Curriculum Vitae

(Revised 6/12/23)

Name: Michael P. Epstein

Office Address: 615 Michael Street, Suite 301, Atlanta, GA 30322

E-mail Address: mpepste@emory.edu

Citizenship: US citizen

Current Titles and Affiliations

a) Academic appointments

Assistant Professor, Department of Human Genetics, Emory University School of Medicine, 09/09/2002 to 08/31/2009

Adjunct Professor, Department of Biostatistics, Emory University Rollins School of Public Health, 01/01/2003 to present

Associate Professor, Department of Human Genetics, Emory University School of Medicine, 09/01/2009 to 08/31/2015

Professor, Department of Human Genetics, Emory University School of Medicine, 09/01/2015-present

Director, Center for Computational and Quantitative Genetics, Emory University School of Medicine, 09/01/2016-present

Education

1996, B.S. in Mathematics and Biological Anthropology, Duke University

1998, M.S. in Biostatistics, University of Michigan

2002, Ph.D. in Biostatistics, University of Michigan Advisors: Drs. Michael Boehnke and Xihong Lin

Committee Memberships

a) Institutional

Faculty Recruitment Committee, Department of Biostatistics, 2004, 2008, 2010, 2017, 2022-2023

Information Technology Committee, Department of Human Genetics, 2006-present

Organizing Committee: BGIN program, Department of Biostatistics and Bioinformatics, 2006 -2010

Recruitment Committee, Population Biology, Ecology, and Evolution Program, Emory University, 2011-2013

Executive Committee, Population Biology, Ecology, and Evolution Program, Emory University, 2011-2015

Curriculum Committee, Population Biology, Ecology, and Evolution Program, Emory University, 2011-2013

Oral Examination Committee, Genetics and Molecular Biology Program, Emory University, 2015-present

Faculty Recruitment Committee, Department of Human Genetics 2016-present

Emory University Senate, 2019-2022

Emory University Faculty Council, 2020-2022

Working Group for Program Enhancement, Genetics and Molecular Biology Program, Emory University, 2020-present

Genetics and Molecular Biology DEI Committee (Chair), Emory University, 2021-present

Scientific Director, Emory Integrated Computational Core, Emory University, 2021-present

a) National

Nominating Committee, American Society of Human Genetics, 2016-2019

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External Advisory Board, OPPERA Project, 2016-present

External Advisory Board, UNC IDDRC Center, 2019-present

Member, National Institute of Dental and Craniofacial Research-Clinical Study Oversight Committee, 2020-present

Peer Review Activities

a) Grants

i) National and International

Michael Smith Foundation for Health Research, Reviewer, 2004

Wellcome Trust, Reviewer, 2005

NIDDK, Special Emphasis Panel, 2006, 2007

NIH, BMRD Study Section, Ad-hoc member 2007

NIDDK, DDK-C Study Section, Ad-hoc member 2008

NIH, GCAT Study Section, Ad-hoc member 2009

NIH, GCAT Study Section, Regular member, 2010-2017

Ontario Genomics Institute, 2012

NIH, Special Emphasis Panel, 2013

Chilean National Commission for Science and Technology, Reviewer, 2015

NIH, CIDR Access Committee, Regular member, 2015-2019

Canadian Statistical Sciences Institute, Reviewer, 2015

US-Israel Binational Science Foundation, Reviewer, 2016

NIDDK, DDK-D Study Section, Ad-hoc member 2017

NIH, Special Emphasis Panel, 2018, 2020

NIH/NIGMS, ESI MIRA panel, 2019

NIH/NIMH, Special Emphasis Panel, 2019

NIH, BMRD Study Section, Ad-hoc member 2020

VA, Mental Health and Behavioral-A (MHBA) panel, Ad-hoc member 2023

b) Manuscripts

i) National and International

From 2002-present, ad hoc reviewer for

American Journal of Epidemiology

American Journal of Human Genetics

Annals of Human Genetics

Annals of Neurology

Bioinformatics

Biometrics

Biometrical Journal

Biostatistics

BMC Bioinformatics

BMC Genetics

Computational Statistics & Data Analysis

Genetic Epidemiology

Genetics

Genes & Immunity

Genome Research

Human Heredity

Human Molecular Genetics

JAMA Psychiatry

Journal of the American Statistical Association

Nature

Nature Communications

Nature Genetics

Obesity

PLoS Genetics

PLoS One

Proceedings of the National Academy of Sciences

Science Advances

Statistical Applications in Genetics and Molecular Biology

Statistics in Medicine

Statistical Methods in Medical Research

Theoretical Population Biology

c) Conference Abstracts

i) National and International

American Society of Human Genetics: Statistical Genetics and Genetic Epidemiology section, 2008, 2020

Consultantships

Ontario Genomics Institute, Scientific Advisory Board, 2012-present Amnion Laboratories, Consultant, 2013-2015

Editorships and Editorial Boards

American Journal of Human Genetics, 2005-2008
F1000 Prime, 2016-present
Genetic Epidemiology, 2011-present
PLoS Genetics, 2016-present
Human Genetics and Genomics Advances, 2020-present
Proceedings of the National Academy of Sciences (Guest Editor), 2020-2021

Honors and Awards

University of Michigan Outstanding First-Year Student in the Department of Biostatistics, 1997

National Institutes of Health Genome Science Pre-Doctoral Traineeship,1996-1999

University of Michigan Horace H. Rackham School of Graduate Studies Pre-Doctoral Fellowship, 2000

Woodruff Leadership Academy selection, 2018

Society Memberships

American Society of Human Genetics, 2000-present American Statistical Association, 2002-present International Biometric Society, 2002-present International Genetic Epidemiology Society, 2003-present

Organization of Conferences

a) National and International

i) Administrative Positions

Organizer, Junior Faculty Workshop, International Biometric Society: Eastern North American Region, 2006

Program Committee, IEEE International Conference on Bioinformatics and Biomedicine, 2012

Lead Organizer, Banff International Research Station Workshop 14w5011, 'Emerging Statistical Challenges and Methods for Analysis of Massive Genomic Data in Complex Human Disease Studies', 2014

Lead Organizer, American Association for the Advancement of Science, 'Genetics, Statistics, and Precision Medicine', 2018

b) Session as chair

'Molecular Basis of Disorders with Complex Inheritance II: Phenotypes and Haplotypes', American Society of Human Genetics, Salt Lake City, Utah, October 2005

'Statistical Methods for Analysis of Gene-Environment Interaction', International Biometric Society: Eastern North American Region, Austin, Texas, March 2005

- 'Recent Advances in Statistical Methods for Genetic Epidemiology', International Statistical Institute, Lisbon, Portugal, August 2007
- 'Statistical Genetics and Genetic Epidemiology', American Society of Human Genetics, Philadelphia, Pennsylvania, November 2008
- 'Next-Generation Sequencing and Rare Variation', International Genetic Epidemiological Society Meeting, Heidelberg, Germany, September 2011
- 'Rare Variant Analysis', Banff International Research Station Workshop, 'Emerging Statistical Challenges and Methods for Analysis of Massive Genomic Data in Complex Human Disease Studies', Banff, Canada, June 2014
- 'Genomic Studies of Schizophrenia and Bipolar Disorder', American Society of Human Genetics, San Diego, California, October 2014
- 'Genetics, Statistics, and Precision Medicine', American Association for the Advancement of Science, February 2018

Formal Teaching

a) Medical Student Training

MEDI545 (Human and Molecular Genetics), Small Group Facilitator, 2003-2006 MD501 (Foundations of Medicine: Normal Human), Small Group Facilitator, 2007

MD500 (Foundations of Medicine: Normal Human), Lecturer, 2010-2011

b) Graduate Program

IBS736 (Genetic Epidemiology), Co-instructor and Co-Organizer, 2002-present

IBS746 (Graduate Human Genetics), Lecturer, 2003, 2005, 2009-present

IBS515 (Current Topics in Human Genetics), Co-instructor and Co-organizer, 2004

IBS592 (Quantitative Methods), Lecturer, 2010-present

EPI552 (Human Genome Epidemiology), Lecturer, 2013-present

BIOS770 (Advanced Statistical Genetics), Lecturer, 2019

BIOS770 (Advanced Statistical Genetics), Organizer and Lead Instructor, 2022

Supervisory Teaching

a) Ph.D. Students Directly Supervised

Lydia Kwee, Graduate Student, Department of Biostatistics and Bioinformatics, Emory University (received Ph.D. Summer, 2008), 2005-2008

Current Position: Biostatistician, Duke Molecular Physiology Institute, Duke University Medical Center

K. Alaine Broadaway, Graduate Student, Population Biology, Ecology, and Evolution program, Emory University (mentored jointly with Dr. Stephanie Sherman), 2010-2015

Current Position: Postdoctoral Fellow, Department of Genetics, University of North Carolina

Yunxuan Jiang, Graduate Student, Department of Biostatistics and Bioinformatics, Emory University (mentored jointly with Dr. Karen Conneely), 2011-2017

Current Position: Statistical Geneticist, 23andMe

Aaron Holleman, Graduate Student, Department of Epidemiology, Emory University (mentored jointly with Dr. Jennifer Mulle), 2017-2022

Current Position: Statistical Geneticist, Alynlam Pharmaceuticals

S. Taylor Fischer, Graduate Student, Department of Biostatistics and Bioinformatics, Emory University, 2018-present

Current Position: Graduate Student

Shijia Bian, Graduate Student, Department of Biostatistics and Bioinformatics, Emory University, 2021-present

Current Position: Graduate Student

Qile Dai, Graduate Student, Department of Biostatistics and Bioinformatics, Emory University (mentored jointly with Dr. Jingjing Yang), 2020-present

Current Position: Graduate Student

Jing Huang, Graduate Student, Genetics and Molecular Biology program, 2021-present

Current Position: Graduate Student

b) Post-doctoral Fellows Directly Supervised

Jessica Hunter, Postdoctoral Researcher, Emory University, 2012-2014

Current Position: Senior Research Public Health Analyst, RTI International

Claudia Solis-Lemus, Postdoctoral Researcher, Emory University, 2017-2019

Current Position: Assistant Professor, Wisconsin Institute for Discovery, University of Wisconsin-Madison.

Anke Huels, Postdoctoral Research, Emory University, 2018-2019

Current Position: Assistant Professor, Department of Epidemiology, Emory University

Sarah Curtis, Postdoctoral Researcher, Emory University (mentored jointly with Dr. Elizabeth Leslie), 2019-

Current Position: Postdoctoral Researcher

Andrew Bass, Postdoctoral Researcher, Emory University (mentored jointly with Dr. David Cutler), 2021-

Current Position: Postdoctoral Researcher

c) Thesis Committee

Kevin Viel, Graduate Student, Department of Epidemiology, Emory University (received Ph.D. Fall, 2007), 2004-2007

Current Position: Senior Statistical Programmer, in Ventiv Health Clinical

Tiffany Oliver, Genetics and Molecular Biology Program (received Ph.D. Spring, 2008), 2005-2008

Current Position: Associate Professor of Biology, Spelman College

Kira Taylor, Graduate Student, Department of Epidemiology, Emory University (received Ph.D. Fall, 2009), 2006-2009

Current Position: Associate Professor of Epidemiology and Public Health, University of Louisville

Jessica Hunter, Genetics and Molecular Biology Program (received Ph.D. Spring 2009), 2006-2009

Current Position: Senior Research Public Health Analyst, RTI International

NaTasha Hollis, Genetics and Molecular Biology Program (received Ph.D. Spring 2010), 2007-2010

Current Position: Epidemiologist, Centers for Disease Control and Prevention

Adam Locke, Genetics and Molecular Biology Program (received Ph.D. Spring 2011), 2007-2011

Current Position: Statistical Geneticist, Regeneron Pharmaceuticals

Benjamin Rambo-Martin, Genetics and Molecular Biology Program, 2012-present

Current Position: Bioinformatics specialist, Battelle

Liz Kennedy, Genetics and Molecular Biology Program, 2014-2018

Current Position: Postdoctoral fellow, Emory University

Peizhou Liao, Department of Biostatistics and Bioinformatics, 2014-2018

Current Position: Postdoctoral Fellow

Chloe Robins, Population Biology, Ecology, and Evolution Program, 2014-2018

Current Position: Human Genetics Investigator, GSK

Kelly Shaw, Genetics and Molecular Biology Program, 2014-2018

Current Position: CDC researcher

Crystal Grant, Genetics and Molecular Biology Program, 2015-2019

Current Position: Christine Mirzayan Science and Technology Policy Graduate Fellow

Sarah Curtis, Genetics and Molecular Biology Program, 2016-2019

Current Position: Postdoctoral fellow

Cristina Trevino, Genetics and Molecular Biology Program, 2015-2020

Current Position: TBD

Trenell Mosley, Genetics and Molecular Biology Program, 2016-2020

Current Position: Postdoctoral fellow

Becky Pollak, Genetics and Molecular Biology Program, 2016-2020

Current Position: Postdoctoral fellow, Icahn School of Medicine at Mount Sinai

Nick Johnson, Population Biology, Ecology, and Evolution Program, 2018-2021

Current Position: TBD

Holly Poore, Department of Psychology, 2018-2021

Current Position: Postdoctoral Fellow

Yemko Pryor, Genetics and Molecular Biology Program, 2019-present

Current Position: Graduate Student

Kimberly Diaz-Perez, Genetics and Molecular Biology Program, 2018-present

Current Position: Graduate Student

Kelsey Robinson, Genetics and Molecular Biology Program, 2020-present

Current Position: Graduate Student

Elizabeth Feldman, Genetics and Molecular Biology Program, 2020-present

Current Position: Graduate Student

Cynthia Perez, Genetics and Molecular Biology Program, 2020-present

Current Position: Graduate Student

d) Ph.D. students: Laboratory rotation

NaTasha Hollis, Genetics and Molecular Biology Program, Spring 2006

Morna Ikeda, Genetics and Molecular Biology Program, Spring 2006

Brandy Wade, Genetics and Molecular Biology Program, Fall 2008

Kelsy Broadaway, Population Biology, Evolution, and Ecology Program, Spring 2010

Valery Baranets, Genetics and Molecular Biology Program, Fall 2011

Trenelle Mosley, Genetics and Molecular Biology Program, Spring 2016

Sarah Curtis, Genetics and Molecular Biology Program, Spring 2016

Hari Somineni, Genetics and Molecular Biology Program, Spring 2016

Nick Johnson, Population Biology, Evolution and Ecology Program, Spring 2017

Beverly Petilli, Genetics and Molecular Biology Program, Spring 2018

Amanda Shurzinske, Genetics and Molecular Biology Program, Spring 2018

Cynthia Perez, Genetics and Molecular Biology Program, Fall 2020

Jing Huang, Genetics and Molecular Biology Program, Fall 2021

e) Masters' students: Directly supervised Masters' theses

Christian Kelly, Graduate Student, Department of Biostatistics and Bioinformatics, Emory University, Spring, 2006

Hemu Nair, Graduate Student, Department of Biostatistics and Bioinformatics, Emory University, Spring, 2007

Yunxuan Jiang, Graduate Student, Department of Biostatistics and Bioinformatics, Emory University, Spring, 2011

Michelle Ivy, Graduate Student, Department of Epidemiology, Emory University, Spring, 2018

Lectureships, Seminar Invitations, and Visiting Professorships

a) National and International

2003: 'Variance-Component Linkage Methods for Complex Traits': Medical Statistics-Current Developments in Statistical Methodology for Genetic Architecture of Complex Diseases, Oberwolfach, Germany

2003: 'Haplotype Analysis in Case-Control Studies': Department of Biostatistics, University of Alabama-Birmingham

2003: 'Variance-Component Methods for Linkage Analysis of General Quantitative Traits': Center for Statistical Science, Brown University.

2004: 'Haplotype Analysis in Case-Control Studies': Department of Biostatistics, University of North Carolina

2004: 'Genetic Association Analysis of Trios and Unrelated Subjects': Department of Biostatistics, Yale University

2005: 'Genetic Association Analysis of Trios and Unrelated Subjects': Department of Biostatistics, University of North Carolina

2006: 'Haplotypes and Fine Mapping': NIAMS Short Course in Statistical Genetics, Atlanta, GA

2006: 'Improved Association Analysis of Case-Parent Trios': Department of Epidemiology, Columbia University

2006: 'Improved Association Analysis of Case-Parent Trios': Department of Statistics, University of Georgia

2006: 'A Simple and Improved Correction for Population Stratification in Case-Control Studies': Division of Cancer Epidemiology and Genetics, National Cancer Institute

2007: 'Multilocus Association Methods for Quantitative Traits': Department of Epidemiology and Biostatistics, Sloan-Kettering Cancer Center,

2008: 'Fast and Robust Association Tests of Untyped Variants in Case-Control Studies': NHGRI Conference on Haplotype Analysis of Population & Pedigree Data in Association Studies, Birmingham, AL

2008: 'Multilocus Association Methods for Quantitative Traits': Department of Biostatistics, University of Alabama-Birmingham

2008: 'Fast and Robust Association Tests of Untyped Variants in Case-Control Studies': DIMACS Workshop on Computational Issues in Genetic Epidemiology, Rutgers University

2008: 'Fast and Robust Association Tests of Untyped Variants in Case-Control Studies': Department of Epidemiology and Biostatistics, University of Pennsylvania

2008: 'Fast and Robust Association Tests of Untyped Variants in Case-Control Studies': Center for Statistical Genetics, Department of Biostatistics, University of Michigan

2009: 'Fast and Robust Association Tests of Untyped Variants in Case-Control Studies': Wellcome Trust Genome Center, Hinxton, United Kingdom

2010: 'A Matching Approach to Correct for Population Stratification in Case-Control Studies': Department of Human Genetics, University of California-Los Angeles

2011: 'Novel Approaches to Correct for Population Stratification in Case-Control Studies': Department of Statistics, Yale University

- 2011: 'Novel Approaches to Correct for Population Stratification in Case-Control Studies': Department of Epidemiology and Public Health, University of Miami
- 2012: 'Novel Approaches to Correct for Population Stratification in Case-Control Studies': Department of Statistics, George Mason University
- 2013: 'Improved Methods for Design and Analysis of Resequencing Studies': Department of Biostatistics, Columbia University
- 2013: 'Statistical Approaches for Gene Mapping in the 22q11DS Sample': International 22q Consortium, Dublin, Ireland
- 2014: 'Statistical Methods for Rare Variant Testing in Affected Sibships': Section of Biostatistics and Epidemiology, Dartmouth School of Medicine
- 2014: 'GE Brings Good Things to Life? Lesson Learned from Gene-Environment Interaction Studies of Psychiatric Traits': Genomics Grand Rounds, Dartmouth School of Medicine
- 2014: 'Statistical Methods for Rare Variant Testing in Affected Sibships': Section of Biostatistics and Epidemiology, Dartmouth School of Medicine
- 2014: 'Statistical Methods for Rare Variant Testing in Affected Sibships': Institute of Human Genetics, University of California-San Francisco
- 2015: 'Statistical Methods for Rare Variant Testing in Affected Sibships': 4th Workshop on Biostatistics and Bioinformatics, Georgia State University
- 2016: 'Assessing Cross-Phenotype Effects of Rare Variants': Department of Biostatistics, Columbia University
- 2017: 'Genetic Analysis of Multivariate Phenotypes': Division of Biostatistics, University of Minnesota
- 2021: 'Novel TWAS Techniques for Studying Complex Human Diseases': Department of Public Health Sciences, Pennsylvania State University
- 2021: 'Novel TWAS Techniques for Studying Complex Human Diseases': Department of Biostatistics, Johns Hopkins University
- 2022: 'A TWAS Framework Leveraging Summary-Level Reference Data': Department of Biostatistics, University of Michigan

b) <u>Institutional</u>

2003: 'Variance-Component Methods for Linkage Analysis of General Quantitative Traits': Department of Biostatistics and Bioinformatics

2007: 'A Simple and Improved Correction for Population Stratification in Case-Control Studies': Department of Human Genetics

2008: 'A Simple and Improved Correction for Population Stratification in Case-Control Studies': Department of Mathematics and Computer Science

2014: 'GE Brings Good Things to Life? Lesson Learned from Gene-Environment Interaction Studies of Psychiatric Traits': Department of Human Genetics

Invitations to Conferences

a) National and International

2004: 'Case-Control Association Analysis Using Haplotype Similarity': International Conference on Statistics in Health Sciences, Nantes, France

2005: 'Association Methods for Complex Traits': Genetics Special Interest Group, American Epilepsy Society, Washington DC

2007: 'Multilocus Association Methods for Quantitative Traits': International Chinese Statistical Association Conference, Raleigh, NC

2007: 'A Simple and Improved Correction for Population Stratification in Case-Control Studies': Joint Statistical Meetings, Salt Lake City, UT

2007: 'A Simple and Improved Correction for Population Stratification in Case-Control Studies': International Statistical Meetings, Lisbon, Portugal

2008: 'Multilocus Association Methods for Quantitative Traits': International Biometric Society Meeting: ENAR region, Crystal City, VA

2008: 'Fast and Robust Association Tests of Untyped Variants in Case-Control Studies': International Society of Clinical Biostatistics Meeting, Copenhagen, Denmark

2010: 'A Matching Approach to Correct for Population Stratification in Case-Control Studies': International Chinese Statistical Association Meeting, Indianapolis, IN

2010: 'Kernel Approaches for Gene Mapping of Complex Traits': Joint Statistical Meetings, Vancouver, BC

- 2011: 'A Permutation Approach to Correct for Confounders in Case-Control Resequencing Studies': Joint Statistical Meetings, Miami, FL
- 2012: A Matching Approach to Correct for Population Stratification in Case-Control Studies': IEEE International Conference on Bioinformatics & Biomedicine, Atlanta, GA
- 2012: 'A Permutation Approach to Correct for Confounders in Case-Control Resequencing Studies': International Biometric Society Meeting: ENAR region. Washington DC
- 2012: 'Association Mapping in Familial Samples Using Kernel Functions': Joint Statistical Meetings, San Diego, CA
- 2014: 'Statistical Methods for Rare Variant Testing in Affected Sibships': International Biometric Society Meeting: ENAR region. Baltimore, MD
- 2014: 'Statistical Methods for Rare Variant Testing in Affected Sibships': Banff International Research Station Workshop 14w5011, 'Emerging Statistical Challenges and Methods for Analysis of Massive Genomic Data in Complex Human Disease Studies'
- 2015: 'Assessing Cross-Phenotype Effects of Rare Variants': Recent Developments in Statistical Methods with Applications to Genetics and Genomics. Oberwolfach, Germany
- 2016: 'Rare Variant Analysis of Complex Disease in Pedigrees': International Biometric Society Meeting: ENAR region, Austin, TX
- 2016: 'Assessing Cross-Phenotype Effects of Rare Variants': International Congress of Human Genetics, Kyoto, Japan
- 2016: 'Assessing Cross-Phenotype Effects of Rare Variants': Mathematical and Computational Medicine International Conference, Columbus, OH
- 2016: 'Assessing Cross-Phenotype Effects of Rare Variants': Joint Statistical Meetings, Chicago, IL
- 2016: 'Assessing Cross-Phenotype Effects of Rare Variants': International Indian Statistical Association, Corvallis, OR
- 2017: 'Genetic Analysis of Multivariate Phenotypes': Third Annual Kliakhandler Conference on Bayesian Inference in Statistics and Statistical Genetics, Houghton, MI

2018: 'Genetic Analysis of Multivariate Phenotypes': Joint Statistical Meetings, Vancouver, Canada

2019: 'Flexible Strategies for Identifying Factors Influencing Pathway Dysregulation': Banff International Research Station Workshop, 'Role of Genomics and Metagenomics in Human Health: Recent Developments in Statistical and Computational Methods'

2020: 'Improved Mediation Analyses in Case-Control Studies': International Genetic Epidemiological Society Meeting, Virtual

Research Focus

My research focuses on statistical techniques for human gene mapping of complex traits. This work involves two synergistic components: a methodological component focused on developing statistical techniques for improved gene mapping and an applied component focused on mapping genes involved in diseases such as Alzheimer's disease, breast cancer, epilepsy, and schizophrenia.

Grant Support

- a) Active support
- i) Federally Funded

R01 AG071170 (NIH/NIA) 09/11/20-8/31/24

Role: MPI \$480,000

Quantitative Genetic Models for Exploring Missing Heritability of Alzheimer's Disease

R01 MH126449 (NIH/NIMH) 9/01/21-09/01/26 Role: MPI \$3,845,978 (total)

The schizophrenia-associated 3q29 deletion: Genetic architecture of behavioral phenotypes

R35 GM138313 (NIH/NIGMS) 09/01/20-06/30/25

Role: Co-I (Yang, PI) \$250,000

Novel Bayesian statistical tools for integrating multi-omics data to help elucidate the genomic etiology of complex phenotypes

P50 HD104463 (NIH/NICHD) 09/01/20-08/31/25 Role: Co-I (Nelson/Todd MPI) \$10,147,351 (total)

Fragile X Premutations, Mechanisms, and Modifiers

Project 3: FXPOI: Mechanisms and Modifiers

R01 DE030342 (NIH/NIDCR) 09/01/21-05/01/26

Role: Co-I (Leslie, PI) \$3,546,618 (total)

Genomics of Cleft Palate

R01 CA237318 (NIH/NCI) 07/01/20-06/30/25

Role: Co-I (Schildkraut/Lawson MPI) \$6,839,897 (total)

Ovarian Cancer Survival in African-American Women

R01 DE028342 (NIH/NIDCR) 08/01/19-07/1/24

Role: Co-Investigator (Leslie, PI) \$405,628

Genetic modifiers of Van der Woude syndrome

R03 DE030118 (NIH/NIDCR) 08/1/21-07/01/23 Role: Co-Investigator (Leslie, PI) \$312,958 (total)

The role of noncoding regulatory variants in orofacial clefts

R03 HD106123 (NIH/NICHD) 09/1/21-06/1/23 Role: Co-Investigator (Hunter, PI) \$105,922 (total)

Capturing and characterizing variability of cognition and behavior in Down syndrome

R01 AG072120 (NIH/NIA) 09/1/21-09/1/26 Role: Co-Investigator (Wingo, Wingo MPI) \$3,920,696 (total)

A brain multi-omic approach to identify key molecular drivers of neuropsychiatric

symptoms in Alzheimer's dementia

R01 AG075827 (NIH/NIA) 09/1/21-09/1/26 Role: Co-Investigator (Wingo, Wingo MPI) \$3,830,232 (total)

Integrative genomic, transcriptomic, and proteomic analyses to investigate sex-specific

differences in Alzheimer's Disease

b) Pending Support

R01 AG077224 (NIH/NIA) 04/01/22-03/31/27 Role: Co-I (Wingo, Wingo MPI) \$3,786,282 (total)

Shared mechanisms between mid-life psychiatric illnesses and late-life AD/ADRD

R01 AG073254 (NIH/NIA) 04/01/22-03/31/27 Role: Co-I (Wingo, PI) \$3,793,596 (total)

Integrating human brain proteomes with AD GWAS to identify novel AD causal genes

c) Previous Support

Emory URC 2003037 06/01/2003 – 06/01/2004

Role: PI \$30,000

Variance-Component Statistical Methods for Gene Mapping of Complex Diseases and

Surrogate Traits

R01 GM046331-13 (NIH/NIGMS) 03/01/2005-02/28/2009

Role: Co-Investigator (D. Reines, PI) \$182,361

RNA Polymerase II Elongation Complex: Structure & Function

Merit Review Grant (VA) 10/01/2005-9/01/2010

Role: Co-Investigator (E. Duncan, PI) \$129,900

Sensorimotor gating in schizophrenia

R01 MH076439-03 (NIH/NIMH) 09/30/2005-07/31/2010

Role: Co-Investigator (M. Zwick, PI) \$361,045

Identifying Autism Susceptibility Genes By High-Throughput Chip Resequencing

P50 MH077083-02 (NIH/NIMH) 07/14/2006-06/30/2008

Role: Co-Investigator (C. Nemeroff, PI) \$1,219,693

Predictors of Antidepressant Treatment Response: The Emory CIDAR

R21 MH076024-02 (NIH/NIMH) 08/15/2006-07/31/2008

Role: Co-Investigator (E. Binder, PI) \$135,000

Peri-Partum Depression and Genetic Variation in Regulating Genes

R01 HG003618-02 (NIH/NHGRI) 09/27/2006-08/31/2011

Role: PI \$200,000 Novel Statistical Methods for Human Gene Mapping

R01 MH080129-01 (NIH/NIMH) 04/01/2007-03/31/2012

Role: Co-Investigator (S. Warren, PI) \$448,556

Schizophrenia Susceptibility by Copy Number Variation in the Ashkenazim

P50 MH077928-01A1 (NIH/NIMH) 09/01/2007-08/31/2012

Role: Co-Investigator (Z. Stowe, PI) \$1,389,445

Perinatal Stress and Gene Influences: Pathways to Infant Vulnerability

U01 HL089856-01 (NIH/NHLBI) 09/01/2007-07/01/2012

Role: Consultant (E. Silverman, PI) \$7,400,000

Genetic Epidemiology of COPD

R01 MH083722 (NIH/NIMH) 07/01/2008-06/30/2012

Role: Co-Investigator (S. Warren, PI) \$485,917

Bipolar I susceptibility by copy number variation in an isolated population

5 U19 MH069056-07(NIH/NIMH) 06/01/2009-05/31/2014

Role: Co-Investigator (Mayberg, PI) \$1,717,858

Emory-MSSM-GSK-NIMH Collaborative Mood and Anxiety Disorders Initiative

R01 MH092923-01 (NIH/NIMH) 08/30/2011-07/31/2014

Role: Co-Investigator (B. Hopkins, PI) \$291,749 Vasopressin Receptor Polymorphism and Social Cognition U01-NS077303-01 (NIH/NINDS) 10/01/2011-09/30/2016

Role: Co-Investigator (Goldstein, PI) \$1,617,056 3 of 7 Epi4K: Gene discovery in 4,000 epilepsy genomes Sequencing, Biostatistics, and Bioinformatics Core

R01 AR060893-01 (NIH/NIAMS) 09/01/2011-08/31/2015

Role: Co-Investigator (S. Prahalad, PI) \$250,000

Segmental chromosome sharing in affected relatives with Juvenile Arthritis

R01 MH071537-03 (NIH/NIMH) 09/01/2010-02/29/2016

Role: Co-Investigator (K. Ressler, PI) \$821,246 Genetic and Trauma-Related Risk Factors for PTSD

U01 NS077367-01 (NIH/NINDS) 10/01/2012-09/30/2016

Role: MPI \$315,000 5 of 7 Epi4K: Gene discovery in 4,000 epilepsy genomes Whole Genome Sequencing in Multiplex Families and Pairs

R01 HG007508-01 (NIH/NHGRI) 09/01/2013-06/30/2016 (NCE)

Role: PI \$250,528

Enhanced Gene Identification in Complex Traits Using Kernel Machines

5 T15 HL098122-05 (NIH/NHLBI) 03/01/2013-02/28/2016

Role: Co-Investigator (L. Waller, PI) \$238,892 Atlanta Summer Institute for Training in Biostatistics

U01 MH101720-01 (NIH/NIMH) 09/26/2013-07/31/2017

Role: Co-Investigator (Warren, PI) \$1,524,233

2/5 International Consortium in Brain and Behavior in 22q11.2 Deletion Syndrome

R01 MH105561-01 (NIH/NIMH) 09/25/14-7/31/18

Role: Co-Investigator (Guo/Kang) \$250,000

Statistical ICA Methods for Analysis and Integration of Multi-Dimensional Data

R01 MH100917-01 (NIH/NIMH) 05/01/2014-04/30/2018

Role: Co-Investigator (Warren/Mulle MPI) \$430,430

1/2 Targeted Sequencing and Functional Evaluation of Mutations in Schizophrenia

R01 HD081274 (NIH/NICHD) 09/10/2014-05/30/2019

Role: Co-Investigator (Trumbower, PI) \$250,000

Mechanisms of Intermittent Hypoxia-Induced Motor Recovery in Persons with SCI

CER-1408-19941 (Fridovich-Keil, PI) 07/01/15-6/01/19

Patient Centered Outcomes Research Institute Intervention and Outcomes in Duarte Galactosemia

U54 NS091859 (NIH/NINDS/NICHD) 09/22/14-05/31/20

Role: Co-Investigator (Warren, PI) \$1.155.338

Modifiers of FMR1-associated Disorders: Application of High Throughput Technologies

R01 GM117946 (NIH/NIGMS) 02/01/16-12/31/20

Role: MPI \$225,000

Statistical Tests for Mapping Genetic Determinants of Complex Traits

R21 DE029698 (NIH/NIDCR) 04/01/20-03/31/23 (NCE)

Role: PI \$150,000

Improved Mediation Analyses in Case-Control Studies

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