## Curriculum Vitae

Peter B. Dervan Name:

Address:

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## **Education**

1967 1972 B.S., Chemistry; Boston College Ph.D., Chemistry; Yale University

# **Academic Career**

1973	NIH Postdoctoral Fellow, Stanford University
1973	Assistant Professor of Chemistry, California Institute of Technology
1979	Associate Professor of Chemistry, California Institute of Technology
1982-	Professor of Chemistry, California Institute of Technology
1988-	Bren Professor, California Institute of Technology
1994-99	Chair, Division of Chemistry and Chemical Engineering
2020	Bren Professor of Chemistry, Emeritus

# **Awards**

1972	Wolfgang Prize for Distinguished Graduate Studies, Yale University
1977	Alfred P. Sloan Research Fellow
1978	Camille and Henry Dreyfus Teacher-Scholar
1983	John Simon Guggenheim Memorial Fellow
1985	ACS Nobel Laureate Signature Award for Graduate Education in Chemistry
1986	Arthur C. Cope Scholar Award, American Chemical Society
1986	Elected member, National Academy of Sciences
1988	Elected member, American Academy of Arts and Sciences
1988	Harrison Howe Award, American Chemical Society, Rochester Section
1993	Arthur C. Cope Award, American Chemical Society
1993	Willard Gibbs Medal, American Chemical Society, Chicago Section
1994	Nichols Medal, American Chemical Society, New York Section
1996	Maison de la Chimie Foundation Prize, France
1997	Elected member, National Academy of Medicine
1998	Remsen Award, American Chemical Society, Baltimore Section
1998	Kirkwood Medal, American Chemical Society, New Haven Section
1999	Alfred Bader Award, American Chemical Society
1999	Max Tishler Prize, Harvard University
1999	Linus Pauling Medal, American Chemical Society, Oregon Portland Puget Sound Section
1999	Richard C. Tolman Medal, American Chemical Society, Southern California Section
2000	Elected member, French Academy of Sciences
2000	Tetrahedron Prize
2002	Elected member, American Philosophical Society
2002	Harvey Prize; Technion, Israel
2004	Elected member, German National Academy of Sciences Leopoldina
2005	Ronald Breslow Award in Biomimetic Chemistry, American Chemical Society
2005	Wilbur Cross Medal, Yale University
2007	2006 National Medal of Science
2009	Frank H. Westheimer Medal, Harvard University
2015	Prelog Medal, ETH Zurich
2020	Elected member, National Academy of Inventors
2022	Priestley Medal, American Chemical Society

#### **Honorary Degrees**

- 1997 Boston College, Doctor of Science, honoris causa
- 2015 University of Wisconsin-Madison, Doctor of Science, honoris causa
- 2020 Baylor College of Medicine, Doctor of Letters in Medicine

#### **Teaching**

- 1980 Associated Students of California Institute of Technology 4th Annual Award for Excellence in Teaching
- 1981 Associated Students of California Institute of Technology 5th Annual Award

for Excellence in Teaching

2007 Associated Students of California Institute of Technology 31st Annual Award for Excellence in Teaching

## Foundation, University, Industrial Service

1987-13	Founding member,	Scientific Advisor	y Board, Gilead Sciences

1987-94 Member, Scientific Advisory Board, IGEN

1988-21

Member, Scientific Advisory Board, Robert A. Welch Foundation Member, Scientific Advisory Council, Abbott Laboratories Chair, Scientific Advisory Council, Abbott Laboratories 1994-96 1996-98

1998-11 Member, Board of Directors, Beckman Coulter, Inc.

1999-04 Member, Board of Directors, GeneSoft Pharmaceuticals

Member, Yale University Council 2007-08

2008-17 Member, Board of Trustees, Yale University

2013-16 Member, Board of Scientific Governors, The Scripps Research Institute

2014-20 Member, Board of Directors, Science History Institute

2015-21 Chair, Scientific Advisory Board, Robert A. Welch Foundation

2018-20 Member, Board of Directors, Science History Institute

#### **Committees and National Service**

1985	Member, Advisory Panel for Chemistry of Life Sciences, National Science Foundation
100600	

Member, Advisory Committee for Chemistry, National Science Foundation Chair, Advisory Committee for Chemistry, National Science Foundation 1986-88

1988-89

1988-90 Member, Board on Chemical Sciences and Technology, NRC 1991-94

Chair, Board on Chemical Sciences and Technology, NRC 1991-94 Member, Council of the Gordon Research Conferences

1992-94 Member, Advisory Board, Chemical & Engineering News

1994-96 Member, Class I Membership Committee, National Academy of Sciences

1997-99 Member, Nominating Committee, National Academy of Sciences

Member, Class I Membership Committee, National Academy of Sciences Member, NIH SBCA Study Section 2005-06

2005-08

Member, Class I Membership Committee, National Academy of Sciences 2012-13

2014 Chair, NIH Director's New Innovator Award Review Panel

2014-17 Chair, Chemistry Section, National Academy of Sciences

# **Editorial Boards**

1001 05	
1981-85	Advisory Board, The Journal of Organic Chemistry
1701 00	Travisory Board, The both that of St Sunte Shellishy

1984-89 Advisory Board, Chemical Reviews

Advisory Board, Nucleic Acids Research 1986-88

1986-92 Advisory Board, Journal of the American Chemical Society

Advisory Board, Accounts of Chemical Research Advisory Board, Bioconjugate Chemistry 1987-89

1989

1991-93

1992

Advisory Board, Journal of Medicinal Chemistry Advisory Board, Tetrahedron Advisory Board, Bioorganic and Medicinal Chemistry 1993

1999-02 Advisory Board, Proceedings of the National Academy of Sciences

Advisory Board, Angewandte Chemie 1999 Advisory Board, ACS Chemical Biology 2006-

## **Visiting Professorships**

1983	Visiting Professor, Eidgenössische Technische Hochschule (ETH), Zurich
1987	T. Y. Shen Visiting Professor, Massachusetts Institute of Technology
1988	Morris S. Kharasch Visiting Professor, <i>University of Chicago</i>
1989	Alexander Todd Visiting Professor, <i>University of Cambridge</i> , England
1990	Walker-Ames Visiting Professor, University of Washington
1993	Rolf Sammet Visiting Professor, Johann Wolfgang Goethe Universität, Frankfurt
1994	Smets Visiting Professor, <i>Université Catholique de Louvain and Katholiek</i>
	Universiteit van Leuven, Belgium
1998	Wellcome Visiting Professor in the Basic Medical Sciences, <i>University of</i>
	Medicine and Dentistry of New Jersey
2009	EaStCHEM Visiting Professor, University of St. Andrews, Scotland

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Special Lectureships
European Symposium on Bio-Organic Chemistry, Gregynog, Wales: Invited Speaker (1983)
Antibiotics 1983, Jarandilla de la Vera, Spain: Invited Lecturer (1983)
Biomolecular Stereodynamics Conference, Albany, N.Y.: Invited Lecturer (1983)
Nucleic Acids Gordon Conference: Invited Speaker (1983)
Physical Organic Gordon Conference: Invited Speaker (1983)
Tenth Mona Symposium, Jamaica: Plenary Lecturer (1984)
Chemistry as a Life Science Symposium, New Jersey: Main Lecturer (1984) Euchem Conference, France: Plenary Lecturer (1984)
Enzymes, Coenzymes and Metabolic Pathways Gordon Conference: Invited Speaker (1984)
Biopolymer Gordon Conference: Invited Speaker (1984)
Recent Developments in Organic Chemistry Symposium, ACS National Meeting, Philadelphia: Invited
     Lecturer (1984)
International Chemistry Congress, Hawaii: Invited Lecturer (1984)
University of North Carolina: Hanes Willis Lecturer (1985)
International Symposium on Bioorganic Chemistry, New York: Plenary Lecturer (1985)
IUPAC Congress, England: Plenary Lecturer (1985)
Cornell University: SKF Lecturer (1985)
29th National Organic Chemistry Symposium: Invited Lecturer (1985)
University of Wisconsin: McElvain Lecturer (1985)
Third International Kyoto Conference, Japan: Main Lecturer (1985)
University of Southern California, First Charles Heidelberger Seminar: Main Lecturer (1986)
Arthur C. Cope Award Symposium, Anaheim: Main Lecturer (1986)
Reisenberg Conference, Frankfurt: Main Lecturer (1986)
Pontifical Academy of Sciences, Vatican: Main Lecturer (1986)
Princeton University: FMC Lecturer (1986)
Yale University: Abbott Lecturer (1986)
Waksman Institute of Microbiology: Allied Corporation Lecturer (1987)
Euchem Stereochemistry Conference, Bürgenstock, Switzerland: Plenary Lecturer (1987) Hirschmann Symposium, Merck: Invited Lecturer (1987)
ACS Select Conference on Advances in Biotechnology and Materials Science Washington, D.C.:
      Invited Speaker (1987)
Nucleic Acids Gordon Conference: Invited Speaker (1987)
University of Nevada - Reno: R. C. Fuson Lecturer (1987)
INSERM Conference, Seillac, France: Invited Speaker (1987)
Johnson Symposium, Stanford University: Invited Speaker (1987)
1987 Welch Conference, Houston, Texas: Invited Speaker (1987)
Dartmouth College: Camille & Henry Dreyfus Lecturer (1987)
Brigham Young University: H. Smith Broadbent Lecturer (1988)
Peptide Gordon Conference: Invited Speaker (1988)
International Roche Pharma Frontiers in Chemistry Meeting, Switzerland: Plenary Lecturer (1988)
Colorado State University: Syntex Distinguished Lecturer (1988)
University of Oklahoma: Rosetta Briegel Barton Lecturer (1988)
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2nd Belgian Organic Synthesis Symposium: Plenary Lecturer (1988) Office of Naval Research: ONR Distinguished Lecturer (1988)

Eastman Kodak: Weissberger-William Lecturer (1988) University of Kansas: Dains Lecturer (1988) National Institutes of Health: DeWitt Stetton, Jr. Lecturer (1988) University of Wisconsin: Perlman Lecturer (1988) 31st Annual Midwest Biochemistry Conference: Keynote Address (1988) Columbia University: Falk-Plaut Lecturer (1988) Albert Einstein College of Medicine: Pfizer Lecturer (1988)
Frontiers in Bioorganic Chemistry, AAAS Symposium, San Francisco: Invited Lecturer (1989)
Research Perspectives in Structural Biology & Chemistry, 5th Biennial Drug Information Association Meeting, San Francisco: Invited Speaker (1989) National Symposium on Frontiers in Science, National Academy of Sciences, Irvine: Invited Lecturer  $(1989)^{\circ}$ Biotechnology and Human Genetic Predisposition to Disease, UCLA Symposia, Steamboat Springs, Colorado: Invited Lecturer (1989) *University of North Dakota:* George A. Abbott Lecturer (1989) 1st Stanislao Cannizzaro Workshop, Enna, Italy: Invited Lecturer (1989) Biomolecular Stereodynamics Conference, Albany, N.Y.: Invited Lecturer (1989) Nucleic Acids Gordon Conference: Chairman (1989) Heterocycles Gordon Conference: Invited Speaker (1989) Fourth International Conference on Bioinorganic Chemistry, Cambridge: Invited Lecturer (1989) Protein Society Meeting, Seattle: Plenary Lecturer (1989) Dedication Symposium, University of Michigan: Plenary Lecturer (1989) Pennsylvania State University: Priestley Lecturer (1989) McGill University: Clifford B. Purves Lecturer (1989) Oxygen Radicals in Biology Gordon Conference: Invited Speaker (1990) Frontiers in Biomedical Research, Annenberg Center: Invited Speaker (1990) Texas A&M University: Frontiers in Chemical Research Lecturer (1990) Boston College: University Lecturer (1990) Symposium on Selective Transformation in Organic Chemistry, The Netherlands: Invited Speaker (1990)University of Washington: Walker-Ames Lecturer (1990)
10th IUPAC Conference on Physical Organic Chemistry, Haifa, Israel: Plenary Lecturer (1990) Genes as Targets for Drug Design, ACS National Medicinal Chemistry Symposium: Invited Lecturer (1990)Symposium on the Chemical Synthesis of Antibiotics, Oiso, Japan: Plenary Lecturer (1990) Vanderbilt University: Arthur Ingersoll Lecturer (1990) Metals in Biology Gordon Conference: Invited Speaker (1991) 35th Annual Meeting of the Biophysical Society, San Francisco: Invited Speaker (1991) University of Montreal: BioMega Lecturer (1991) Furman University: John Albert Southern Lecturer (1991) Cancer Therapy into the 21st Century Symposium: Plenary Lecturer (1991) Hoffmann La Roche: Max Hoffer Memorial Lecturer (1991) Purdue University: H. C. Brown Lecturer (1991)
Carlton College: Frank G. and Jean M. Chesley Lecturer (1991) University of California, Berkeley: Calvin Lecturer (1991) Nucleic Acids Gordon Conference: Invited Speaker (1991) 32nd National Organic Symposium, Minnesota: Invited Speaker (1991) Conference Jacques Monod "Drugs Acting on Nucleic Acids," Roscoff, France: Invited Lecturer (1991) Stereochemistry at Sheffield, England: Invited Speaker (1991) 23rd General Assembly of Gesellshaft Deutscher Chemiker, Munich, Germany: Invited Speaker (1991) Frontiers in Chemistry and Medicine Symposium, Glaxo UNC Conference: Invited Speaker (1991) University of Notre Dame: Reilly Lecturer (1991) Atlantic Coast Lecturer (1992) Symposium on Molecular & Genetic Medicine, Stanford: Invited Speaker (1992) Michigan State University: Warner-Lambert Distinguished Lecturer (1992) University of Minnesota: Kolthoff Lecturer (1992) Frontiers in Chemical Research Symposium, Boston College: Invited Speaker (1992) University of California, Santa Barbara: B. R. Baker Memorial Lecturer (1992) Reaction Mechanism Conference: Invited Speaker (1992) Bioorganic Gordon Conference: Invited Speaker (1992) Progress in Natural Products Symposium, Nottingham, England: Plenary Lecturer (1992)

Molecular Recognition, National Academy of Sciences Colloquium: Invited Speaker (1992)

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Washington State University: Carl M. Stevens Lecturer (1992)
Fifth IASOC Conference, Ischia, Italy: Invited Speaker (1992)
San Jose State University: H. Murray Clark Memorial Lecturer (1992)
The Scripps Research Institute: DuPont-Merck Lecturer (1992)
University of Illinois: Eli-Lilly Lecturer (1992)
Rutgers University: Merck Lecturer (1992)
University of Iowa: Wawzonek Lecturer (1992)
Frontiers of Physical Science, AAAS Meeting, Boston: Invited Lecturer (1993) DNA & Biotechnology: A Celebration of 40 Years of the Double Helix, Cold Spring Harbor
    Laboratory: Invited Lecturer (1993)
Neue Schweizerische Chemische Gesellschaft, Zurich: Invited Lecturer (1993)
University of Pittsburgh: Phillips Lecturer (1993)
Arizona State University: Eyring Lecturer (1993)
Symposium on the Interface of Chemistry & Biology, Merrell Dow: Invited Lecturer (1993) ASBMB-ACS Symposium "40 Years After the Double Helix," San Diego: Invited Lecturer (1993)
IUPAC 2nd ISBOC, Fukuoka, Japan: Invited Lecturer (1993)
Johann Wolfgang Goethe Universitat, Frankfurt: Rolf Sammet Lecture (1993)
DNA Recognition Symposium, Copenhagen: Invited Lecturer (1993)
Northwestern University: Myron and Muriel Bender Lecturer (1993)
Yale University: Leo Sternbach Lecturer (1993)
Université Catholique de Louvain, and Katholiek Universiteit van Leuven, Belgium: Smets Chair
    Lecturer (1994)
114th Annual Meeting of Pharmaceutical Society of Japan, Tokyo: Plenary Lecturer (1994)
1994 Nichols Award Symposium: Medal Lecturer (1994)
Symposium on Recognition Processes, Birmingham, UK: Keynote Speaker (1994)
Pennsylvania State University: Thomas J. Watson, Jr. Lecturer in Molecular Biology (1994)
Universities of Sydney and New South Wales, Australia: Inaugural Howard Lecturer (1994)
Northeastern University: Arthur D. Little Lecturer (1994)
Florida Institute of Technology: Harold Blatt Lecturer (1994)
The University of Texas at Austin: Pettit Memorial Lecturer (1994)
New Frontier's Between Chemistry and Biology, Madrid, Spain: Juan March Lecturer (1995)
NATURE 3rd International Conference - The Science of Complex Molecular Systems, Paris: Invited
    Speaker (1995)
University of California, San Francisco: Troy C. Daniels Lecturer (1995)
Nucleic Acids Gordon Conference: Invited Speaker (1995)
Chemistry at the Interface of Biology and Medicine, Beckman Research Institute of the City of Hope:
    Plenary Lecturer (1995)
International Chemical Congress, Symposium on Molecular Recognition and Supramolecular
    Assemblies, Honolulu: Invited Speaker (1995)
Memorial Sloan-Kettering Cancer Center: Inaugural Jack Fox Lecturer (1996)
Contemporary Challenges in Molecular Medicine, Parke-Davis: Plenary Lecturer (1996)
FASEB Summer Research Conference, Enzymes that Act on Nucleic Acids: Invited Speaker (1996)
European Research Conference on Supramolecular Chemistry, Salamanca, Spain: Plenary Lecturer
    (1996)
20th IUPAC Symposium on the Chemistry of Natural Products, Chicago: Plenary Lecturer (1996)
North Jersey Section, ACS: Cecil L. Brown Lecturer (1996)
Frontiers in Chemical Biology Symposium, Harvard Medical School: Invited Speaker (1996)
Fifth Eurasia Conference, Guangzhou, China: Plenary Lecturer (1996)
Brown University: Leallyn B. Clapp Lecturer (1997)
Case Western Reserve University, Frontiers in Chemistry: Invited Lecturer (1997)
6th French-American Chemical Society Meeting on Synthetic and Bioorganic Chemistry, Tucson:
    Plenary Lecturer (1997)
Saint Vincent College: Threshold on the Twenty-First Century Lecturer (1997)
Harvey Mudd College 1997 Presentation Day: Keynote Address (1997)
Biomolecular Stereodynamics Conference, Albany, NY: Invited Lecturer (1997)
17th IUBMB/ASBMB Congress, Science for the 21st Century, San Francisco: Invited Lecturer (1997)
Chemistry: A Life Science, National Institutes of Health, Bethesda: Invited Speaker (1997) Scientist of the Year: ARCS Foundation Lecturer (1997)
63rd Meeting of the Israel Chemical Society, Tel Aviv: Plenary Lecturer (1998)
Challenges for Chemistry in the 21st Century, ACS National Meeting, Dallas: Invited Lecturer (1998)
Gene-Targeted Drugs: Function & Delivery, Nobel Workshop, Stockholm: Invited Speaker (1998)
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Wellcome Lecture, UMD, New Jersey (1998)

Decoding Genetic Function, Josel Fried Symposium, Chicago: Plenary Speaker (1998) International Symposium on Molecular Recognition, Warsaw, Poland: Plenary Lecturer (1998) Silver Jubilee FEBS Meeting, Copenhagen: Invited Speaker (1998) Yale University: John Gamble Kirkwood Award Lecturer (1998) University of Ottawa, Canada: Lemieux Lecturer (1998) 25th Anniversary Celebration of the Cope Award, ACS Anaheim: Invited Speaker (1999) Alfred Bader Award Symposium, ACS Anaheim: Award Lecturer (1999) Five College Chemistry Lecturer (1999) Harvard University: Max Tishler Prize Lecturer (1999) Chemistry for Health, Royal Society of Chemistry, Edinburgh: Plenary Lecturer (1999) Pauling Award Symposium, Oregon: Award Lecturer (1999) Frontiers in Bioorganic Chemistry-2000, Taipei, Taiwan: Invited Speaker (1999) Transcription Factor Pathogenesis of Cancer at the Millennium, AACR Conference, Dana Point, CA: Invited Speaker (2000) Trinity University: McGavock Lecturer (2000) University of Nebraska: C. S. Hamilton Award Lecture (2000) 100 Jahre Chemische Institute in der Hessische Strasse, Berlin: Invited Speaker (2000) University of California, Irvine: Robert W. Taft Memorial Lecturer (2000) Texas Tech University: Henry J. Shine Endowment Lecturer (2000) Pierce College: Frontiers in Science Lecturer (2000) University of Saskatchewan: J.W.T. Spinks Lecturer (2001) International Meeting on Recognition Studies in Nucleic Acids, Sheffield: Plenary Lecturer (2001) Johns Hopkins University School of Medicine: Charles E. Dohme Memorial Lecturer, "Chemistry in the Service of Medicine" (2001) Iowa State University: Henry Gilman Lecturer (2001) Conference on Fundamental Sciences, Singapore: Public Lecturer (2001) ACS National Meeting, Chicago: Tetrahedron Prize Award Lecturer (2001) Sixteenth Annual William S. Johnson Symposium, Stanford University: Invited Speaker (2001) Frontiers in Molecular Sciences: Nobel Jubilee Symposium in Chemistry, Stockholm: Invited Lecturer (2001)Texas A&M University: Derek Barton Lecturer (2002) *University of Illinois:* Marvel Lecturer (2002) University of Rochester: Rothchild Lecturer (2002) 7th ICSN Symposium, Gif-sur-Yvette, France: Invited Speaker (2002) Harvey Prize Lecture: Haifa, Israel (2002) Bioorganic Gordon Research Conference: Invited Speaker (2002) Frontiers in Organic Chemistry, Colorado State University: 6th John K. and Delores Stille Science Symposium: Invited Speaker (2002) Presidents Research Seminar Series: Memorial Sloan-Kettering Cancer Center: Invited Speaker (2002) International Symposium on Nucleic Acids; From Bases to Genomics, Paris: Plenary Lecturer (2003) Interface between Chemistry and Biology Symposium, Biomedical Center at Uppsala University, Sweden: Invited Speaker (2003) University of Alberta: 41st Reuben Benjamin Sandin Lecturer (2003) Washington University, St. Louis: 44th Joseph W. Kennedy Lecturer (2003) Frontiers in DNA Research, ACS National Meeting, New York: Invited Speaker (2003) Symposium on Nucleic Acids, Yale University: Invited Speaker (2003) Technical University of Berlin: Bohlmann Lecturer (2003) Chemistry & Biology of Peptides Gordon Conference: Invited Speaker (2004) Special Symposium for Dieter Seebach, Zürich: Invited Speaker (2004) Oxford University, United Kingdom: Robert Robinson Memorial Lecturer (2004) McGill University, Montreal: Merck Lecturer (2004) University of Rochester: Victor J. Chambers Memorial Lecturer (2004) Georgia Institute of Technology: Peter B. Sherry Memorial Lecture (2004) University of Michigan: Werner E. Bachmann Memorial Lecturer (2004) 15<sup>th</sup> International Conference of Organic Synthesis, Nagoya, Japan: Plenary Lecturer (2004) Drug Carriers in Medicine & Biology Gordon Conference: Invited Speaker (2004) Ronald Breslow Award Symposium, ACS San Diego: Award Lecturer (2005) Virginia Commonwealth University: Mary E. Kapp Lecturer (2005) Biomolecular Stereodynamics Conference, Albany, New York: Invited Lecturer (2005) Chemistry Meets Biology, Spetses, Greece: Invited Lecturer (2005) Pacifichem 2005, Honolulu, New Age of Advanced Materials Symposium: Invited Lecturer (2005)

ACS-CSIR International Conference on Building Bridges for 21st Century Organic Chemistry and

Chemical Biology, Pune, India: Plenary Lecturer (2006)

Knud Lund Larson Symposium, Organic Chemistry at the Interface to Biology, Copenhagen: Invited Speaker (2006)

Harvard Medical School: Otto Krayer Lecturer (2006)

University of Pennsylvania: Bayer Student Organic Lecturer (2006)

2nd International Symposium: Molecular Control of Gene Expression, Erlangen, Germany: Keynote Lecturer (2006)

Challenges in Organic Chemistry, Eighth Tetrahedron Symposium, Berlin: Plenary Speaker (2007)

ETH Zurich: Behringer Simon Lecture (2007)

Conway Festival of Research, University College Dublin, Dublin: Invited Speaker (2007)

University of California, Davis: R. Bryan Miller Plenary Lecturer (2008) University of Manchester, United Kingdom: T. Y. Shen Lecturer (2008)

International Symposium in Molecular Recognition of DNA: Biological Applications, Tokyo: Plenary Lecturer (2008)

University of Illinois, Urbana: Rinehart Lecturer in Chemical Biology (2008)

University of St. Andrews, Scotland: Organic Chemistry meets Chemical Biology Symposium: Invited Speaker (2009)

University of Wisconsin, Madison: 33<sup>rd</sup> Steenbock Symposium: Invited Speaker (2009)

K. T Wang Bio-organic Chemistry Lectureship, Taiwan (2009) Frank H. Westheimer Prize Medal Lecture, Harvard (2010)

33<sup>rd</sup> Reaction Mechanisms Conference, UMass: Invited Speaker (2010)

Molecular Recognition of Nucleic Acids: Pacifichem, Honolulu: Invited Speaker (2010)

25 Years of the Committee on Professional Training, ACS Meeting, Anaheim: Invited Speaker (2011) Stanford University: Sessler Distinguished Alumni Lecturer (2011)

Gibbs Medal Centennial, ACS Meeting, Denver: Invited Speaker (2011) Goodman Award Symposium, ACS Meeting, Denver: Invited Speaker (2011) Harvey Mudd College: Bruce J. Nelson '74 Distinguished Speaker (2011)

Frontiers in Nucleic Acid Chemistry, Biology and Drug Discovery, ACS Meeting, San Diego: Invited Speaker (2012)

Paris Foldamers 2013 Symposium, Les Cordeliers, Paris, France: Invited Speaker (2013)

St. Louis University: Sigma-Aldrich Lecturer (2013)

Dana-Farber Cancer Institute: Susan Swerling Lecturer (2013)
Fundamentals in Chemistry and Applications Symposium, NTU, Singapore: Invited Speaker (2013)
35th Annual Princeton ACS Fall Organic Chemistry Symposium, Princeton: Invited Speaker (2013)
25th Annual Frontiers in Chemistry Symposium, The Scripps Research Institute: Invited Speaker (2014)
247th ACS National Meeting and Exposition, Dallas: ACS Chemical Biology Lecturer (2014)

University of Wisconsin, Madison: Hirschmann Lecturer (2014)

University of Virginia: Sidney Hecht Lecturer (2014)

Tetrahedron Prize Symposium, ACS Meeting, San Francisco: Invited Speaker (2014)

Rice University: Richard B. Turner Lecturer (2015)

Southwestern University: Jean Dreyfus Boissevain Lecturer (2015)

Frontiers of Molecular Science Symposium, Chalmers University, Sweden: Invited Speaker (2015)

ETH Zurich: Prelog Medal Lecture (2015) 16th Joseph F. Bunnett Symposium, UC, Santa Cruz: Invited Speaker (2016)

University of California, Irvine: Overman Lecturer (2016)

University of California, Los Angeles: Glenn Seaborg Symposium: Invited Speaker (2016)

University of Illinois, Urbana: Nelson Leonard Centennial Symposium: Invited Speaker (2017)

City of Hope, Duarte: Arthur D. Riggs Distinguished Lecturer (2017)

The Salk Institute, La Jolla: Leslie Orgel Lecturer (2017) Peptides Gordon Conference: Keynote Lecturer (2018)

19th Tetrahedron Symposium, Lake Garda, Italy: Plenary Lecturer (2018) A. I. Scott Medal Symposium, Texas A&M University: Invited Speaker (2018)

California Institute of Technology: John D. Roberts Lecture (2019)