

CURRICULUM VITAE

JASON H. MOORE, PhD, FACMI

EDUCATION

- 1994-1999 University of Michigan Ph.D. in Human Genetics
Ann Arbor, Michigan
Dissertation: “Genetic Analyses of Dynamic Quantitative Traits”
Mentor: Dr. Charles F. Sing, Department of Human Genetics
- 1994-1998 University of Michigan M.A. in Applied Statistics
Ann Arbor, Michigan
Mentor: Dr. Vijay Nair, Department of Statistics
- 1993-1994 University of Michigan M.S. in Human Genetics
Ann Arbor, Michigan
Mentor: Dr. Charles F. Sing, Department of Human Genetics
- 1988-1991 Florida State University B.S. in Biological Sciences
Tallahassee, Florida
Mentor: Dr. Siwo R. deKloet, Department of Biological Sciences

POSTDOCTORAL TRAINING

none

LICENSURE AND CERTIFICATION

none

ACADEMIC APPOINTMENTS - PRIMARY

- 2015-present Endowed Edward Rose Professor of Informatics
Perelman School of Medicine
University of Pennsylvania, Philadelphia, Pennsylvania
- 2015-present Professor Biostatistics, Epidemiology, and Informatics (with tenure)
Professor of Genetics (with tenure)
Director, Institute for Biomedical Informatics (IBI)
Member, Genomics and Computational Biology (GCB) Graduate Group
Member, Graduate Group in Epidemiology and Biostatistics (GGEB)
Member, Center of Excellence in Environmental Toxicology (CEET)
Member, Abramson Cancer Center (ACC)
Member, Penn Center for Precision Medicine (PCPM)

Perelman School of Medicine
University of Pennsylvania, Philadelphia, Pennsylvania

2010-2015
Endowed Third Century Professor
Dartmouth College, Hanover, New Hampshire

2008-2015
Professor of Genetics (with tenure)
Professor of Community and Family Medicine (with tenure)
Member, Norris-Cotton Cancer Center
Member, Cancer Epidemiology and Chemoprevention Research Program
Member, Center for Environmental Health Sciences
Member, Center for Neuroscience
Member, Collaboratory for Healthcare and Biomedical Informatics
Member, Clinical and Translational Sciences Institute (SYNERGY)
Member, Graduate Program in Molecular and Cellular Biology (MCB)
Member, Graduate Program in Quantitative Biomedical Science (QBS)
Geisel School of Medicine, Dartmouth College, Hanover, New Hampshire

2004-2010
Endowed Frank Lane Research Scholar in Computational Genetics
Geisel School of Medicine, Dartmouth College, Hanover, New Hampshire

2004-2008
Associate Professor of Genetics (tenure-track)
Associate Professor of Community and Family Medicine (tenure-track)
Member, Norris-Cotton Cancer Center
Member, Cancer Epidemiology and Chemoprevention Research Program
Member, Center for Environmental Health Sciences
Member, Center for Neuroscience
Member, Graduate Program in Molecular and Cellular Biology (MCB)
Geisel School of Medicine, Dartmouth College, Hanover, New Hampshire

2003-2004
Associate Professor of Molecular Physiology and Biophysics (with tenure)
Member, Center for Human Genetics Research
Member, Vanderbilt-Ingram Cancer Center
Member, Interdisciplinary Graduate Program (IGP)
Member, Neuroscience Graduate Program
Member, Chemical and Physical Biology Graduate Program
Member, Biomedical Informatics Graduate Program
Vanderbilt University Medical School, Nashville, Tennessee

2003-2004
Endowed Ingram Associate Professor of Cancer Research
Vanderbilt University Medical School, Nashville, Tennessee

2002-2003
Endowed Ingram Assistant Professor of Cancer Research
Vanderbilt University Medical School, Nashville, Tennessee

1999-2003
Assistant Professor of Molecular Physiology and Biophysics
Member, Program in Human Genetics
Member, Vanderbilt-Ingram Cancer Center
Member, Interdisciplinary Graduate Program (IGP)
Member, Neuroscience Graduate Program
Member, Biomedical Informatics Graduate Program
Vanderbilt University Medical School, Nashville, Tennessee

- 1993-1998 Graduate Research Assistant with Dr. Charles F. Sing, Department of Human Genetics, University of Michigan, Ann Arbor, Michigan
- 1991-1993 Research Assistant with Dr. David G. Beer, Department of Surgery, Thoracic Oncology Laboratory, University of Michigan Cancer Center, University of Michigan, Ann Arbor, Michigan
- 1989-1991 Undergraduate Research Assistant with Dr. Siwo R. deKloet, Department of Biological Sciences, Institute of Molecular Biophysics, Florida State University, Tallahassee, Florida

ACADEMIC APPOINTMENTS - SECONDARY

- 2015-present Professor of Computer and Information Sciences
School of Engineering and Applied Science
University of Pennsylvania, Philadelphia, Pennsylvania
- 2015-present Member, Department of Biomedical and Health Informatics
The Children's Hospital of Philadelphia
- 2009-2015 Affiliate Professor of Computer Science, University of New Hampshire,
Durham, New Hampshire
- 2009-2015 Adjunct Associate Professor of Psychiatry and Human Behavior, The Warren
Alpert Medical School of Brown University, Providence, RI
- 2008-2015 Adjunct Investigator, Translational Genomics Research Institute (TGen),
Phoenix, Arizona
- 2007-2015 Founding Member, Complex Systems Center, University of Vermont,
Burlington, Vermont
- 2005-2015 Adjunct Associate Professor of Computer Science, University of Vermont,
Burlington, Vermont
- 2004-2008 Affiliate Associate Professor of Computer Science, University of New
Hampshire, Durham, New Hampshire

OTHER PROFESSIONAL POSITIONS

- 2015-present Founding Director, Institute for Biomedical Informatics (IBI), Perelman
School of Medicine, University of Pennsylvania
- 2015-present Founding Director, Division of Informatics, Department of Biostatistics,
Epidemiology, and Informatics, Perelman School of Medicine, University of
Pennsylvania
- 2015-present Founding Senior Associate Dean for Informatics, Perelman School of Medicine,
University of Pennsylvania
- 2015-present Director, Exposure Biology Informatics Core, Center of Excellence in
Environmental Toxicology, Perelman School of Medicine, University of
Pennsylvania
- 2013-2015 Founding Associate Director, Center for Molecular Epidemiology, Dartmouth
College (highlight: funded in 2010 by a \$12 million NIH/NIGMS Center of
Biomedical Research Excellence (COBRE) grant)

- 2011-2015 Founding Associate Director, Dartmouth SYNERGY Clinical and Translational Research Institute, Dartmouth College (highlight: funded in 2013 by an \$18 million NIH/NCATS CTSA grant)
- 2010-2015 Founder and Director, Institute for Quantitative Biomedical Sciences, Geisel School of Medicine and Dartmouth College (highlight: funded in 2010 by a \$10 million institutional investment and in 2011 by an \$11 million NIH/NIGMS Center of Biomedical Research Excellence (COBRE) grant)
- 2010-2015 Founding Associate Director for Bioinformatics, Norris-Cotton Comprehensive Cancer Center, Geisel School of Medicine, Dartmouth College
- 2009-2015 Founder and Director, Bioinformatics Visualization Laboratory, Geisel School of Medicine and Dartmouth College
- 2005-2015 Founder and Director, The DISCOVERY Resource – Dartmouth Initiative for SuperCOmputing Ventures in Education and REsearch. (Highlight: established A shared 2400-processor parallel computing resource for Dartmouth College).
- 2004-2015 Founder and Director, Computational Genetics Laboratory, Geisel School of Medicine and Dartmouth College
- 2004-2015 Director, Bioinformatics Shared Resource, Norris-Cotton Cancer Center, Geisel School of Medicine and Dartmouth College (highlight: expanded core from one to 11 fulltime computer programmers and bioinformatics staff)
- 2004-2015 Director of Bioinformatics, Geisel School of Medicine and Dartmouth College
- 2003-2004 Founder and Director (with Drs. Schrimpf and Sheldon), Vanderbilt Advanced Computing Center for Research and Education (ACCRES) (highlight: established A new center with \$8.3 million in competitive institutional funding to provide high- performance computing support to all investigators at Vanderbilt University)
- 2003-2004 Founder and Director, Bioinformatics and Supercomputing Shared Resource, Vanderbilt-Ingram Cancer Center
- 1999-2004 Director, Bioinformatics Core, Center for Human Genetics Research, Vanderbilt University Medical School (highlight: expanded core from three to 12 fulltime programmers)

MAJOR COMMITTEE ASSIGNMENTS AND CONSULTATIONS

International, National and Regional

- 1999 Co-Moderator, Session on “Linkage and Polymorphisms II”, 49th Annual Meeting of the American Society of Human Genetics, San Francisco, California, October 19 - 23.
- 1999-2000 Treasurer, American Statistical Association, Middle Tennessee Chapter
- 2001-2002 President, American Statistical Association, Middle Tennessee Chapter
- 2001 Scientific Committee, Critical Assessment of Microarray Data Analysis (CAMDA-2001) conference, Duke University, Durham, North Carolina
- 2001 Grant Reviewer, Medical Research Council (MRC), United Kingdom
- 2002-2004 Scientific Advisory Board, GenoMed Inc., St. Louis, Missouri
- 2002 Grant Reviewer, Genome Canada, Canada
- 2002-2005 Grant Reviewer, “Technology Development for Biomedical Applications: Phased Innovation Award (R21/R33)”, PAR-02-091, PAR-03-075, National Center for

- Research Resources, National Institutes of Health
- 2002-2005 Program Committee for the annual European Workshop on Evolutionary Bioinformatics (EvoBIO)
- 2003 Chair, Session on "Microarray Analysis", 1st European Workshop on Evolutionary Bioinformatics (EvoBIO 2003), Essex, England
- 2003 Grant Reviewer, Special Emphasis Panel, National Institute of Allergy and Infectious Disease, National Institutes of Health
- 2003 Chair, Session on "Real World Applications in Bioinformatics", 2003 Genetic and Evolutionary Computation Conference (GECCO 2003), Chicago, Illinois
- 2003-2005 Scientific Committee, annual workshop on "Grammatical Evolution"
- 2003-2006 Organizer and Chair (with Marylyn Ritchie), annual workshop on "Biological Applications of Genetic and Evolutionary Computation (BioGEC)"
- 2003-present Scientific Committee, Genetic and Evolutionary Computation Conference (GECCO)
- 2004 Grant Reviewer, Idaho Research Center Grant Program, Idaho State Board of Education
- 2004 Grant Reviewer, Special Emphasis Panel for Centers of Biomedical Research Excellence (COBRE), National Center for Research Resources, National Institutes of Health (NIH).
- 2004 Co-Organizer and Co-Chair, National Cancer Institute (NCI) Think Tank on Cancer Susceptibility and Resistance. (highlight: this was one of eight NCI-sponsored think tanks that were charged with making recommendations to Dr. von Eschenbach, Director of the NCI, about the future of cancer research)
- 2004 Grant Reviewer, WellBeing of Women – The Health Research Charity for Women and Babies, London.
- 2004-2005 Organizer and Chair, Educational Session on "Gene-Gene Interactions in Cancer Etiology", 2005 annual meeting of the American Association of Cancer Research
- 2004-2005 Co-Organizer and Co-Chair, National Cancer Institute (NCI) Conference on "Predictive Models of Cancer Susceptibility: Integrated Strategies", Newport Beach, California.
- 2005 Grant Reviewer, Howard Hughes Medical Institute (HHMI).
- 2005 Grant Reviewer, Special Emphasis Panel on Bioinformatics Tools and Systems, ZRG1 BST-A (10). National Institutes of Health (NIH).
- 2005 Grant Reviewer, NIH Director's Roadmap Initiative, National Centers for Biomedical Computing (NCBC), National Institutes of Health (NIH).
- 2005 Chair, Session on Structure Activity Relationships, 3rd European Workshop on Evolutionary Bioinformatics (EvoBIO 2005), Lausanne, Switzerland.
- 2005 Chair, Panel Discussion on Advanced Computational Methods in Bioinformatics, 3rd European Workshop on Evolutionary Bioinformatics (EvoBIO 2005), Lausanne, Switzerland.
- 2005 Program Committee, 2005 Graduate Student Workshop on Genetic and Evolutionary Computing, Washington D.C.
- 2005 Consultant, InterGenetics, Inc.
- 2005-2014 Technical Committee, European Conference on Evolutionary Computing, Machine Learning and Data Mining in Bioinformatics (EvoBIO)
- 2005-2006 Program Chair (with Carlos Cotta), 4th European Workshop on Evolutionary Computation and Machine Learning in Bioinformatics (EvoBIO 2006), Budapest, Hungary.

- (highlight: helped transform this workshop to a full conference for 2007)
- 2005-2006 Program Chair (with James Foster), Biological Application Track, 2006 ACM Genetic and Evolutionary Computation Conference (GECCO 2006), Seattle, Washington.
- 2005 Technical Committee, IEEE Symposium on Computational Intelligence in Bioinformatics and Computational Biology. San Diego, California.
- 2005-present Founding Council Member, International Society of Cancer Informatics.
- 2005-present Head, Working Group on Methodology, Bladder Cancer Consortium
- 2005-present Consultant, Celera Diagnostics, Inc.
- 2005-2009 Education Committee, International Genetic Epidemiology Society (IGES).
- 2005-2006 Program Committee, Workshop on Pattern Recognition in Bioinformatics (PRIB'06), International Association for Pattern Recognition (IAPR), Hong Kong, China.
- 2006 Grant Reviewer, High-End Instrumentation Program (S10), National Center Research Resources (NCRR), National Institutes of Health (NIH).
- 2006 Chair, Panel Discussion on Computational Approaches for Pharmacogenetics, Pacific Symposium on Biocomputing (PSB), Wailea, Maui, Hawaii.
- 2006 Grant Reviewer, NHLBI RFA "SCCOR in Pulmonary Vascular Disease," (RFA HL-05-007), National Institutes of Health (NIH).
- 2006 Member, Task Force on Statistical Genetics Software Development, International Genetic Epidemiology Society (IGES).
- 2006 Chair, Panel Discussion on Advanced Computational Methods in Bioinformatics, 4th European Workshop on Evolutionary Computation and Machine Learning in Bioinformatics (EvoBIO 2006), Budapest, Hungary.
- 2006 Chair, Session on Data Mining and Knowledge Discovery, 4th European Workshop on Evolutionary Computation and Machine Learning in Bioinformatics (EvoBIO 2006), Budapest, Hungary.
- 2006-2007 Steering Committee, 5th European Conference on Evolutionary Computation, Machine Learning and Data Mining in Bioinformatics (EvoBIO 2007), Valencia, Spain.
- 2006-2007 Program Committee, 5th European Conference on Evolutionary Computation, Machine Learning and Data Mining in Bioinformatics (EvoBIO 2007), Valencia, Spain.
- 2006 Technical Committee, 2006 IEEE Symposium on Computational Intelligence in Bioinformatics and Computational Biology (IEEE CIBCB 2006), Toronto, Ontario, Canada.
- 2006 Grant Reviewer, Interdisciplinary Research Consortium (PAR-06-122), Roadmap Initiative, National Institutes of Health (NIH).
- 2006-2007 Program Committee, Workshop on Pattern Recognition in Bioinformatics (PRIB'07), International Association for Pattern Recognition (IAPR), Singapore.
- 2006-2007 Program Chair (with Clare Congdon), Biological Applications Track, 2007 ACM Genetic and Evolutionary Computation Conference (GECCO 2007), London, England.
- 2006-2007 Founder, Organizer and Chair, 2007 Workshop on Open-Source Software for Applied Genetic and Evolutionary Computation (SoftGEC'07), London, England.
- 2006-2009 Working Group on Modeling Variation in Gene Networks, National Evolutionary Synthesis Center, Durham, North Carolina.
- 2007 Grant Reviewer, Comparative Biology Elucidation of Environmental Pathways

- and Susceptibility (RFA-ES-06-004), National Institute of Environmental Health Sciences, National Institutes of Health (NIH).
- 2007-2008 Chair, Education Committee, International Genetic Epidemiology Society (IGES).
- 2007-2010 Web Master, Education Wiki, International Genetic Epidemiology Society (IGES).
- 2007 Grant Reviewer, Horizon Program, The Netherlands Genomics Initiative.
- 2007 Chair, Session on “Network Construction and Analysis”, 5th European Conference on Evolutionary Computation, Machine Learning and Data Mining in Bioinformatics (EvoBIO 2007), Valencia, Spain.
- 2007 Grant Reviewer, Interdisciplinary Research Consortium – U54 (RFA-RM-06-008), NIH Roadmap Initiative, National Institutes of Health.
- 2007 Program Committee, IEEE 7th International Symposium on Bioinformatics and Bioengineering, Harvard Medical School, Boston, Massachusetts.
- 2007-2008 Internal Advisory Board, 2008 International Conference on Neural Networks and Genetic Algorithms in Materials Science and Engineering (NGMS’08).
- 2007-2008 Steering Committee, 6th European Conference on Evolutionary Computation, Machine Learning and Data Mining in Bioinformatics (EvoBIO 2008), Naples, Italy.
- 2007-2008 Program Committee, 6th European Conference on Evolutionary Computation, Machine Learning and Data Mining in Bioinformatics (EvoBIO 2008), Naples, Italy.
- 2007-2008 Program Chair (with Clare Congdon), Bioinformatics and Computational Biology Track, 2008 ACM Genetic and Evolutionary Computation Conference (GECCO 2008), Atlanta, Georgia.
- 2007-2008 Founder, Organizer and Chair, Workshop on Open-Source Software for Applied Genetic and Evolutionary Computation (SoftGEC).
- 2007-2011 Scientific Advisory Committee, Southern Center on Environmentally-Driven Disparities in Birth Outcomes, Duke University, Durham, North Carolina.
- 2008 Program Committee and Mentor, Graduate Student Workshop, 2008 ACM Genetic and Evolutionary Computation Conference (GECCO 2008), Atlanta, Georgia.
- 2008 Chair, Risk Models Working Group, National Cancer Institute Workshop on Integrated Systems Genetics: The Path Forward, Newport Beach, California, March 12-14, 2008.
- 2008-2015 Data Management and Analysis Committee, Preterm Birth Genome Project
- 2008-present Ambassador to the U.S.A, International Genetic Epidemiology Society (IGES).
- 2008 Organizer and Chair, Educational Workshop on Machine Learning, 2008 Meeting of the International Genetic Epidemiology Society (IGES), St. Louis, Missouri.
- 2008-2009 Grant Reviewer, P01 Special Emphasis Panel, National Institute of Allergy and Infectious Diseases, National Institutes of Health (NIH).
- 2008-2009 Program Committee, 7th European Conference on Evolutionary Computation, Machine Learning and Data Mining in Bioinformatics (EvoBIO 2009), Tubingen, Germany.
- 2009 Program Committee and Mentor, Graduate Student Workshop, 2009 ACM Genetic and Evolutionary Computation Conference (GECCO 2009), Montreal, Canada.

- 2009-2013 Member, Biomedical Library and Informatics Review Committee (BLIRC), National Library of Medicine (NLM), National Institutes of Health (NIH).
- 2009 Grant Reviewer, NIH ARRA Challenge Grant Program (RFA-OD-09-003), National Institutes of Health (NIH).
- 2009 Grant Reviewer, NIH ARRA Grand Opportunity Grant Program (RFA-OD-09-004), National Institutes of Health (NIH).
- 2009 Organizer and Chair, Bioinformatics Workshop, Northeast Regional IDeA Meeting, Mountain View Grand Resort, New Hampshire, August 7, 2009.
- 2009 Organizer and Chair, Bioinformatics Workshop, Northeast Regional Life Sciences Core Directors (NERLSCD) meeting, Cornell University, Ithaca, New York, November 10, 2009.
- 2010-2011 Founder, Organizer and Chair, Workshop on Visualization Methods in Genetic and Evolutionary Computation (VizGEC).
- 2010 Reviewer, Bioinformatics and Biomedical Applications Track, International Conference on Pattern Recognition (ICPR).
- 2010-2011 Scientific Program Committee, 2011 AMIA Summit on Translational Bioinformatics, American Medical Informatics Association.
- 2010 Program Committee, 5th International Conference on Pattern Recognition in Bioinformatics (PRIB), Nijmegen, The Netherlands.
- 2010-2013 Organizer and Chair, Genetic Programming Theory and Practice (GPTP) Workshop, University of Michigan, Ann Arbor, Michigan.
- 2010-2011 External Advisory Board, Center for Personalized Medicine and Therapeutic Innovation, Children's Mercy Hospital, Kansas City, Missouri.
- 2011 External Review Board, Bioinformatics Research Center, North Carolina State University, Raleigh, North Carolina.
- 2011-present Program Committee, European Conference on Artificial Life (ECAL)
- 2011-2015 Program Committee, IEEE Conference on Biomedical Computing (BioMedCom)
- 2011-present Advisory Board, Parabon Computation, Inc.
- 2011-2012 General Chair, 2012 ACM Genetic and Evolutionary Computation Conference (GECCO 2012), Philadelphia, Pennsylvania. (highlight: organized and led this conference for 500 people).
- 2011-2012 Communications Committee, American Society of Human Genetics.
- 2012-2013 Steering Committee, NSF EPSCoR Workshop on Bioinformatics, Clinton Presidential Library and Peabody Hotel, Little Rock, Arkansas.
- 2012-2015 Planning Committee, "Up for a Challenge" competition, National Institutes of Health (NIH).
- 2013 Program Committee, Genetic Programming Track, 2013 ACM Genetic and Evolutionary Computation Conference (GECCO 2013), Amsterdam, The Netherlands.
- 2013-2015 Technical Committee, The International Association for Pattern Recognition
- 2013-2019 External Advisory Committee, Institute for Bioinformatics and Evolutionary Studies (iBEST), University of Idaho.
- 2013-present External Advisory Committee, Hawaii IDeA Network of Biomedical Research Excellence (INBRE), University of Hawaii.
- 2013 Chair, Workshop on Training the Next Generation of Quantitative Biologists, Pacific Symposium on Biocomputing, Big Island, Hawaii.
- 2013 Chair (with Casey Greene and Chao Cheng), Workshop on Noncoding RNA, Pacific Symposium on Biocomputing, Big Island, Hawaii.

- 2014 Program Committee, 5th ACM Conference on Bioinformatics, Computational Biology and Health Informatics (ACM BCB)
- 2014-2019 External Advisory Committee, Indiana University Network Science Institute.
- 2014-2019 External Advisory Committee, Center for Biomedical Informatics and Biostatistics, University of Arizona.
- 2015-2016 Scientific Program Committee, 2016 AMIA Summit on Translational Bioinformatics, American Medical Informatics Association.
- 2016 NIH U4C contest entry reviewer and panel chair, “Up for a Challenge” competition, National Cancer Institute (NCI).
- 2016 Grant Reviewer, NLM T15 Institutional Training Grants (RFA-LM-11-001), National Institutes of Health (NIH).
- 2016-2017 Chair, 2017 AMIA Summit on Translational Bioinformatics, American Medical Informatics Association.
- 2017-2019 Grant Reviewer, NIDA Centers of Excellence (PAR-14-186), National Institutes of Health (NIH).
- 2018-2019 Grant Reviewer, NIGMS Collaborative Grant Program for Multidisciplinary Teams (PAR-17-340), National Institutes of Health (NIH).
- 2018-present External Advisory Committee, South Carolina Cancer Disparities Research Center, Medical University of South Carolina, Charleston, South Carolina.
- 2019 Chair (with Berghout, Lussier, Bulyk, Kann, and Vitali), Workshop on Translational Informatics for Population Health, Pacific Symposium on Biocomputing, Big Island, Hawaii.
- 2019 Chair (with Drs. Lussier, Butte, Chen, and Li), Workshop on Reading Between the Genes, Pacific Symposium on Biocomputing, Big Island, Hawaii.
- 2019 Scientific Advisory Board, GIGA Center, University of Liege, Liege, Belgium
- 2019 NIDDK (RE)Building a Kidney External Evaluation Committee (EEC), National Institutes of Health (NIH).
- 2019-2020 Founding Organizer (with Drs. Kohane, Tatonetti, and Tenenbaum), Symposium on Artificial Intelligence for Learning Health Systems (SAIL).
- 2020 Chair (with Drs. Kim and Ritchie), Workshop on Translational Bioinformatics, Pacific Symposium on Biocomputing, Big Island, Hawaii.

Institutional

- 1997-1998 Awards Committee, Department of Human Genetics, University of Michigan
- 1999-2001 Coordinator, Genetics Interest Group, Vanderbilt University (highlight: invited, scheduled, and introduced speakers for weekly meetings)
- 1999-2004 Core Oversight Board, Center for Human Genetics Research, Vanderbilt University
- 1999-2004 Courtesy seminars in the Departments of Medicine, Biomedical Informatics, Microbiology and Immunology, Physics, Mathematics, and Molecular Physiology and Biophysics, as well as the Center for Human Genetics Research, Genetics Interest Group, Vanderbilt-Ingram Cancer Center, Biomathematics Program, General Clinical Research Center, Biophysics Group, Vanderbilt University
- 2000 Organizer and Moderator, Workshop on Statistical Genomics: Making Sense of All the Data, Vanderbilt University

- 2001-2004 Founder and Director, Graduate Program in Applied Statistics, Vanderbilt University. (highlight: started an interdisciplinary M.S. program for biomedical graduate students)
- 2001-2002 Trans-Institutional Bioinformatics Recruiting Team, Vanderbilt University
- 2001-2003 Planning Committee for the Vanderbilt Advanced Computing Center for Research and Education (ACCRE), Vanderbilt University (highlight: secured \$8.3 million from the Vanderbilt Academic Venture Capital Fund as a PI)
- 2002 Organizer, Workshop on Sequence Mining, Vanderbilt University
- 2002-2004 Research Advisory Committee for Information Technology, Vanderbilt University
- 2003-2004 Reviewer, American Cancer Society Institutional Research Grants (ACS-IRG), Vanderbilt-Ingram Cancer Center, Vanderbilt University
- 2003-2004 Bioinformatics Search Committee, Vanderbilt University
- 2003-2004 Information Technology Executive Committee, Vanderbilt-Ingram Cancer Center
- 2003-2004 Large Lecture Course Project Taskforce, Vanderbilt University
- 2003-2004 Executive Board for Program in Biomathematics, Vanderbilt University
- 2003-2004 Research Enterprise Taskforce, Vanderbilt University (highlight: appointed by the Associate Vice Chancellor to help plan the future of research at Vanderbilt Medical School)
- 2004-2015 Courtesy seminars: Departments of Biochemistry, Biological Sciences, Genetics, Medicine, and Pathology, Biomedical Informatics Grand Rounds, Cardiology Grand Rounds, Cancer Center Grand Rounds, Psychiatry Grand Rounds, Thayer School of Engineering, Geisel School of Medicine and Dartmouth College
- 2004-2007 Search Committee for Associate Director of Research Computing, Dartmouth College
- 2004-2006 Search Committee for the Director of the Neukom Institute for Computational Sciences, Dartmouth College
- 2004-2006 Biostatistics Search Committee, Department of Community and Family Medicine, Geisel School of Medicine at Dartmouth
- 2005-2012 Director, Cancer Biomedical Informatics Grid (caBIG), Norris-Cotton Cancer Center, Geisel School of Medicine at Dartmouth
- 2006-2012 Chair, Research Computing Oversight Subcommittee (RCOS), Council on Computing, Dartmouth College.
- 2006-2015 Chair, Integrative Biology Committee, Geisel School of Medicine at Dartmouth
- 2006-2008 Search Committee for Director of Biostatistics, Department of Community and Family Medicine, Geisel School of Medicine at Dartmouth
- 2006-2007 Cores Planning Committee for the Translational Research Building, Geisel School of Medicine at Dartmouth
- 2006-2013 Information Technology Planning Committee, Geisel School of Medicine at Dartmouth
- 2007-2015 Founding Organizer and Chair (with Craig Tomlinson), Dartmouth Symposium on Integrative Biology
- 2008-2013 Reviewer, American Cancer Society Institutional Research Grants (ACS-IRG), Norris-Cotton Cancer Center, Geisel School of Medicine at Dartmouth
- 2008-2015 Research Subcommittee, Information Systems Steering Committee, Dartmouth-Hitchcock Medical Center
- 2009 Planning Committee, 2009 NIH/NCRR Regional IDeA Meeting, New Hampshire
- 2009-2011 Senior Management Team, Dartmouth Center for Clinical and Translational

Science (DDCTS)

2009-2011 Chair (with Dr. Andrew Gettinger), Clinical Informatics Search Committee, Geisel School of Medicine at Dartmouth

2009 Copenhaver Award Committee, Geisel School of Medicine at Dartmouth

2010 Reviewer, Pilot Application Review Committee, Dartmouth Center for Clinical and Translational Science (DDCTS)

2010-2015 Dean's Academic Board (DAB), Geisel School of Medicine at Dartmouth

2010-2015 Dean's Biomedical Research Council (BRC), Geisel School of Medicine at Dartmouth (highlight: developed research strategic plan for the medical school)

2011-2015 Dean's Council on Core Facilities, Geisel School of Medicine at Dartmouth

2011-2015 Geisel Faculty Council, Geisel School of Medicine at Dartmouth

2011-2013 Biostatistics Search Committee, Department of Community and Family Medicine, Geisel School of Medicine at Dartmouth

2013-2014 Geisel Budget Improvement Committee, Geisel School of Medicine at Dartmouth (highlight: reviewed and planned the FY15 budget for the medical school)

2014-2015 Geisel Space Committee, Geisel School of Medicine at Dartmouth

2014-2015 Core Missions Workgroup, Geisel School of Medicine at Dartmouth (highlight: reviewed and planned the strategic plan for the medical school)

2014-2015 Geisel-DH Academic Council, Geisel School of Medicine at Dartmouth

2015-present Chair (with Kevin Mahoney), Senior Information Technology Leadership Committee, Perelman School of Medicine and University of Pennsylvania Health System, University of Pennsylvania (highlight: reviewed and approved major IT expenditures for the medical school)

2015-present Committee of Center and Institute Directors (CCID), Perelman School of Medicine, University of Pennsylvania

2015-present Executive Committee, Genomics and Computational Biology (GCB) Graduate Group, Perelman School of Medicine, University of Pennsylvania

2015-present Internal Scientific Advisory Board, Penn Medicine Neuroscience Center, Perelman School of Medicine, University of Pennsylvania

2015-present Chair, Informatics Search Committee, Institute for Biomedical Informatics, Perelman School of Medicine, University of Pennsylvania

2015-present Executive Committee, Penn Center for Precision Medicine, Perelman School of Medicine, University of Pennsylvania

2016-2017 Search Committee, Cardiovascular Institute Director, Perelman School of Medicine, University of Pennsylvania

2016-present Biomedical Library Advisory Committee, University of Pennsylvania

2016-2017 Biomedical Informatics Search Committee, Children's Hospital of Philadelphia

2016-2017 Search Committee for Chair of the Department of Systems Pharmacology and Translational Therapeutics, Perelman School of Medicine, University of Pennsylvania

2017-present Advisory Board, Biostatistics Core, Abramson Cancer Center, University of Pennsylvania

2017 Chair, Leveraging Health Data Committee, Shaping the Future of Medicine 2.0 Strategic Planning Initiative, Perelman School of Medicine, University of Pennsylvania

2017 Health Care Value and Outcomes Committee, Shaping the Future of Medicine 2.0 Strategic Planning Initiative, Perelman School of Medicine, University of Pennsylvania

- 2017-present Environmental Epidemiology Search Committee, Center of Excellence in Environmental Toxicology, Perelman School of Medicine, University of Pennsylvania
- 2017-present Cancer Epidemiology Search Committee, Center for Clinical Epidemiology and Biostatistics, Perelman School of Medicine, University of Pennsylvania
- 2017-present Search Committee for Chief of the Division of Biostatistics, Perelman School of Medicine, University of Pennsylvania
- 2018-present University Scholars Council, Center for Undergraduate Research and Fellowships, University of Pennsylvania
- 2018-2019 Chair, Clinical and Medical Bioinformatics Working Group, Abramson Cancer Center, Perelman School of Medicine, University of Pennsylvania
- 2018-2019 Chair, Genomic and Clinical Research Database Committee, Perelman School of Medicine, University of Pennsylvania
- 2019-present Awards Committee, Department of Biostatistics, Epidemiology, and Informatics, Perelman School of Medicine, University of Pennsylvania
- 2019-2020 Chair, Data Privacy for Research Committee, Perelman School of Medicine, University of Pennsylvania
- 2020-present Internal Advisory Committee, Center for Innovation and Precision Dentistry, School of Dental Medicine, University of Pennsylvania
- 2020 Faculty Search Committee, Department of Pathology and Laboratory Medicine, Perelman School of Medicine, University of Pennsylvania

MEMBERSHIPS IN PROFESSIONAL SOCIETIES

- 1994-present American Statistical Association (ASA)
- 1999-present American Society of Human Genetics (ASHG)
- 1999-present International Genetic Epidemiology Society (IGES)
- 1999-present International Society for Genetic and Evolutionary Computation (ISGEC)
- 2000-present International Society of Computational Biology (ISCB)
- 2000-present International Society for Psychiatric Genetics (ISPG)
- 2004-present Association for Computing Machinery (ACM)
- 2007-present American Association for Cancer Research (AACR)
- 2010-present American Association for Artificial Intelligence (AAAI)
- 2010-present American Medical Informatics Association (AMIA)

EDITORIAL BOARDS

- 2003-2006 Managing Editor for Frontiers in Biosciences
- 2004-present Writer, Computing Reviews
- 2004-2013 Founding Member of the Editorial Board for Cancer Informatics
- 2006-2011 Editorial Board for Physiological Genomics
- 2007-2009 Founding Associate Editor for Journal of Artificial Evolution and Applications
- 2007-2013 Founding Member of the Editorial Board for Memetic Computing
- 2007-present Founding Editor-in-Chief of BioData Mining
- 2008-2009 Editor, special issue on Biological and Biomedical Application of Evolutionary Computation, Journal of Artificial Evolution and Applications

- 2009-present Founding Editor, Book Series on Systems Genetics, Cambridge University Press
- 2009-present Editorial Board for Genetic Programming and Evolvable Machines
- 2011-2014 Guest Associate Editor, PLoS Genetics
- 2011-present Associate Editor, Genetic Epidemiology
- 2012-2013 Editorial Board for Applied Soft Computing
- 2013-2014 Editor, special issue on Evolutionary Computation, Journal of Biomedical Informatics
- 2013-2015 Associate Editor, IEEE/ACM Transactions on Computational Biology and Bioinformatics
- 2013 Editor, special issue on Data Science, Current Molecular Medicine
- 2014 Editor, special issue on Simulation, Genetic Epidemiology
- 2019-present Advisory Board, Springer book series on Natural Computing
- 2019-present Editorial Board, Patterns
- 2020 Editor, Special Issue for Journal of Precision Medicine

AWARDS AND HONORS

- 1990 American Cancer Society Summer Research Fellowship, Florida State University.
- 1994-1998 American Heart Association Graduate Fellowship, University of Michigan.
- 2001 James V. Neel Young Investigator Award, International Genetic Epidemiology Society.
- 2002 EvoSolve Best Paper Award for Research towards Biomedical Applications of Biocomputing.
- 2002-2004 Endowed Ingram Professorship in Cancer Research, Vanderbilt University.
- 2004-2010 Endowed Frank Lane Research Scholar in Computational Genetics, Geisel School of Medicine at Dartmouth.
- 2004 Best Paper Award, Genetic and Evolutionary Computation Conference (GECCO).
- 2007 Nominated to the Institute of Medicine, National Academy of Sciences.
- 2009 First Place, Graphical Processing Unit (GPU) Programming Competition, 2009 Genetic and Evolutionary Computation Conference (GECCO'09).
- 2010 First Place, Graphical Processing Unit (GPU) Programming Competition, 2010 Genetic and Evolutionary Computation Conference (GECCO'10).
- 2010 Best Paper Award, 2010 Genetic and Evolutionary Computation Conference (GECCO'10).
- 2010-2015 Endowed Third Century Professorship, Dartmouth College
- 2011 Best Paper Award, 2011 European Conference on Artificial Life (ECAL'11)
- 2011 Elected Fellow of the American Association for the Advancement of Sciences (AAAS)
- 2012 Recognition of Service Award, Association of Computing Machinery (ACM)
- 2012 Best Paper Award, 2012 Translational Bioinformatics Conference, South Korea
- 2013 Best Paper Award, 2013 European Conference on Evolutionary Computation, Machine Learning and Data Mining in Bioinformatics (EvoBIO'13)
- 2013 Award for Excellence, Norris-Cotton Cancer Center, Geisel School of Medicine

and Dartmouth College
2013 Kavli Fellow, National Academy of Sciences
2013 Best Paper Award, 2013 Translational Bioinformatics Conference, South Korea
2014 26th Presidential Faculty Lecturer, Dartmouth College
2014 Academy of Distinguished Alumni, Murphysboro School District, Illinois
2015 Endowed Edward Rose Professorship, University of Pennsylvania
2015 Elected Fellow of the American College of Medical Informatics (ACMI)
2016 Best Paper Award, Genetic and Evolutionary Computation Conference (GECCO)
2016 Healthcare Innovator Award, Philadelphia Business Journal
2017 Elected Fellow of the American Statistical Association (ASA)

JOURNAL REFEREE ACTIVITIES

1999-present referee for American Heart Journal, American Journal of Human Genetics, American Journal of Hypertension, American Journal of Physiology, American Journal of Respiratory and Critical Care Medicine, Annals of Applied Statistics, Annals of Human Genetics, Applied Soft Computing, Artificial Life, Atherosclerosis, Big Data, BioData Mining, Bioinformatics, Biophysical Journal, Blood Coagulation and Fibrinolysis, BMC Bioinformatics, BMC Cancer, BMC Medical Genetics, BMC Medical Genomics, BMC Medical Informatics and Decision Making, Cancer Research, Circulation, Clinical Genetics, Diabetes, European Journal of Human Genetics, Evolutionary Computing, Expert Review of Molecular Diagnostics, Genetic Epidemiology, Genetics, Genetic Programming and Evolvable Machines, Genomics, Human Genetics, Human Heredity, Human Molecular Genetics, IEEE Transactions on Evolutionary Computing, Journal of the American Medical Association (JAMA), Journal of the American Medical Informatics Association (JAMIA), Journal of Machine Learning Research, Journal of Reproductive Immunology, Lecture Notes in Computer Science, Machine Learning, Methods of Information in Medicine, Nature Genetics, Nature Methods, Nature Reviews Genetics, Pacific Symposium on Biocomputing, Pharmacogenomics, PLoS Computational Biology, PLoS Genetics, Proceedings of the American Medical Informatics Associations (AMIA), Proceedings of the National Academy of Sciences USA (PNAS), Psychiatric Genetics, Trends in Genetics

RESEARCH FUNDING

(dollar amounts are annual direct costs)

Past

1999-2000 American Cancer Society (P.I. – Moore)
\$15,534
Genetic Epidemiology of Adenoma Response to Chemoprevention

1999-2000 VUMC Discovery Grant (P.I. - Moore)
\$50,000

VANPAC: A VANderbilt PARallel Computer

- 1999-2001 GlaxoSmithKline (P.I. – Haines)
\$702,846
A Genetic Epidemiology Center

Role: lead statistical geneticist on the Depression Network (DeNt) project
- 2000-2002 VU Discovery Grant (Co-P.I. – Moore)
\$75,000
VAMPIRE Parallel Computing Facility
- 2000-2003 NIH R24 DK58749 (P.I. - George)
\$336,029
Vanderbilt NIDDK Biotechnology Center

Role: Co-P.I. of Bioinformatics Core
- 2000-2004 NIH R01 HL65962 (P.I. – Brown)
\$250,000
Genes and Fibrinolytic Capacity of Human Endothelium
- 2000-2006 NIH R01 HL65234 (P.I. – Moore)
\$250,000
Genetic Architecture of Plasma t-PA and PAI-1
- 2001-2003 Kleberg Fund (P.I. - Moore)
\$37,018
Collaborative Microarray Data Analysis for Cancer Research
- 2001-2004 NIH P50 CA90949 (P.I. – Carbone)
\$1,655,547
SPORE in Lung Cancer

Role: Co-investigator to help with data analysis and bioinformatics
- 2001-2004 NIH U01 HL65962 (P.I. - Roden)
\$1,828,997 (\$220,000 to Moore)
Pharmacogenomics of Arrhythmia Therapy

Role: P.I. of Genetic Epidemiology Core
- 2001-2004 NIH R01 AG19085 (P.I. – Haines)
\$779,306
Genetic Studies of Dementia in the Amish

Role: Co-investigator to help with data analysis and bioinformatics

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- 2001-2004 NIH R01 CA064277 (P.I. – Zheng)
\$363,464
Shanghai Breast Cancer Study

Role: Co-investigator to help with data analysis and bioinformatics
- 2001-2004 NIH U01 HL68744 (P.I. - Hawiger)
\$1,299,416 (\$50,000 to Moore)
Functional Genomics of Inflammation

Role: P.I. of Bioinformatics Core
- 2003-2004 Kleberg Fund (P.I. - Moore)
\$37,005
Visual Analysis of Microarray Data Analysis Results for Cancer Research
- 2001-2004 NIH U19 DK42502 (P.I. - Magnuson)
\$1,067,922 (\$50,000 to Moore)
Genes of Pancreas Function and Development

Role: P.I. of Bioinformatics Core
- 2002-2004 NIH P01 GM31304 (P.I. – Wilkinson)
\$849,554
Determinants of Individual Responsiveness to Drugs

Role: Co-investigator to help with data analysis and bioinformatics
- 2002-2004 NIH R01 AG20135 (P.I.- Martin)
\$468,000 (\$103,005 to Moore)
Revealing Epistasis in Alzheimer Disease

Role: P.I. of subcontract
- 2002-2004 VUMC Discovery Grant (P.I. - Olsen)
\$50,000
Gene Expression in Systemic Lupus Erythmatosus

Role: Co-investigator to help with data analysis and bioinformatics
- 2002-2004 NIH P20 LM07613 (P.I. - Stead)
\$260,270 (\$75,000 to Moore)
Exploratory Visual Analysis of Genomic and Proteomic Data

Role: P.I. of Project 2
- 2002-2004 NIH P50 CA95103 (P.I. – Coffey)
\$1,685,494

SPORE in GI Cancer

Role: Co-investigator to help with data analysis and bioinformatics

2003-2004 NIH P50 CA098131 (P.I. – Arteaga)
\$1,698,501
SPORE in Breast Cancer

Role: Co-investigator to help with data analysis and bioinformatics

2003-2004 VU AVCF (P.I. - Moore, with Sheldon and Schrimpf)
\$8,660,000
A Vanderbilt Scientific Computing Center (SCC) for Multidisciplinary Research

2003-2004 NIH R01 AI057661 (P.I. - Crowe)
\$250,000
Cell-Mediated Immune Responses to Vaccinia Viruses

Role: Co-investigator to help with data analysis and bioinformatics

2004 NIH U01 CA084239 (P.I. - Coffey)
\$725,536
Prevention and Metastasis: Final Frontier in Colon Cancer

Role: Co-investigator to help with data analysis and bioinformatics

2004-2005 NIH S10 RR017210 (P.I. - Moore)
\$1,536,000
Parallel Computer

2006-2008 NIH R03 CA121382 (P.I. Andrew)
\$50,000
Comprehensive Assessment of Bladder Cancer Genetic Susceptibility

Role: Co-investigator to help with data analysis and bioinformatics

2006-2009 NIH R01 CA116394 (P.I. - Ahles)
\$291,899
Genetics of Cognitive Decline Post Cancer Chemotherapy

Role: Co-investigator to help with data analysis and bioinformatics

2009-2010 NIH R56 AI080932 (P.I. - McKinney)
\$260,000 (\$40,000 to Moore)
Machine Learning Analysis of Genetic Modulators of Vaccine Immune Response

Role: P.I. of subcontract to help with bioinformatics

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2004-2010 NIH R01 HD047447 (P.I. - Moore)
\$368,000
Genetic Basis of Trauma Recovery

2009-2011 NIH P20 RR018787 (P.I. - Stanton)
\$907,000
NCRR ARRA Supplement for Cyber-Infrastructure

Role: Co-investigator to lead bioinformatics project

2009-2012 NIH U24 RR029825 (P.I. - Nadler)
\$7,500,000 (\$300,000 to Moore)
Networking Research Resources across America

Role: P.I. of subcontract to assist with databasing resources at Dartmouth

2011-2013 NIH R41 GM097765 (P.I. - Moore)
\$150,000
CG-GRID: Computational Genetics Grid Resource for Interaction Discovery

2005-2014 NIH P42 ES007373 (P.I. - Stanton)
\$1,811,689
Toxic Metals in the Northeast

Role: P.I. of Integrative Biology Core (Core E)

2009-2014 DOD W81XWH-09-0460 (P.I. – Wishart)
\$1,422,000
Repair in Multiple Sclerosis

Role: Co-investigator to help with genetic analysis

2004-2014 NIH R01 AI59694 (P.I. - Moore)
\$313,592
Bioinformatics Strategies for Biodefense Vaccine Research

2009-2015 NIH R25 CA134286 (P.I. - Moore, with Karagas and Tosteson)
\$377,263 0.60 cal
Training Program for Quantitative Population Sciences

2009-2014 NIH P30 CA023108 (P.I. - Israel)
\$1,978,323 (\$40,000 to Moore)
Cancer Center Support Grant

Role: P.I. of Bioinformatics Core

2010-2015 NIH P20 GM103506 (P.I. - Taylor)
\$2,569,180 (\$150,000 to Moore)

New Hampshire IDeA Network of Biomedical Research Excellence (INBRE)

Role: P.I. of the Bioinformatics Core

- 2011-2015 NIH P20 GM103534 (P.I. - Moore)
\$1,568,007
Quantitative Biology Research Institute
- 2016-2021 NIH T32 LM012204 (P.I. Moore)
\$193,000
Quantitative Biomedical Sciences at Dartmouth
(grant transferred to Dr. Chris Amos when Dr. Moore moved to Penn)
- 2012-2016 NIH R01 EY022300 (P.I. - Moore)
\$190,000
Bioinformatics Approaches for Visual Disease Genetics
- 2006-2016 NIH R01 LM009012 (P.I. - Moore)
\$216,384 0.60 cal
Machine Learning Prediction of Cancer Susceptibility
- 2014-2017 NIH R42 GM097765 (P.I. - Moore)
\$569,332
CG-GRID: Computational Genetics Grid Resource for Interaction Discovery
- 2012-2017 NIH R01 LM011360 (M.P.I. - Moore)
\$250,000 (\$60,000 to Moore)
Bioinformatics Strategies for Multidimensional Brain Imaging
- 2015-2018 NSF (P.I. subcontract – Moore)
\$50,000
The North East Big Data Innovation Hub
- 2016-2019 NIH R01 EY023557 (P.I. O'Brien)
\$2,229,370
Primary Open Angle African-American Glaucoma Genetics

Role: Co-investigator to help with bioinformatics analysis
- 2015-2019 Pennsylvania Department of Health (P.I. subcontract – Moore)
\$147,492 to Moore
Integrative Big Data for Biomedical Discovery
- 2015-2019 NIH U01 TR001263 (P.I. – Merkle)
\$293,588
Rare Diseases Data Management and Coordinating Center

Role: Co-investigator to assist with bioinformatics analysis

Present

- 2017-2022 NIH T32 HG009495 (M.P.I. – Moore)
\$403,000
Postdoctoral Training Program in Genome Medicine
- 2017-2021 NIH R01 LM012601 (M.P.I. – Moore, contact)
\$250,000
Biomedical Computing and Informatics Strategies for Precision Medicine
- 2009-2023 NIH R01 LM010098 (M.P.I. – Moore, contact)
\$300,000
Bioinformatics Strategies for Genome-Wide Association Studies
- 2016-2021 NIH R01 AI116794 (P.I. - Moore)
\$408,699
Biomedical Computing and Informatics Strategies for Infectious Disease Research
- 2016-2021 NIH UC4 DK112217 (M.P.I. – Moore)
\$8,062,000
Penn Integrated Human Pancreas Procurement and Analysis Program
- 2016-2021 UL1 TR001878 (P.I. – Fitzgerald)
\$500,000 to Moore
Institutional Clinical and Translational Science Award
- Role: P.I. of Biomedical Informatics Core
- 2015-2020 NIH P30 ES013508 (P.I. – Penning)
\$100,000 to Moore
Center of Excellence in Environmental Toxicology
- Role: PI of Exposure Biology Informatics Core
- 2016-2020 NIH R01 HL134015 (P.I. – Pack)
\$480,000
Approaches to genetic heterogeneity of obstructive sleep apnea
- Role: Co-investigator to help with bioinformatics analysis
- 2019-2024 NIH U01 DK123716 (M.P.I. – Moore)
\$1,603,000
Human Pancreas Analysis Program – T2D
- 2019-2024 NIH U01 DK123594 (P.I. – Kaestner)
\$1,208,000

Human Pancreas Analysis Program – T2D

Role: Co-investigator to data storage and analysis

Pending

- 2020-2024 NIH R01 LM011360 (M.P.I. – Moore)
\$250,000
Biomedical Strategies for Multidimensional Brain Imaging Genomics
- 2020-2025 NIH R01 AG066833 (M.P.I. – Moore, contact)
\$1,00,000
Artificial Intelligence Strategies for Alzheimers Disease Research
- 2020-2024 NIH R01 LM013467 (M.P.I. – Moore, contact)
\$250,000
Methods for Unbiased and Reproducible Evaluation of Machine Learning Algorithms

TEACHING EXPERIENCE/CURRENT TEACHING RESPONSIBILITIES

Perelman School of Medicine, University of Pennsylvania

Courses and Lectures

- 2015 “Precision Medicine”, lecture for Core Principles - Genetics, University of Pennsylvania Medical School.
- 2015 “Visualization”, lecture for Data Science (EPID600), University of Pennsylvania Medical School.
- 2016 “Biomedical Informatics”, lecture for Medical Informatics (Frontiers 519), University of Pennsylvania Medical School.
- 2016 “Precision Medicine”, lecture for Core Principles - Genetics, University of Pennsylvania Medical School.
- 2016 “Visualization”, lecture for Data Science (EPID600), University of Pennsylvania Medical School.
- 2016 “Visualization”, lecture for Computational Data Exploration (CS015), University of Pennsylvania School of Engineering.
- 2017 “Biomedical Informatics”, lecture for Medical Informatics (Frontiers 519), University of Pennsylvania Medical School.
- 2017 “Exposure Biology Informatics”, lecture for Molecular Toxicology (PHRM 590), University of Pennsylvania Medical School.
- 2017 “Precision Medicine”, lecture for Core Principles - Genetics, University of Pennsylvania Medical School.
- 2017 “Visualization”, lecture for Data Science (EPID600), University of Pennsylvania Medical School.
- 2017 “Visualization”, lecture for Computational Data Exploration (CS015), University of Pennsylvania School of Engineering.

- 2018-present Course Director, Special Topics in Biomedical Informatics (BMIN504), University of Pennsylvania Medical School.
- 2018 “Visualization”, lecture for Computational Data Exploration (CS015), University of Pennsylvania School of Engineering.
- 2018 “Visualization”, lecture for Data Science (EPID600), University of Pennsylvania Medical School.
- 2018 “Introduction to Biomedical Informatics”, lecture for Measurement in Epidemiology (EPID549), University of Pennsylvania Medical School.
- 2018 “Machine Learning and Artificial Intelligence”, lecture for Precision Medicine (Frontiers 531), University of Pennsylvania Medical School.
- 2019 “Biomedical Informatics”, lecture for Medical Informatics (Frontiers 519), University of Pennsylvania Medical School.
- 2019 “Machine Learning and Artificial Intelligence”, lecture for Precision Medicine (Frontiers 531), University of Pennsylvania Medical School.
- 2019 “Visualization”, lecture for Data Science (BMIN503), University of Pennsylvania Medical School.

High School Students Mentored

- 2019 Natasha Ray

Undergraduate Students Mentored

- 2016 Daniel Angell, Computer Science major, Drexel University
- 2015-2016 Tuan Nguyen, Computer Science major, Drexel University
- 2016 Rolando Garcia, Computer Science major, Arizona State University
- 2016 Tuan Nguyen, Computer Science major, Swarthmore College
- 2016 Ben Yang, Computer Science major, University of Pennsylvania
- 2017 Sophia Moses, Penn Undergraduate Research Mentoring (PURM) program, University of Pennsylvania
- 2017-2018 Cynthia Lee, University of Pennsylvania
- 2017 Judy Hong, University of Pennsylvania
- 2017 Neil Gramopadhye, University of Pennsylvania
- 2018 Naomi Pohl, University of Pennsylvania
- 2018 Saranya Sampath, Penn Undergraduate Research Mentoring (PURM) program, University of Pennsylvania
- 2018 Keren Herran, University of Maryland Baltimore County
- 2018-2020 Hoyt Gong, University of Pennsylvania
- 2018-2019 Abhi Suri, University of Pennsylvania
- 2019 Jun Park, Penn Undergraduate Research Mentoring (PURM) program, University of Pennsylvania
- 2019-2020 Durga Srivatsan, University of Pennsylvania
- 2019-2020 Emily Hong, University of Pennsylvania

Masters Students Mentored

- 2015-2016 Dichen Li, Master’s Program in Computer and Information Technology, University of Pennsylvania

- 2015-2016 Zairah Mustahsan, Master's Program in Embedded Systems, University of Pennsylvania
- 2015-2016 Akshay Varik, Master's Program in Mechanical Engineering, University of Pennsylvania
- 2015-2016 Ted Fujimoto, Master's Program in Computer and Information Science, University of Pennsylvania
- 2016 Grishma Jena, Master's Program in Computer and Information Science, University of Pennsylvania
- 2016 Vishal Murali, Master's Program in Mechanical Engineering, University of Pennsylvania
- 2017-2018 Maksim Shestov, Graduate Group in Genomics and Computational Biology (GCB), University of Pennsylvania
- 2018-2019 Monica Ionescu, Master's Program in Computer and Information Science, University of Pennsylvania

Masters Committees Served On

- 2017 Ravy Vajravelu, Master's Program in Clinical Epidemiology (MSCE), University of Pennsylvania

M.D. Students Mentored

- 2016-2018 Andrew Sohn, Thomas Jefferson School of Medicine
- 2018 Lin Xi, University of Pennsylvania Medical School

Graduate Rotation Students Mentored

- 2016 David Nicholson, Graduate Group in Genomics and Computational Biology (GCB), University of Pennsylvania
- 2017 Maksim Shestov, Graduate Group in Genomics and Computational Biology (GCB), University of Pennsylvania
- 2017 Ben Aurbach, Graduate Group in Genomics and Computational Biology (GCB), University of Pennsylvania
- 2018 John Gregg, Graduate Group in Genomics and Computational Biology (GCB), University of Pennsylvania
- 2018 Yun Hao, Graduate Group in Genomics and Computational Biology (GCB), University of Pennsylvania
- 2020 Alexa Woodward, Graduate Group in Epidemiology and Biostatistics (GGEB), University of Pennsylvania
- 2020 Jessie Tong, Graduate Group in Epidemiology and Biostatistics (GGEB), University of Pennsylvania

Ph.D. Committees Served On

- 2016-2019 Mark Yarmarkovich, Graduate Group in Cell and Molecular Biology (CAMB), University of Pennsylvania
- 2016-2019 Lu Wang, Graduate Group in Biostatistics and Epidemiology (GGEB), University of Pennsylvania

- 2019-present Stephanie Teeple, Graduate Group in Biostatistics and Epidemiology (GGEB), University of Pennsylvania
2019-present Jessica Meeker, Graduate Group in Biostatistics and Epidemiology (GGEB), University of Pennsylvania

Ph.D. Students Mentored

- 2013-2017 Brett Beaulieu-Jones, Genomics and Computational Biology (GCB), University of Pennsylvania. (highlight: Dr. Beaulieu-Jones is currently a postdoc with Dr. Zak Kohane at Harvard)
2013-2018 Elizabeth Piette, Genomics and Computational Biology (GCB) Graduate Group, University of Pennsylvania
2017-present Jingya Qiu, Graduate Group in Genomics and Computational Biology (GCB), University of Pennsylvania
2019-present John Gregg, Graduate Group in Genomics and Computational Biology (GCB), University of Pennsylvania
2019-present Yun Hao, Graduate Group in Genomics and Computational Biology (GCB), University of Pennsylvania
2019-present Alexa Woodward, Graduate Group in Epidemiology and Biostatistics (GGEB), University of Pennsylvania

Postdoctoral Students and Non-Tenure Track Faculty Mentored

- 2015-2016 Alicia Cutillo, M.D., Postdoc, University of Pennsylvania
2015-2016 Randal Olson, Ph.D., Postdoc, University of Pennsylvania
2015-2016 Christian Darabos, Ph.D., Research Associate, University of Pennsylvania
2015-2017 Yancy Lo, Ph.D., Postdoc, University of Pennsylvania
2015-2017 Molly Hall, Ph.D., Postdoc, University of Pennsylvania
2015-2018 Ryan Urbanowicz, Ph.D., Research Associate, University of Pennsylvania
2016-present Ruowang Li, Ph.D., Postdoc, University of Pennsylvania
2016-2019 William LaCava, Ph.D., Postdoc, University of Pennsylvania
2016-present Alena Orlenko, Ph.D., Postdoc, University of Pennsylvania
2016-2019 Patryk Orzechowski, Ph.D., Postdoc, University of Pennsylvania
2016-present Nadia Penrod, Ph.D., Postdoc, University of Pennsylvania
2018-present Sijia Huang, Ph.D., Postdoc, University of Pennsylvania
2018-present Stefano Ruberto, Ph.D., Postdoc, University of Pennsylvania
2018-present Trang Le, Ph.D., Postdoc, University of Pennsylvania
2019-present Phil Freda, Ph.D., Postdoc, University of Pennsylvania
2019-present Joe Romano, Ph.D., Postdoc, University of Pennsylvania
2019-present William LaCava, Ph.D., Instructor, University of Pennsylvania

Tenure-Track Faculty Mentored

- 2015-2018 Lana Garmire, Ph.D., Assistant Professor, University of Hawaii
2015-2018 ClarLynda Williams-Duvane, Assistant Professor, North Carolina Central University

The Geisel School of Medicine at Dartmouth

Courses and Lectures

- 2005 “Data Mining in Human Genetics”, lecture for Topics in Computer Science: Data Mining (CS88/188), Dartmouth College.
- 2005 “Logic Regression”, lecture for Computational Biology Journal Club (BIO270), Dartmouth College.
- 2005 Course Director and Lecturer (with Mike Whitfield), Genetics 118, “Genomics and Bioinformatics”, The Geisel School of Medicine at Dartmouth.
- 2005 “SNPs and Genome Variation”, lecture for Genetics 118, The Geisel School of Medicine at Dartmouth.
- 2005 “Genotype to Phenotype”, lecture for Genetics 118, The Geisel School of Medicine at Dartmouth.
- 2005 “Cyber-Genetics”, lecture for Humanities Institute course on “Cyber-Disciplinarity”, Department of Film and Television Studies, Dartmouth College.
- 2006-2013 Course Co-Director and Lecturer (with Mike Whitfield), Genetics 146, “Molecular and Computational Genomics”, The Geisel School of Medicine at Dartmouth.
- 2006 “Introduction to Biostatistics and Data Mining”, lecture for Genetics 146, The Geisel School of Medicine at Dartmouth.
- 2006 “Biostatistics and Data Mining using R”, lecture for Genetics 146, The Geisel School of Medicine at Dartmouth.
- 2006 “SNPs and Genome Variation”, lecture for Genetics 146, The Geisel School of Medicine at Dartmouth.
- 2006 “Genotype to Phenotype”, lecture for Genetics 146, The Geisel School of Medicine at Dartmouth.
- 2006 “Biostatistics I”, lecture for Biochemistry 103, The Geisel School of Medicine at Dartmouth.
- 2006 “Biostatistics II”, lecture for Biochemistry 103, The Geisel School of Medicine at Dartmouth.
- 2006 “Data Mining and Analysis”, lecture for Pharmacology 131, The Geisel School of Medicine at Dartmouth.
- 2006 “Artificial Life”, lecture for Genetics 146, The Geisel School of Medicine at Dartmouth.
- 2006 “Digital Biology”, lecture for “Genes and Society”, Biology 4, Dartmouth College.
- 2006 “Genetic Analysis of Common Human Diseases”, lecture for Experimental and Molecular Medicine I (PEMM 101), The Geisel School of Medicine at Dartmouth.
- 2007 “Genetics of Complex Diseases”, lecture for 4th-year medical students taking Advanced Medical Sciences, The Geisel School of Medicine at Dartmouth.
- 2007 “Introduction to Biostatistics and Data Mining”, lecture for Genetics 146, The Geisel School of Medicine at Dartmouth.
- 2007 “Biostatistics and Data Mining using R”, lecture for Genetics 146, The Geisel School of Medicine at Dartmouth.
- 2007 “SNPs and Genome Variation”, lecture for Genetics 146, The Geisel School of

- Medicine at Dartmouth.
- 2007 “Genotype to Phenotype”, lecture for Genetics 146, The Geisel School of Medicine at Dartmouth.
- 2007 “Biostatistics I”, lecture for Biochemistry 103, The Geisel School of Medicine at Dartmouth.
- 2007 “Biostatistics II”, lecture for Biochemistry 103, The Geisel School of Medicine at Dartmouth.
- 2007 “Genetic Analysis of Common Human Diseases”, lecture for Experimental and Molecular Medicine I (PEMM 101), The Geisel School of Medicine at Dartmouth.
- 2008 “Genetic Medicine”, lecture for 4th-year medical students taking Advanced Medical Sciences, The Geisel School of Medicine at Dartmouth.
- 2008 “Digital Biology”, lecture for “Genes and Society”, Biology 4, Dartmouth College.
- 2008 “Data Mining and Analysis”, lecture for Pharmacology 131, The Geisel School of Medicine at Dartmouth.
- 2008 “Biostatistics I”, lecture for Biochemistry 103, The Geisel School of Medicine at Dartmouth.
- 2008 “Biostatistics II”, lecture for Biochemistry 103, The Geisel School of Medicine at Dartmouth.
- 2008 “SNPs and Genome Variation”, discussion session for Genetics 146, The Geisel School of Medicine at Dartmouth.
- 2008 “Genotype to Phenotype”, discussion session for Genetics 146, The Geisel School of Medicine at Dartmouth.
- 2008 “Genetic Analysis of Common Human Diseases”, lecture for Experimental and Molecular Medicine I (PEMM 101), The Geisel School of Medicine at Dartmouth.
- 2009 “Data Mining and Analysis”, lecture for Pharmacology 131, The Geisel School of Medicine at Dartmouth.
- 2009 “Genetic Medicine”, lecture for 4th-year medical students taking Advanced Medical Sciences, Dartmouth Medical School.
- 2009 “Personal Genetics”, discussion for 4th-year medical students taking Advanced Medical Sciences, The Geisel School of Medicine at Dartmouth.
- 2009 “Biostatistics I”, lecture for Biochemistry 103, The Geisel School of Medicine at Dartmouth.
- 2009 “Biostatistics II”, lecture for Biochemistry 103, The Geisel School of Medicine at Dartmouth.
- 2009 “Digital Biology”, lecture for “Genes and Society”, Biology 4, Dartmouth College.
- 2009 “Introduction to Biostatistics and Data Mining”, lecture for Genetics 146, The Geisel School of Medicine at Dartmouth.
- 2009 “Biostatistics and Data Mining using R”, lecture for Genetics 146, The Geisel School of Medicine at Dartmouth.
- 2009 “SNPs and Genome Variation”, lecture for Genetics 146, The Geisel School of Medicine at Dartmouth.
- 2009 “Genotype to Phenotype”, lecture for Genetics 146, The Geisel School of Medicine at Dartmouth.

- 2009 “Genetic Analysis of Common Human Diseases”, lecture for Experimental and Molecular Medicine I (PEMM 101), The Geisel School of Medicine at Dartmouth.
- 2009 "Analysis of High-Dimensional Omics Data", lecture for Biostatistics (PEMM 103), The Geisel School of Medicine at Dartmouth.
- 2009 “Visual Analytics”, lecture for Computational Biology Journal Club (BIO270), Dartmouth College.
- 2010 “Genetic Medicine”, lecture for 4th-year medical students taking Advanced Medical Sciences, The Geisel School of Medicine at Dartmouth.
- 2010 “Biostatistics I”, lecture for Biochemistry 103, The Geisel School of Medicine at Dartmouth.
- 2010 “Biostatistics II”, lecture for Biochemistry 103, The Geisel School of Medicine at Dartmouth.
- 2010 “Data Mining and Analysis”, lecture for Pharmacology 131, The Geisel School of Medicine at Dartmouth.
- 2010 "Integrative Biology in Global Health Studies", lecture for Essential of Global Health Research (INTS 87.1), Dartmouth College
- 2010 “Genetic Medicine”, lecture for Experimental and Molecular Medicine I (PEMM 101), The Geisel School of Medicine at Dartmouth.
- 2010 "Analysis of High-Dimensional Omics Data", lecture for Biostatistics (PEMM 103), The Geisel School of Medicine at Dartmouth.
- 2011 “Genetic Medicine”, lecture for 4th-year medical students taking Advanced Medical Sciences, The Geisel School of Medicine at Dartmouth.
- 2011 “Biostatistics I”, lecture for Biochemistry 103, The Geisel School of Medicine at Dartmouth.
- 2011 “Biostatistics II”, lecture for Biochemistry 103, The Geisel School of Medicine at Dartmouth.
- 2011 “Data Mining and Analysis”, lecture for Pharmacology 131, The Geisel School of Medicine at Dartmouth.
- 2011 “Introduction to Biostatistics and Data Mining”, lecture for Genetics 146, The Geisel School of Medicine at Dartmouth.
- 2011 “Biostatistics and Data Mining using R”, lecture for Genetics 146, The Geisel School of Medicine at Dartmouth.
- 2011 “SNPs and Genome Variation”, lecture for Genetics 146, The Geisel School of Medicine at Dartmouth.
- 2011 “Genotype to Phenotype”, lecture for Genetics 146, The Geisel School of Medicine at Dartmouth.
- 2011 "Analysis of High-Dimensional Omics Data", lecture for Biostatistics (PEMM 103), The Geisel School of Medicine at Dartmouth.
- 2011-2015 Course Director and Lecturer, QBS 110, “Integrative Biomedical Sciences I”, The Geisel School of Medicine at Dartmouth.
- 2011 “Computational Cancer Genetics”, lecture for QBS 110, The Geisel School of Medicine at Dartmouth.
- 2011 “Bioinformatics Shared Resource”, lecture and tour for QBS 110, The Geisel School of Medicine at Dartmouth.
- 2011 “Genetic Medicine”, lecture for Experimental and Molecular Medicine I (PEMM 101), The Geisel School of Medicine at Dartmouth.
- 2012 “Genetic Medicine”, lecture for 4th-year medical students taking Advanced

- Medical Sciences, The Geisel School of Medicine at Dartmouth.
- 2012 “Biostatistics I”, lecture for Biochemistry 103, The Geisel School of Medicine at Dartmouth
- 2012 “Biostatistics II”, lecture for Biochemistry 103, The Geisel School of Medicine at Dartmouth.
- 2012 “Data Mining and Analysis”, lecture for Pharmacology 131, The Geisel School of Medicine at Dartmouth.
- 2012 “Introduction to Biostatistics and Data Mining”, lecture for Genetics 146, The Geisel School of Medicine at Dartmouth.
- 2012 “Biostatistics and Data Mining using R”, lecture for Genetics 146, The Geisel School of Medicine at Dartmouth.
- 2012 “SNPs and Genome Variation”, lecture for Genetics 146, The Geisel School of Medicine at Dartmouth.
- 2012 “Genotype to Phenotype”, lecture for Genetics 146, The Geisel School of Medicine at Dartmouth.
- 2012 “Computational Cancer Genetics”, lecture for QBS 110, The Geisel School of Medicine at Dartmouth.
- 2012 “Bioinformatics Shared Resource”, lecture and tour for QBS 110, The Geisel School of Medicine at Dartmouth.
- 2012 “Genetic Medicine”, lecture for Experimental and Molecular Medicine I (PEMM 101), The Geisel School of Medicine at Dartmouth.
- 2013 “Genetic Medicine”, lecture for 4th-year medical students taking Advanced Medical Sciences, The Geisel School of Medicine at Dartmouth.
- 2013 “Data Mining and Analysis”, lecture for Pharmacology 131, The Geisel School of Medicine at Dartmouth.
- 2013 “Introduction to Biostatistics and Data Mining”, lecture for Genetics 146, The Geisel School of Medicine at Dartmouth.
- 2013 “Biostatistics and Data Mining using R”, lecture for Genetics 146, The Geisel School of Medicine at Dartmouth.
- 2013 “SNPs and Genome Variation”, lecture for Genetics 146, The Geisel School of Medicine at Dartmouth.
- 2013 “Genotype to Phenotype”, lecture for Genetics 146, The Geisel School of Medicine at Dartmouth.
- 2013 Course Director (with Scott Williams and Chris Amos) and lecturer, Genetics 107, “Genetics: Then and Now”, The Geisel School of Medicine at Dartmouth.
- 2013 “Epistasis”, lecture and discussion for Genetics 107, “Genetics: Then and Now”, The Geisel School of Medicine at Dartmouth.
- 2013 “Pleiotropy”, lecture and discussion for Genetics 107, “Genetics: Then and Now”, The Geisel School of Medicine at Dartmouth.
- 2013-2015 Course Director (with Scott Williams) and Lecturer, QBS 111, “Integrative Biomedical Sciences II”, The Geisel School of Medicine at Dartmouth.
- 2013 “Computational Cancer Genetics”, lecture for QBS 110, The Geisel School of Medicine at Dartmouth.
- 2013 “Bioinformatics Shared Resource”, lecture and tour for QBS 110, The Geisel School of Medicine at Dartmouth.
- 2013 “Genetic Medicine”, lecture for Experimental and Molecular Medicine I (PEMM 101), The Geisel School of Medicine at Dartmouth.
- 2014 “Genetic Medicine”, lecture for 4th-year medical students taking Advanced

- 2014 Medical Sciences, The Geisel School of Medicine at Dartmouth.
“Data Mining and Analysis”, lecture for Pharmacology 131, The Geisel School of Medicine at Dartmouth.
- 2014 “Epistasis”, lecture and discussion for Genetics 107, “Genetics: Then and Now”, The Geisel School of Medicine at Dartmouth.
- 2014 “Pleiotropy”, lecture and discussion for Genetics 107, “Genetics: Then and Now”, The Geisel School of Medicine at Dartmouth.
- 2014 “Genotype to Phenotype”, lecture for Genetics 146, The Geisel School of Medicine at Dartmouth.
- 2014 “Genetic Medicine”, lecture for Experimental and Molecular Medicine I (PEMM 101), The Geisel School of Medicine at Dartmouth.

High School Students Mentored

- 2007 Daniel Himmelstein, Hanover High School, Hanover, NH (highlight: attended Cornell University and then UCSF for graduate school).
- 2007-2009 Delaney Granizo-MacKenzie, Hanover High School, Hanover, NH (highlight: attended Princeton University).
- 2007-2009 Nicholas Sinnott-Armstrong, Hanover High School, Hanover, NH (highlight: attended Brown University).
- 2009-2012 Ambrose Granizo-MacKenzie, Hanover High School, Hanover, NH
- 2010-2011 Tim Woodin, Sharon High School, Sharon, VT
- 2011-2013 Sam Coxon, Sharon High School, Sharon, VT
- 2011-2012 Ryan Amos, Houston, TX (highlight: attended Dartmouth College).
- 2012 Tom Kennedy, Hartford High School, VT (highlight: attended Southern Methodist University).
- 2013 Peter Tsongolis, Hartford High School, VT
- 2014 Emily Grussing, Williston High, MA

Undergraduate Students Mentored

- 2005-2007 Adam Chmelynski, class of 2008, Presidential Scholar, Dartmouth College
- 2006-2007 Ryan Church, class of 2009, Dartmouth College
- 2006-2007 Kristin Fladseth, class of 2009, Dartmouth College
- 2006-2007 Oleg Seletsky, class of 2009, Presidential Scholar, Dartmouth College
- 2007-2010 Arvis Sulovari, class of 2010, Dartmouth College
- 2007-2008 Elizabeth Weber, class of 2009, Dartmouth College
- 2007-2009 Emmanuel Mensah, class of 2009, Dartmouth College
- 2007-2009 Kevin Mwenda, class of 2009, Dartmouth College
- 2007-2008 Joann Gruber, class of 2010, HHMI Fellow, Dartmouth College
- 2007-2011 Daniel Himmelstein, class of 2011, Cornell University
- 2007-2008 Dylan Thomas, class of 2009, Dartmouth College
- 2008-2009 Kathleen Champion, class of 2011, HHMI Fellow, Dartmouth College
- 2009-2011 Karin Hill, class of 2011, Skidmore College
- 2009-2011 Nora Kim, class of 2012, HHMI Fellow, Dartmouth College (highlight: 2nd place winner of the 2012 Neukom Prize for Undergraduate Research at Dartmouth College).

2009 Sarah Streeter, class of 2012, HHMI Fellow, Dartmouth College
2010-2011 Tyler Perry, class of 2012, Dartmouth College
2010-2011 Dennis Ng, class of 2012, Dartmouth College
2011-2012 Brendin Beaulieu-Jones, class of 2014, Presidential Scholar, Dartmouth College
2011-2012 Elli Kim, class of 2014, Presidential Scholar, Dartmouth College
2011-2012 Jennifer Jaco, class of 2013, Dartmouth College
2011 Michael Fullerton, iSURF student, Great Bay Community College, NH
2012-2014 Amanda Zieselman, class of 2015, WISP, Sophomore Scholar, Barbara Crute Memorial Internship, Dartmouth College
2012 Ilena Jones, class of 2015, WISP, Dartmouth College
2012 Ayesha Dholakia, class of 2015, WISP, Dartmouth College
2012 Claudia Pham, class of 2015, WISP, Dartmouth College
2012-2013 Ryan Collins, class of 2013, Dartmouth College
2012 Christine Cuddemi, iSURF student, Emmanuelle College, MA
2012-2013 Britney Graham, iSURF student, New England College, NH
2012-2013 Felix Ackerman, Vassar College, NY
2012-2014 Ryan Amos, class of 2016, Dartmouth College
2013 Lauren Yeager, class of 2016, WISP, Dartmouth College
2013 Stephanie Alden, class of 2016, WISP, Dartmouth College
2013 Alexandra Dalton, class of 2016, WISP, Dartmouth College
2013 Mulin Xiong, class of 2016, WISP, Dartmouth College
2013 Tom Madsen, class of 2014, Dartmouth College
2013 Gediminas Bertasius, class of 2014, Dartmouth College
2013 Derek Leung, class of 2014, Dartmouth College
2013 Haley Moulton, class of 2015, Dartmouth College
2013 Christina Danosi, class of 2013, Dartmouth College
2013 Dzung Pham, iSURF student, St. Anselm College, NH
2013 Janesha Brown, iSURF student, Tougaloo College, MS
2013 Jane Chen, class of 2013, Brown University
2013 Tom Kennedy, class of 2016, Southern Methodist University
2013 Samantha Harmon, class of 2015, Dartmouth College
2014 Carrie Davison, class of 2017, WISP, Dartmouth College
2014 Emily Bih, class of 2017, WISP, Dartmouth College
2014 Rachel Patel, class of 2017, WISP, Dartmouth College
2014 Allyson Long, class of 2017, WISP, Dartmouth College
2014 Kenzie Clark, class of 2017, WISP, Dartmouth College
2014 Jinya Qiu, class of 2016, Dartmouth College
2014 Ailin Song, class of 2017, Dartmouth College
2014 Pritika Vig, class of 2017, Dartmouth College
2014 Emily Kong, class of 2017, Dartmouth College
2014 Samantha Cheng, class of 2016, Presidential Scholar, Dartmouth College

Graduate Rotation Students Mentored

2005 Kristine Pattin, Molecular and Cellular Biology (MCB), Dartmouth College
2005 Anna Tyler, Molecular and Cellular Biology (MCB), Dartmouth College
2005 Chantel Sloan, Molecular and Cellular Biology (MCB), Dartmouth College
2005 Sarah Pendergrass, Molecular and Cellular Biology (MCB), Dartmouth College

2005 Eric Arehart, M.D.-Ph.D. Program, Dartmouth College
2005 Randy Lambrechts, Molecular and Cellular Biology (MCB), Dartmouth College
2005 Ryan Urbanowicz, Molecular and Cellular Biology (MCB), Dartmouth College
2006 Casey Green, Molecular and Cellular Biology (MCB), Dartmouth College
2006 Amelia Lyman, Molecular and Cellular Biology (MCB), Dartmouth College
2006 Diyong Xu, Molecular and Cellular Biology (MCB), Dartmouth College
2007 Nima Pouladi, Molecular and Cellular Biology (MCB), Dartmouth College
2008 Richard Cowper, Molecular and Cellular Biology (MCB), Dartmouth College
2008 Fisayo Adejuyigbe, Molecular and Cellular Biology (MCB), Dartmouth College
2008 Nadia Penrod, Program in Experimental and Molecular Medicine, Dartmouth College
2009 Wei Shi, Molecular and Cellular Biology (MCB), Dartmouth College
2009 Jeremy Huckins, Program in Experimental and Molecular Medicine, Dartmouth College
2009 Jason Gilmore, Molecular and Cellular Biology (MCB), Dartmouth College
2010 Dov Pechenick, Molecular and Cellular Biology (MCB), Dartmouth College
2010 Qinxin Pan, Molecular and Cellular Biology (MCB), Dartmouth College
2011 Rishika De, Molecular and Cellular Biology (MCB), Dartmouth College
2011 Robert Frost, Quantitative Biomedical Sciences (QBS), Dartmouth College
2011 Jaclyn Taroni, Molecular and Cellular Biology (MCB), Dartmouth College
2011 Nancy Simone Scott, Molecular and Cellular Biology (MCB), Dartmouth College
2012 Diana Chernikova, M.D.-Ph.D. Program, Dartmouth College
2012 Jing Li, Molecular and Cellular Biology (MCB), Dartmouth College
2012 Minjun Huang, Molecular and Cellular Biology (MCB), Dartmouth College
2012 Craig Mackenzie, Quantitative Biomedical Sciences (QBS), Dartmouth College
2012 James Rudd, Quantitative Biomedical Sciences (QBS), Dartmouth College
2013 Jie Tan, Molecular and Cellular Biology (MCB), Dartmouth College
2013 Britney Graham, Quantitative Biomedical Sciences (QBS), Dartmouth College
2013 Brett Beaulieu-Jones, Quantitative Biomedical Sciences (QBS), Dartmouth College
2014 Elizabeth Piette, Quantitative Biomedical Sciences (QBS), Dartmouth College

Masters Students Mentored

2008 Paul Haake, Computer Science, University of Vermont
2009 Tamra Heberling, Mathematics, Montana State University

M.D. Students Mentored

2005-2008 Eric Arehart (Co-Mentor with John Hwa), M.D.-Ph.D. Program, Dartmouth College (highlight: won the John W. Strohbehn Medal for Excellence in Biomedical Research)
2013-2016 Diana Chernikova, M.D.-Ph.D. Program, Dartmouth College

Ph.D. Committees Served On

2005-2011 Gavin Grant, Molecular and Cellular Biology Program, Dartmouth College
2005-2011 Lacy George, Molecular and Cellular Biology Program, Dartmouth College

2006-2011	Jennifer Sargent, Molecular and Cellular Biology Program, Dartmouth College
2006-2011	Darren Bauer, Genome Center, University of New Hampshire
2006-2011	Viktor Martyanov, Molecular and Cellular Biology Program, Dartmouth College
2006-2012	Randy Lambrechts, Molecular and Cellular Biology Program, Dartmouth College
2007	Catarina Campbell, Genetics, Harvard Medical School
2008-2012	Brendan Faherty, Molecular and Cellular Biology Program, Dartmouth College
2010-2013	Dan Hupala, Molecular and Cellular Biology Program, Dartmouth College
2010-2014	Jason Gilmore, Molecular and Cellular Biology Program, Dartmouth College
2013-2015	Nathaniel Crabtree, University of Arkansas
2013-2015	Zhenghui Li, Molecular and Cellular Biology Program, Dartmouth College
2014-2015	Jie Tan, Molecular and Cellular Biology Program, Dartmouth College
2014-2015	Matthew Ung, Molecular and Cellular Biology Program, Dartmouth College

Ph.D. Students Mentored

2005-2009	Sarah Pendergrass (Co-Mentor with Mike Whitfield), Molecular and Cellular Biology (MCB), Dartmouth College. Dissertation: "Gene Expression Subsets and Biomarkers in the Genome-Wide Expression Profiles of Systemic Sclerosis" (highlight: Dr. Pendergrass is currently a Research Associate with Dr. Marylyn Ritchie at Penn State University)
2005-2009	Chantel Sloan, Molecular and Cellular Biology (MCB), Dartmouth College. Dissertation: "Population Structure, Ancestry and Environmental Predictors of Lung and Bladder Cancer in New Hampshire" (highlight: Dr. Sloan is currently an Assistant Professor of Health Sciences at BYU).
2005-2010	Kristine Pattin, Molecular and Cellular Biology (MCB), Dartmouth College. Dissertation: "Exploiting the Proteome to Improve the Genome-Wide Genetic Analysis of Epistasis in Common Human Diseases" (highlight: Dr. Pattin is currently the Curriculum Director for the Graduate Program in Quantitative Biomedical Sciences at Dartmouth College).
2006-2009	Casey Greene, Molecular and Cellular Biology (MCB), Dartmouth College. Dissertation: "Relief-based bioinformatics methods for the analysis of epistasis in genetic association studies". (highlight: Dr. Greene did a postdoc with Dr. Olga Troyanskaya at the Lewis-Sigler Institute for Integrative Genomics at Princeton University; currently an Assistant Professor at University of Pennsylvania).
2006-2010	Anna Tyler, Molecular and Cellular Biology (MCB), Dartmouth College. Dissertation: "A Complex Systems Approach to Pleiotropy". (highlight: Dr. Tyler is currently a postdoc at The Jackson Laboratories in Bar Harbor, Maine).
2006-2012	Ryan Urbanowicz, Molecular and Cellular Biology (MCB), Dartmouth College. Dissertation: "The Detection and Characterization of Epistasis and Heterogeneity: A Learning Classifier System Approach". (highlight: Dr. Urbanowicz is currently a Research Associate with Dr. Jason Moore at University of Pennsylvania).
2008-2012	Richard Cowper Sal.Lari, Molecular and Cellular Biology (MCB), Dartmouth College. Dissertation: "Systematic characterization of trait-associated variants" (highlight: Dr. Cowper Sal.Lari is a postdoc with Manolis Kellis at MIT).
2008-2013	Nima Pouladi, Molecular and Cellular Biology (MCB), Dartmouth College. Dissertation: "Dissecting the heterogeneity of breast tumor subtypes". (highlight: Dr. Pouladi is a postdoc with Yves Lussier at the University of Arizona).

- 2008-2013 Nadia Penrod, Program in Experimental and Molecular Medicine (PEMM), Dartmouth College. Dissertation: “Understanding the vulnerabilities of tumors: A network-based approach to drug target discovery”. (highlight: Dr. Penrod is a postdoc with Dr. Jason Moore at University of Pennsylvania).
- 2010-2014 Qinxin Pan, Molecular and Cellular Biology (MCB), Dartmouth College. Dissertation: “Integration of machine learning, network science and pathway analysis in genetic epidemiology”. (highlight: Dr. Pan is a consultant for Health Advances in Boston).
- 2010-2014 Dov Pechenick, Molecular and Cellular Biology (MCB), Dartmouth College (highlight: winner of the 2012 Neukom Prize for Graduate Research at Dartmouth College; Appointed Neukom Fellow in 2013).
- 2011-2015 Rishika De, Molecular and Cellular Biology (MCB), Dartmouth College. Dissertation: “Characterizing and interpreting gene-gene interactions associated with metabolic traits. (highlight: Dr. De is a consultant for Health Advances in Boston).
- 2012-2016 Jing Li, Molecular and Cellular Biology (MCB), Dartmouth College. (highlight: Dr. Li is a computer scientist for Squared, Inc.).
- 2012-2014 Rob Frost, Quantitative Biomedical Sciences (QBS), Dartmouth College. Dissertation: “Statistical methods for gene set annotation optimization, unsupervised gene set testing and independent gene set filtering”. (highlight: Dr. Frost is currently an Assistant Professor of Data Science at Dartmouth College).
- 2013-2016 Diana Chernikova, M.D.-Ph.D. Program, Dartmouth College. Dissertation: “Gut microbiome composition in at-risk infants”

Postdoctoral Students and Non-Tenure Track Faculty Mentored

- 2004-2006 Tom Chittenden, Ph.D., Postdoc, Dartmouth College
- 2005-2006 Folkert Asselbergs, M.D., Ph.D., Dartmouth College (highlight: Dr. Asselbergs is an Assistant Professor at the University of Utrecht).
- 2005-2009 David Jewell, Ph.D., Instructor of Genetics, Dartmouth College (highlight: Dr. Jewell is an Instructor at Colby-Sawyer College).
- 2009-2011 Joshua Payne, Ph.D., Postdoc (K25), Dartmouth College (highlight: Dr. Payne is doing a second postdoc with Dr. Andreas Wagner at the University of Zurich).
- 2009-2014 Paul Thompson, Ph.D., Instructor of Genetics, Dartmouth College
- 2010-2011 Davnah Urbach, Ph.D., Postdoc, Dartmouth College (highlight: Dr. Urbach has a career in the publishing industry in Zurich).
- 2010-2012 Kristine Pattin, Ph.D., Instructor of Genetics, Dartmouth College (highlight: Dr. Pattin is the Curriculum Director for the Graduate Program in Quantitative Biomedical Sciences at Dartmouth College).
- 2010-2014 Ting Hu, Ph.D., Postdoc, Dartmouth College
- 2010-2011 Diane Gilbert-Diamond, Ph.D., Postdoc (K25), Dartmouth College (highlight: Dr. Gilbert-Diamond is an Assistant Professor at Dartmouth College).
- 2010-2015 Christian Darabos, Ph.D., Postdoc, Dartmouth College
- 2011-2013 Devin Koestler, Ph.D., Postdoc (K25), Dartmouth College (highlight: Dr. Koestler is an Assistant Professor at the University of Kansas).
- 2011-2014 Anne Hoen, Ph.D., Postdoc, Dartmouth College (highlight: Dr. Hoen is an Assistant Professor at Dartmouth College).
- 2012-2015 Ryan Urbanowicz, Ph.D., Postdoc (K25), Dartmouth College

2012-2015 Kwangsik Nho, Ph.D., Postdoc (K99/R00), Indiana University
2014-2015 H. Robert Frost, Ph.D., Postdoc, Dartmouth College

Tenure-Track Faculty Mentored

2005-2007 Eric Duell, Ph.D., Assistant Professor of Community and Family
Medicine, Dartmouth College
2006-2015 Mark Borsuk, Ph.D., Assistant Professor of Engineering, Dartmouth College
2006-2015 Clare Congdon, Ph.D., Assistant Professor of Computer Science, University
of Southern Maine
2006-2011 Robert Culverhouse, Ph.D., Assistant Professor of Medicine, Washington
University
2006-2015 Carol Kim, Ph.D., Associate Professor of Biochemistry, Microbiology and
Molecular Biology, University of Maine
2006-2013 Craig Tomlinson, Ph.D., Assistant Professor of Medicine, Dartmouth College
2006-2015 Luiza Caramori, M.D., Ph.D., Assistant Professor of Endocrinology and Diabetes,
University of Minnesota
2006-2015 Jiang Gui, Ph.D., Assistant Professor of Community and Family Medicine,
Dartmouth College
2006-2012 LaCreis Kidd, Ph.D., Associate Professor of Epidemiology, University of
Louisville
2006-2009 Brett McKinney, Ph.D., Assistant Professor of Genetics, University of Alabama
Birmingham
2006-2011 Heather Wishart, Ph.D., Associate Professor of Psychiatry, Dartmouth College
2006-2009 Mike Whitfield, Ph.D., Assistant Professor of Genetics, Dartmouth College
2007-2009 Angeline Andrew, Ph.D., Assistant Professor of Community and Family
Medicine, Dartmouth College
2008-2014 Kathleen Askland, M.D., Assistant Professor of Psychiatry, Brown University

Vanderbilt University

Courses and Lectures

1999 “Genetics of Alzheimer’s Disease”, lecture for Neuroscience Section of the
Interdisciplinary Graduate Program (IGP) first year course, Vanderbilt University
2000-2004 “Biostatistics in Genetics”, lecture for Human Genetics (MPB340), Vanderbilt
University
2000-2004 “Human Population Genetics”, lecture for Human Genetics (MPB340),
Vanderbilt University
2000-2004 “Quantitative Trait Genetics”, lecture for Human Genetics (MPB340), Vanderbilt
University
2000-2001 Course Co-Director, Tutorials in Physiology (MPB324), Vanderbilt University
2000-2004 Founder and Director of the Vanderbilt Individualized Graduate Program in
Applied Statistics (highlight: allows Ph.D. students to obtain an M.S. degree in
Applied Statistics concurrent with their doctoral studies – still active)
2002-2004 Founder and Director of the Biostatistics Section of the Interdisciplinary Graduate
Program (IGP) first year course (6 lectures), Vanderbilt University

- 2002-2004 “Philosophy of Statistics I”, lecture for the Biostatistics Section of the Interdisciplinary Graduate Program (IGP) first year course, Vanderbilt University
- 2002-2004 “Philosophy of Statistics II”, lecture for the Biostatistics Section of the Interdisciplinary Graduate Program (IGP) first year course, Vanderbilt University
- 2002-2004 “Descriptive Statistics”, lecture for the Biostatistics Section of the Interdisciplinary Graduate Program (IGP) first year course, Vanderbilt University
- 2002-2004 “Categorical Data Analysis”, lecture for the Biostatistics Section of the Interdisciplinary Graduate Program (IGP) first year course, Vanderbilt University
- 2002-2004 “T-test and ANOVA”, lecture for the Biostatistics Section of the Interdisciplinary Graduate Program (IGP) first year course, Vanderbilt University
- 2002-2004 “Correlation and Regression”, lecture for the Biostatistics Section of the Interdisciplinary Graduate Program (IGP) first year course, Vanderbilt University
- 2002 “Transmission Disequilibrium Test”, lecture for Fundamentals of Genetics course, Vanderbilt University and Meharry Medical College
- 2002 “Microarray Data Analysis”, lecture for course on Genetic Analysis of Complex Human Diseases, Vanderbilt University
- 2002 “Quantitative Genetics”, lecture for course on Genetic Analysis of Complex Human Diseases, Vanderbilt University
- 2003 “Study Design in Genetics”, lecture for Human Genetics (MPB340), Vanderbilt University
- 2003 “Computational Approaches for Detecting and Characterizing Gene-Gene Interactions”, lecture in short course for Bristol-Myers Squibb, Department of Biomedical Informatics, Vanderbilt University
- 2004 “Low-Penetrance Genes and Gene-Gene Interactions”, lecture for course on Molecular Epidemiology, International Agency on Cancer Research and Vanderbilt University
- 2004 “Emerging Issues in Bioinformatics”, lecture for short course on Molecular Epidemiology, International Agency on Cancer Research and Vanderbilt University

Graduate Rotation Students Mentored

- 1999 Don Carpenter, Interdisciplinary Graduate Program (IGP), Vanderbilt University
- 2000 Joel Parker, Biomedical Informatics Graduate Program, Vanderbilt University
- 2000 Sheng-Ru Shiou, Interdisciplinary Graduate Program (IGP), Vanderbilt University
- 2000 Jennifer Lamb, Interdisciplinary Graduate Program (IGP), Vanderbilt University
- 2000 Marylyn Ritchie, Interdisciplinary Graduate Program (IGP), Vanderbilt University
- 2002 Jian Shi, Chemical and Physical Biology Program, Vanderbilt University
- 2002 David Reif, Interdisciplinary Graduate Program (IGP), Vanderbilt University
- 2002 Lawrence Fu, Biomedical Informatics Graduate Program, Vanderbilt University
- 2002 Ken Stawowy, Interdisciplinary Graduate Program (IGP), Vanderbilt University
- 2002 Scott Gruver, Chemical and Physical Biology Program, Vanderbilt University
- 2003 Nykolaus Reed, Meharry Medical College, Nashville, Tennessee
- 2003 Digna Valez, Interdisciplinary Graduate Program (IGP), Vanderbilt University
- 2003 Jana Shirey, Interdisciplinary Graduate Program (IGP), Vanderbilt University
- 2003 Will Bush, Chemical and Physical Biology Program, Vanderbilt University

- 2004 Alison Motsinger, Interdisciplinary Graduate Program (IGP), Vanderbilt University
2004 Todd Edwards, Interdisciplinary Graduate Program (IGP), Vanderbilt University

Masters Students Mentored

- 2000-2002 Joel Parker, M.S. in Biomedical Informatics, Vanderbilt University, Thesis: “Dynamics Based Pattern Recognition for the Analysis of Multivariate Gene Expression Data”.
2000-2002 Marylyn Ritchie, M.S. in Applied Statistics, Vanderbilt University, Thesis: “Power of Multifactor Dimensionality Reduction for the Detection of Gene-Gene Interactions in the Presence of Noise Due to Genotyping Error, Missing Data, Phenocopy, and Genetic Heterogeneity”.
2001-2005 Tricia Thornton, M.S. in Biomedical Informatics (Co-Mentor with Jonathan Haines), Vanderbilt University, Thesis: “Comparison of Three Clustering Methods for Dissecting Trait Heterogeneity in Simulated Data”
2003-2005 David Reif, Applied Statistics M.S. Student, Vanderbilt University. Thesis: “Exploratory Visual Analysis of Pharmacogenomic Results”

M.D. Students Mentored

- 2003 Robert Thiele, Introduction to Biomedical Research (IBR) Program, Vanderbilt University

Ph.D. Committees Served On

- 1999-2003 Holli Hutcheson, Interdisciplinary Graduate Program (IGP), Vanderbilt University
2000-2004 Alecia Willis, Interdisciplinary Graduate Program (IGP), Vanderbilt University
2000-2004 Renee Dawson, Interdisciplinary Graduate Program (IGP), Vanderbilt University
2001-2004 Jake McCauley, Interdisciplinary Graduate Program (IGP), Vanderbilt University
2001-2004 Sarah Schwartz, Interdisciplinary Graduate Program (IGP), Vanderbilt University
2002-2004 Roger Liu, Interdisciplinary Graduate Program (IGP), Vanderbilt University
2003-2004 Elizabeth Rula, Neuroscience Graduate Program, Vanderbilt University

Ph.D. Students Mentored

- 2000-2003 Marylyn Ritchie, Interdisciplinary Graduate Program (IGP) Ph.D. Student, Vanderbilt, Dissertation: “Genetic programming neural networks for detecting gene-gene interactions” (highlight: Dr. Ritchie is a Professor with tenure and Director of the Center for Systems Genomics at Penn State University).
2001-2006 Tricia Thornton-Wells (Co-Mentor with Jonathan Haines), Integrative Neuroscience Ph.D. Student, Vanderbilt University, Dissertation: “Confronting complexity: A comprehensive statistical and computational strategy for identifying the missing link between genotype and phenotype” (highlight: Dr. Thornton-Wells is a Research Scientist at Novartis).
2003-2006 David Reif, Interdisciplinary Graduate Program (IGP) Ph.D. Student, Vanderbilt University, Dissertation: “Integrated analysis of genetic and proteomics data”

(highlight: Dr. Reif won a Presidential Young Investigator Award from the White House – he is now an Associate Professor at North Carolina State University)

Postdoctoral Students and Non-Tenure Track Faculty Mentored

2003-2005 Brett McKinney, Ph.D., Vanderbilt University (highlight: Dr. McKinney is currently the William K. Warren Jr. Chair in Bioinformatics and Associate Professor of Computer Science at the University of Tulsa)

Tenure-Track Faculty Mentored

2002-2004 Jay Folke, Ph.D., Assistant Professor of Epidemiology, Vanderbilt University
2002-2004 Chuck Matthews, Ph.D., Assistant Professor of Epidemiology, Vanderbilt University
2003-2004 Jeff Canter, Ph.D., Assistant Professor of Molecular Physiology and Biophysics, Vanderbilt University
2003-2004 Doug Mortlock, Ph.D., Assistant Professor of Molecular Physiology and Biophysics, Vanderbilt University
2003-2004 Marylyn Ritchie, Ph.D., Assistant Professor of Molecular Physiology and Biophysics, Vanderbilt University

University of Michigan

Courses and Lectures

1992-1998 Tutor, Student Athlete Support Program, University of Michigan, Biology 130 (Animal Behavior), Biology 152 (Biology), Biology 154 (Biology), Biology 305 (Genetics), Statistics 100 (Statistical Reasoning), Statistics 402 (Statistics and Data Analysis)
1997-1998 “The Likelihood Method in Genetics I”, lecture for Human Genetics (HG 542), University of Michigan
1997-1998 “The Likelihood Method in Genetics II”, lecture for Human Genetics (HG 542), University of Michigan

Florida State University

Courses and Lectures

1991 Teaching Assistant, Animal Development (PCB 3253C), Florida State University

INVITED PRESENTATIONS

1997 “Association of variation in the *ACE* and *ATR* Genes with interindividual variation in linear dynamic features of ambulatory blood pressure”, 4th International Conference on Preventive Cardiology. Montréal, Québec, Canada, June 29 - July 3.

- 1997 “Genetic linkage analysis”, Breast Cancer: Genetics and Risk Evaluation Workshop. University of Michigan Cancer Center, Ann Arbor, Michigan, July 8 - 13. (Host: Diane Baker)
- 1998 “Genetic analyses of dynamic quantitative traits”, Vanderbilt University Medical School, Nashville, Tennessee, March 9. (Host: Jonathan Haines)
- 1998 “Genetic studies of blood pressure dynamics improve the identification of genes influencing blood pressure regulation”, 48th Annual Meeting of the American Society of Human Genetics, Denver, Colorado, October 27 – 31.
- 1999 “Genetics of quantitative traits”, Genetic Analysis Methods for Medical Researchers Workshop, Duke University, Durham, North Carolina, March 13 – 17. (Host: Margaret Pericak-Vance)
- 1999 “New traits for genetic studies of blood pressure regulation”, Department of Microbiology, Meharry Medical College, Nashville, Tennessee, November 2. (Host: Scott Williams)
- 1999 “Simulation of gene expression patterns in cDNA microarray data”, American Statistical Association, Middle Tennessee Chapter, Nashville, Tennessee, November 19. (Host: Yu Shyr)
- 2000 “Analysis of quantitative traits”, Workshop on the Genetic Analysis of Complex Human Diseases, Duke University, Durham, North Carolina, April 2-5. (Host: Marcy Speer)
- 2000 “Analytical issues associated with SNPs”, Workshop on the Genetic Analysis of Complex Human Diseases, Duke University, Durham, North Carolina, April 2-5. (Host: Marcy Speer)
- 2000 “What are we going to do with 300,000 SNPs?”, Glaxo-Wellcome, London, England, April 19. (Host: Lefkos Middleton)
- 2000 “A cellular automata approach to identifying gene-gene and gene-environment interaction effects on complex traits”, 8th World Congress on Psychiatric Genetics, Versailles, France, August 27-31.
- 2000 “A cellular automata-based pattern recognition approach to identifying gene-gene and gene-environment interactions” 50th Annual Meeting of the American Society of Human Genetics, Philadelphia, Pennsylvania, October 3-7.
- 2000 “Combinatorial partitioning reveals interactive effects of the *ACE I/D* and *PAI-1 4G/5G* polymorphisms on plasma PAI-1 levels” 50th Annual Meeting of the American Society of Human Genetics, Philadelphia, Pennsylvania, October 3-7.
- 2000 “A cellular automata-based pattern recognition approach to identifying gene-gene and gene-environment interactions”, James V. Neel New Investigator Award Finalist Presentation, 2000 International Genetic Epidemiology Society meeting, San Antonio, Texas, October 27-29.
- 2000 “Symbolic discriminant analysis for mining gene expression patterns”. Critical Assessment of Techniques for Microarray Data Analysis (CAMDA’00) meeting, Duke University Durham, North Carolina, December 18-19, 2000.
- 2001 “Data reduction and pattern recognition approaches to the genetics of complex diseases”. Center for Human Genetics, Duke University Medical School, Durham, North Carolina, January 17. (Host: Margaret Pericak-Vance).
- 2001 “Data reduction and pattern recognition approaches to the genetics of complex diseases”. GlaxoSmithKline, Durham, North Carolina, February 7. (Host: Chris Foster).
- 2001 “Genetics of quantitative traits”, Workshop on the Genetic Analysis of Complex Human Diseases, Duke University, Durham, North Carolina, May 5-9. (Host: Marcy Speer).

- 2001 “Future directions and major unsolved problems in genetic epidemiology”, Workshop on the Genetic Analysis of Complex Human Diseases, Duke University, Durham, North Carolina, May 5-9. (Host: Marcy Speer)
- 2001 “Introduction to biostatistics”, Workshop on the Genetic Analysis of Complex Human Diseases, Duke University, Durham, North Carolina, May 5-9. (Host: Marcy Speer).
- 2001 “The role of interactions among ACE and PAI-1 polymorphisms in risk of myocardial infarction”, Division of Cardiology, Yale University Medical School, New Haven, Connecticut, August 23, 2001 (Host: Pat Hebert).
- 2001 “Symbolic discriminant analysis for mining gene expression patterns”, James V. Neel New Investigator Award Presentation, 2001 International Genetic Epidemiology Society meeting, Garmisch-Partenkirchen, Germany, September 2-4, 2001.
- 2001 “Power of multifactor dimensionality reduction (MDR) for identifying gene-gene and gene-environment interactions”, 2001 International Genetic Epidemiology Society meeting, Garmisch-Partenkirchen, Germany, September 2-4, 2001.
- 2001 “Symbolic discriminant analysis for mining gene expression patterns”, European Conference on Machine Learning, Freiberg, Germany, September 5-7, 2001
- 2001 “Power of cellular automata for identifying gene-gene and gene-environment interactions”, 9th World Congress on Psychiatric Genetics, St. Louis, Missouri, October 6-10, 2001.
- 2001 “Machine learning optimization of neural network architecture improves the identification of gene-gene and gene-environment interactions”, 9th World Congress on Psychiatric Genetics, St. Louis, Missouri, October 6-10, 2001.
- 2001 “Computational approaches to the analysis of microarray data”, Department of Biology, California State University, San Marcos, California, October 18, 2001 (Host: Thomas Wahlund).
- 2001 “New paradigms for the analysis of high-dimensional genetic data”, Department of Mathematics, University of Tennessee, Chattanooga, Tennessee, November 6, 2001 (Host: John Graef).
- 2002 “A cellular automata approach to detecting interactions among single-nucleotide polymorphisms in complex multifactorial diseases”, Pacific Symposium on Biocomputing 2002, Kaua’i, Hawaii, January 5, 2002 (Host: Russ Altman).
- 2002 “New strategies for identifying combinations of single-nucleotide polymorphisms associated with common multifactorial diseases”, Department of Biostatistics and Epidemiology, University of Pennsylvania, Philadelphia, Pennsylvania, January 31, 2002 (Host: Tim Rebbeck).
- 2002 “symbolic discriminant analysis for mining gene expression patterns”, Division of Nephrology, Department of Pediatrics, University of Minnesota, Minneapolis, Minnesota, February 15, 2002 (Host: Mike Mauer).
- 2002 “New strategies for identifying gene-gene interactions in common multifactorial diseases”, Department of Biostatistics, University of Alabama, Birmingham, Alabama, March 4, 2002 (Host: Hemant Tiwari).
- 2002 “New strategies for identifying gene-gene interactions in common multifactorial diseases”, Clinical Diabetes and Nutrition Section, NIDDK, National Institutes of Health, Phoenix, Arizona, March 8, 2002 (Host: Johanna Wolford).
- 2002 “Application of genetic algorithms to the discovery of complex genetic models for simulation studies in human genetics”, 2002 Genetic and Evolutionary Algorithm Conference (GECCO’02), New York, New York, July 12, 2002.

- 2002 “Strategies for identifying gene-gene interactions in cardiovascular disease”, Department of Clinical Pharmacology and Cardiology, University of Groningen, Groningen, The Netherlands, August 8, 2002 (Host: Wiek van Gilst).
- 2002 “Non-traditional statistical approaches for the analysis of high-dimensional genetic data”, Invited Session at the 2002 Joint Statistical Meetings, New York, New York, August 15, 2002 (Host: Dan Weeks).
- 2002 “Symbolic discriminant analysis for mining gene expression patterns: The Importance of cross-validation consistency”, Workshop on Evolutionary and Neural Computation in Bioinformatics, Granada, Spain, September 7, 2002 (Host: David Corne).
- 2002 “Cellular automata and genetic algorithms for parallel problem solving in human genetics”, EvoSolve Best Paper Award Presentation at the Seventh International Conference on Parallel Problem Solving from Nature (PPSN), Granada, Spain, September 10, 2002.
- 2002 "Genetic architecture of intermediate traits for arterial thrombosis in Africa and The Netherlands". Third Annual Vanderbilt-Meharry Genetics Symposium, Vanderbilt University, Nashville, Tennessee, September 20, 2002.
- 2002 “Multifactor dimensionality reduction is an ideal discriminator of discrete clinical endpoints using multilocus genotypes”, Xth World Congress for Psychiatric Genetics, Brussels, Belgium, October 10, 2002.
- 2002 “Concordant results of microarray and gene mapping studies in human autoimmune Disease”, 52nd Annual Meeting of the American Society of Human Genetics, Baltimore, Maryland, October 17, 2002.
- 2002 “A novel strategy for selecting optimal subsets of SNPs for the analysis of gene-gene interactions”, 2002 Annual Meeting of the International Genetic Epidemiology Society, New Orleans, Louisiana, November 16, 2002.
- 2003 “Computational approaches for detecting and characterizing gene-gene interactions”, Invited Tutorial at the Pacific Symposium on Biocomputing, Kaua’i, Hawaii, January 3, 2003 (Host: Russ Altman).
- 2003 "Symbolic discriminant analysis of proteomics data", 2nd Annual Conference on Protein Informatics: From Database to Prediction, San Diego, California, January 14, 2003.
- 2003 "Computational approaches for detecting gene-gene interactions", Oberwolfach Conference on Medical Statistics: Current Developments in Statistics Methodology for Genetic Architecture of Complex Diseases, Oberwolfach, Germany, February 4, 2003. (Hosts: Christopher Amos, Max Bauer, Helmut Schafer).
- 2003 “Computational approaches for detecting and characterizing gene-gene interactions in multifactorial diseases”, 2003 University of Tennessee - Oak Ridge National Laboratory Bioinformatics Summit, Pikeville, Tennessee, March 28, 2003. (Host: Jay Snoddy).
- 2003 "Cross validation consistency for the assessment of genetic programming results in microarray studies", 1st European Workshop on Evolutionary Computation and Bioinformatics (EvoBio), Essex, England, April 14, 2003. (Hosts: David W. Corne and Elena Marchiori).
- 2003 “Computational approaches for detecting and characterizing gene-gene interactions”, Department of Cancer Biology, Wake Forest University School of Medicine, Winston-Salem, North Carolina, May 1, 2003 (Host: Jennifer Hu).
- 2003 “Computational approaches for detecting and characterizing gene-gene interactions”, Invited Tutorial at the 11th International Conference on Intelligent Systems in Molecular Biology (ISMB), Brisbane, Australia, June 29, 2003 (Presented by Marylyn Ritchie on my behalf).

- 2003 "A grammar for petri net modeling in human genetics", 2nd Workshop on Grammatical Evolution, Chicago, Illinois, July 12, 2003. (Host: Conor Ryan).
- 2003 "Complex systems strategies for cancer bioinformatics", Fred Hutchinson Cancer Research Center. Seattle, Washington, November 13, 2003. (Host: Ross Prentice)
- 2003 "The importance of epistasis for understanding breast cancer", NCI/NIH Breast SPORE Roundtable. Cambridge, Massachusetts, November 20, 2003. (Host: Dirk Iglehart).
- 2003 "Complex Systems Strategies for Cancer Bioinformatics", Lombardi Cancer Center, Georgetown University, Washington D.C., December 8, 2003. (Host: Ed Gelman).
- 2004 "Biocomputing strategies for the study of complex biological systems", Dartmouth College, Hanover, New Hampshire, January 19, 2004. (Host: Dan Rockmore).
- 2004 "Biocomputing strategies for the study of complex biological systems", University of North Carolina, Chapel Hill, North Carolina, January 28, 2004. (Host: Terry Magnuson).
- 2004 "Biocomputing strategies for the study of complex biological systems", Department of Computer Science, Colby College, Waterville, Maine, March 19, 2004. (Host: Clare Congdon)
- 2004 "Computational analysis of gene-gene interactions in cancer epidemiology", Invited session presentation for the 2004 meeting of the American Association for Cancer Research, Orlando, Florida, March 30, 2004. (Host: Tim Rebbeck).
- 2004 "Biocomputing strategies for the study of complex biological systems", University of Texas Southwestern Medical Center, Dallas, Texas, April 28, 2004. (Host: Steve Crozier).
- 2004 "Systems biology thought experiments for interpreting epistasis models", Invited session presentation at the 36th Symposium on the Interface: Computing Science and Statistics, Baltimore, Maryland, May 28, 2004. (Host: Bill Shannon).
- 2004 "Petri nets for modeling high-order genetic systems", 2004 SIAM Conference on Discrete Mathematics, Nashville, Tennessee, June 13, 2004. (Host: Chun Li).
- 2004 "Systems biology modeling in human genetics using Petri nets and grammatical evolution". 2004 Genetic and Evolutionary Computation Conference (GECCO 2004), Seattle, Washington, June 29, 2004 (Host: James Foster).
- 2004 "Epistasis and human biology", Marshfield Clinic, Marshfield, Wisconsin, August 9th, 2004 (Host: Russell Wilke).
- 2004 "Systems biology thought experiments in human genetics using artificial life and grammatical evolution", Ninth International Conference on the Simulation and Synthesis of Living Systems (ALIFE IX), Boston, Massachusetts, September 12, 2004.
- 2004 "Systems biology thought experiments in human genetics", invited session presentation for the 2004 Scientific Sessions of the American Heart Association (AHA), New Orleans, Louisiana, November 7, 2004.
- 2004 "Bioinformatics", Colby-Sawyer College, New Hampshire, November 16, 2004 (Host: Bill Thomas).
- 2004 "Machine learning analysis of attribute interactions in human genetics", University of New Hampshire, Durham, New Hampshire, December 10, 2004 (Host: Phil Hatcher).
- 2005 "Data mining in human genetics using multifactor dimensionality reduction", Celera Diagnostics, San Francisco, California, February 3, 2005 (Host: David Ross).
- 2005 "Gene-gene interactions in cancer etiology", invited session presentation for the 2005 meeting of the American Association for Cancer Research (AACR), Anaheim, California, April 16, 2005.
- 2005 "Interpreting gene-gene interactions", invited session presentation for the 2005 meeting

- of the American Association for Cancer Research (AACR), Anaheim, California, April 16, 2005.
- 2005 “Epistasis and human diseases”, New England Complex Systems Institute, Cambridge, Massachusetts, May 3, 2005 (Host: Yaneer Bar-Yam).
- 2005 “Bioinformatics: genotype to phenotype”, invited tutorial presentation for the 2005 Genetic and Evolutionary Computation Conference (GECCO), Washington, D.C., June 25, 2005 (Host: James Foster).
- 2005 “Computational human genetics”, keynote speaker for the 2005 Computer Science Research Day, Department of Computer Science, University of Vermont, Burlington, Vermont, August 26, 2005 (Host: Xindong Wu).
- 2005 “A complete BNF grammar for systems biology thought experiments in human genetics using artificial life and biologically inspired computing”, 2005 Congress on Evolutionary Computing (CEC), Edinburgh, Scotland, September 3, 2005.
- 2005 “A flexible framework for data mining and knowledge discovery in psychiatric genetics”, 2005 World Congress on Psychiatric Genetics (WCPG), Boston, Massachusetts, October 15, 2005.
- 2005 “A flexible framework for data mining and knowledge discovery in human genetics”, 2005 Annual Meeting of the International Genetic Epidemiology Society (IGES), Park City, Utah, October 23, 2005.
- 2005 “Traversing the conceptual divide between biological and statistical epistasis: Systems biology and a more modern synthesis”, Department of Biology, University of Idaho, Moscow, Idaho, November 4, 2005. (Host: James Foster).
- 2005 “A global view of epistasis”, Keynote speaker for the 2005 Annual Conference of the Portuguese Society of Human Genetics, Cascais, Portugal, November 10, 2005. (Host: Joao Lavinha).
- 2005 “Population biology: new concepts for modeling risk”, Predictive Models of Cancer Susceptibility: Integrated Strategies meeting, Newport Beach, California, December 6, 2005 (Host: Hoda Anton-Culver).
- 2005 “Epistasis and cancer risk: A data mining approach”, Predictive Models of Cancer Susceptibility: Integrated Strategies meeting, Newport Beach, California, December 6, 2005 (Host: Hoda Anton-Culver).
- 2006 “Combinatorial pharmacogenetics”, Pacific Symposium on Biocomputing, Wailea, Maui, Hawaii, January 4, 2006 (Host: Marylyn Ritchie).
- 2006 “Detecting and interpreting epistasis in epidemiologic studies of common human diseases”, Department of Epidemiology and Population Sciences, Albert Einstein College of Medicine, New York, New York, January 19, 2006 (Host: Sylvia Wassertheil-Smoller).
- 2006 “Genome-wide analysis of epistasis”, Department of Statistics, Oxford University, Oxford, United Kingdom, February 7, 2006 (Host: Jonathan Marchini).
- 2006 “Genome-wide analysis of epistasis”, The Wellcome Trust Centre for Human Genetics, Oxford University, Oxford, United Kingdom, February 9, 2006 (Host: Lon Cardon).
- 2006 “Detecting and interpreting epistasis in epidemiologic studies of common human diseases”, Department of Epidemiology, M.D. Anderson Cancer Center, Houston, Texas, March 16, 2006 (Host: Margaret Spitz).
- 2006 “Genome-wide genetic analysis using genetic programming: the critical need for expert knowledge”, Workshop on Genetic Programming Theory and Practice (GPTP-2006), Center for the Study of Complex Systems, University of Michigan, Ann Arbor, Michigan, May 10, 2006 (Host: Bill Worzerl and Rick Riolo).

- 2006 “Bioinformatics strategies for human genetics”, Invited keynote speaker for the Bioinformatics Session of the 2006 Annual Conference on the Mathematics of Information Technology and Complex Systems (MITACS), Toronto, Canada, June 19, 2006 (Host: Shelley Bull).
- 2006 “Bioinformatics”, invited tutorial presentation for the 2006 Genetic and Evolutionary Computation Conference (GECCO), Seattle, Washington, July 8, 2006.
- 2006 “Quantitative biology approaches to the study of gene-environment interaction in environmental health and toxicology”, National IDeA Symposium of Biomedical Research Excellence (NISBRE), Washington, D.C., July 22, 2006.
- 2006 “Genome-wide analysis of epistasis: Finding epistatic needles in a genomic haystack”, Celera Diagnostics, San Francisco, California, August 14, 2006 (Host: David Ross).
- 2006 “Symbolic modeling of epistasis using competent genetic programming”, Celera Diagnostics, San Francisco, California, August 15, 2006 (Host: David Ross).
- 2006 “Symbolic modeling of epistasis”, Department of Computer Science, University of Amsterdam, Amsterdam, The Netherlands, September 8, 2006 (Host: Elena Marchiori).
- 2006 “Exploiting expert knowledge in genetic programming for genome-wide genetic analysis”, Parallel Problem Solving from Nature IX Conference, Reykjavik, Iceland, September 9, 2006.
- 2006 “Symbolic modeling of gene-gene interactions using genetic programming”, Workshop on Bio-inspired Computing in Computational Biology, Parallel Problem Solving from Nature IX Conference, Reykjavik, Iceland, September 12, 2006.
- 2006 “Genome-wide genetic analysis using computational intelligence: The importance of expert knowledge”, Invited keynote speaker for the 2006 IEEE Symposium on Computational Intelligence in Bioinformatics and Computational Biology, Toronto, Canada, September 28, 2006 (Host: Dan Ashlock).
- 2006 “Feature selection using random forests for the integrated analysis of multiple data types”, 2006 IEEE Symposium on Computational Intelligence in Bioinformatics and Computational Biology, Toronto, Canada, September 30, 2006 (Host: Dan Ashlock).
- 2006 “Exploiting expert knowledge for genome-wide genetic analysis”, Invited speaker for the Session on Physiological Genomics and Proteomics of Lung Diseases, 2006 Conference of the American Physiological Society, Ft. Lauderdale, Florida, November 3, 2006.
- 2006 “Detecting, characterizing, and interpreting epistasis using multifactor dimensionality reduction”, Invited speaker for the Workshop on Statistical Genetics, Mayo Clinic, Rochester, Minnesota, November 29, 2006 (host: Jean-Pierre Kocher).
- 2007 “Detecting, characterizing, and interpreting epistasis”, Department of Physics, University of Georgia, Athens, Georgia, March 22, 2007 (Host: Rob Geller).
- 2007 “Solving Complex Problems in Human Genetics using Genetic Programming”, 5th European Conference on Evolutionary Computation, Machine Learning and Data Mining in Bioinformatics (EvoBIO), Valencia, Spain, April 11th, 2007 (Host: Elena Marchiori).
- 2007 “Tuning ReliefF for genome-wide genetic analysis”, 5th European Conference on Evolutionary Computation, Machine Learning and Data Mining in Bioinformatics (EvoBIO), Valencia, Spain, April 12th, 2007.
- 2007 “Genetic analysis using multifactor dimensionality reduction”, Department of Epidemiology, University Medical Center, Groningen, The Netherlands, April 16, 2007 (Host: Harold Snieder).
- 2007 “Genome-wide analysis of epistasis”, Department of Epidemiology, University Medical Center, Groningen, The Netherlands, April 16, 2007 (Host: Harold Snieder).

- 2007 “Open-source software for applied genetic programming in the domain of human genetics: challenges and opportunities”, Invited Speaker for the Workshop on Genetic Programming Theory and Practice (GPTP-2007), Center for the Study of Complex Systems, University of Michigan, Ann Arbor, Michigan, May 17, 2007 (Hosts: Bill Worzel and Rick Riolo).
- 2007 “Genome-wide analysis of epistasis using computational intelligence and biological knowledge”, Invited speaker for the American Association of Cancer Research conference on Approaches to Complex Pathways in Molecular Epidemiology, Albuquerque, New Mexico, May 31, 2007 (Host: Duncan Thomas).
- 2007 “Integrated human and mouse systems genetics”, Invited speaker for the Board of Scientific Advisors, National Cancer Institute, Bethesda, Maryland, June 29, 2007 (Host: Cheryl Marks).
- 2007 “Symbolic modeler: Open-source software for applied genetic programming in human genetics”, Invited Speaker for the Workshop on Open-Source Software for Applied Genetic and Evolutionary Computing (SoftGEC-2007), London, England, July 7, 2007.
- 2007 “Bioinformatics”, invited tutorial presentation for the 2007 Genetic and Evolutionary Computation Conference (GECCO), London, England, July 8, 2007.
- 2007 “Quantitative biology in New England”, invited presentation for the Northeast Regional IDeA Meeting, Burlington, Vermont, August 17, 2007.
- 2007 “Genetic analysis of quantitative traits”, Celera Diagnostics, Alameda, California, August 27, 2007 (Host: David Ross).
- 2007 “A role for high-performance computing in the genetic analysis of common human diseases”, Lawrence Livermore National Laboratory, Livermore, California, August 28, 2007 (Host: Ed Turano).
- 2007 “Detecting, characterizing, and interpreting epistasis”, James Graham Brown Cancer Center, University of Louisville, Louisville, Kentucky, September 18, 2007 (Host: La Creis Kidd).
- 2007 “Multifactor dimensionality reduction 1.0”, XVth World Congress on Psychiatric Genetics, New York, New York, October 10, 2007.
- 2007 “Genome-wide genetic analysis using computational intelligence”, New England Biolabs, Ipswich, Massachusetts, November 1, 2007.
- 2007 “Computational intelligence approaches to genome-wide genetic analysis”, Translational Genomics Research Institute, Phoenix, Arizona, November 30, 2007 (Host: Eric Reiman).
- 2008 “A role for computational intelligence and expert knowledge in genome-wide association studies”, Center for Computational Biology and Bioinformatics, University of Indiana, Indianapolis, Indiana, January 14, 2008 (Host: Sean Mooney).
- 2008 “Integrated systems genetics: risk models”, National Cancer Institute Workshop on Integrated Systems Genetics: The Path Forward, Newport Beach, California, March 13, 2008 (Host: Hoda Anton-Culver).
- 2008 “Development and evaluation of an open-ended computational evolution system for the genetic analysis of susceptibility to common human diseases”, 6th European Conference on Evolutionary Computation, Machine Learning and Data Mining in Bioinformatics (EvoBIO), Naples, Italy, March 26, 2008.
- 2008 “The future of bioinformatics”, 6th European Conference on Evolutionary Computation, Machine Learning and Data Mining in Bioinformatics (EvoBIO), Naples, Italy, March 27, 2008.
- 2008 “Bioinformatics education and training”, 6th European Conference on Evolutionary

- Computation, Machine Learning and Data Mining in Bioinformatics (EvoBIO), Naples, Italy, March 28, 2008.
- 2008 “Gene by gene interaction”, Invited tutorial for the 8th Annual NIH/NIDDK Statistical Genetics Short Course for Obesity and Nutrition Researchers, San Diego, California, April 4, 2008 (Host: Hemant Tiwari).
- 2008 “Does complexity matter? Artificial evolution, computational evolution and the genetic analysis of epistasis in common human diseases”, Invited speaker for the Workshop on Genetic Programming Theory and Practice (GPTP-2008), Center for the Study of Complex Systems, University of Michigan, Ann Arbor, Michigan, May 12, 2008 (Hosts: Bill Worzel and Rick Riolo).
- 2008 “Bioinformatics”, invited tutorial presentation for the 2008 Genetic and Evolutionary Computation Conference (GECCO), Atlanta, Georgia, July 12, 2008.
- 2008 “Computational intelligence and the genetic analysis of common human diseases”, Invited speaker for the Maine Software and Information Technology Industry Association (MESDA), Westbrook, Maine, August 21, 2008 (Host: Clare Bates Congdon).
- 2008 “An introduction to machine learning”, Invited speaker, Educational Session on Machine Learning in Genetic Epidemiology, 2008 International Genetic Epidemiology Society meeting, St. Louis, Missouri, September 14, 2008.
- 2008 “Multifactor dimensionality reduction”, Invited speaker, Educational Session on Machine Learning in Genetic Epidemiology, 2008 International Genetic Epidemiology Society meeting, St. Louis, Missouri, September 14, 2008.
- 2008 “Computational intelligence and the genetic analysis of common human diseases”, Keynote speaker for the Department of Genetics Annual Retreat, University of Alabama Birmingham, Birmingham, Alabama, September 21, 2008 (Host: Brett McKinney).
- 2008 “Computational intelligence strategies for genome-wide genetic analysis”, Oklahoma Medical Research Foundation (OMRF), Oklahoma City, Oklahoma, December 4, 2008 (Host: Courtney Grey-McGuire).
- 2008 “Epistasis, plastic reaction norms and human disease susceptibility”, Invited speaker for the annual meeting of the NIEHS Superfund Basic Research and Training Program, Asilomar, California, December 8, 2008.
- 2008 “Epistasis and its impact on genome-wide association studies”, Invited speaker for Celera Diagnostics, Alameda, California, December 10, 2008 (Host: David Ross).
- 2009 "Embracing complexity in the genome-wide analysis of neuroimaging phenotypes", Invited speaker for the Fifth International Imaging Genetics Conference, Irvine, California, January 19, 2009 (Host: Steven Potkin).
- 2009 “Bioinformatics strategies for epistasis modeling in genome-wide association studies”, Invited speaker for the Laurence H. Baker Center for Bioinformatics and Biological Statistics, Iowa State University, Ames, Iowa, February 13, 2009 (Host: Robert Jernigan).
- 2009 “Computational intelligence and the genetic analysis of common human diseases”, Invited speaker for the Department of Statistics, North Carolina State University, Raleigh, North Carolina, March 12, 2009 (Host: Alison Motsinger-Reif).
- 2009 "Genetic analysis of vaccine adverse effects", Invited speaker for the Institute of Medicine, National Academy of Science, Washington D.C., June 24, 2009.
- 2009 “Bioinformatics”, invited tutorial presentation for the 2009 Genetic and Evolutionary Computation Conference (GECCO), Montreal, Canada, July 8, 2009.
- 2009 "Bioinformatics: Challenges and opportunities." Invited presentation for the Northeast Regional IDEa Meeting, Mountain View Grand Resort, New Hampshire, August 7, 2009.

- 2009 "An open-ended computational evolution strategy for genetic analysis", Invited speaker for the 2009 International Genetic Epidemiology Society meeting, Oahu, Hawaii, October 20, 2009.
- 2009 "Epistasis and its implications for personal genetics", Invited speaker for the Genome Sciences Institute, Boston University. November, 17, 2009. (Host: Lindsay Farrer)
- 2009 "Bioinformatics challenges for genome-wide association studies", Invited speaker for the Center for Computational Molecular Biology and the Department of Psychiatry and Human Behavior, Brown University. November, 18, 2009. (Host: Steven Rasmussen).
- 2010 "Bioinformatics challenges for genome-wide association studies", Invited speaker for the Center for Computational Medicine and Bioinformatics, University of Michigan. February 24, 2010. (Host: Brian Athey).
- 2010 "Bioinformatics challenges for genome-wide association studies", Invited speaker for the Program in Computational Biology, Fred Hutchinson Cancer Research Center, March 11, 2010 (Host: Barbara Trask).
- 2010 "Bioinformatics challenges for genome-wide association studies", Invited speaker for the Center for Computational Biology and Bioinformatics, Indiana University Medical School, March 18, 2010 (Host: Ken Cornetta).
- 2010 "Exploiting expert knowledge in a computational evolution system", Invited speaker for the Workshop on Genetic Programming Theory and Practice (GPTP-2010), Center for the Study of Complex Systems, University of Michigan, May 20, 2010 (Host: Rick Riolo).
- 2010 "Bioinformatics strategies for gene-environment interaction analysis", National Institute of Environmental Health Sciences, May 27, 2010 (Host: Kim McAllister).
- 2010 "Bioinformatics", invited tutorial presentation for the 2010 Genetic and Evolutionary Computation Conference (GECCO), Portland, Oregon, July 6, 2010.
- 2010 "Visual Analytics", invited workshop presentation for the 2010 Genetic and Evolutionary Computation Conference (GECCO), Portland, Oregon, July 7, 2010.
- 2010 "The case of the missing heritability", Invited speaker, University Medical Center Utrecht, The Netherlands, August 23, 2010 (Host: Folkert Asselbergs).
- 2010 "Gene-gene interactions", keynote presentation for the Capita Selecta on Complex Disease Analysis, Leuven, Belgium, August 26, 2010.
- 2010 "Epistasis and its implications for personal genetics", invited speaker for the Endowed H.C. Huang Lectureship, Department of Pharmacology and Toxicology, University of Louisville, Louisville, Kentucky, September 8, 2010 (Host: LaCreis Kidd).
- 2010 "Computational challenges for large-scale analysis", invited speaker for the workshop on Next Generation Analytic Tools for Large-Scale Genetic Epidemiology Studies of Complex Disease, National Institutes of Health, Bethesda, Maryland, September 15, 2010.
- 2010 "Using expert knowledge to guide data mining analysis of gene-gene interactions", invited speaker for the World Congress on Psychiatric Genetics, Athens, Greece, October 6, 2010.
- 2010 "Moving on from genome-wide association studies", plenary speaker for the Biomarker Discovery Conference, Shoal Bay, Australia, December 6, 2010. (Host: Pablo Mascato).
- 2010 "Probing genetic architecture with epistasis networks", plenary speaker for the Biomarker Discovery Conference, Shoal Bay, Australia, December 8, 2010. (Host: Pablo Mascato).
- 2010 "Epistasis and its implications for personal genetics", plenary speaker for the Biomarker Discovery Conference, Shoal Bay, Australia, December 9, 2010. (Host: Pablo Mascato).
- 2011 "Human microbiome visualization using 3D technology", invited speaker for the Pacific

- Symposium on Biocomputing, Kona, Hawaii, January 4, 2011.
- 2011 “Epistasis and its implications for personal genetics”, invited speaker, Atherosclerosis Research Unit, Karolinska Institute, Stockholm, Sweden, February 14, 2011. (Host: Anders Hamsten).
- 2011 “Tools for epistasis”, invited speaker for the 2011 Joint International Conference of the African and Southern African Societies of Human Genetics, Cape Town, South Africa, March 9, 2011.
- 2011 “Personal genetics”, invited speaker, University of Southern Maine, Portland, Maine, April 5, 2011 (Host: Clare Bates Congdon).
- 2011 “Introduction to bioinformatics”, invited tutorial speaker, IEEE Symposium Series on Computational Intelligence, Paris, France, April 12, 2011.
- 2011 "Application of computational evolution and visual analytics to the genetic analysis of prostate cancer", Invited speaker for the Workshop on Genetic Programming Theory and Practice (GPTP-2011), Center for the Study of Complex Systems, University of Michigan, May 12, 2011 (Host: Rick Riolo).
- 2011 “Systems genetics”, invited speaker, Celera, Inc., June 21, 2011. (Host: David Ross).
- 2011 “Human microbiome visualization using 3D technology”, invited speaker for the Beyond Sequencing conference, San Francisco, California, June 22, 2011.
- 2011 “Visual analytics”, invited workshop presentation for the 2011 Genetic and Evolutionary Computation Conference (GECCO), Dublin, Ireland, July 7, 2011.
- 2011 “A systems approach to genetic epidemiology” invited speaker, Department of Epidemiology, M.D. Anderson Cancer Center, Houston, Texas, September 8, 2011. (Host: Xifeng Wu)
- 2011 “Integration and visualization of genetic and genomic data using a 3-D video game engine”, invited speaker, Annual Meeting of the International Genetic Epidemiology Society (IGES), Heidelberg, Germany, September 19, 2011.
- 2011 “Computational systems genetics and human health”, invited speaker, Center for Biocomplexity, University of Notre Dame, South Bend, Indiana, September 27, 2011. (Host: Michael Ferdig).
- 2011 “Machine learning approaches to the genetic analysis of complex traits”, invited speaker, 175th Anniversary of the National Library of Medicine, Bethesda, Maryland, November 2, 2011 (Host: Valerie Florance).
- 2011 “Personal genomics and surgical care”, invited speaker, Department of Surgery, West Virginia University Medical School, Morgantown, West Virginia, November, 30, 2011 (Host: Linda Davis).
- 2011 “Systems genetics approaches to cancer research”, invited speaker, Randolph Cancer Center, West Virginia University Medical School, Morgantown, West Virginia, November, 30, 2011 (Host: Lan Guo).
- 2012 "Systems genetics approaches to neuroimaging phenotypes", invited speaker for the Eighth International Imaging Genetics Conference, Irvine, California, January 17, 2012 (Host: Steven Potkin).
- 2012 “Personal genetics: Are we trying to predict the unpredictable?”, invited speaker, Julius L. Chambers Biomedical/Biotechnology Research Institute, North Carolina Central University, Durham, North Carolina, January, 31, 2012 (Host: Sean Kimbro).
- 2012 “Systems genetics approaches to human disease susceptibility”, invited speaker, Center for Systems Genomics, Penn State University, State College, Pennsylvania, March 21, 2012 (Host: Marylyn Ritchie).
- 2012 “EvoBIO: Past, present and future”, invited keynote presentation, 10th European

- Conference on Evolutionary Computation, Machine Learning and Data Mining in Bioinformatics (EvoBIO), Malaga, Spain, April 12th, 2012.
- 2012 “Systems genetics approaches to human disease susceptibility”, invited speaker, Center for Quantitative Sciences, Vanderbilt University, Nashville, Tennessee, April 20, 2012 (Host: Yu Shyr).
- 2012 "Genetic analysis of prostate cancer: Computational evolution, Pareto optimization and post-processing", Invited speaker for the Workshop on Genetic Programming Theory and Practice (GPTP-2012), Center for the Study of Complex Systems, University of Michigan, May 10, 2012 (Host: Rick Riolo).
- 2012 “Genetic analysis of prostate cancer: Computational evolution, Pareto optimization and post-processing”, Invited speaker for the Modeling Biological Systems Workshop at the 12th International Conference on Parallel Problem Solving from Nature (PPSN-2012), Taormina, Sicily, September 1, 2012 (Host: Julia Handl).
- 2012 “Collaborative bioinformatics across Northern New England”, invited speaker for Workshop on Bioinformatics, Mount Desert Island Biological Laboratory, Bar Harbor, Maine, October 6, 2012 (Host: Ben King).
- 2012 “Computational intelligence strategies for embracing the complexity of genetic architecture”, plenary speaker for the Translational Bioinformatics Conference, Jeju, South Korea, October 17, 2012 (Host: Ju Han Kim).
- 2012 "An artificial intelligence approach to biomarker discovery", invited plenary speaker for the Biomarker Discovery Conference, Shoal Bay, Australia, December 3, 2012. (Host: Pablo Mascato).
- 2012 “The human microbiome: Analytical tools and techniques”, invited plenary speaker for the Workshop on Personalized Medicine, University of Newcastle, Australia, December 7, 2012. (Host: Regina Berretta).
- 2013 “Embracing the complexity of genetic architecture”, invited plenary speaker, Pacific Symposium on Biocomputing, Big Island, Hawaii, January 5, 2013.
- 2013 “Epistasis discovery”, invited plenary speaker, 1st Annual Epistasis Discovery in Genetics and Epidemiology (EDGE) workshop, Key West, Florida, January 31, 2013 (Host: Marylyn Ritchie)
- 2013 “Systems genomics approaches to disease susceptibility”, invited keynote speaker, NSF EPSCoR Workshop on Bioinformatics, Clinton Presidential Library, Little Rock, Arkansas, March 3, 2013.
- 2013 "Exploiting interestingness in a computational evolution system", Invited speaker for the Workshop on Genetic Programming Theory and Practice (GPTP-2013), Center for the Study of Complex Systems, University of Michigan, May 10, 2012 (Host: Rick Riolo).
- 2013 “Exploiting interestingness in a computational evolution system”, Invited speaker and Kavli Fellow for the 2013 Indonesian-American Kavli Frontiers of Science Symposium, National Academy of Sciences, Bali, Indonesia, June 26, 2013 (Host: Edward Patte).
- 2013 “Multifactor dimensionality reduction analysis of gene-gene interactions”, invited speaker, Advances in Statistical Methods for Cancer Genetic Epidemiology symposium, Memorial Sloan Kettering Cancer Center, New York, New York, August 23, 2013 (Host: Jaya Satagopan).
- 2013 “Computational intelligence approaches to human genetics”, invited speaker, Department of Computer Science, Bioinformatics and Computational Biology Program, Worcester Polytechnic Institute, Worcester, Massachusetts, September 13, 2013 (Host: Carolina Ruiz).
- 2013 “Statistical epistasis networks reduce the computational complexity of searching three-

- locus genetic models”, invited speaker for the Translational Bioinformatics Conference, Seoul, South Korea, October 1, 2013 (Host: Ju Han Kim).
- 2013 “Bioinformatics and its role in integrating the scientific disciplines”, keynote speaker for the Third Biennial Western Regional IDeA Scientific Conference, Honolulu, Hawaii, October 8, 2013 (Host: Robert Nichols).
- 2014 “Quantitative Biomedical Sciences”, invited speaker for the Workshop on Educating the Next Generation of Quantitative Biologists, Pacific Symposium on Biocomputing, Big Island, Hawaii, January 3, 2013.
- 2014 "Computational intelligence methods for imaging genetics", invited speaker for the Ninth International Imaging Genetics Conference, Irvine, California, January 20, 2014 (Host: Steven Potkin).
- 2014 "Biology-based simulation of epistasis", invited speaker, 2nd Annual Epistasis Discovery in Genetics and Epidemiology (EDGE) workshop, Key West, Florida, February 7, 2014 (Host: Marylyn Ritchie)
- 2014 “Bioinformatics challenges for the simulation of genetics data”, invited speaker for National Institutes of Health (NIH) Workshop on Simulation of Genetics Data, Bethesda, Maryland, March 11, 2014.
- 2014 “Integrating the biomedical sciences for personalized medicine: Translational bioinformatics”, invited speaker, Department of Biomedical Informatics, The Ohio State University, Columbus, Ohio, March 20, 2014 (Host: Philip Payne)
- 2014 “Statistical epistasis networks”, invited speaker, Department of Biostatistics, MD Anderson Cancer Center, Houston, Texas, March 26, 2014 (Host: Sanjay Shete)
- 2014 “Bioinformatics: 25 years of integrating the biological sciences”, 26th Presidential Faculty Lecturer, Dartmouth College, Hanover, New Hampshire, March 31, 2014 (Host: President Phillip Hanlon)
- 2014 "The EMREGNT artificial intelligence system", invited speaker for the Workshop on Genetic Programming Theory and Practice (GTP-2014), Center for the Study of Complex Systems, University of Michigan, May 9, 2014 (Host: Rick Riolo).
- 2014 “Bioinformatics: 25 years of integrating the biological sciences”, invited speaker, University of Hawaii Medical School, Honolulu, Hawaii, May 12, 2014 (Host: Robert Nichols)
- 2014 “Embracing the complexity of cancer genetics and genomics”, Distinguished Lecturer, University of Hawaii Cancer Center, Honolulu, Hawaii, May 14, 2014 (Host: Lana Garmire)
- 2014 “A translational bioinformatics approach to embracing the complexity of human genomics”, keynote speaker, Institute for Biomedical Informatics retreat, University of Pennsylvania, Philadelphia, Pennsylvania, May 30, 2014 (Host: John Holmes)
- 2014 “Bioinformatics education through eLearning”, invited speaker, Fifth Biennial National IDeA Symposium of Biomedical Research Excellence (NISBRE), National Institute of General Medical Sciences, Washington, D.C., June 17, 2014 (Host: Katia Sol-Church)
- 2014 “Bioinformatics: 25 years of integrating the biomedical science”, University of Utrecht Medical Center, Utrecht, The Netherlands, June 25, 2014 (Host: Folkert Asselbergs)
- 2014 “EMERGENT: A genetic programming-based artificial intelligence system”, invited speaker, Genetic and Evolutionary Computation Conference (GECCO), Vancouver, Canada, July 16, 2014.
- 2014 “Network science approaches to the genetic analysis of common diseases”, invited

- speaker, Institute for Biomedical Informatics, University of Pennsylvania, Philadelphia, Pennsylvania, July 24, 2014 (Host: Chi Dang)
- 2014 “The important role of visualization in the communication of statistics”, invited speaker, Joint Statistical Meetings (JSM), August 5, 2014.
- 2014 “Network science approaches to the genetic analysis of common diseases”, invited speaker, Department of Medical and Molecular Genetics, Indiana University School of Medicine, Indianapolis, Indiana, August 14, 2014.
- 2014 “Artificial intelligence strategies for the genetic analysis of common diseases”, invited speaker, Department of Biomedical Informatics, The Ohio State University, Columbus, Ohio, October 7, 2014 (Host: Philip Payne)
- 2014 “Dyadicity analysis of statistical epistasis networks”, invited speaker for the Translational Bioinformatics Conference, Qingdao, China, October 26, 2014 (Host: Ju Han Kim).
- 2015 “Artificial intelligence strategies for the analysis of big data”, invited speaker for the Leveraging Big Data and Predictive Knowledge to Fight Disease event at the New York Academy of Sciences, New York, New York, July 28, 2015.
- 2015 “Artificial intelligence and visual analytics”, keynote speaker for the 8th Annual Mid-Atlantic Healthcare Informatics Symposium, Philadelphia, Pennsylvania, October 23, 2015.
- 2016 “Artificial intelligence for biomedical research”, invited speaker, Department of Computer Science, University of Arkansas Little Rock, Little Rock, Arkansas, February 25, 2016.
- 2016 “Artificial intelligence for biomedical research”, invited speaker, Department of Computer Science, University of Arkansas Little Rock, Little Rock, Arkansas, February 25, 2016.
- 2016 “Artificial intelligence for precision medicine”, invited speaker for the Vanderbilt Institute for Genetics, Nashville, Tennessee, March 16, 2016.
- 2016 “Artificial intelligence in medicine”, invited speaker, Institute for Operations Research and the Management Sciences (INFORMS), Philadelphia Chamber of Commerce, Philadelphia, Pennsylvania, April 21, 2016.
- 2016 “Artificial intelligence for precision medicine”, invited speaker for the Biomarker World Congress, Philadelphia, Pennsylvania, May 17, 2016.
- 2016 “Artificial Intelligence for Data Science”, keynote lecture for Data Science Day and Northwestern University, Chicago, Illinois, June 10, 2016 (host: Justin Starren)
- 2016 “Artificial intelligence for Big Data”, invited speaker for the Big Data Short Course, University of Utrecht, The Netherlands, July 11, 2016.
- 2016 “Innovations in Computational Genetic Epidemiology”, invited speaker for the U4C finalist symposium, National Cancer Institute, Bethesda, Maryland, September 12, 2016.
- 2016 “Automated data science”, Center for Data Analytics and Biomedical Informatics, Temple University, Philadelphia, Pennsylvania, September 28, 2016.
- 2016 “An automated data science assistant”, Center for Computational Health Sciences, University of California San Francisco, San Francisco, California, November 3, 2016. (host: Ryan Hernandez)
- 2017 “No-boundary-thinking in bioinformatics”, Workshop on No-Boundary-Thinking in Bioinformatics, Pacific Symposium on Biocomputing, Big Island, Hawaii, January 3, 2017. (Host: Xiuzhen Huang)
- 2017 “10 tip for success as a data scientist in academia”, Workshop on Training Data Scientists, Pacific Symposium on Biocomputing, Big Island, Hawaii, January 3, 2017. (Host: Lana Garmire)

- 2017 “Tutorial on Automated Machine Learning”, AMIA Translational Bioinformatics (TBI), San Francisco, California, March 28, 2017.
- 2017 “Tutorial on Visual Analytics”, AMIA Translational Bioinformatics (TBI), San Francisco, California, March 28, 2017.
- 2017 “Automated data science”, Department of Biomedical Informatics, University of Pittsburgh, Pittsburgh, Pennsylvania, April 28, 2017. (Host: Mike Biecich)
- 2017 “Accessible Artificial Intelligence”, Genetic Programming Theory and Practice (GPTP) workshop, Ann Arbor, Michigan, May 19, 2017.
- 2017 “An automated data science assistant”, Farr Institute for Health Informatics Research, University College London, London, England, June 13, 2017 (host: Spiros Denaxas)
- 2017 “Artificial intelligence for Big Data”, invited speaker for the Big Data Short Course, University of Utrecht, The Netherlands, August 22, 2017.
- 2017 “Visual Analytics”, invited speaker for the Big Data Short Course, University of Utrecht, The Netherlands, August 22, 2017.
- 2017 “Artificial Intelligence for Everyone”, keynote speaker for the Translational Bioinformatics Conference, Long Beach, California, September 30, 2017. (Host: Dokyoon Kim)
- 2017 “Accessible Artificial Intelligence”, Big Data Symposium, American Statistical Association, Philadelphia, Pennsylvania, October 12, 2017. (Host: Scott McClintock)
- 2017 “Accessible Artificial Intelligence”, Network Science Institute, Indiana University, Bloomington, Indiana, October 16, 2017. (Host: Ann MaCranie)
- 2017 “Accessible Artificial Intelligence for Biomedical Informatics”, Division of Informatics, Johns Hopkins University, December 8, 2017 (Host: Harold Lehman)
- 2018 “A heuristic method for simulating open data of arbitrary complexity”, Pacific Symposium on Biocomputing, Big Island, Hawaii, January 5, 2018.
- 2018 “A visual analytics future”, invited keynote lecture for Pacific Symposium on Biocomputing, Big Island, Hawaii, January 5, 2018.
- 2018 “Accessible Artificial Intelligence”, Genome Sciences Seminar, University of Virginia, Charlottesville, Virginia, January 24, 2018. (Host: Steve Rich)
- 2018 “Accessible Artificial Intelligence for Data Science”, Bioinformatics Seminar, University of Miami, Miami, Florida, April 27, 2018. (Host: Steven Chen)
- 2018 “Accessible Artificial Intelligence”, Keynote Lecture for the Big Data Approaches Symposium, Novo Nordisk Foundation, Copenhagen, Denmark, May 15, 2018. (Host: Ramneek Gupta)
- 2018 “Incorporating Expert Knowledge into Machine Learning”, Keynote Lecture for the Workshop on Machine Learning Prediction of Disease, Technical University of Denmark, Copenhagen, Denmark, May 16, 2018. (Host: Ramneek Gupta)
- 2018 “Accessible Artificial Intelligence for Data Science”, Seminar for the Computational Biology and Bioinformatics Graduate Program, Yale University, New Haven, Connecticut, June 6, 2018. (Host: Mark Gerstein)
- 2018 “Accessible Artificial Intelligence for Data Science”, Invited Keynote Lecture for the International Conference on Intelligent Biology and Medicine (ICIBM), Los Angeles, California, June 12, 2018. (Host: Zhongming Zhao)
- 2018 “Artificial intelligence for Big Data”, invited speaker for the Big Data Short Course, University of Utrecht, The Netherlands, August 22, 2018.
- 2018 “Visual Analytics”, invited speaker for the Big Data Short Course, University of Utrecht, The Netherlands, August 22, 2018.
- 2018 “Accessible Artificial Intelligence”, National Institute of Aging, National Institutes of

- health, Bethesda, Maryland, August 29, 2018. (Host: Nalini Raghavachari).
- 2018 “Accessible Artificial Intelligence for Data Science”, Invited lecture, Dartmouth College, Hanover, New Hampshire. November 12, 2018. (Host: Minjun Huang)
- 2018 “Accessible Artificial Intelligence for Data Science”, Invited lecture, NIDDK Workshop on Environmental Determinants of Diabetes in the Young (TEDDY), Washington D.C. December 10, 2018 (Host: Susan Smith).
- 2019 “Accessible Artificial Intelligence for Data Science”, Keynote lecture, Workshop on Translational Informatics of Population Health, Pacific Symposium on Biocomputing, Big Island, Hawaii. January 3, 2019 (Host: Yves Lussier).
- 2019 “Accessible Artificial Intelligence for Data Science”, Invited lecture, Department of Biomedical Informatics, Salt Lake City, Utah. January 17, 2019 (Host: Younghee Lee)
- 2019 “Accessible Artificial Intelligence for Data Science”, Invited lecture, Department of Computer Science, Southern Illinois University, Carbondale, Illinois. April 11, 2019 (Host: Bidyut Gupta).
- 2019 “Accessible Artificial Intelligence for Data Science”, Keynote speaker, Washington University, St. Louis, Missouri. April 12, 2019 (Host: Phillip Payne)
- 2019 “Accessible Artificial Intelligence for Data Science”, Invited lecture, Annual meeting of the Human Islet Cell Research (HIRN) Network. April 30, 2019.
- 2019 “Accessible Artificial Intelligence for Data Science”, Invited lecture, National Cancer Institute, Rockville, Maryland, May 2, 2019.
- 2019 “Accessible artificial intelligence for data science”, Invited speaker, Lifetime Data Science Conference, Pittsburgh, Pennsylvania, May 28, 2019.
- 2019 “Accessible artificial intelligence for data science”, Invited speaker, Conference on Precision Medicine, Puerto Vallarta, Mexico, June 1, 2019.
- 2019 “Accessible artificial intelligence for the environmental health sciences”, Keynote speaker, National Academy of Science, Washington D.C., June 6, 2019.
- 2019 “HUMIES finalist award presentation”, invited speaker, Genetic and Evolutionary Computation Conference (GECCO), Prague, Czech Republic, July 16, 2019.
- 2019 “Automating the discovery of test statistics using genetic programming”, invited speaker, Genetic and Evolutionary Computation Conference (GECCO), Prague, Czech Republic, July 16, 2019.
- 2019 “Hierarchical simulation of complex data using genetic programming”, invited speaker, Genetic and Evolutionary Computation Conference (GECCO), Prague, Czech Republic, July 16, 2019.
- 2019 “Accessible artificial intelligence for data science”, Invited speaker, Joint Statistical Meetings (JSM), Denver, Colorado, July 28, 2019.
- 2020 “Accessible artificial intelligence for data science”, Invited speaker, Department of Population and Quantitative Sciences, Case-Western Reserve University, October 28, 2019 (Host: Scott Williams).
- 2020 “Artificial intelligence strategies for precision medicine”. Invited speaker for the Translational Bioinformatics Workshop, Pacific Symposium on Biocomputing, Big Island, Hawaii. January 4, 2019 (Host: Ju Han Kim).

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Impact Summary (3/2/20 – Source: Google Scholar)

Among 1% most cited scientists in according to Thomas Reuters in 2014
(<http://highlycited.com/>)

Total publications = 568

Total citations = 35,325

Average citations per paper ~ 58

H-index = 87

i10-index = 389

Publications cited \geq 10 times = 389

Publications cited \geq 20 times = 278

Publications cited \geq 50 times = 135

Publications cited \geq 100 times = 74

Publications cited \geq 200 times = 37

Publications cited \geq 500 times = 11

Refereed Publications

1. Al-Kasspooles, M., **Moore, J.H.**, Orringer, M.B., and Beer, D.G. Amplification and overexpression of the EGFR and erbB-2 genes in human esophageal adenocarcinomas. International Journal of Cancer 54, 213-219 (1993). (Highlight: cited more than 236 times).
2. Wu, G.D., Beer, D.G., **Moore, J.H.**, Orringer, M.B., Appelman, H.D., and Traber, P.G. Sucrase-isomaltase gene expression in Barrett's esophagus and adenocarcinoma. Gastroenterology 105, 837-844 (1993). (Highlight: cited more than 50 times)
3. **Moore, J.H.**, Lesser, E.J., Erdody, D.H., Natale, R.B., Orringer, M.B., and Beer, D.G. Intestinal differentiation and p53 gene alterations in Barrett's esophagus and esophageal adenocarcinoma. International Journal of Cancer 56, 487-493 (1994). (Highlight: cited more than 45 times)
4. Bongiorno, P.F., Whyte, R.I., Lesser, E.J., **Moore, J.H.**, Orringer, M.B., and Beer, D.G. Alterations of K-ras, p53 and erbB-2/neu in human lung adenocarcinomas. Journal of Thoracic and Cardiovascular Surgery 107, 590-595 (1994). (Highlight: cited more than 50 times).
5. Bongiorno, P.F., Al-Kasspooles, M., Lee, S.W., Rachwal, W.J., **Moore, J.H.**, Whyte, R.I., Orringer, M.B., and Beer, D.G. E-cadherin expression in primary and metastatic thoracic neoplasms and in Barrett's oesophagus. British Journal of Cancer 71, 166-172 (1995). (Highlight: cited more than 55 times).
6. **Moore, J.H.** Artificial intelligence programming with LabVIEW: Genetic algorithms for instrumentation control and optimization. Computer Methods and Programs in Biomedicine 47, 73-79 (1995). (Highlight: cited more than 30 times)
7. **Moore, J.H.**, Reilly, S.L., Ferrell, R.E. and Sing, C.F. The role of the apolipoprotein E polymorphism in the prediction of coronary artery disease age of onset. Clinical Genetics 51, 22-25 (1997).
8. Schwartz, G.L., Turner, S.T., **Moore, J.H.** and Sing, C.F. Predictors of interindividual variation in ambulatory blood pressure and their time and/or activity dependence. American Journal of Hypertension 13, 52-60 (2000).

9. **Moore, J.H.** Detection of linear and nonlinear dependencies in time series using the method of surrogate data in S-PLUS. Computer Methods and Programs in Biomedicine, 63, 117-121 (2000).
10. Schwartz, G.L., Turner, S.T., **Moore, J.H.** and Sing, C.F. Effect of time of day on intraindividual variability in ambulatory blood pressure. American Journal of Hypertension, 13, 1203-1209 (2000).
11. Parker, J.S. and **Moore, J.H.** Dynamics based pattern recognition and parallel genetic algorithms for the analysis of multivariate gene expression data. In: Proceedings of the Genetic and Evolutionary Computation Conference Workshop Program, San Francisco, pp 433-436 (2001).
12. **Moore, J.H.** and Hahn, L.W. Multilocus pattern recognition using cellular automata and parallel genetic algorithms. In: Spector, L., Goodman, E.D., Wu, A., Langdon, W.B., Voigt, H.-M., Gen, M., Sen, S., Dorigo, M., Pezeshk, S., Garzon, M.H., Burke, E. (eds) Proceedings of the Genetic and Evolutionary Computation Conference, Morgan Kaufmann Publishers, San Francisco, p 1452 (2001).
13. **Moore, J.H.**, Parker, J.S. and Hahn, L.W. Symbolic discriminant analysis for mining gene expression patterns. In: De Raedt, L., Flach, P. (eds) Lecture Notes in Artificial Intelligence 2167, pp 372-381, Springer-Verlag, Berlin (2001). (Highlight: cited more than 30 times)
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15. **Moore, J.H.** Improved power of sib-pair linkage analysis using measures of complex trait dynamics. Human Heredity 52, 113-115 (2001).
16. **Moore, J.H.** and Hahn, L.W. A cellular automata approach to detecting interactions among single-nucleotide polymorphisms in complex multifactorial diseases. Pacific Symposium on Biocomputing 7, 53-64 (2002). (Highlight: cited more than 30 times, selected by Faculty of 1000)
17. **Moore, J.H.**, Hahn, L.W., Ritchie, M.D., Thornton, T.A., White, B.C. Application of genetic algorithms to the discovery of complex models for simulation studies in human genetics. In: W.B.Langdon, E. Cantu-Paz, K. Mathias, R. Roy, D. Davis, R. Poli, K. Balakrishnan, V. Honavar, G. Rudolph, J. Wegener, L. Bull, M.A. Potter, A.C. Schultz, J.F. Miller, E. Burke, and N. Jonoska (eds). Proceedings of the Genetic and Evolutionary Computation Conference, Morgan Kaufmann Publishers, San Francisco, pp 1150-55 (2002). (Highlight: cited more than 45 times)
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