Massachusetts General Hospital, Boston, Massachusetts, 1992

D.Sc., Honoris Causa, Adelphi University, Garden City, New York, 1995

D.Sc., Honoris Causa, University of Miami, Miami, Florida, 1995

Dottore "ad honorem" in Scienze Biologiche, University of Bologna, Bologna, Italy, 1998

Jiménez Díaz Memorial Prize, Fundación Conchita Rábago de Jiménez Díaz, Madrid Spain, 1999

C.U. Ariëns-Kappers Medal, Netherlands Institute for Brain Research, Amsterdam, The Netherlands, 1999

Medal of the Presidency of the Italian Republic, 1999

D.Sc., Honoris Causa, University of Minnesota, 2000  
La Medaille de la Ville de Paris (Echelon Vermeil), 2002  
Cátedra Santiago Grisolia Prize, Valencia, Spain, 2003  
Caianiello Memorial International Award, INNS and Calabria Award, Calabria, Italy 2003

### **Scientific and Honorary Societies**

Member, National Academy of Sciences  
Member, American Academy of Arts and Sciences  
Member, American Philosophical Society  
Foreign Member, Academy of Sciences, Institut de France  
Foreign Member, Spanish Royal Academy of Sciences  
Fellow, New York Academy of Sciences  
Fellow, The New York Academy of Medicine  
Fellow, Jewish Academy of Arts and Sciences. Albert Einstein Commemorative Medallion, 1986  
Associate, The Neurosciences Research Program, 1963-present  
Non-Resident Fellow, The Salk Institute for Biological Studies, 1973-1985  
Member, Board of Trustees, The Salk Institute for Biological Studies, 1975-1985  
Member, Board of Overseers, Faculty of Arts and Sciences, University of Pennsylvania, 1976-1983  
Member, Advisory Board, Basel Institute of Immunology, Switzerland, 1970-1977; Chairman, 1975-1977  
Member, Board of Trustees, Carnegie Institution of Washington, 1987  
Member, Board of Governors, Weizmann Institute of Science, Israel. Emeritus, 1987  
Senior Governor, Research Institute of The Scripps Clinic, Chairman, Visiting Committee 1984-1992  
Member, Board of Scientific Overseers, The Jackson Laboratory, 1975-1979  
Trustee, Rockefeller Brothers Fund, 1972-1982  
Member, Rockefeller Brothers Fund Planning Committee, 1982-1983  
Member, Council on Foreign Relations  
Member, American Society of Biological Chemists  
Honorary Member, Japanese Pharmaceutical Society  
Honorary Member, Japanese Biochemical Society  
Member, American Chemical Society  
Member, American Association of Immunologists  
Member, The American Society for Cell Biology  
Member, Society for Developmental Biology  
Member, Genetics Society of America  
Fellow, American Association for the Advancement of Science  
Member, Harvey Society (President, 1975-1976)  
Sigma Xi  
Alpha Omega Alpha Honorary Medical Society  
Member, Scientific Council, Center for Theoretical Studies, 1970-1972  
Member, Biophysics and Biophysical Chemistry Study Section, National Institutes of Health, 1964-1967  
Honorary Member, American Psychoanalytic Association, 1997  
Distinguished Counsellor to the Board, The New York Botanical Garden

### **Clubs**

Century Association, New York  
Cosmos Club, Washington, D.C.

### **Organizing Chairmanships**

Co-Chairman - The Gordon Conference on Proteins, New Hampton, New Hampshire, June 19-23, 1972  
Chairman - Symposium on Cellular Selection and Regulation in the Immune Response, 27th Annual Meeting of the Society of General Physiologists, Woods Hole, Massachusetts, September, 5-8, 1973  
Co-Chairman - Armand Hammer Symposium in Tumor Biology, The Salk Institute for Biological Studies, La Jolla, California, January 19-21, 1976  
Co-Chairman - International Conference on the Molecular Basis of Cell-Cell Interaction, Scripps Clinic and Research Foundation, San Diego, California, February 14-17, 1977, 1978, 1979, 1980, 1981  
Conference Organizer - UCLA Symposia on Molecular and Cellular Biology, Molecular Determinants of Animal form, Park City, Utah, March 31- April 4, 1985

### **Lectureships**

Visiting Professor, Carter Wallace Lectures, Princeton University, 1965  
Visiting Professor, Harvard University, 1965  
Visiting Professor, National Institutes of Health Biophysics-Bio-organic Chemistry Lectureship, Cornell University, 1971  
Darwin Centennial Lectures: The Molecular Biology of the Immune Response, The Rockefeller University, November-December, 1971  
Philips Lecturer, Haverford College, 1972  
Karl August Forster Lecture, given June 30, 1972, Physiologisch-Chemisches Institut der Johannes Gutenberg Universität, Mainz, West Germany  
Felton Bequest Visiting Professor, The Walter and Eliza Hall Institute for Medical Research, Australia, 1972  
Walter and Eliza Hall Institute Oration, given May 3, 1973, Australia  
Harvey Lecture, The Rockefeller University, 1973  
Bennett Lecture, American Neurological Association, 1973  
Nobel Laureate Lecture, De Pauw University, 1973  
Nelson Visiting Professor, University of California, Davis, 1973  
Honors Lecture, New York Medical Center, 1973  
Harry Steenbock Lecturer, University of Wisconsin, 1974  
Robbins Lecturer, "Molecular Immunology", Pomona College, 1974  
Annual Sigma Xi Lecture, University of Pennsylvania, 1974  
Edgar Fahs Smith Lecture of the American Chemical Society, University of Pennsylvania, 1974  
Smith, Kline and French Lecturer, University of California at Berkeley, 1975  
Annual Graduate Lecture, State University of New York Downstate Medical Center, 1975  
Cori Lecturer, Roswell Park Memorial Institute, 1975  
Jack Schultz Memorial Lecture in Genetics, Fox Chase Center for Cancer and Medical Sciences, 1975  
Feodor Lynen Lecture, University of Miami, 1975  
Visiting Professor, Graduate School and University Center of the City University of New York, 1975  
Donald E. Johnson Lecture on Cancer Research, University of Michigan, 1975

Guest Lecturer, The First Annual Symposium on Chemistry and Molecular Biology, University of Kentucky, Lexington, Kentucky, 1975  
Linus Pauling Lecture, Stanford University, 1975  
Buchman Memorial Lecture, California Institute of Technology, 1975  
Philips Lecturer, Haverford College, 1975  
Klopsteg Lecture, Northwestern University, 1976  
National Institutes of Health Lecture, 1976  
Rabbi Shai Shacknai Memorial Lectures, Hebrew University-Hadassah Medical School, Israel, 1977  
Man and Ideas Lecture, Museum of Art, Carnegie Institute, 1977  
Bronk Lecture on Developments in Science, International House, 1978  
Visiting Professor, College de France, 1978  
Twenty-third George H. Bishop Lecture in Experimental Neurology, Washington University, 1978  
Meyer Bodansky Annual Lecture, University of Texas Medical Branch, 1979  
The Second Albert Einstein Lecture, The New York Academy of Sciences, 1979  
The Dreyfus Foundation Distinguished Lecturer, University of Rochester, 1979  
The Alfred E. Mirsky Christmas Lectures on Science, The Rockefeller University, 1979  
Memorial Lecturer, Centennial Anniversary of the Pharmaceutical Society of Japan, Tokyo, 1980  
Guest Speaker, Annual Stated Meeting of the American Academy of Arts and Sciences, Boston, 1981  
Guest Lecturer, Professors Council, College of Physicians and Surgeons, Columbia University, 1981  
Sigma Xi Lecture, Swarthmore Chapter of Sigma Xi, Swarthmore College, 1981  
Guest Lecturer, Dean's Lecture Series, University of Rochester, 1981  
National Lecturer of the Biophysical Society, Annual Meeting, Boston, 1982  
University Arts Council Lecture Series, Seton Hall University, 1982  
Dakin Lecturer, Adelphi University, 1982  
Guest Lecturer, Annual Biophysics Lecture, Syracuse University, 1982  
Irvine Distinguished Lecture Series in the Neurosciences, University of California at Irvine, 1983  
Dean of Natural Sciences and Mathematics Lecture Series, University of Southern California at Los Angeles, 1983  
Distinguished Neuroscience Lecturer Series, Public Lecture, University of California at San Francisco, 1983  
Nicholas J. Giarmann Memorial Lecture, Yale University School of Medicine, 1983  
The Fuller Albright Lecture, Annual Meeting of the Peripatetic Club, New York, 1983  
The Laboratory Colloquium, Los Alamos National Laboratory, 1983  
The Graduate Lecture Series and Science and Society Series, California State University, Long Beach, 1983  
The Darwin Lectures, Second Series: The Theory of Neuronal Group Selection, The Rockefeller University, 1983  
Guest Lecturer, Medical Research Council Centre, England, 1983  
Nobel Laureate Revisiting Lectures, Karolinska Institutet, 1983  
Guest Lecturer, Institut Pasteur, 1983  
Distinguished Scientist Annual Sigma Xi Speaker, State University of New York, Downstate Medical Center, 1983  
Dean's Lecture, Seminars in Comparative Cell Biology, University of Pennsylvania, 1983  
Hopkins/Hughes Symposium Lecturer, The Johns Hopkins University School of Medicine, 1983

- Guest Speaker, Annual Meeting of the American Association for the Advancement of Science, Detroit, 1983
- Guest Lecturer, Cell Contact and Adhesion Conference, Gordon Research Conferences, New Hampshire, 1983
- Guest Lecturer, National Institutes of Health Seminar Series, Bethesda, 1983
- Sesquicentennial Lecture on Science, Haverford College, 1983
- Visiting Scientist, The John D. and Catherine T. MacArthur Foundation Lecture Series, University of Colorado Health Sciences Center, Denver, 1983
- Guest Speaker, Seminar Series, Center for Neurobiology, Columbia University Medical Center, 1983
- Guest Lecturer, California Institute of Technology, Pasadena, 1984
- Guest Lecturer, Department of Anatomy, University of Toronto, Canada, 1984
- Guest Lecturer, Cellular and Developmental Colloquium, Harvard University, 1984
- Guest Lecturer, Sixth Annual Basic Neurochemistry Lecture, American Society for Neurochemistry, Portland, 1984
- Guest Lecturer, First Lecture in M.D.-Ph.D. Student Seminar Series, Washington University, St. Louis, Missouri, 1984
- Principal Speaker, The Tenth Annual Symposium on Chemistry and Molecular Biology, University of Kentucky, 1984
- Guest Lecturer, New Horizons in Science and Technology, The University of North Carolina at Charlotte, 1984
- Guest Speaker, The Society of Neurological Surgeons Meeting, New York, 1984
- Guest Lecturer, Departmental Colloquia in Chemistry, Lenore F. Meadows Memorial Lecture, Queens College of the City of New York, 1984
- Guest Speaker, University of Texas Health Center at Dallas, 1984
- Visiting Professor, Molecular Disease Conference of the Baylor College of Medicine Medical Scientist Training Program, Baylor College of Medicine, 1984
- Featured Speaker, Awards Dinner of Medical Research Foundation of Oregon, 1984
- Guest Lecturer, 10th Sigrid Juselius Medical Symposium on Gene Expression During Normal and Malignant Differentiation, Hansaari Congress Center, Helsinki, Finland, 1984
- Keynote Speaker, March of Dimes Birth Defects Conference, Denver, 1984
- Guest Lecturer, 34th Meeting of the Kuratorium fur die Tagungen der Nobel-preistrager, Lindau, West Germany, 1984
- Guest Speaker, Society for Experimental Biology, Scotland, 1984
- Guest Lecturer, Neuronal Cell Culture Conference, FASEB, Vermont, 1984
- Guest Speaker, Third International Congress on Cell Biology, Symposium on Molecular Aspects of Cell Adhesion and Recognition, Tokyo, Japan, 1984
- Keynote Speaker, Nobel Conference XX, Gustavus Adolphus College, 1984
- Main Speaker, Annual Meeting of the Natural Science Society of Switzerland, 1984
- Guest Lecturer, Table Ronde Roussel-Uclaf, Paris, 1984
- Guest Speaker, Principles and Mechanisms of Neuronal Migration, Annual Meeting of the Society for Neuroscience, Anaheim, 1984
- Albert Dorfman Memorial Lecture, The University of Chicago, 1984
- Keynote Speaker, VIII National Congress of Internal Medicine, Barranquilla, Columbia, 1984
- Keynote Speaker, S.C. Williams Memorial Symposium on Cellular Interactions in Embryonic Development, University of Pennsylvania, 1984

Keynote Speaker, 150th Meeting of the Interurban Clinical Club, The Rockefeller University, 1984  
Nelson Distinguished Lecture in Biology, Rutgers University, 1985  
Guest Lecturer, Institute Seminar Lecture, Memorial Sloan-Kettering Cancer Center, New York, 1985  
Guest Speaker, Colloquium on Molecular Neurobiology, Massachusetts General Hospital, 1985  
Keynote Speaker, 17th Stadler Genetics Symposium on Genetics, Development, and Evolution, University of Missouri-Columbia, 1985  
Robbins Lecturer, "Developmental Biology - The Sciences of Recognition," Pomona College, 1985  
Speaker/Conference Organizer, UCLA Symposia on Molecular and Cellular Biology, Molecular Determinants of Animal Form, Park City, Utah, 1985  
Mack Lipkin Man and Nature Lectures, "The Sciences of Recognition," American Museum of Natural History, New York, 1985  
Visiting Professor, College de France, 1985  
Plenary Lecturer, The Fourth International Conference, Differentiation of Normal and Neoplastic Cells, Heidelberg, Federal Republic of Germany, 1985  
The 83rd Christian Herter Lecture, NYU Medical Center, 1985  
Lenox Hill Hospital Alumni Lecture, Lenox Hill Hospital, New York, 1985  
Guest Lecturer, Friday Evening Lectures, Marine Biological Laboratory, 1985  
Guest Speaker, Tenth International Congress of the International Society of Developmental Biologists, Symposium on Positional Information and Pattern Formation, Los Angeles, 1985  
Guest Speaker, First International Symposium on Cellular Endocrinology, W. Alton Jones Cell Science Center, Lake Placid, 1985  
Guest Lecturer, Grand Rounds, The Children's Hospital, Boston, 1985  
Guest Speaker, Second Annual Nobel Laureate Lecture Series, Montclair State College, 1985  
Keynote Speaker, British Society for Cell Biology Conference on The Extracellular Matrix: Receptors, Genes and Signals, England, 1985  
Guest Lecturer, Nobel Conference on Molecular Evolution of Life, Sweden, 1985  
The Aharon Katzir-Katchalsky Lecture, "Biological Foundations and Human Behavior," Weizmann Institute of Science, 1985  
Colin Syme Visiting Professor, The Walter and Eliza Hall Institute of Medical Research, Australia, 1985  
Guest Speaker, "American Society, Public and Private Responsibilities," Harvard University, 1985  
Guest Lecturer, Artificial Intelligence Series, Yale University, 1985  
Birnbaum Visiting Lecturer, Cornell University Medical College, New York, 1986  
Public Lecture in Neurobiology, University College London, 1986  
Special Seminar, Imperial Cancer Research Fund Laboratories, London, 1986  
Guest Lecturer, The Ciba Foundation Symposium on The Junctional Complexes of Epithelial Cells, London, 1986  
Guest Speaker, Conference on Biological Computation, The University of Arizona, Tucson, 1986  
Guest Lecturer and Departmental Seminar, Developmental Biology Course, The University of Arizona, Tucson, 1986  
Distinguished Scientist Lecture Series, Bard College, New York, 1986  
Distinguished Visiting Scientist, School of Medicine of the Medical College of Georgia, Augusta, 1986  
Guest Lecturer, Medical University of South Carolina in Charleston, 1986  
Guest Speaker, Jesup Lectures, Columbia Laboratory, 1986  
Guest Speaker, Recent Advances in Cell Adhesion Conference, FASEB, Missouri, 1986  
Guest Speaker, American Thoracic Society, 1986

Guest Speaker, Message to Mind Symposia, University of Michigan, 1986  
Keynote Speaker, Fortieth Anniversary of the National Institute of Mental Health, Washington, D.C., 1986  
Guest Lecturer, 17th Annual FEBS Meeting, West Berlin, 1986  
Otto E. Mortenson Lecturer, University of Missouri, Columbia, 1986  
Guest Speaker, First Annual Meeting of the Markey Scholars, Glen Cove, New York, 1986  
Speaker, Roche Institute Neuroscience Symposium, Nutley, New Jersey, 1986  
Guest Speaker, University of Wisconsin-Madison, 1986  
Lecturer, Banbury Center Conference, Cold Spring Harbor, New York, 1986  
Philip R. Johnson Visiting Professor, University of Texas, Dallas, 1986  
First Annual von Behring Lecturer, Phillips - Universitat Marburg, West Germany, 1986  
Guest Lecturer, Frontiers in Biology Symposia, Centre d`Immunologie de Marseille, Luminy, 1986  
Speaker, 7th National Conference on Thrombosis and Hemostasis, Dallas, 1986  
Fourth Annual Hans Neurath Lecturer, University of Washington-Seattle, 1986  
Herbert McLean Evans Memorial Lecturer, University of California, San Francisco, 1986  
President's Lecture, The New York Public Library, 1986  
Lecturer, Symposium on Advances in Developmental Biology, The Upjohn Company, Augusta, Michigan, 1986  
Nobel Lecturer, Collegium International Neuro - Psychopharmacologicum, San Juan, Puerto Rico, 1986  
Centennial Lecturer, McMaster University, Hamilton, Ontario, Canada, 1987  
Storer Life Sciences Lecturer, University of California, Davis, 1987  
Speaker, Medical Grand Rounds, New York Medical College, New York, 1987  
Lecturer, 7th Annual Columbia University Lectures in Computer Science, New York, 1987  
Guest Lecturer, Kyoto Symposium on Bioscience III, Kyoto, Japan, 1987  
Guest Lecturer, Juan March Foundation, Madrid, Spain, 1987  
Seminar Speaker, Wake Forest University, Bowman Gray School of Medicine, Winston-Salem, North Carolina, 1987  
Keynote Speaker, University of Cincinnati Medical Center, 7th Annual Graduate Student Research Forum, Cincinnati, Ohio, 1987  
Guest Speaker, IBM Physical Sciences Colloquium, Thomas J. Watson Research Center, Yorktown Heights, New York, 1987  
Guest Speaker, Squibb Corporation Neuroscience Symposium, Princeton, New Jersey, 1987  
Keynote Speaker, The Neuroscience Institute of the Neurosciences Research Program Symposium, The Wenner Gren Center, Stockholm, Sweden, 1987  
Chairperson and Guest Speaker, European Developmental Biology Congress, Helsinki, Finland, 1987  
Guest Speaker, Gordon Conference on Cell Contact and Adhesion, Tilton School, Tilton, New Hampshire, 1987  
Session Chair and Speaker, International Brain Research Organization (IBRO) Second World Congress of Neuroscience, Budapest, Hungary, 1987  
Guest Speaker, NIH Centennial Celebration, Duke University Medical Center, Durham, North Carolina, 1987.  
Guest Lecturer, Centennial Symposium on Developmental Neuroscience, NIH, Bethesda Maryland, 1987  
Guest Lecturer, Nobel Laureate Address, Nobel Neurosciences Series, University of Toronto, Canada, 1987



George Boxer Memorial Lecturer, University of Medicine and Dentistry of New Jersey, Robert Wood Johnson Medical School, Piscataway, New Jersey, 1987  
Guest Lecturer, Ernst Klenk Conference on Molecular Neurobiology, Cologne, Germany, 1987  
Fritz Thyssen Stiftung Evaluation Commission, Cologne, Germany, 1987  
Jenkinson Memorial Lecturer, University of Oxford, England, 1987  
Guest Lecturer, Johnson & Johnson Focused Giving Scientific Symposium, New Brunswick, New Jersey, 1987  
Guest Lecturer, 23rd Winter Seminar of the Max-Planck Institute, Klosters, Switzerland, 1988  
Lecturer, NIH Conference on the Molecular and Genetic Basis of Growth and Development, Bethesda, Maryland, 1988  
Giovanni Battista Morgagni Lecturer, University of Padova, Padova, Italy, 1988  
Cécile and Oskar Vogt Award Lecturer, University of Dusseldorf, Germany, 1988  
Guest Lecturer, La Jolla Cancer Research Foundation Annual Symposium, La Jolla, California, 1988  
VIIIth Susan Swerling Lecturer, Dana Farber Cancer Institute, Boston, Massachusetts, 1988  
Lecturer, NIH Conference on Molecular Genetics and Development, Bethesda, Maryland, May, 1988  
Guest Lecturer, Final Lecture of Northwestern Public Lecture Series, Northwestern University, Evanston, Illinois, 1988  
Keynote Speaker, Stony Brook Symposium on Molecular Biology, Stony Brook, New York, 1988  
Plenary Lecturer, XVIth Collegium International Neuro-psychopharmacology (C.I.N.P.) Congress, Munich, Germany, 1988  
Lecturer, Nordisk Insulin Symposium No. 2, Molecular Mimicry in Health and Disease, Copenhagen, Denmark, 1988  
F.A. Matsen Lecture on Theories in Science, University of Texas at Austin, Austin, Texas, 1988  
Lecturer, Next Steps that will Revolutionize Psychiatry in the 21st Century, New York, New York, 1988  
Lecturer, Jacques Monod Conference on Early Events in Neurogenesis, Roscoff, France, 1988  
Lecturer, Symposium on Pattern and Process in Evolving Systems, Marquette University, Milwaukee, Wisconsin, 1988  
Lecturer, Third International Conference on New Horizons in Medicine, Research Institute of Scripps Clinic, La Jolla, California, 1988  
Zeltzman Lecture, University of Vermont, Vermont, 1988  
Evening Lecture, 16th Aharon Katzir-Katchalsky Conference on Dynamics in Molecular and Cellular Biology, Université Libre de Bruxelles, Brussels, Belgium, 1988  
Henry Adams Lecture, Collegiate School, New York, New York, 1989  
Lecturer, New York Academy of Science Junior Academy 25th Anniversary Science & Technology Symposium at the American Museum of Natural History, New York, New York, 1989  
Rosetta Briegel Barton Lecture, The University of Oklahoma, Norman, Oklahoma, 1989  
The Ralph Gerard Lecture in Neurosciences, University of California at Irvine, School of Biological Sciences, Irvine, California, 1989  
Evening Lecture, Cologne Spring Meeting, Institute for Genetics, Cologne, Germany, 1989  
Speaker, Symposium on Parallel Computation, Neural Networks and Intelligence Systems, Syracuse University, Syracuse, New York, 1989  
Nobel Lecturer, Broward General Medical Center, Fort Lauderdale, Florida, 1989  
Lecturer, Sesquicentennial Science Symposium "Origins: From Matter to Mind," Boston University, Boston, Massachusetts, 1989  
Fogan Lecture, State University of New York at Buffalo, Buffalo, New York, 1989

Speaker, International Congress "The Culture of Memory," Florence, Italy, 1989  
Plenary Lecturer, International School of Neuroscience, Padova, Italy, 1989  
Inaugural Address, Beckman Institute, University of Illinois at Urbana-Champaign, 1989  
Speaker, Dean's Forum, University of Pennsylvania, Philadelphia, 1989  
Lectura magistralis, Georgetown Bicentennial Lecture Series on Artificial Intelligence, Georgetown University, Washington, D.C., 1989  
Lecturer, American Philosophical Society Annual Meeting, Philadelphia, Pennsylvania, 1989  
Second Hillarp Memorial Lecture, Bioscience 89 Congress, Malmö, Sweden, 1989  
Distinguished Speaker, Office of Naval Research, Arlington, Virginia, 1989  
Speaker, "Evolution and Development" Colloquium, Ohio State University, Columbus, Ohio, 1989  
Wenner-Gren Lecture, University of Stockholm, Sweden, 1989  
Lecturer, Institut Jacques Monod, Paris, France, 1989  
Lectura magistralis, 6th Capo Boi Conference on Neuroscience, Sardinia, Italy, 1989  
Speaker, 11th International Joint Conference on Artificial Intelligence, Detroit, Michigan, 1989  
Lecturer, Wenner-Gren Center International Symposium, Stockholm, Sweden, 1989  
Distinguished Lecturer, The University of Maryland, College Park, Maryland, 1989  
Keynote Speaker, Xth International Symposium on Glycoconjugates, Jerusalem, Israel, 1989  
Lecturer, Office of Naval Research Contractors' Meeting on Haptics and Sensory-Guided Motor Control, Woods Hole, Massachusetts, 1989  
Lecturer, Harvard Neurosurgery Update, Harvard Medical School, Boston, Massachusetts, 1989  
Lecturer, First Annual Bristol-Myers Symposium on Neuroscience Research, The Johns Hopkins University, Baltimore, Maryland, 1989  
Foerster Lecture, University of California at Berkeley, Berkeley, California, 1989  
Lecturer, Special Convocation on the Future of Knowledge, Brown University, Providence, Rhode Island, 1989  
The James T. Penney Lecture, University of South Carolina, Columbia, South Carolina, 1989  
Lecturer, Mount Sinai Medical Center Symposium, New York, New York, 1989  
Lecturer, Society of Cosmetic Chemists Annual Meeting, New York, New York, 1989  
Lecturer, Carl Friedrich von Siemens Stiftung, Munich, Germany, 1989  
Lecturer, 25th Winter Seminar at Klosters, Switzerland, 1990  
Nobel Lecturer, Ramon y Cajal: Yesterday, Today, and Tomorrow, International Meeting, Madrid, Spain, 1990  
Plenary Lecturer, Second Annual Meeting of the International Joint Conference on Neural Networks, Washington, D.C., 1990  
Beatty Lecturer, McGill University, Montreal, Quebec, Canada, 1990  
Lecturer, Morgan Stanley Symposium in the Neurosciences, New York, New York, 1990  
Distinguished Guest Lecturer in Physiology, Medical College of Virginia, Richmond, 1990  
Distinguished Guest Lecturer in Cell Biology, Baylor College of Medicine, Houston, Texas, 1990  
Lecturer, The Fifth Annual Willard B. Rew Memorial Lecture, Harvard University Medical School, Boston, Massachusetts, 1990  
Lecturer, The Third Annual Marie Nyswander Memorial Lecture, Beth Israel Medical Center, New York, New York, 1990  
Recipient Lecture, University of Pennsylvania Distinguished Graduate Award, Philadelphia, Pennsylvania, 1990  
Lecturer, Mind and Brain Colloquium, University of Bielefeld, Bielefeld, Germany, 1990

- Lecturer, Fortieth Annual Nobel Prizewinners' Meeting, Lindau, Germany, 1990
- Lecturer, Second Annual Conference of "Espaces Europeens des Sciences a Strasbourg," Fondation Alsace, Strasbourg, France, 1990
- After Dinner Speaker, Decade of the Brain Symposium, National Institute of Medicine, Washington, D.C., 1990
- Lecturer, International School of Neuroscience, Praglia, Italy, 1990
- Lecturer, Fifth International Conference, "The Human Mind," Vatican City, 1990
- Lecturer, First International Symposium of the Ramón Areces Foundation "Present and Future of Research on the Brain," Madrid, Spain, 1990
- Lilly Lecture, Lilly Research Laboratories, Indianapolis, Indiana, 1990
- Lecturer, Neuroscience Symposium, New York University Medical Center, New York, 1991
- Lecturer, New York Academy of Sciences, New York, New York, 1991
- Lecturer, Center for Frontier Studies, Temple University, Philadelphia, Pennsylvania, 1991
- Lecturer, International Institute for Advanced Studies Lectures, "Body Plan and its Diversity," Kyoto, Japan, 1991
- Speaker, Max-Planck-Institut für Biophysikalische Chemie, "Selection - Natural and Unnatural - in Biotechnology," Göttingen, Germany, 1991
- Speaker, Federation of American Societies for Experimental Biology Annual Meeting, Atlanta, Georgia, 1991
- Harold Cooper Lectureship, The Conference on the Frontiers of the Biological Basis of Psychiatric Disorders, The University of Texas Medical School at Houston, Houston, Texas, 1991
- Robert S. Schwab Lecture, American Academy of Clinical Neurophysiology, Boston, Massachusetts, 1991
- Lecturer, The Centennial of the Neuron: A Decade of the Brain Event, NIMH and Fidia Research Foundation, Washington, D.C., 1991
- Speaker, Decade of the Brain Conference, the Library of Congress and NIMH, Washington, D.C., 1991
- Lecturer, Opening of the Cutaneous Biology Research Center, Massachusetts General Hospital, Harvard Medical School, Boston, Massachusetts, 1991
- Lecturer, Trends in Biology in Dawn of the Year 2000, The Gulbenkian Foundation, Lisbon, Portugal, 1991
- Lecturer, International School of Neuroscience, Fidia Research Foundation, Praglia Abbey, Italy, 1991
- Participant and Speaker, Nobel Jubilee, The Nobel Foundation and Lund University, Lund, Sweden, 1991
- Speaker, Nobel International Symposium, "Plasticity in the nervous system-from molecular to network level," Karolinska Institute, Stockholm, Sweden, 1991
- Derek Denny-Brown lecture, Boston Society of Neurology and Psychiatry, Boston, Massachusetts, 1992
- Speaker, New Perspectives on Memory, The Johns Hopkins Medical Institutions, Baltimore, Maryland, 1992
- Plenary Speaker, Association of American Medical Colleges Council of Deans Meeting, AAMC, Orlando, Florida, 1992
- Albert J. Barrett Lecture, The University of Michigan Department of Psychiatry, Ann Arbor, Michigan, 1992
- Keynote Speaker, The Third Frontiers in Science Symposium: Cell and Tissue Structure in Development, Differentiation, and Cancer, The National Institute of Environmental Health Sciences, Research Triangle Park, North Carolina, 1992
- Lecturer, Columbia University, College of Physicians and Surgeons, New York, New York, 1992

- Joseph Henry Lecture, Philosophical Society of Washington, Washington, D.C., 1992  
Speaker, Cold Spring Harbor Laboratory Symposium: The Cell Surface, Cold Spring Harbor, New York, 1992  
Jury Member, The Jaime I Prize in Science, Valencia, Spain, 1992  
Plenary Speaker, Nobel Symposium 83, Biological Function of Gangliosides, Lidingö, Sweden, 1992  
Key Note Speaker, Japan Bioindustry Association, Bio Japan '92 Symposium, Yokohama, Japan, 1992  
Speaker, Science and the Human Dimension Symposium: Reductionism's Primacy in the Natural Sciences and in Popular Exposition, Jesus College, Cambridge, England, 1992  
Lecturer, Times/Dillons Lecture, The Times, London, England, 1992  
Lecturer, The Fifth Locarno International Conference on Science and Society: Memory and Oblivion, Locarno International Conferences on Science and Society, Locarno, Switzerland, 1992  
Speaker, Harry Mullin, M.D. Memorial Lecture, University of Scranton, Scranton, Pennsylvania, 1992  
Speaker, Brain and Cognitive Processes, International Center for Semiotic and Cognitive Studies, Universita di San Marino, San Marino, Italy, 1992  
Speaker, Mind, Brain and Psychoanalysis, The American Psychoanalytic Association, New York, New York, 1992  
Speaker, Annual Meeting of the American Group Psychotherapy Association, San Diego, California, 1993  
Invited Address, 60th Anniversary Meeting of the Society for Research in Child Development, New Orleans, Louisiana, 1993  
Lecturer, Symposium Pharmaco-Clinique Roussel Uclaf No 16, Paris, France, 1993  
Lecturer, Concepts in Biology and Medicine, Faculty Lecture Series, The Scripps Research Institute, La Jolla, California, 1993  
Keynote Speaker, American Society for Biological Chemistry and Molecular Biology, San Diego, California, 1993  
Speaker, Department of Health and Human Services, National Institute of Child Health and Human Development, Symposium: Calcium and Neuronal Plasticity, Bethesda, Maryland, 1993  
Lecturer, Gathering of Laureates, Kuratorium für die Tagungen der Nobelpreisträger in Lindau (B) e.V., Lindau, Germany, 1993  
Chairman/Moderator, Novo Nordisk Foundation Symposium No. 7, Memory Concepts - Basic and Clinical Aspects, Copenhagen, Denmark, 1993  
Speaker, International Society of Developmental Biologists, 12th International Congress, Vienna, Austria, 1993  
Speaker, Encino-Tarzana Regional Medical Center 20th Anniversary: Celebration of Achievement, Tarzana, California, 1993  
Chairman/Speaker, Shrödinger Symposium, Dublin, Ireland, 1993  
Speaker, American Physiological Society Conference: Physiology and Pharmacology of Motor Control, San Diego, California, 1993  
Speaker, 7th Aspen/Wye Communications Conference, Aspen, Colorado, 1993  
Keynote Speaker, Annual Meeting of the Swiss Chapter of IBRO and the First Swiss Poster Meeting on Basic and Clinical Neuroscience, Basel, Switzerland, 1994  
Speaker, ISO-Foundation for Creativity and Leadership: Symposium on Creativity and Leadership, Zermatt, Switzerland, 1994  
Speaker, Becton Dickinson's International Cytometry Symposium, San Francisco, California, 1994  
Lecturer, Boston Psychoanalytic Institute, Boston, Massachusetts, 1994

- Speaker, Wenner-Gren Center International Conference, Stockholm, Sweden, 1994
- Speaker, The Royal Swedish Academy of Engineering Sciences Symposium on "Man and Information Technology," Forsmark Village, Sweden, 1994
- Speaker, Nobel Symposium, "The Life-Span Development of Individuals: A Synthesis of Biological and Psychosocial Perspectives," Stockholm, Sweden, 1994
- Speaker, Wright Science Colloquium on "Brain and Intelligence," Geneva, Switzerland, 1994
- Speaker, Max-Planck Institute, 30th Winter Seminar on "Molecules, Information and Memory," Klosters, Switzerland, 1995
- Speaker, Annenberg Center Symposium, "Frontiers in Biomedical Research," Indian Wells, California, 1995
- Speaker, The Royal Society Meeting on "The Evolution of Eukaryotic Cell Processes," London, England, 1995
- Kiskadden Lecturer, American Society of Plastic Surgeons, San Diego, California, 1995
- Keynote Speaker, SpoletoScienza, "Healing Knowledge," Spoleto, Italy, 1995
- Speaker, Carl Friedrich von Siemens Symposium, "Man and His Brain," Munich, Germany, 1995
- Speaker, Curie Institute Inauguration Symposium, Paris, France, 1995
- Speaker, Eighth International Institute of Genetics and Biophysics Meeting, Evolution and Development, Capri, Italy, 1995
- Speaker, Nobel Symposium, "Genetic versus Environmental Determination of Human Behaviour and Health," Stockholm, Sweden, 1996
- Lecturer, Complexity Lecture Series, Florida Atlantic University, Boca Raton, Florida, 1996
- Mackey Endowed Lecturer, Washington University School of Architecture, St. Louis, Missouri, 1996
- Lecturer, Arts and Lecture Series, California State University at San Marcos, San Marcos, California, 1996
- Lecturer, Bren Fellows Lecture, University of California at Irvine, Irvine, California, 1996
- Speaker, University at Buffalo's Sesquicentennial Academic Symposium, "Does the Body Matter? Frontiers of Knowledge in Nature, Society, and Culture," Buffalo, New York 1996
- Lecturer, The 250<sup>th</sup> Anniversary Symposium for Princeton University, "The Architectonics of Nature," Princeton, New Jersey 1996
- Lecturer, The Brady Endowment Fund, "Modern Brain Theory: Putting The Mind Into Nature," Jewish Community Center of Greater Washington, Rockville, Maryland, 1997
- Speaker, Nobel Symposium, Neural Darwinism: Population Thinking and Higher Brain Function, Stockholm, Sweden, 1997
- Lecturer, Lezioni Lincee Lecture Series, Scuola Normale Superiore, Pisa, Italy, 1997
- Magisterial Lecture, Meeting of the World Psychiatric Association, Universita Cattolica del Sacro Cuore, Rome, Italy, 1997
- Lecturer, BNL 50<sup>th</sup> Anniversary Distinguished Lecture Series, Brookhaven National Laboratory, Upton, New York, 1997
- Lecturer, Bicentennial Symposium, "Great Issues for Medicine in the Twenty-First Century," Dartmouth Medical School, Hanover, New Hampshire, 1997
- Speaker, "Body, Mind, and Brain: Cognitive Science Confronts Philosophy," University of Oregon, Eugene, Oregon, 1997
- Speaker, Strategic Directions in Biomedical Engineering, Conference of The Whitaker Foundation, Washington, D.C., 1997

- Lecturer, The Last Word Lunchtime Lectures, The Royal Geographical Society, London, United Kingdom, 1998
- Lecturer, University Lecture Series, University of Texas Southwestern Medical Center, Dallas, Texas, 1998
- Lecturer, Cognitive Science Colloquium, Georgia Institute of Technology, Atlanta, Georgia, 1998
- Keynote Speaker, "Psychoanalysis, Neurobiology and Therapeutic Change," The 65<sup>th</sup> Anniversary of The Institute For Psychoanalysis, Chicago, Illinois, 1998
- Speaker, The La Jolla Academy of Medicine, The Spring Reception Dinner Meeting, Rancho Santa Fe Golf Club, Rancho Santa Fe, California, 1998
- Speaker, International Seminar "Europe and Culture," Calouste Gulbenkian Foundation, Lisbon, Portugal, 1998
- Speaker, X<sup>o</sup> Edition of Spoletoscienza, Fondazione Sigma-Tau, Spoleto, Italy, 1998
- Speaker, Gulbenkian Seminar on Science and Consciousness, Calouste Gulbenkian Foundation, Lisbon, Portugal, 1998
- Speaker, Gulbenkian Symposium on Cognitive Neuroscience: Consciousness, Calouste Gulbenkian Foundation, Lisbon, Portugal, 1998
- Speaker, Nobel Symposium, Schizophrenia: Pathophysiological Mechanisms, Stockholm, Sweden, 1998
- Speaker, Symposium on Neuroscience & Society, Collège de France, Paris, France, 1998
- Speaker, "Between Physics and Biology: The Legacy of Luigi Galvani," University of Bologna, Bologna, Italy, 1998
- Keynote Speaker, Luigi Galvani Bicentenary Celebrations, University of Bologna, Bologna, Italy, 1998
- Speaker, "Reflections on XXth Century Sciences," Académie Royale des Sciences, des Lettres et des Beaux-Arts de Belgique Foundation Ochs-Lefèbvre International Symposium, Brussels Belgium, 1999
- Speaker, "Distinguished Lectureship Series" Medical University of Texas, Neuroscience Research Center, Texas, 1999
- Speaker, The Keck Foundation Roundtable Meeting, Los Angeles, California 1999
- Lecturer, Jiménez Díaz Memorial Lecture, Fundación Conchita Rábago de Jiménez Díaz, Madrid, Spain, 1999
- Speaker, 1999 Symposium, University of Wisconsin, Madison, Wisconsin 1999
- Lecturer, Institute for Brain Research, The Netherlands, Amsterdam 1999
- Speaker, The Frontiers of the Mind for the Twenty-First Century, The Library of Congress Conference, Washington, D.C., 1999
- Keynote Speaker, Congress on Evolutionary Computation, Washington, D.C., 1999
- Lecturer, Neuronal Ensembles: Paradigm Shifts in Cognitive Modeling Symposium, Washington, D.C., 1999
- Keynote Speaker, XXV Pio Manzù International Conference: "Argonauts of the Noosphere," Rimini, Italy, 1999
- Keynote Speaker, Pfahler hall dedication ceremony, Ursinus College, Collegeville, Pennsylvania, 2000
- Keynote Speaker, Workshop on Development and Learning, Michigan State University, Lansing, Michigan, 2000
- Lecturer, Toward a Science of Consciousness Conference, Tucson, Arizona, 2000
- Lecturer, Sonya Rudikoff Gutman Lecture, Bennington College, Vermont, 2000
- Lecturer, American Legion Brain Sciences Lecture, University of Minnesota, 2000

- Keynote Speaker, Mind/Brain/Behavior Initiative Conference, Harvard University, Boston, Massachusetts, 2000
- Lecturer, The Performance Theatre, Bergen, Norway, 2000
- Lecturer, Brain, Mind and Society at the Millennium, Federation of European Neuroscience, Brighton, United Kingdom, 2000
- Speaker, House Officers Reunion, Massachusetts General Hospital, Boston, Massachusetts, 2000
- Keynote Speaker, Oregon Health Sciences Foundation, Portland, Oregon, 2000
- Keynote Lecturer, Vincent duVigneaud Memorial Symposium, Will Graduate School of Medial Sciences, Cornell University, New York, 2001
- Lecturer, American Psychiatric Association Annual Meeting, New Orleans, Louisiana, 2001
- Lecturer, 11<sup>th</sup> International Congress on Genes, Gene Families, and Isozymes, Stockholm, Sweden, 2001
- Plenary Lecturer, 4<sup>th</sup> International Conference on Biological Physics, Kyoto, Japan, 2001
- Lecturer, The Tercentennial Tetelman Fellowship, Jonathan Edwards College, Yale University, 2001
- Plenary Lecturer, Ecole Polytechnique Fédérale de Lausanne, Lausanne, Switzerland, 2001
- Lecturer, “The Conscious Brain – The Hard Problem” series, Culture Council at Karolinska Institutet, Stockholm, Sweden, 2001
- Honorary President and Lecturer, The Biology and Consciousness Conference, Paris, France, 2002
- Lecturer, Contemporary Topics in Immunology Symposium, Nobel Forum, Karolinska Institutet, Stockholm, Sweden, 2002
- Keynote Lecturer, 32<sup>nd</sup> Annual Meeting of The Jean Piaget Society, Philadelphia, Pennsylvania, 2002
- Speaker, W. Grey Walter '02 Workshop, Southampton, United Kingdom, 2002
- Keynote Lecturer, 14<sup>th</sup> Annual Meeting of the American Neuropsychiatric Association, Honolulu, Hawaii, 2003
- Chair Lectures, Cátedra Santiago Grisolia, Valencia, Spain, 2003
- Keynote Lecturer, 23<sup>rd</sup> Blankenese Conference, Hamburg, Germany, 2003
- Keynote Lecturer, “Dewey, Hayek and Embodied Cognition: Experience, Beliefs and Rules” Symposium, Behavioral Research Council, American Institute for Economic Research, Great Barrington, Massachusetts, 2003
- Speaker, 2004 Global Conference, Milken Institute, Beverly Hills, CA, 2004
- Keynote Speaker, Frontiers of 21<sup>st</sup> Century Science Forum, Council of Scientific Society Presidents, Washington, D.C., 2004
- Lecturer, 2003-2004 Colloquium Series, William Alanson White Society, New York, NY, 2004