



## DR. LEROY E. HOOD

Curriculum Vitae

**Business Address:** Institute for Systems Biology  
401 Terry Avenue North  
Seattle, Washington 98109  
<http://isbscience.org/>

**Date and Place of Birth:** Missoula, Montana - October 10, 1938

**Citizenship:** United States

**Marital Status:** Married 1963, two children

### Education:

1960 - B.S. California Institute of Technology (Biology)  
1964 - M.D. The Johns Hopkins School of Medicine (Medicine)  
1968 - Ph.D. California Institute of Technology (Biochemistry) - Immunoglobulins: Structure, Genetics, and Evolution

### Research Interests:

Systems biology and medicine  
Genomics  
Technology development  
Personalized medicine cancer  
Neurodegeneration  
Clinical assays

### Non-Scientific Interests:

Mountaineering and climbing  
Photography  
Running  
Science fiction

### Professional Experience:

1963-1964 NIH Predoctoral Fellowship, California Institute of Technology  
1964-1967 NIH Postdoctoral Fellowship, California Institute of Technology  
1967-1970 Senior Investigator, Immunology Branch, GL&C, NCI, National Institutes of Health, Bethesda, MD  
1970-1973 Assistant Professor of Biology, California Institute of Technology  
1973-1975 Associate Professor of Biology, California Institute of Technology

1975-1977	Professor of Biology, California Institute of Technology
1977-1992	Bowles Professor of Biology, California Institute of Technology
1980-1989	Chairman, Division of Biology, California Institute of Technology
1981-1990	Director, Cancer Center, California Institute of Technology
1989-1992	Director, NSF Science and Technology Center for Molecular Biotechnology, California Institute of Technology
1992-2000	Director, NSF Science and Technology Center for Molecular Biotechnology, University of Washington
1992-1999	William Gates III Professor, Chairman & Founder, Department of Molecular Biotechnology, School of Medicine, University of Washington
1992-1999	Professor, Departments of Bioengineering and Immunology; Adjunct Professor, Departments of Medicine and Computer Science, University of Washington
1999-Present	Professor at Large, Keck Graduate Institute of Applied Life Sciences
1999-Present	Co-founder and Chief Strategic Officer, Institute for Systems Biology
2000-Present	Affiliate Professor, Departments of Bioengineering, Computer Science, and Immunology, University of Washington
2002-Present	Affiliate Professor, Department of Microbiology & Immunology, University of British Columbia
2004-Present	Full Faculty Member, University of Washington Molecular and Cellular Biology Program
2016-Present	Senior Vice President and Chief Science Officer, Providence St. Joseph Health

### **Academic and Professional Honors:**

1960	Hinrichs Memorial Award, Caltech: Outstanding Student Leader
1960	B.S. with Honors, Caltech
1963	Alpha Omega Alpha, Johns Hopkins Medical School
1971-76	NIH Career Development Award
1974	Camille and Henry Dreyfus Teacher-Scholar Grant
1977	Endowed Professorship: The Ethel Wilson Bowles and Robert Bowles Professor of Biology
1980	Howard Taylor Ricketts Medal, University of Chicago: Outstanding Accomplishment in the Medical Sciences
1981	Bridges Award, ARCS Foundation: Communication of Science to the General Public
1982	Harvey Lecturer, The Rockefeller University
1984	3M Life Sciences Award: Significant Contributions to the Health and Welfare of Mankind
1985	The Ernst W. Bertner Memorial Award, The University of Texas System Cancer Center, University of Texas at Houston
1985	California Scientist of the Year
1985	One of the Science Digest's 100 Top Innovators: Development of Highly Sophisticated Instruments for the Synthesis and Analysis of Genes and Proteins
1986	Analytical Prize, German Society for Clinical Chemistry Award: "The Development of Microchemical Facilities for High-Sensitivity Protein Sequencing
1986	Doctor of Science Honorary Degree, Montana State University, Bozeman, Montana
1987	Louis Pasteur Award for Medical Innovation: "Studies that Bring New Perceptions of Nature and Impact Medicine in the Future

- 1987 Fellow of the American Association for the Advancement of Science: "Studies in Molecular Immunology and the Development of Techniques in Protein and Nucleic Acid Chemistry
- 1987 ARCS' Man of Science for Pioneering Research: "Deciphering the Message of DNA"
- 1987 Isco Award for Significant Contributions to the Field of Biochemical Instrumentation, University of Nebraska-Lincoln
- 1987 Doctor of Science Honorary Degree, Mt. Sinai School of Medicine of the City University of New York
- 1987 Dickson Prize in Medicine for Contributions to Immunology and Molecular Biology
- 1987 Albert Lasker Basic Medical Research Award for Studies of Immune Diversity
- 1988 Distinguished Service Award of the 1988 Miami BIO/TECHNOLOGY Winter Symposium for Pioneering the Automation of Protein and DNA Sequencing and Synthesis
- 1988 Rabbi Shai Shacknai Memorial Prize in Immunology and Cancer Research, Hebrew University
- 1988 Doctor of Science Honorary Degree, University of British Columbia, Vancouver
- 1989 Commonwealth Award of Distinguished Service for Work in Developing Instruments Used to Study Modern Biology and Medicine
- 1989 Doctor of Science Honorary Degree, University of Southern California, Los Angeles, California
- 1989 The Cetus Award for Biotechnology, ASM
- 1989 Steven C. Beering Award, Indiana University School of Medicine
- 1990 Doctor of Humane Letters Honorary Degree, Johns Hopkins University
- 1990 American College of Physicians Award for Distinguished Contributions in Science as Related to Medicine
- 1991 Franz Groedel Medal, American College of Cardiology
- 1992 Fellow of the International Institute of Biotechnology, Canterbury, Kent, UK
- 1992 Fifth Annual Duke University Award for Immunologic Research
- 1992 Doctor of Science Honorary Degree, Wesleyan University
- 1993 Scientist of the Year, Research and Development Magazine
- 1993 Initiatives in Technology Award, Partners in Public Education
- 1993 CIBA-GEIGY DREW Award in Biomedical Research, Drew University
- 1994 Lynen Medal, Miami Bio/Technology Winter Symposium
- 1994 Johns Hopkins University Distinguished Alumnus Award
- 1994 American Association for Clinical Chemistry National Lectureship Award
- 1994 National Biotechnology Venture Award
- 1995 Honorary Doctorate of Science, Whitman College, Walla Walla, WA
- 1997 UCLA Gold Medal for Contributions to Science and Medicine
- 1997 Fellow of the American Academy of Microbiology
- 1997 Laguna Niguel Hall of Fame Award for Development of Automated Sequencing and Synthesis of DNA
- 1998 Beckman Lecturer Award, Association for Laboratory Automation for Pioneering and Original Research in Automation
- 1998 Distinguished Service Award, National Association of Biology Teachers
- 1999 Honorary Elected Member, American Association for Clinical Chemistry
- 1999 Forbes Magazine's Top 25 Most Influential Biotech Leader
- 1999 Honorary Doctorate of Science, Bates College, Lewiston, ME

- 2000 Edman Award, Methods of Protein Structure Analysis (MPSA) 13th International Congress, Charlottesville, Virginia
- 2001 The New York Academy of Medicine Award for Discovery in the Service of Health, New York, NY
- 2001 The Society for Biomolecular Screening (SBS) Award for Achievement in Biomolecular Screening and Lead Discovery
- 2001 Dudley Smith Licensing Lecture Award, the Licensing Executives Society (LES)
- 2001 Honorary Doctorate of Science, The Pennsylvania State University, University Park, PA
- 2001 The Seattle Times MetroPOLIST 150: Most Influential People Who Shaped Seattle in the Past 150 Years
- 2002 Discover Magazine's 20 Biotech Geniuses
- 2002 Kyoto Prize in Advanced Technology
- 2002 *The Economist* Innovation Award for Bioscience
- 2002 Genome Technology Allstar, Most Outstanding in Sequencing Technology
- 2002 George R. Stibitz Computer Pioneer Award, Bozeman, MT
- 2003 Andrew C. von Eschenbach Lecture Award, 10th Annual Genitourinary Oncology Conference, University of Texas MD Anderson Cancer Center, Houston, TX
- 2003 Lemelson-MIT Prize for Invention and Innovation, Cambridge, MA
- 2003 World Technology Award for Biotechnology
- 2003 Howard Vollum Award for Distinguished Accomplishment in Science & Technology, Reed College, Portland, OR
- 2004 Biotechnology Industry Organization (BIO) and Chemical Heritage Foundation (CHF) 6<sup>th</sup> Annual Biotechnology Heritage Award, San Francisco, CA
- 2004 Association for Molecular Pathology (AMP) Award for Excellence in Molecular Diagnostics, Los Angeles, CA
- 2004 Honorary Professor, Zhejiang University, China
- 2004 Honorary Professor, Tsinghua University, China
- 2004 Honorary Director, Medical Systems Biology Research Center, Tsinghua University School of Medicine, China
- 2005 Distinguished Biomedical Science Achievement Award in Recognition of Pioneering Developments in Molecular Biotechnology, Oakland University, Center for Biomedical Research, Rochester, MN
- 2005 Doctor of Human Letters, Honoris Causa, Loyola University, Chicago, IL
- 2005 Honorary Doctorate of Science, Medical College of Wisconsin, Milwaukee, Wisconsin
- 2005 Degree of Doctor Honoris Causa, Ben-Gurion University of the Negev, Beer-Sheva, Israel
- 2005 Bio-IT World Best Practices Award for Developing Automated Biological Instrumentation, and for Pioneering the Field of Systems Biology
- 2005 *Seattle Magazine's* 25 Most Influential People of the Year
- 2005 Biomedicum Helsinki Foundation Award, Helsinki, Finland
- 2006 Associate Member of European Molecular Biology Organisation
- 2006 Heinz Award for pioneering work in Systems Biology
- 2006 Wharton - Infosys Business Transformation Award
- 2007 American Society of Cytopathology - Basic Science Lectureship Award
- 2007 Inducted into National Inventor's Hall of Fame
- 2007 Society for Surgical Oncology - Basic Science Award
- 2007 Honorary Doctorate of Science, College of Wooster, Wooster, Ohio

- 2007 LASER/Boeing Science Advocate Award in Appreciation of Outstanding Efforts for Science Education (K-12) Advocacy
- 2007 Fellow of the Institute of Systems and Synthetic Biology, Imperial College, London
- 2008 Honorary Doctorate of Science, University of Edinburgh, Edinburgh Scotland
- 2008 Pittcon Heritage Award, Pittsburgh Conference and the Chemical Heritage Foundation
- 2008 Cura Personalis Award for Outstanding Contributions to Human Health Guided by Compassion and Service, Georgetown University
- 2008 Wired Magazine's 2008 Smart List: 15 people the Next President Should Listen To
- 2009 100 Agents of Change, Rolling Stone magazine (April 2, 2009 edition)
- 2009 Honorary Doctor of Science (Hon DSc), University of Warwick, England
- 2009 Outstanding Achievement and Innovation in Life Sciences, Seattle Business Magazine, Leaders in Health Care
- 2010 Heath Memorial Award, (awarded for contributions to patient care through clinical application of basic cancer knowledge) University of Texas, MD Anderson Cancer Center
- 2010 The Kistler Prize, (awarded for increasing the knowledge and understanding of the relationship between the human genome and society) Foundation for the Future, Seattle, WA
- 2010 Honorary Professor, College of Biology and Biotechnology, Hunan University, Changsha, China
- 2010 Distinguished Alumni Award, California Institute of Technology
- 2011 National Academy of Engineering, 2011 Fritz J. and Delores H. Russ Prize for automating DNA sequencing that revolutionized biomedicine and forensic science
- 2011 Honorary Doctor of Science (Hon DSc) from Mount Sinai School of Medicine
- 2011 Chinese Academy of Science Einstein Professorship, awarded to distinguished international scientists actively working on the frontiers of science and technology
- 2011 Personalized Medicine Coalition award for distinguished leadership advancing the frontiers of personalized medicine
- 2011 BioMed SA Julio Palmaz award given to an internationally recognized innovator having made significant contributions to the biomedical industry by putting novel ideas into action with transformational results
- 2011 National Medal of Science (awarded in 2012)
- 2012 Honorary member of the Society of Toxicology
- 2012 National Academy of Inventors, Charter Fellow
- 2013 Future in Review, CEO of the year
- 2013 Alvin J. Thompson Award for Leadership in K-12 education and science (awarded by NW Assoc. for Biomed Research)
- 2013 Fellow, American Association for Cancer Research (AACR)
- 2013 Peking University Global Fellowship Award
- 2013 Honorary Professorship - Peking University
- 2013 Seven Over 70 Best Innovators in MIT Technology Review Magazine
- 2014 Geoffrey Beene Builders of Science award presented by Research!America
- 2014 Institute of Electrical and Electronics Engineers Medal for Innovations in Healthcare Technology
- 2014 Named by the Best Schools one of the 50 Most Influential Scientists in the World
- 2015 The Johns Hopkins University Alumni Association Global Achievement Award
- 2015 Named by Scientific American #6 among the Top 100 Biotech Visionaries Worldwide

- 2016 Ellis Island Medal of Honor
- 2016 University College Dublin Ulysses Medal
- 2017 National Academy of Sciences Award for Chemistry in Service to Society
- 2017 Honorary Doctor of Science (Hon DSc) from University of British Columbia
- 2018 IRI Medal Award recognizes leaders of technology for their outstanding accomplishments in technological innovation, which contribute broadly to the development of industry and to the benefit of society
- 2019 IRI Medal for Technological Advances that Further Industrial Application to Biology

### **Memberships in Professional Organizations:**

American Academy of Arts and Sciences  
 American Academy of Microbiology (American Society for Microbiology), Fellow  
 American Association for the Advancement of Science  
 American Association for Clinical Chemistry, Honorary Member  
 American Association of Immunologists  
 American Chemical Society  
 American Institute for Medical and Biological Engineering (AIMBE), College of Fellows  
 American Medical Association  
 American Philosophical Society  
 American Society for Biochemistry and Molecular Biology  
 Association of American Physicians  
 Association for Laboratory Automation  
 European Molecular Biology Organization  
 Institute of Medicine  
 National Academy of Sciences  
 International Society of Molecular Evolution  
 National Academy of Engineering  
 Sigma Xi  
 Society for Integrative and Comparative Biology  
 World Technology Network, Fellow

### **Lectureships:**

1974 Welch Foundation Conference on Chemical Research, Houston  
 1977 Distinguished Lectureship, Department of Zoology, University of Texas-Austin  
 1979 Mary Huling Edens Lecturer in Medical Genetics, Galveston  
 1980 Philips Lecturer, Haverford  
 1980 Howard Taylor Ricketts Lecturer, University of Chicago  
 1980 Camille and Henry Dreyfus Lecturer, Pomona College  
 1980 Kinyoun Lecturer, National Institutes of Health  
 1980 Smith Kline and French Lecturer, Vanderbilt University  
 1981 Dan Campbell Lecturer, Asilomar  
 1981 Michael Heidelberger Lecturer, Columbia University  
 1981 Shaffer Lecturer, Washington University School of Medicine  
 1981 Watkins Lecturer, Wichita State University  
 1981 Stanhope Bayne-Jones Memorial Lecturer, Johns Hopkins Medical School  
 1981 Burroughs Wellcome Lecturer, Mt. Sinai Medical School  
 1981 Jesse Beams Memorial Lecturer, University of Virginia Medical School

- 1981 Robert W. Woodruff Lecturer, Emory University
- 1982 John M. Chemerda Lecturer, The Pennsylvania State University
- 1982 Marrs McLean Lecturer, Baylor College of Medicine
- 1982 Carter-Wallace Lecturer, Princeton University
- 1982 Smith-Kline Lecturer, Philadelphia
- 1982 Sommer Memorial Lecturer, Portland
- 1982 Dreyfus Distinguished Lecturer, Indiana University
- 1982 Visiting Professor of Biochemistry, University of California, Riverside
- 1982 Dreyfus Distinguished Lecturer, St. Olaf College
- 1983 Linus Pauling Lecturer, Stanford University
- 1983 Wendell Griffith Lecturer, St. Louis University
- 1983 Syme Lecturer, Walter and Eliza Hall Institute of Medical Research, Melbourne
- 1983 Allied Lecturer, Rutgers University
- 1983 Smith Kline and French Lecturer, University of California, San Francisco
- 1983 Benjamin Knox Rachford Memorial Lecturer, University of Cincinnati
- 1983 Belfort Lecturer, Purdue University
- 1983 Stuart Memorial Lecturer, Brown University
- 1984 Charles Heidelberger Memorial Lecturer, University of Southern California
- 1984 Albert Coons Memorial Lecturer, Harvard Medical School
- 1984 Nellie Fox Distinguished Lecturer, Northwestern Medical School
- 1984 President's Lecturer, Texas A&M
- 1986 J.S. Blumenthal Lecturer, University of Minnesota
- 1986 Wellcome Visiting Professor, University of Michigan
- 1986 Barton Lecturer, University of Oklahoma
- 1986 Maurice Ogur Memorial Lecturer, Southern Illinois University at Carbondale
- 1986 Nieuwland Lecturer in Biological Sciences, the University of Notre Dame
- 1986 R.E. Dyer Lecturer, Bethesda, Maryland
- 1987 Rennebohm Lecturer, University of Wisconsin, Madison
- 1987 The Committee of the Interscience Conference on Antimicrobial Agents and Chemotherapy Lecturer, New York
- 1987 Albert M. Snell Memorial Lecturer, Research Institute, Palo Alto Medical Foundation
- 1987 The 1987 Benedum Lecturer, West Virginia University
- 1987 Herman Beerman Lecturer, The Society for Investigative Dermatology
- 1988 Rabbi Shai Shacknai Memorial Prize Lectureship, Hebrew University
- 1988 James M. Craig Memorial Lecturer, Oregon State University
- 1989 Wayne State University Distinguished Lecturer for the Center of Molecular Biology
- 1989 H. Willard Davis Lecturer, The University of South Carolina
- 1989 The Cape Lecturer, McGill University
- 1989 Jeanette Oshman Efron Lecturer in Molecular Genetics, Baylor College of Medicine
- 1989 Myron Karon Lecturer, Childrens Hospital of Los Angeles
- 1989 Los Angeles Society of Pathologists Lecturer, Los Angeles
- 1990 Visiting Scholar, National Institute of Dental Research, NIH
- 1990 John G. Reinhold Lecturer, University of Pennsylvania
- 1990 Bristol Myers Lecturer, University of Colorado, Boulder
- 1990 Hobart H. Willard Lectureship in Analytical Chemistry, University of Michigan
- 1990 Roy and Eva Hong Lectureship in Molecular Biology, University of Illinois
- 1990 Jeanette Piperno Memorial Lectureship, Temple University

- 1990 Microbiology Graduate Students Distinguished Lecturer, Iowa State University
- 1990 Basil Staples Visiting Professorship, University of Maine
- 1990 Bren Fellows Lectureship, University of California, Irvine
- 1991 Leo S. Weil Memorial Lecturer, Touro Infirmary, Tulane Medical Center and Louisiana State University Medical Center, New Orleans
- 1991 Jessie & John Danz Lectureship, University of Washington
- 1991 Kosuge Memorial Lectureship, University of California, Davis
- 1991 Franz Groedel Lecturer, Opening Plenary Session, American College of Cardiology
- 1991 Hoffman-LaRoche Lectureship in Microbiology, the Waksman Institute, Rutgers University
- 1991 The Aser Rothstein Lecturer, Research Institute of the Hospital for Sick Children, Toronto, Canada
- 1991 Distinguished Medical Scientist Lecturer, Ohio State University
- 1991 Richard S. Polacsek Lecturer, Welch Medical Library, Johns Hopkins University
- 1992 William Weigle Memorial Lecturer, Scripps Research Institute
- 1993 Hooke Lecturer, XVI Congress of the Int'l Society for Analytical Cytology
- 1993 Serono Lecturer, American Society of Andrology
- 1993 Beirne B. Carter Lecturer in Immunology, University of Virginia
- 1993 Charles C. & Mary Elizabeth Lovely Verstandig Distinguished Visiting Professor, University of Tennessee Memphis
- 1994 Feodor Lynen Lecturer, The Miami Bio/Technology Winter Symposium
- 1994 Dennis Memorial Lecturer, Baylor College of Medicine
- 1994 Baker Lecturer, American Laryngological Association
- 1994 R.V. Pole Memorial Lecturer, Conference on Lasers and Electro-Optics
- 1994 Ramon Guiteras Lecturer, American Urological Association, Inc.
- 1994 Ernest Cotlove Lecturer, Academy of Clinical Laboratory Physicians and Scientists
- 1994 Lansdowne Lecturer, University of Victoria
- 1994 Zickler Lecturer, State University of New York at Stony Brook
- 1995 Howard Steel Lecturer, Pediatric Orthopaedic Society of North America
- 1995 Phi Beta Kappa Lecturer, Whitman College
- 1995 Paulette Shirley Pritchett Lecturer, University of Alabama at Birmingham
- 1995 Matthew T. Moore Distinguished Lecturer, American Association of Neuropathologists
- 1995 Neel Distinguished Research Lecturer, American Academy of Otolaryngology Head and Neck Surgery
- 1995 I.S. Ravdin Lecturer in Basic Sciences, Clinical Congress of the American College of Surgeons
- 1995 Pokar Kabra Lecturer, University of California, San Francisco
- 1996 Watkins Visiting Professor, Wichita State University
- 1996 Marlene DeLuca Memorial Lecturer, University of California, San Diego
- 1996 O'Leary Visiting Scientist Lecturer, Gonzaga University
- 1996 Leach Lecturer, Lorne Conference on Protein Structure and Function, Lorne, Australia
- 1997 John P. McGovern Lecturer, Baylor College of Medicine
- 1997 Harvey Lecturer, Rockefeller University
- 1997 Takeru Higuchi Memorial Lecturer, University of Kansas, Lawrence
- 1997 Tadeus J. Wiktor Memorial Lecturer, The Wistar Institute, Philadelphia
- 1998 Walter J. Burdette Lecturer in Medical Science, Yale University Maurice M. Burkholder Lectureship in Oncology, Mountain States Medical Research Institute



- 1998 Eli Lilly Visiting Lecturer, Indianapolis, Indiana
- 1998 Apsler Lecturer, Clark College
- 1999 Heeley Lecturer, The Lawrenceville School
- 1999 Centre for Medicine Research (CMR) International Annual Lecturer, Royal College of Physicians, London
- 1999 MPS Distinguished Lecturer, National Science Foundation
- 1999 Michael Kriegler Memorial Lecturer, University of California, San Diego
- 1999 John C. Krantz, Jr. Distinguished Lecturer, The University of the Sciences in Philadelphia
- 1999 Wilkins Visiting Professor, Boston University Medical Center
- 1999 Willit F. Whitmore Jr. Lecturer, American Urological Association, Dallas, Texas
- 1999 Ørsted Lecturer, Technical University of Denmark
- 1998 Storer Life Sciences Lecturer, University of California Davis
- 2000 Paul D. Lamson Memorial Lecturer, Vanderbilt University
- 2000 John & Betty Moore Lecturer on "Science as a Way of Knowing," University of California, Riverside
- 2000 Stevenson Memorial Lecturer, The University of Western Ontario
- 2000 John C. Krantz, Jr. Distinguished Lecturer, The University of the Sciences in Philadelphia
- 2000 G.F. Smith Lecturer, University of Illinois, Urbana
- 2000 Simon Stevin Lecturer, the Delft University of Technology, The Netherlands
- 2001 Alfred Deakin Lecturer, Melbourne, Australia
- 2001 Commencement Speaker, The Pennsylvania State University, "The Challenge of Change"
- 2002 6<sup>th</sup> Andrew H. Weinberg Lecturer, Dana-Farber Cancer Institute, Boston, Massachusetts
- 2002 David Perlman Lecturer for Leadership in the Emerging Field of Systems Biology, for the Division of Biochemical Technology (BIOT) at the American Chemical Society (ACS) National Meeting
- 2003 Waddell Memorial Lecturer, Arizona Cancer Center, Tucson, AZ
- 2003 Andrew C. von Eschenbach Lecture, The University of Texas MD Anderson Cancer Center, Houston, TX
- 2003 Hunter Lecture in Bioengineering, Clemson University, Clemson, SC
- 2003 E. Llewellyn-Thomas Scientific Lecturer, Institute of Biomaterials & Biomedical Engineering, University of Toronto, Ontario
- 2003 American Thoracic Society (ATS) President's Lecture, Seattle, WA
- 2003 Provost's Lecture, Purdue University Sigma Xi, West Lafayette, IN
- 2003 Jack Peter Green Lecturer, Mt. Sinai Medical Center, New York, NY
- 2003 Si Ramo Lecturer, Keck Graduate Institute of Applied Life Sciences, Claremont, CA
- 2003 Janice Antoine Lumpkin Memorial Lecturer, University of Maryland Baltimore County, Baltimore, MD
- 2004 17<sup>th</sup> Schrodinger Lecturer, Imperial College of Science, Technology and Medicine, London
- 2004 Florence S. Mahoney Lecture on Aging, National Institutes of Health, Bethesda, MD
- 2005 American Association for Cancer Research Distinguished Lecturer, Anaheim, CA
- 2005 Medieval Distinguished Lecturer in Pharmaceutical Sciences, University of Manchester, Manchester, UK
- 2005 Parker H. Petit Distinguished Lecturer, Parker H. Petit Institute for Bioengineering and Bioscience, Georgia Institute of Technology, Atlanta, GA

- 2005 5<sup>th</sup> Annual William Wallace Scott Research Lecturer, Johns Hopkins University, Baltimore, MD
- 2005 Efraim Racker Lecturer in Biology and Medicine, Cornell University, Ithaca, NY
- 2006 Barnett Lecturer, Barnett Institute, Northeastern University, Boston, MA
- 2006 Roy E. Moon Distinguished Lectureship in Science, Angelo State University, San Angelo, TX
- 2006 Chalmers J. Lyons Memorial Lecturer, American Association of Oral and Maxillofacial Surgeons Annual Meeting, San Diego, CA
- 2006 Stier Memorial Lecturer, Washington State University, Spokane, WA
- 2007 Pioneer Seminar for the Institute of Genomic Biology, University of Illinois, Champaign-Urbana, IL
- 2007 Raymond and Beverly Sackler Visiting Lectureship, University of Toronto, Toronto, Ontario
- 2008 William D. Stubenbord Visiting Professorship, Weill Cornell Medical College, New York, NY
- 2009 Axelrod Lectureship, Purdue University
- 2009 The Scripps Research Institute Kellogg School of Science and Technology Graduate Program in Chemical and Biological Sciences Distinguished Lecture Series
- 2009 Nath Lectureship, West Virginia University
- 2010 University of Utah Benning Lecture Series
- 2010 Montana State University Kopriva Lecture Series
- 2010 Johnson & Johnson Ortho Clinical Diagnostics Lecture Series
- 2011 Stenchever Lecture honoring Morton A. Stenchever, MD, University of Washington
- 2011 Genome BC Don Rix Distinguished Lecture Series
- 2011 Toronto University Perimeter Institute Public Lecture Series
- 2011 Iowa State University Department of Electrical/Computer Engineering ECpE Distinguished Lecture Series
- 2012 Russ College Distinguished Lecture Series
- 2012 Purdue University Prestige Lecture Series
- 2012 Qatar Foundation Distinguished Lecture Series
- 2012 Johns Hopkins University Thomas Hunt Morgan Lectureship
- 2012 Master Lectureship Shanghai Jiao Tong University (SJTU)
- 2012 Paul H. Lange, FACS Endowed Lectureship
- 2013 New Frontiers in Science Distinguished Lecture Series, FDA
- 2013 Archibald Byron Macallum Lecturer, University of Toronto
- 2013 First Annual Jeffrey Michel Annual Innovations in Systems Biology Lecture Series, Rice University
- 2013 18<sup>th</sup> Annual Aline U. and James M. Orten Memorial Lecture
- 2013 First annual Gilbert S. Omenn Lectureship, Department of Computational Medicine and Bioinformatics, University of Michigan
- 2014 The William Harvey Medal For Transforming Medicine, The William Harvey Research Institute, London
- 2015 Annenberg Leadership & Management Speaker Series- Harvey Mudd College
- 2015 Dr. Martin Rodbell Lecture- National Institute of Environmental Health Sciences
- 2015 IBM Distinguished Lectureship, NYC
- 2015 The Annual Heinz C. Prechter Lectureship - University of Michigan
- 2016 Bernard Amos Lecture - Duke University

- 2017 17<sup>th</sup> Annual Daniel Nathans Lecture in Molecular Biology and Genetics - Johns Hopkins  
 2017 John A. Lynch Distinguished Lecture - Notre Dame  
 2017 Grand Rounds - Washington State University  
 2017 Spiegelman Lecture - University of Illinois  
 2017 Presidents' Lecture - Academy of Nutrition and Dietetics Food & Nutrition Conference & Expo Chicago, Illinois  
 2018 Willam Potter Lecture - Thomas Jefferson University, Philadelphia, PA

### **Editorial Advisory Duties:**

- 1970-1975 Advisory Editor, *Immunochemistry*  
 1975-1981 Editorial Advisory Board, *Biochemistry*  
 1975-1980 Advisory Board, *Biochemical Genetics*  
 1975-1980 Editorial Board, *Biological Regulation and Control: A Comprehensive Treatise*(Plenum)  
 1980-1975 Associate Editor, *Journal of Immunology*  
 1981-1985 Associate Editor, *Cell*  
 1981-1999 Editorial Board, *Journal of Molecular Evolution*  
 1986-1996 Editorial Board, *Proteins: Structure, Function and Genetics*  
 1987-1989 Advisory Board, *Clinical Immunology and Immunopathology*  
 1988-2003 Editorial Board, *Genomics*  
 1988-1999 Editorial Board, *BioTechniques*  
 1990-1995 Editorial Board, *Genetic Analysis and Applications*  
 1990-Present Editorial Board, *Current Opinion in Biotechnology*  
 1991-1999 Editorial Board, *Molecular Phylogenetics and Evolution*  
 1991-Present Advisory Editor, *Human Mutation*  
 1993-1999 Editorial Board, *Proteins*  
 1994-Present Editorial Board, *Journal of Computational Biology*  
 1994-Present Editorial Board, *Molecular Medicine*  
 1995-1999 Editorial Committee, *Methods in Molecular and Cellular Biology*  
 1995-2001 Editorial Board, *Molecular Biotechnology*  
 1995-Present Associate Editor, *Genome Science and Technology*  
 2000-Present Advisor, *Encyclopedia of the Human Genome*  
 1998-Present Editorial Board, *Annual Reviews of Human Genetics and Genomics*  
 1999-Present Editorial Associate Board, *GeneScreen*  
 1999-Present Advisory Board, *Genome Biology*  
 1999-Present Editorial Board, *Functional and Integrative Genomics*  
 2000-Present Advisory Board, *Data-Rich Genomics Series*, Oxford University Press  
 2000-Present Advisor, *SoundVisions Productions*  
 2006-Present External Advisory Board, *Encyclopedia of Complexity and Systems Science (ECSS)*  
 2014-Present Editorial Board, *Nature Publishing Journal, Systems Biology and Applications*

### **Current Committee/Board Duties:**

- AbCellera, Scientific Advisory Board  
 AbVitro, Scientific Advisory Board  
 Accelerator Corporation, Board of Directors  
 Algomedix, Board of Directors  
 Allozyne, Board of Directors

BioCity Turku, Scientific Advisory Board  
 Cellular Dynamics, Scientific Advisory Board  
 Center for Advancement of Science in Space (CASIS) Board of Directors  
 Center for Systems Biology and Medicine of Aging-Peking, Science Advisory Board  
 Complete Genomics, Scientific Advisory Board  
 Cytoscape, Board of Directors  
 Data4Cure  
 Diabetomics, Scientific Advisory Board  
 Genomatica, Scientific Advisory Board  
 Gladstone, Scientific Advisory Board  
 Integrated Diagnostics, Board of Directors  
 Intelligent Medical Devices, Board of Directors  
 InterWest Partners, Advisory Committee & Life Sciences  
 La Jolla Institute for Allergy and Immunology, Board of Directors  
 McLaughlin Research Institute, Scientific Advisory Committee  
 Microsoft Research-University of Trento, Scientific Advisory Board  
 myMERCURYrisk, Scientific Advisory Board  
 NABsys, Inc., Board of Directors NextBio, Scientific Advisory Board  
 NextBio, Scientific Advisory Board  
 Omeros, Board of Directors  
 Omicia, Board of Directors  
 P4Medical Institute, Board of Directors  
 Plexera (formerly Lumera), Scientific Advisory Board  
 PrimeraDX, Scientific Advisory Board  
 Prognosys Biosciences, Scientific Advisory Board  
 Roberts & Company, Board of Directors  
 Seattle Science Foundation, Board of Directors  
 Sapphire Energy, Inc., Scientific Advisory Board  
 SciLifeLab, Stockholm, Scientific Advisory Board  
 Sophia Genetics, Scientific Advisory Board  
 transSMART Foundation, Board of Directors  
 TRACK-TBI, Scientific Advisory Board  
 Washington Global Health Alliance, Executive Committee  
 WIN, Co-Chair, Scientific Advisory Board

## BIBLIOGRAPHY

### A. Issued Patents

1. Hood LE and Hunkapiller MW. **(1981)** *Apparatus for the Performance of Chemical Processes*. U.S. Patent No. 4,252,769.
2. Hood LE, Hunkapiller MW, Dreyer WJ, Hewick RM, Stark AW. **(1986)** *Method for the Sequential Performance of Chemical Processes*. U.S. Patent No. 4,603,114.
3. Hood LE, Hunkapiller MW, Dreyer WJ, Hewick RM, Stark AW. **(1986)** *Conversion Flask for Sequential Performance Apparatus*. U.S. Patent No. 4,610,847.
4. Hood LE, Hunkapiller MW, Dreyer WJ, Hewick RM, Stark AW. **(1987)** *Apparatus for the Sequential Performance of Chemical Processes*. U.S. Patent No. 4,704,256.
5. McGrath MS, Weissman IL, Hood L. **(1988)** *Diagnostic and Therapeutic Aspects of Receptor-Mediated Leukemogenesis*. U.S. Patent No. 4,786,590.

6. Hood LE, Weissman IL, McGrath MS. **(1989)** *Diagnostic Reagents Based on Unique Sequences Within the Variable Region of the T Cell Receptor and Uses Thereof*. U.S. Patent No. 4,886,743.
7. Landegren U and Hood L. **(1991)** *Method of Detecting a Nucleotide Change in Nucleic Acids*. U.S. Patent No. 4,988,617.
8. Smith, LM, Hood LE, Hunkapiller MW, Hunkapiller TJ. **(1992)** *Automated DNA Sequencing Technique*. U.S. Patent No. 5,171,534.
9. Barany FJ, Nickerson Zd, Kaiser RJ Jr, Hood LE. **(1996)** *Thermostable ligase- mediated DNA amplifications system for the detection of genetic disease*. U.S. Patent No. 5,494,810.
10. Smith LM, Hood LE, Hunkapiller MW, Hunkapiller TJ. **(1998)** *Automated DNA Sequencing Technique*. U.S. Patent No. 5,821,058.
11. Barany FJ, Nickerson Zd, Kaiser RJ Jr, Hood LE. **(1998)** *Thermostable ligase- mediated DNA amplification system for the detection of genetic disease*. U.S. Patent No. 5,830,711.
12. Barany FJ, Nickerson Zd, Kaiser RJ Jr, Hood LE. **(2000)** *Thermostable ligase- mediated DNA amplification system for the detection of genetic disease*. U.S. Patent No. 6,054,564.
13. Li L and Hood L. **(2000)** *Human Jagged Polypeptide, Encoding Nucleic Acids and Methods of Use*. U.S. Patent No. 6,136,952.
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