

## Curriculum Vitae

**Veronica J. Vieland, Ph.D.**  
**Executive Director, Mathematical Medicine LLC**  
**Professor Emerita, Departments of Pediatrics & Statistics**  
**The Ohio State University**

### Contact Information

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### Areas of Research Interest

Statistical genetics  
 Genetic architecture of psychiatric and other complex human disorders  
 Genetic modifiers of Mendelian disorders  
 Genetic and genomic data repositories  
 Computational methods in biology  
 Measurement theory in biology  
 Foundations of statistical inference  
 Intersection of thermodynamics, information theory and statistical inference  
 Philosophy of statistics

### Education

<u>Year</u>	<u>Degree, field</u>	<u>Institution</u>
1979	B.A., Philosophy	Barnard College, New York, New York
1981	M.A., Philosophy (Mathematical Logic and Philosophy of Science)	Columbia University, Department of Philosophy New York, New York
1986	Ph.D., Philosophy (Mathematical Logic and Philosophy of Science)	Columbia University, Department of Philosophy New York, New York
1988	M.S., Biostatistics	Columbia University, Department of Biostatistics New York, New York
1988-90	Postdoctoral Research Fellow Biostatistics/Child psychiatry	Columbia University, Department of Child Psychiatry New York, New York

### Academic Appointments

<u>Year</u>	<u>Position</u>	<u>Institution</u>
1981-84	Instructor	Columbia University, New York, NY
1984-86	Graduate Research Assistant	Columbia University
1986	Instructor	Marymount Manhattan College, New York, NY
1986-88	Graduate Research Assistant	Columbia University, School of Public Health, New York, NY
1988-90	Research Scientist	New York State Psychiatric Institute, New York, NY

1990-95	Assistant Professor	Departments of Psychiatry and Biostatistics, Columbia University
1991	Visiting Scholar	Department of Biomathematics, University of California Los Angeles
1995-99	Associate Professor	Department of Preventive Medicine & Environmental Health, Division of Biostatistics, College of Medicine The University of Iowa, Iowa City, IA (primary appointment)
1995-00	Associate Professor	Department of Psychiatry, College of Medicine The University of Iowa (secondary appointment)
1996-00	Associate Professor	Interdepartmental Ph.D. Program in Genetics The University of Iowa
1999-00	Associate Professor	Department of Biostatistics, College of Public Health (founded 1999) The University of Iowa (primary appointment)
2000-03	Professor	Department of Biostatistics, College of Public Health The University of Iowa (primary appointment)
2000-06	Professor	Department of Psychiatry, College of Medicine The University of Iowa (secondary appointment)
2000-06	Professor	Interdepartmental Ph.D. Program in Genetics The University of Iowa
2000-03	Director	Division of Statistical Genetics, Department of Biostatistics College of Public Health The University of Iowa
2000-06	Director	Center for Statistical Genetics Research College of Public Health & Carver College of Medicine The University of Iowa
2003-06	Professor & Head	Department of Public Health Genetics College of Public Health The University of Iowa
2006-07	Dwight E. Peters and Juanita R. Curran Professor of Pediatric Research	Abigail Wexner Research Institute at Nationwide Children's Hospital
2006-07	Director, Center for Quantitative and Computational Biology	Abigail Wexner Research Institute at Nationwide Children's Hospital
2007-2022	Battelle Chair in Quantitative and Computational Biology	Abigail Wexner Research Institute at Nationwide Children's Hospital
2007-2022	Director, Battelle Center for Mathematical Medicine	Abigail Wexner Research Institute at Nationwide Children's Hospital

	(formerly known as Center for Quantitative and Computational Biology)	
2006-2022	Professor (Primary)	Department of Pediatrics College of Medicine The Ohio State University
2007-2022	Professor (Secondary)	Department of Statistics The Ohio State University
2007-2020	Professor (Adjunct)	Department of Biomedical Informatics The Ohio State University
2007-2010	Professor (Adjunct)	Department of Genetics Rutgers University
2011-2022	Vice-President for Computational Research	Abigail Wexner Research Institute at Nationwide Children's Hospital
2022-	Founder and Executive Director	Mathematical Medicine LLC

### Honors and Awards

Elected Fellow, American Association for the Advancement of Science (AAAS), 2013.

Elected Fellow, American PsychoPathological Association (APPA, founded in 1910), 2012.

National Institute of Mental Health Career Development Award, 1997-2002

Myers Center Award for the Study of Human Rights in North America (awarded to Get Smart!), 1994

World Congress on Psychiatric Genetics Junior Investigator Travel Award, Oct. 1993

National Institute of Mental Health Scientist Development Award, 1990-1995

Columbia University President's Fellowship, 1979-1982

Graduated cum laude with Honors, Barnard College, Columbia University, 1979

William Pepperell Montague Prize for Promise of Distinction in Philosophy, Barnard College, Columbia University, 1979

### Professional Affiliations

Member, Society for Women in Philosophy, 1981-1986

President, New York Chapter of the Society for Women in Philosophy, 1983-1984

American Society of Human Genetics, 1990-2015

International Genetic Epidemiology Society, founding member, 1991-2017

Member, American Association for the Advancement of Science (AAAS), 2008-

Member, Society for Philosophy of Science in Practice, 2009-

Member, Genetics Society of America, 2012-2014

Member, American PsychoPathological Association (APPA), 2012-

Member, The Philosophy of Science Association, 2013 –

## Classroom Teaching

<u>Year</u>	<u>Course Title and Number</u>
1981	Formal Logic
1982	Epistemology
1982-84	Contemporary Civilization
1985	Mathematical Logic
1986	Mathematical Logic
1994	Probability Theory with Statistical Applications
1996	Risk and Protective Factors in Childhood Psychopathology (Child Psychiatry Residents' Lecture)
1996	Independent Study in Statistical Genetics (Susan Slager)
1996	Summer Student Seminar Series in Human Genetics
1996	Statistical Genetics
1997	Independent Study (Terry Braun, Genetics Ph.D. Rotation)
1997	Advanced Topics in Genetic Data Analysis
1997	Biostatistics Preceptorship (Kim Williamson)
1998	Risk and Protective Factors in Childhood Psychopathology (Child Psychiatry Residents' Lecture)
1999	Statistical Genetics
1999	Advanced Biostatistics Seminar
1999	Advanced Topics in Genetic Data Analysis
1999	Biostatistics Preceptorship (Wen Huang)
2001	Statistical Genetics I
2001	Advanced Topics in Genetic Data Analysis
2002	Statistical Genetics I: Dichotomous Traits
2002	Biostatistics Preceptorship (Deli Wang)
2002	Statistical Genetics Preceptorship (Jackie Bartlett)
2002	Statistical Genetics Preceptorship (LaVonne Mangin)
2003	Statistical Genetics I: Dichotomous Traits
2003	Advanced Topics in Genetic Data Analysis
2003	Biostatistics Preceptorship (Xinqun Yang)
2003	Statistical Genetics Preceptorship (Huaming Tan)
2004	Statistical Genetics Preceptorship (Min Shi)
2005	Statistical Genetics Preceptorship (Diana Istook)
2005	Clinical Genetics Practicum (Instructor of record for genetics clinic/journal club rotation)
2006	Theory of Statistical Genetics
2006	Clinical Genetics Practicum (Instructor of record for genetics clinic/journal club rotation)
2006	Independent Study in Statistical Genetics (Yungui Huang)

## Doctoral Thesis Committees

Thesis Committee Member for Daniel Nettleton  
 Department of Statistics & Actuarial Science, The University of Iowa, Ph.D. awarded, 1996.  
 Dissertation title: Order-restricted inference for interval mapping of quantitative trait loci

Thesis Co-director for Kai Wang  
 Department of Statistics & Actuarial Science, The University of Iowa, Ph.D. awarded, 1998.  
 Dissertation title: A Bayesian approach to replication of linkage studies

Oral Examination Committee for Maria Mendoza  
 Department of Biostatistics, University of Iowa, Ph.D. awarded, 1999

Thesis Co-Director for Susan Slager  
 Department of Biostatistics, The University of Iowa, Ph.D. awarded, 1999  
 Dissertation title: Linkage disequilibrium mapping of complex disorders: Investigating statistical power to detect linkage.

Thesis Co-Director for Elizabeth Ludington  
 Department of Biostatistics, The University of Iowa, Ph.D. awarded, 2000  
 Dissertation title: Sex-specific recombination in linkage analysis

Thesis Director for Mark Logue  
 Department of Statistics & Actuarial Science, The University of Iowa, Ph.D. awarded, 2001  
 Dissertation title: Bayesian linkage detection under an unknown genetic model

Thesis Committee Member for Terry Braun  
 Interdisciplinary Genetics Ph.D. Program, The University of Iowa, Ph.D. awarded, 2001  
 Dissertation title: A Software Tool Architecture to Assist Disease Gene Identification

Thesis Committee Member for Todd Scheetz  
 Interdisciplinary Genetics Ph.D. Program, The University of Iowa, Ph.D. awarded, 2001

Thesis Committee Member for Christopher Bartlett  
 Center for Molecular & Behavioral Neuroscience, Rutgers University, Newark NJ, Ph.D. awarded, 2003  
 Dissertation title: Localization of genes negatively influencing language development in specific language impairment with applications to autism.

Thesis Co-Director for Xinqun Yang  
 Department of Biostatistics, Division of Statistical Genetics, The University of Iowa, Ph.D. awarded, 2005  
 Dissertation title: A New Bayesian Approach to Disequilibrium Mapping

Thesis Co-Director for Manika Govil  
 Program in Public Health Genetics (Statistical Genetics), College of Public Health, The University of Iowa, Ph.D. awarded, 2005  
 Dissertation Title: Extensions of the Posterior Probability of Linkage: Distributed Computing, Incorporation of Genetic Map Information, an Application to Cleft Lip and/or Palate

Thesis Committee Member for Kwang-Youn Kim  
 Department of Biostatistics, Division of Statistical Genetics, College of Public Health, The University of Iowa, Ph.D. awarded, 2006

Thesis Director for Yungui Huang  
 Program in Public Health Genetics (Statistical Genetics), College of Public Health, The University of Iowa, Ph.D. awarded, 2000  
 Dissertation Title: Association Statistics Under the PPL Framework

### **Postdoctoral Fellows Supervised**

Co-Mentor for Linda Brzustowicz, M.D., Principal Investigator  
 NIMH Mentored Career Development Award  
 "Phenotype Definition in Familial Schizophrenia," 1997-2002  
 Department of Genetics, Rutgers University

Primary Mentor for Jian Huang, Ph.D., Principal Investigator  
 NIMH Mentored Research Scientist Development Award  
 "Statistical Models of Genetic Anticipation in Psychiatry," 1998-2003  
 Department of Statistics, The University of Iowa

Co-Mentor for Peggy C. Nopoulos, M.D., Principal Investigator  
 NIDR Mentored Patient Oriented Career Development Award  
 "Brain Structure/Function in Orofacial Clefting Disorders," 1999-2004  
 Department of Psychiatry, The University of Iowa

Co-Mentor for Thomas Wassink, M.D., Principal Investigator

NIMH Mentored Career Development Award  
 "A Multi-faceted Search for Autism Disease Genes," 2000-2005  
 Department of Psychiatry, The University of Iowa

Co-Mentor for Vicki L. Ellingrod, M.D., Principal Investigator  
 NIMH Mentored Scientist Development Award  
 "Genetics of Antipsychotic Metabolism," 2001-2006  
 Department of Psychiatry, The University of Iowa

Primary Mentor for Mark Logue, Ph.D., Postdoctoral Research Fellow  
 NIMH Psychiatric Genetics Training Program (R Crowe, PI)  
 Department of Psychiatry, The University of Iowa, 2002

Co-Mentor for Robert Philibert, M.D., Principal Investigator  
 NIMH Mentored Career Development Award  
 "A Thyroid Receptor Co-Activator Hypothesis for Psychosis," 2002-2006  
 Department of Psychiatry, The University of Iowa

Primary Mentor for Christopher Bartlett, Ph.D., Postdoctoral Research Fellow  
 Center for Statistical Genetics Research, University of Iowa, 2003- 2006

Primary Mentor for Hongling Wang, Ph.D., Postdoctoral Research Fellow  
 Center for Statistical Genetics Research, University of Iowa, 2005-2006; Center for Quantitative and Computational  
 Biology, Columbus Children's Abigail Wexner Research Institute, 2006-2007.

Primary Mentor for Sang-Cheol Seok, Ph.D., Postdoctoral Research Fellow  
 Battelle Center for Mathematical Medicine, Abigail Wexner Research Institute at Nationwide Children's Hospital,  
 2007-2009.

Co-Mentor for Manika Govil, Ph.D., Principal Investigator  
 NIDCR Translation to Independence Award  
 "Statistical Genetic Analysis of Complex Craniofacial and Dental Genetic Disorders", 2008-2013  
 Center for Craniofacial and Dental Genetics, University of Pittsburgh

Primary Mentor for Kimberly Walters, Ph.D., Postdoctoral Research Fellow  
 Battelle Center for Mathematical Medicine, Abigail Wexner Research Institute at Nationwide Children's Hospital,  
 2009 –2015

Member, Mentorship Committee for Jennifer Trittman, M.D., Assistant Professor of Pediatrics  
 Neonatal-Perinatal Medicine and the Center for Perinatal Research, Abigail Wexner Research Institute at  
 Nationwide Children's Hospital 2012-2015

Primary Mentor for Joseph McEwen, Ph.D., Postdoctoral Research Fellow  
 Battelle Center for Mathematical Medicine, Abigail Wexner Research Institute at Nationwide Children's Hospital.  
 2017

Research Supervisor for Daniel Nolan, M.D., Ph.D., Fellow, Medical Genetics and Genomics, Nationwide Children's  
 Hospital 2020-2022

### **Administrative Committees**

<u>Year</u>	<u>Committee</u>
1995-96	Department of Preventive Medicine and Environmental Health, University of Iowa Resource and Space Committee
1996-97	Department of Preventive Medicine and Environmental Health, University of Iowa Computer Committee

1996-01 Department of Preventive Medicine and Environmental Health, University of Iowa  
NIMH Training Grant Steering Committee

1996-01 Department of Preventive Medicine and Environmental Health, University of Iowa  
Chair, NIMH Training Grant Pre-Doctoral Recruitment Committee

1997 Department of Preventive Medicine and Environmental Health, University of Iowa  
Environmental Health Science Research Center,  
Pilot Project Review Committee

1997-98 Department of Preventive Medicine and Environmental Health, University of Iowa  
Biostatistics Curriculum Review Committee

1997-98 Department of Preventive Medicine and Environmental Health, University of Iowa  
Student Evaluation Committee

Fall 1998 Department of Preventive Medicine and Environmental Health, University of Iowa  
Faculty Organizer, M.S. Specialty and Ph.D. Qualifying Exam in Biostatistics

1999 Ad Hoc Committee to Design a Biostatistics Track For the Undergraduate  
Mathematics Major, University of Iowa

1999-00 Department of Preventive Medicine and Environmental Health, University of Iowa  
Master's Examination Committee

1999-01 College of Public Health, Department of Biostatistics, University of Iowa  
Co-chair, Statistical Genetics Search Committee

2000-01 Offices of the Vice President for Research and Provost, University of Iowa  
Member, Informatics Study Committee

2000-01 College of Public Health & College of Medicine, University of Iowa  
Research Week Planning Committee

2000-02 Interdisciplinary Genetics Ph.D. Program, University of Iowa  
Planning Committee for new Bioinformatics and Computational Biology Track

2000-02 College of Medicine, Department of Psychiatry, University of Iowa  
Statistical Genetics/Psychiatry Search Committee

2000- 06 College of Public Health, University of Iowa  
CPH Research Advisory Council

2001-02 College of Public Health, Department of Biostatistics, University of Iowa  
Chair, Statistical Genetics Search Committee

2001-02 College of Public Health, Department of Biostatistics, University of Iowa  
Biostatistics Department Head Search Committee

2001-02 College of Public Health, University of Iowa  
Merck Fellowship Committee

2001-02 College of Public Health, University of Iowa  
New Investigator Research Award Review Committee

2001-02 Offices of the Vice President for Research and Dean of the Graduate College, University of Iowa  
Informatics Initiative Steering Committee

2002-05	College of Public Health, University of Iowa Chair, Computation and Informatics Committee
2002-03	College of Public Health, University of Iowa Chair, Admissions Committee, Department of Biostatistics
2002-05	Health Informatics Program Steering Committee
2003	College of Public Health, Department of Biostatistics, University of Iowa Chair, Statistical Genetics Subtrack Comprehensive Exam Committee
2003-04	College of Public Health, Program in Public Health Genetics, University of Iowa Chair, Strategic Planning Committee
2003-06	College of Public Health, University of Iowa Executive Committee
2003-05	College of Public Health, University of Iowa Alumni Relations Council
2003-05	Co-Chair, Offices of the Vice President for Research and Dean of the Graduate College, University of Iowa Informatics Steering Committee
2003-06	Interdisciplinary PhD Program in Genetics, University of Iowa Computational Genetics Subtrack Committee
2004	Graduate College, University of Iowa Collegiate Consulting Group
2010-2011	Member, Research Information Technology Advisory Council, Abigail Wexner Research Institute at Nationwide Children's Hospital
2011-2014	Chair, Research Information Technology Advisory Council, Abigail Wexner Research Institute at Nationwide Children's Hospital
2010-2022	Member, Research Conflict of Interest Committee, Abigail Wexner Research Institute at Nationwide Children's Hospital
2011-2012	Member, Research Strategic Planning Committee, The Ohio State University
2011-2018	Member, Enterprise Data Strategy Committee, Nationwide Children's Hospital
2012	Chair, The Chief Research Information Officer Search Committee, Abigail Wexner Research Institute at Nationwide Children's Hospital
2013-2014	Member, The Chief Research Information Officer Search Committee, Abigail Wexner Research Institute at Nationwide Children's Hospital
2013-2014	Chair, Research Computing Executive Committee, Abigail Wexner Research Institute at Nationwide Children's Hospital
2014	Member, Director of Genomics Search Committee, Nationwide Children's Hospital
2014	Member and Affirmative Action Advocate, Center for Gene Therapy Faculty Member Search Committee, Nationwide Children's Hospital



2014-2022	Member, Internal Advisory Board for the Center for Genomic Medicine & Pharmacogenomics, The Ohio State University College of Medicine
2016	Member, Research Retreat Planning Committee, Abigail Wexner Research Institute at Nationwide Children's Hospital
2016-2017	Member, Biostatistical Core Director Search Committee, Abigail Wexner Research Institute at Nationwide Children's Hospital
2016-2017	Member, Biobehavioral Health Faculty Search Committee, Abigail Wexner Research Institute at Nationwide Children's Hospital
2017-2022	Member, Bremer Lecture Selection Committee, Abigail Wexner Research Institute at Nationwide Children's Hospital
2017-2022	Member, Promotion and Tenure Committee, Department of Pediatrics, The Ohio State College of Medicine
2019-2020	Member, Center for Childhood Cancer and Blood Diseases Faculty Search Committee, Abigail Wexner Research Institute at Nationwide Children's Hospital
2019-2020	Member and Affirmative Action Advocate, Center for Innovation in Pediatric Practice Faculty Search Committee, Abigail Wexner Research Institute at Nationwide Children's Hospital
2020	Member, Review Committee, Additional Ventures Fund Grant Proposals, Abigail Wexner Research Institute at Nationwide Children's Hospital

### Other Professional Activities

<u>Year</u>	<u>Activity</u>
1991	Invited Participant, Genetics Training Workshop, MacArthur Foundation Mental Health Research Network
1990 -	Participant in Genetic Analysis Workshops 7, 9, 10, 11, 12, 13, 15
1994 -	Referee for <i>American Journal of Epidemiology</i> , <i>American Journal of Human Genetics</i> , <i>American Journal of Public Health</i> , <i>Annals of Human Genetics</i> , <i>Archives of General Psychiatry</i> , <i>European Journal of Human Genetics</i> , <i>Genomics</i> , <i>Neuropsychiatric Genetics</i> , <i>Nature Genetics</i> , <i>Thyroid et al.</i>
1995	NIMH Ad Hoc Genetics Review Committee
1996, 2000	Referee for Genetic Analysis Workshop 10 publication submissions
1996-2001	Consultant, NIH-NIDCD Grant R01 DC01654, Family Genetic Studies of Language Impairment. PI: P Tallal
1997	NIMH Genetics and Epidemiology Initial Review Group
1998	NIMH, Chair, Special Initial Review Group
1998, 2000	Co-chair, Psychiatric Genetics Chromosome 5 Workshops
1997-2005	Member of International Board of Scientific Advisors, Canadian Medical Research Grant GR-14501, The Genetics of Complex Disorders: An Integrated Approach To the Study of Bipolar Disorder, Schizophrenia, Alcoholism and Autism. PI's: M Maziade, R Palmour, MA Roy, P Szatmari

- 1998 Organizer and Chair, Iowa Workshop in Statistical Genetics in Public Health, June 15-17, 1998, The University of Iowa
- 2001 Associate Editor, Genetic Analysis Workshop (Genet Epidem)
- 2002 Session Co-Moderator, Haplotype blocks and linkage disequilibrium mapping. American Society of Human Genetics, Baltimore MD
- 2002 NIH Special Review Panel
- 2002 NCI Biostatistics Program, External Review Committee
- 2002-2005 Psychiatric Genetics editorial board
- 2002 American Society of Human Genetics, Abstract Reviewer for 2002 Annual Meeting
- 2003 NIH Mammalian Genetics Review Committee, Ad Hoc Member
- 2003 Judge, Poster Session, College of Medicine/College of Public Health Research Week
- 2004 Invited Participant and Presenter, NIH Forum on "Gene Discovery in Mental Disorders: How to Proceed?", Laguna Beach CA
- 2004 Judge, Poster Session, College of Medicine/College of Public Health Research Week
- 2004 Group Leader, Genetic Analysis Workshop 14, Noordwijkerhout, The Netherlands
- 2004-2006 Collaborator, Gerontological Nursing Interventions Research Center, UI College of Nursing
- 2005 Associate Editor, Genetic Analysis Workshop 14 (Biomed Central)
- 2006-2011 Scientific Consultant to Genome Canada's Autism Genome Project (Steve Scherer, PI)
- 2006 Participant, Committee on Institutional Cooperation (CIC) Professional Development Seminar for Department Heads and Chairs, Park Ridge, Illinois February 9-11
- 2006 Invited Participant, "A Critical Assessment of Autism Genetics" and Chair, Session 5 Statistical Genetics, Banbury Center, Cold Spring Harbor Laboratory NY, March 12-14
- 2006 Invited Workshop Participant, "Systems Genetics and Complex Phenotypes." National Institute of General Medical Sciences, Bethesda MD, September 7-9
- 2006 Group Leader, Genetic Analysis Workshop 15, St. Pete Beach, FL
- 2006-2011 Consultant, Molecular Genetic Study of Autism and Related Phenotypes In Extended Pedigrees, CIHR, Szatmari PI
- 2007-2008 Scientific Consultant to NIH 1R01DK-077510-01  
 'Genome-wide association of common alleles with long-term diabetic complications'  
 Period: 09/30/2006 08/31/2009  
 PI: AD Paterson.
- 2007 Associate Editor, Genetic Analysis Workshop 15, (Biomed Central)
- 2005-2007 Member, NIH Center for Inherited Disease Research Access Committee
- 2007 -2008 Chair, NIH Center for Inherited Disease Research Access Committee

2008	Chair, NIH Center for Inherited Disease Research Ad hoc Review
2008	Session Co-Moderator, Neuropsychiatric Disorders and Neurodevelopment. American Society of Human Genetics, Philadelphia, PA
2008-2013	Consultant, “Genome-Wide Association Study of Hypoplastic Left Heart and Related Defects” RO1 HL090506, McBride PI
2010-2012	Member, Steering Committee, NIMH Rutgers University Cell and DNA Repository U24 MH068457, Tischfield, PI
2010	Member, NIA Special Emphasis Panel (U01: Alzheimer’s Disease Neuroimaging Initiative)
2010-2013	Member, College of CSR Reviewers, National Institutes of Health Center for Scientific Review
2010-2016	Associate Editor, Human Heredity
2011-2016	Editorial Board, G3:Genes Genomes Genetics, International Conference on Mathematical and Computational Medicine
2012	Co-Organizer (with Gunter Wagner, Yale University), Workshop on Measure Theoretic Issues in Biology, Columbus, Ohio, June 10-12.
2013	Member, Advisory Panel, “Foundations of Quantification and Measurement in the Biological Science”, Templeton Foundation, New York, NY, February.
2014	Ad Hoc Grant Reviewer, Natural Sciences and Engineering Research Council of Canada
2015	Organizer, American Association for the Advancement of Science Symposium “Extracting Evidence from Biological Data: Multiple Disciplines Get In on the Act,” San Jose, CA, February 14.
2015 - 2022	Director, Institutional High Performance Computing facility, Nationwide Children’s Hospital
2016	Organizer, Society for Philosophy of Science in Practice Symposium, “Replication and Evidence: A Tenuous Relationship,” Glassboro, NJ, June 17-19.
2017	Invited Symposium participant, “Evidence: An Interdisciplinary Conversation about Knowing and Certainty,” Center for Science and Society and the Institute for Social and Economic Research and Policy, Columbia University, New York, NY, April 21-22. (See also Scientific Presentations and Invited Lectures, below.)
2017	Invited Symposium participant, “Unraveling Genetic Modifiers of Muscular Dystrophy” Eccles Institute of Human Genetics, University of Utah, Salt Lake City, UT, May 24. (See also Scientific Presentations and Invited Lectures, below.)
2017	Invited Workshop participant, “How do we decide what to measure?” Centre for Biodiversity Dynamics, Norwegian University of Science and Technology, Trondheim, Norway, June 6-10. (See also Scientific Presentations and Invited Lectures, below.)
2018 - 2020	Member, Ohio Supercomputing Center/OARnet Advisory Board
2019 - 2022	Advisory Board Member, The Ohio State University Research Cyberinfrastructure and Advanced Computing Advisory Council

## Research Grants

<u>Title &amp; Agency</u>	<u>Role</u>	<u>Dates</u>
Post-doctoral Fellowship in Psychiatric Genetics NIMH Training Grant MH14620 (Raymond Crowe, PI)	Faculty Member	1989-2002
Genetic Modeling of Child Psychopathology NIH Mentored Career Development Award K01 MH00884	PI	1990-1995
Psychiatric Genetics and Family Studies: Robust Methods NIH R01 MH48858 (Susan E. Hodge, PI)	Co-I	1992-1997
Sampling Models & Methods for Complex Genetic Diseases NIMH Shannon Award	PI	1994-1995
Family Study of Obsessive Compulsive Disorder NIH R01 MH44175 (Abby Fyer, PI)	Co-I	1994-1998
Sampling Models & Methods for Complex Genetic Diseases NIH R01 MH2841	PI	1995-2004
Pre- and Post-doctoral Fellowships in Psychiatric Epidemiology and Biometry NIMH Training Grant MH15168 (Robert Woolson, PI)	Faculty Member	1996-2001
Genetic Modeling of Psychopathy NIMH Career Development Award K02 MH01432	PI	1997-2002
Linkage Study of Panic Disorder NIMH R01 MH 34728 (Raymond Crowe, PI)	Co-I	1997-2000
Collaborative Linkage Study of Autism NIH R01 MH5528401 (Joseph Piven, PI)	Co-I	1999-2004
Molecular Genetics of Autism NIMH R01 NS43550 (Thomas Wassink, PI)	Co-I	2002-2006
Gene-Brain-Behavior Relationships in Autism NIMH STAART Center U54 MH066418 (Joseph Piven, PI)	Co-I	2002-2007
Infrastructure to Facilitate Discovery of Autism Genes NINDS R01 NS42165-01	Co-PI	2002-2009
Autism Genome Project National Alliance for Autism Research (NAAR) PI for Data Coordination Site	Co-PI	2004-2006
Integrated Statistical and Computational Methods for Isolating Genes for Non-Syndromic Cleft Lip with or without Cleft Palate Roy J Carver Charitable Trust	PI	2005-2007
Identification and Functional Assessment of Autism Susceptibility Genes NIMH R01 MH76433 Linked to separate R01s to L. Bruzstowicz and J. Millonig	PI	2005-2011
Molecular Genetic Study of Autism and Related Phenotypes	Co-I	2005-2010

In Extended Pedigrees NIMH RO1 MH076028 (Joseph Piven, PI)		
Bayesian Reanalysis of a Multi-Site Gene-Mapping Study of Cleft Lip/Cleft Palate NIDCR R03 DE017167	PI	2006-2008
Autism Genome Project Autism Speaks PI for Data Coordinating Site	Co-PI	2007-2012
Autism Trio Collection Consortium Autism Speaks PI for Data Coordinating Site	Co-PI	2007-2009
Coalescent Modeling for Genetic Mapping in Population-Based Samples IPR and Population & Health TIE Seed Grant, The Ohio State University	Co-PI	2008-2009
The Psychiatric GWAS Consortium: Integrated and Coordinated GWAS Meta-Analyses NIH U01 MH085515 (Mark Daly, PI)	Co-I	2008-2009
Combining Epidemiologic Designs to Model Genetic Risks for Psychiatric Disorders NIMH RO1 MH086117	PI	2009-2012
Combining Epidemiologic Designs to Model Genetic Risks for Psychiatric Disorders (Supplement) NIMH RO1 MH086117 S1	PI	2010-2012
A Molecular Genetic Study of Autism and Related Phenotypes In Extended Pedigrees Canadian Institutes of Health Research (Peter Szatmari, PI)	Co-I	2011-2016
NIMH Center for Collaborative Genetic Studies (CCGS) Combined Analysis of Psychiatric Studies (CAPS) NIH U24MH068457 (LM Brzutowicz, J Tischfield, PI)	PI (CAPS)	2012-2025
Quantitative determination of Ecological Niches for Polymicrobial Colonization in OM NIH RO1 GM 103612 (Jayajit Das, PI)	Co-I	2013-2017
Genetic Modifiers of Duchenne Muscular Dystrophy NIH R01 NS 085238 (Kevin Flanigan, PI)	Co-I	2014-2027
A National Pediatric Learning Health System Patient-Centered Outcomes Research Institute (Chris Forrest, PI)	Site PI (NCH)	2014-2015
Uncovering Basic Signaling Mechanisms in NK Cells in Mice And Humans NIH R56 AI 108880 (Jayajit Das, PI)	Co-I	2014-2016
Measuring the Evidence in Evidence-Based Medical Research W. M. Keck Foundation	PI	2015-2019
The Nature and Uses of Evidence in Science Columbia University Center for Science and Society	Co-PI	2019

PediAtric ReseArch of Drugs, Immunoparalysis  
and Genetics during MODS  
NIH R01 HD 095976 (Mark Hall, PI)

Co-I

2019 – 2024

## Patents

Modulators of Disease Severity in Muscular Dystrophy. Flanigan K, Weiss RB, **Vieland VJ**. *Submitted September 22, 2017.*

## Bibliography

### Peer-reviewed Publications

1. Shaffer D, **Vieland V**, Garland A, Rojas M, Underwood M, and Busner C. Adolescent suicide attempters: Response to suicide-prevention programs. *JAMA* 264:3151-3155, 1990.
2. Shaffer D, Garland A, **Vieland VJ**, Underwood M, and Whittle B. The impact of curriculum-based suicide prevention programs for teenagers. *J Am Acad Child Adolesc Psychiatry* 30:588-596, 1991.
3. **Vieland VJ**, Whittle B, Garland A, Hicks R, and Shaffer D. The impact of curriculum-based suicide prevention programs for teenagers: An 18-month follow-up. *J Am Acad Child Adolesc Psychiatry* 30:811-815, 1991.
4. Shaffer D, **Vieland VJ**, Garland A, et al. Adolescents who attempt suicide – reply. *JAMA – Journal of the American Medical Association* 265(21):2805-2806, 1991.
5. **Vieland VJ**, Greenberg DA, Hodge SE, and Ott J. Linkage analysis of two-locus diseases under single-locus and two-locus analysis models. *Cytogen Cell Genet* 59:145-146, 1992.
6. **Vieland VJ**, Hodge SE, and Greenberg DA. The adequacy of single-locus approximations for linkage analysis of oligogenic traits. *Genet Epi* 9:45-59, 1992.
7. Knowles JA, **Vieland VJ**, and Gilliam TC. Perils of gene mapping with microsatellite markers. *Am J Hum Genet* 31:905-909, 1992.
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84. Huang Y, Seok SC, Valentine-Cooper W, Burian J, Mangin L, Nouanesengsy B, Modi A, Vieland VJ. KELVIN 2.1: A tool for modeling genetic architecture for complex disorders. ASHG 60<sup>th</sup> annual meeting, American Society of Human Genetics, #3013/f, 2010.

85. Nouanesensy B, Seok SC, Vieland VJ. Visualizing multidimensional support intervals for genetic models. ASHG 60<sup>th</sup> annual meeting, American Society of Human Genetics, #3023/f, 2010.
86. Valentine-Cooper W, Huang Y, Seok S, Veronica VJ. Poster: High-Performance Computing for Mapping Disease-Related Genes. Computational Advances in Bio and Medical Sciences (ICCABS), 2011, *IEEE 1st International Conference on* , vol., no., pp.263, 3-5 Feb. 2011
87. Huang Y, Tomer Y, Vieland VJ. Modeling HLA epistatic interactions using a unified GWAS and linkage analytical method maps new putative genes for Type 1 Diabetes. ASHG 61<sup>st</sup> annual meeting, American Society of Human Genetics, Poster 694W, 2011.
88. Seok SC, Nouanesensy B, Vieland VJ. KELVIZ: A Graphing and Annotating Tool for Statistical Evidence in Human Genetics. ASHG 61<sup>st</sup> annual meeting, American Society of Human Genetics, Poster 674W, 2011.
89. Walters KA, Tobin K, Azaro M, Lehner T, Brzustowicz LM, Vieland VJ. Review and re-analysis of all schizophrenia multiplex families in the NIMH repository substantially alters overall linkage findings. ASHG 61<sup>st</sup> annual meeting, American Society of Human Genetics, Poster 646T, 2011.
90. Vieland VJ, Walters KA, Tobin K, Azaro M, Lehner T, Brzustowicz LM. Combined linkage and genome-wide association analysis of multiple schizophrenia (SZ) and bipolar data (BP) sets from public repositories reveals striking new evidence of distinct and overlapping genes. ASHG 61<sup>st</sup> annual meeting, American Society of Human Genetics, Poster 551F, 2011.
91. Govil M, Mukhopadhyay N, Huang Y, Valentine-Cooper W, Field LL, Lidral A, Murray J, Marazita ML, Vieland VJ. CL/P: Utilizing Advanced Analytic Approaches to Identify Etiologic Genes. AADR Annual Meeting, March 2012.
92. Thompson A, Szatmari P, Vieland VJ, Piven J, Fernandez BA, Walters K, Parlier MC, O'Conner I, Whitten K. Sex differences in extended pedigrees with ASD. International Society for Autism Research (INSAR), Toronto, Canada, May 17, 2012.
93. Oikkonen J, Huang Y, Ukkola-Vuoti L, Raijas P, Vieland VJ, Onkamo P, Järvelä I. Biological pathways of musical aptitude. Poster HGM2013-ICG-1338; HGM/ICG Conference (HGM2013/21<sup>st</sup> International Congress of Genetics), Singapore, April 13-18, 2013.
94. White P, Vieland VJ, Greenberg DA, Hodge SE. Combine and conquer: An integrated software suite for finding causal relationships between sequence variants and clinical phenotypes. Nationwide Children's Hospital and The Ohio State University Genetics Collaboration Symposium, Columbus, OH, May 20, 2014.
95. Trittman JK, Gastier-Foster JM, Vieland VJ, Klebanoff MA, Chicoine LG, Nelin LD. Bronchopulmonary dysplasia-associated pulmonary hypertension and mutations in the *DDAHI* gene. The American Physiological Society, Experimental Biology Conference, 2015.
96. Seok SC, Vieland VJ. A Quest for a Calibrated Statistical Evidence Measure: Multinomial Hypotheses. The Third International Mathematical and Computational Conference, Columbus, OH, May 15-18, 2016.
97. Brzustowicz L, Vieland V, Ambite JL, Lehner T, Tischfield J. NRGR: NIMH Repository and Genomics Resource: New Collections, Services and Access Tools to Search Data and Biosamples. European Neuropsychopharm, Oct 1, 2017.
98. Ruocco B, Mayani R, Sharma S, Wilson S, Vahi K, Voinea S, Davis G, Valentine-Cooper W, Mathew J, Arens Y, Deelman E, Azaro M, Vieland V, Ambite JL, Brzustowicz L. Enhancing Access to Data at the National Institute of Health Repository and Genomics Resource. XXVIIth World Congress of Psychiatric Genetics, October 26-31, 2019, Los Angeles, CA. European Neuropsychopharm 29(5) Suppl: S173-S174, 2019.

#### Media Attention for Work on Statistical Evidence

“Medicine needs a sensible way to measure weight of the evidence” Tom Siegfried, Science News Prime, December 19, 2011

“Making Data Work: Researchers pursue analogy between statistical evidence and thermodynamics” Tom Siegfried, Science News, September 8, 2012

“An overdependence on p-values”. Proceedings of the National Academy Sciences podcast interview, November 13, 2014

"Top 10 scientific mysteries for the 21st century," includes measurement of evidence as mystery #7 with link to Vieland et al. paper. Science News, February 1, 2015.

### Scientific Presentations and Invited Lectures

1. Statistical Inference in the Absence of Sampling. Invited presentation, Bernice Ryerson-MacEvoy Child Psychiatry Research Colloquium, New York State Psychiatric Institute, January 1989.
2. Adequacy of single-locus linkage models for analysis of multilocus traits. Columbia University Seminar in Genetic Epidemiology, February 1992.
3. Data management in molecular genetic studies – from pedigrees to lod scores. American Psychopathological Association, 1992.
4. Genetic linkage analysis of panic disorder. American Psychopathological Association, 1992.
5. Segregation analysis of panic disorder. International Genetic Epidemiology Society, 1992.
6. Evidence for a major gene for obsessive-compulsive disorder. Behavioral Genetic Association, 1992.
7. Why haven't we found any genes for psychiatric disorders? Child Psychiatry Grand Rounds, St. Lukes-Roosevelt Hospital, New York, September 1993.
8. A robust approach to ascertainment correction. Columbia University seminar in genetic epidemiology, December 1993.
9. How many models should we use in linkage analysis of genetically complex disorders? Invited presentation, National Institutes of Health, Molecular Epidemiology and Disease Indicators Branch, February 1994.
10. Ascertainment bias: An intractable problem for segregation analysis. Invited presentation, National Institutes of Mental Health Mentored Awardees Conference, June 1994.
11. Simple linkage analysis of complex traits. Invited presentation, Division of Genetics Seminar, Department of Pediatrics, University of Pennsylvania, November 1994.
12. A likelihood solution to a classical problem in human genetics: ascertainment corrections for sequentially and nonsequentially sampled pedigrees. Invited presentation, Department of Preventive Medicine Seminar, University of Iowa, November 1994.
13. A likelihood solution to a classical problem in human genetics: Ascertainment corrections for sequentially and nonsequentially sampled pedigrees. Invited presentation, Department of Biostatistics Seminar, Columbia University, April 1994.
14. Did you know that maximizing the lod score yields asymptotically biased estimates of the recombination fraction? Invited presentation, Workshop on Statistical Methods in Genetic Mapping, Tarrytown, NY, November 1995.
15. Statistical Genetics and Genetic Epidemiology, Epidemiology Student Meeting, The University of Iowa, November 1995.

16. Families: A problem for genetic linkage studies. Division of Biostatistics Seminar, The University of Iowa, April 1996.
17. A new statistical test of age-of-onset anticipation: With application in bipolar disorder. Invited presentation, Genetic Analysis Workshop 10, 1996.
18. Model fitting in human genetics: How hard can it be. Invited presentation, Statistical Society of Canada Annual Meeting, Fredericton, Canada, June 1997.
19. Design for a genetic linkage study of pulmonary fibrosis. Pulmonary Research Conference, The University of Iowa, June 1997.
20. A new test for age-of-onset anticipation in human genetics. The University of Iowa, 1997.
21. Statistical evaluation of age-of-onset anticipation in human genetics may not be feasible. Platform presentation, American Society of Human Genetics, October 1997.
22. A new statistical test for genetic anticipation. Invited presentation, Department of Biostatistics Seminar, Johns Hopkins School of Public Health, Baltimore MD, October 1997.
23. How hard can it be to find a difference between two means? Division of Biostatistics Seminar, The University of Iowa, November 1997.
24. Results of a genomic screen for autism include strong evidence of linkage to chromosome 13. Vieland VJ, for the Collaborative Linkage Study of Autism (CLSA). Platform presentation, American Society of Human Genetics, October 1998.
25. A Bayesian approach to replication of linkage studies. Genetic Analysis Workshop 11, Arachon, France, 1998.
26. The effect of allelic heterogeneity on the power of transmission-disequilibrium tests and affected sib-pair linkage tests. International Genetic Epidemiology Society, Arachon, France, 1998.
27. A novel Bayesian approach to linkage analysis based on multiple sets of data. Invited presentation, University Seminar in Genetic Epidemiology, Columbia University, November 1998.
28. A novel approach to genetic linkage analysis based on multiple sets of data. Invited presentation, Department of Genetics Seminar, Rutgers University, September 1999.
29. Statistical genetics: is it part of bioinformatics? University of Iowa and Iowa State Joint Workshop on Bioinformatics, The University of Iowa, Iowa City IA, 2000.
30. Combined multipoint analysis of multiple asthma data sets based on the posterior probability of linkage. Genetic Analysis Workshop, San Antonio TX, 2000.
31. Measuring the strength of statistical evidence for or against linkage based on multiple sets of data. Invited presentation, Callaway Gardens Conference on Autism Research GA, March 2001.
32. HLODs, trait models, and ascertainment. Invited presentation, Columbia University, New York NY, March 2001.
33. How many ASPs does it take to tell the heterogeneity from epistasis? Invited presentation, Columbia University, NY, October 2002.
34. Quantitative methods for mapping human disease-genes: Ongoing work in the UI Center for Statistical Genetics Research. Applied Mathematical and Computational Sciences Seminar, The University of Iowa, November 2002.
35. How many ASPs does it take to tell heterogeneity from epistasis? Invited presentation, Mayo Clinic, Rochester MN, December 2002.

36. Center for Statistical Genetics Research (CSGR). Invited presentation, International Autism Conference, Zurich, Switzerland, May 2003.
37. Mapping Genes for Autism: Ongoing Work at the University of Iowa. Dept. of Psychiatry Research Seminar, University of Iowa, 2003.
38. A new genome screen for autism based on the posterior probability of linkage (PPL). Platform Presentation, American Society of Human Genetics, Los Angeles CA, November 2003.
39. Measurement of linkage disequilibrium (LD) parameter  $D'$  for complex traits via the posterior probability of LD (PPL-LD) changes the LD picture with CAPON, a large candidate gene for schizophrenia. Platform Presentation, American Society of Human Genetics, Toronto, Ontario, Canada, October 2004.
40. Current challenges in autism genetics research: A statistical geneticist's perspective. Invited presentation, Columbus Children's Hospital, Columbus OH, August 2005.
41. Statistical paradigms, genetic complexity, and computation: A statistical pragmatist's approach to gene mapping for complex disorders. Invited presentation, Dept. of Epidemiology & Biostatistics, Case Western Reserve University, Cleveland OH, September 2005.
42. Statistical paradigms and statistical genetics. Seminar presentation, Program in Public Health Genetics, Univ. of Iowa, Iowa City IA, September 2005.
43. Statistical paradigms and the search for autism genes. Invited presentation, Dept. of Epidemiology, Biostatistics, & Occupational Health, McGill University, Montreal CA, November 2005.
44. The incredible shrinking LOD: How increasing the sample size can actually obscure true linkage peaks, and what we can do about this. Invited presentation, Banbury Center meeting, "A critical assessment of autism genetics." Cold Spring Harbor Laboratory, Cold Spring Harbor NY, March 2006.
45. Measurement of statistical evidence in genetic research. Invited presentation, Columbus Children's Abigail Wexner Research Institute Annual Research Retreat, Granville OH, April 2006.
46. Genetics of autism: Common pitfalls in interpretation. Invited Educational Symposium, International Meeting for Autism Research, Montreal CA, June 2006.
47. Measuring statistical evidence in the age of a million SNPs. Second Annual Canadian Genetic Epidemiology & Statistical Genetics Meeting, Toronto CA, April 2007.
48. More is known than is: How what we know (about gene mapping for complex diseases) can hurt us. Invited presentation, Department of Genetics, Rutgers, The State University of New Jersey, Piscataway, New Jersey, September 2007.
49. PPLD: extension of the PPL framework to detect trait-marker LD and estimate  $D'$  in general pedigree structures. Platform Presentation (VJV presenter), American Society of Human Genetics, San Diego, CA, October 2007.
50. And now for something completely different: How philosophy of measurement can help us find genes for autism. Invited presentation, Cincinnati Children's Hospital, Cincinnati, Ohio, May 2008.
51. New linkage analysis by the Autism Genome Project (AGP) reveals strong evidence of linkage to multiple loci as well as gene-gene interactions. Platform Presentation, American Society of Human Genetics, Philadelphia, PA, October 2008.
52. What does it mean to measure statistical evidence? Invited presentation, Columbia University, New York, New York, February 2009.
53. Disease mapping via the coalescent. Hoffman L (presenting author), Kubatko L, Vieland VJ, Huang Y. Joint Statistical Meeting, Washington DC, August 2009.



54. Copy number variation discovery in autism spectrum disorder. Pagnamenta AT (presenting author), Pinto D, Khan H, Vieland VJ, Le Couteur A, Scherer SW, Monaco AP, for the Autism Genome Project (AGP). Platform Presentation, American Society of Human Genetics, Philadelphia, PA, October 2009.
55. Kelvin: Computer Program or Way of Life? A brief history of a piece of statistical genetics software. Invited presentation, Columbia University, New York, New York, November 2009.
56. Theory and practice of evidence measurement in statistical genetics: The PPL framework in its current incarnation. Invited presentation, University of Alabama at Birmingham, January 2010.
57. Measurement of evidence and evidence of measurement. Invited presentation, Offord Centre, McMaster University, Hamilton Ontario, December 2010.
58. Association statistics in the PPL framework. Invited Rounds, Population Genomics Program, McMaster University, Hamilton Ontario, December 2010.
59. The importance of being accurate: Measurement in psychiatric genetic research, Child Psychiatry Grand Rounds, Columbia University, New York, NY, November 2011.
60. Searching for a good measure of evidence: A work in progress, Genetic Epidemiology Seminar, Columbia University, New York, NY, November 2011.
61. Calibration of statistical evidence using principles of thermodynamics. Invited presentation, University of Toronto, Toronto, Ontario, April 2012.
62. Calibration of statistical evidence using principles of thermodynamics. Invited presentation, Johns Hopkins University, Baltimore, MD, May 2012.
63. Measurement of evidence: What's the problem? Workshop on Measure Theoretic Issues in Biology, Columbus, OH, June 2012.
64. Measurement of evidence on an absolute scale using thermodynamic principles. Workshop on Measure Theoretic Issues in Biology, Columbus, OH, June 2012.
65. Measurement of evidence in biomedical (and other) applications. Invited talk at "Foundations of Quantification and Measurement in the Biological Science", Templeton Foundation, New York, NY, February 2013.
66. Is the universe made of information? Plenary Speaker, MidSouth Computational Biology and Bioinformatics Society (MCBIOS) X Conference, Columbia, MO, April 2013.
67. Is the universe made of information? Invited presentation, Mathematical Biosciences Institute, The Ohio State University, Columbus, OH, April 2013.
68. Genomic Medicine: The view from genetics. Invited talk, "Road to Collaboration: NCH and OSU Human Genetics Community", Columbus, OH, May 2014.
69. P-values are not measures of evidence, in session "The Perils of P Values: How to Be Smart When Writing about Stats". Invited talk, National Association of Science Writers, Columbus, OH, October 2014.
70. Replication, measurement and biological evidence, with Hasok Chang, part of the symposium "Quantifying Life". Invited talk, Philosophy of Science Association, Chicago, IL, November 8, 2014.
71. An information-dynamic framework for measuring statistical evidence. Plenary speaker, The Second Annual Zing Conference on Mathematical and Computational Medicine, Cancun, Mexico, December, 2014.
72. Towards a new information-dynamic framework for measuring evidence in biology. American Association for the Advancement of Science, San Jose, CA, February 14, 2015.

73. Measuring statistical evidence in biological research. Invited talk, Department of Biological Sciences, Columbia University, New York, NY, March 2015.
74. Guest speaker, Columbia University Biological Sciences SCNC W3920 (Ignorance, S Firestein Instructor), New York, NY, March 11, 2015.
75. Is rigorous measurement of statistical evidence possible? Invited speaker, Society for Philosophy of Science in Practice, Aarhus, Denmark, June 24, 2015.
76. Measurement of evidence in theory and in practice. Invited speaker, Making of Measurement, Cambridge, UK, July 23, 2015.
77. Reproducibility, Replication and Scientific Evidence. Invited speaker, Sickkids Centre for Brain and Mental Health and Child Health, Toronto, CAN, December 9, 2015.
78. Measurement of Statistical Evidence in Scientific Applications. Invited speaker, Department of Statistical Sciences, University of Toronto, Toronto, CAN, December 10, 2015.
79. How to Know When We Are (or Are Not) Measuring Statistical Evidence. Invited speaker. The Third International Conference on Mathematical and Computational Medicine, Columbus, OH, May 18, 2016.
80. Replication, Evidence, and Statistical Practice. Platform presentation, Society for Philosophy of Science in Practice (SPSP) Biennial Conference, Glassboro NJ, June 17-19, 2016.
81. Measurement of Statistical Evidence: Picking up Where Hacking (et al.) Left Off. Platform presentation, Philosophy of Science Biennial meeting, Atlanta, GA, November 2016.
82. What the History of Age-of-Onset Anticipation Studies Can Teach Us About Reproducibility and Evidence. Invited lecture at Symposium: "Evidence: An Interdisciplinary Conversation about Knowing and Certainty," Center for Science and Society and the Institute for Social and Economic Research and Policy, Columbia University, New York, NY, April 21-22, 2017. (See also Other Professional Activities, above.)
83. The Relationship Between Replication and Statistical Evidence: To Be Clear, It's Very Confusing. Invited lecture, Department of Biostatistics (graduate seminar on Likelihood, Professor Lisa Strug, Instructor). University of Toronto, Toronto, CA, May 15, 2017.
84. Statistical Modeling of Genetic Modifiers. Invited lecture at Symposium: "Unraveling Genetic Modifiers of Muscular Dystrophy" Eccles Institute of Human Genetics, University of Utah, Salt Lake City, UT, May 24, 2017. (See also Other Professional Activities, above.)
85. Some Topics in Statistical Measurement. Invited lecture at Workshop: "How do we decide what to measure?" Centre for Biodiversity Dynamics, Norwegian University of Science and Technology, Trondheim, Norway, June 6-10, 2017. (See also Other Professional Activities, above.)
86. Measurement of Statistical Evidence on an Absolute Scale Following Thermodynamic Principles: Measurement Scales and Minimal Evidence. Invited participant in Symposium, "The Concept of Statistical Evidence," Statistical Society of Canada annual meeting, Montreal CA, June 4-June 6, 2018
87. Who Knows Which Way the Evidence is Going? Platform presentation, Society for Philosophy of Science in Practice (SPSP) Biennial Conference, Ghent, Belgium, June 29-July 2, 2018
88. Linkage Analysis of Complex Traits: Failed paradigm or powerful tool? Invited presentation. Mathematical Bioscience Institute, The Ohio State University, Columbus, Ohio, September 17-19, 2018.

89. Evidentialist Statistics for Scientific Applications: Thinking in terms of likelihood ratios rather than p-values. Invited speaker. The Fifth International Conference on Mathematical and Computational Medicine, Telluride CO, June 7-11, 2021.