

## David W. Fardo

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CONTACT INFORMATION	University of Kentucky College of Public Health Department of Biostatistics 121 Washington Avenue, Room 201-C Lexington, KY 40536-0003	<i>Phone:</i> (859) 218-2070 <i>Fax:</i> (859) 257-4665 <i>Email:</i> david.fardo AT uky.edu
RESEARCH INTERESTS	Statistical genetics, genome-wide association studies, longitudinal data analysis, family-based association testing, statistics education, statistics for public health applications	
PROFESSIONAL EXPERIENCE	Assistant Professor of Biostatistics <b>University of Kentucky</b> , Lexington, Kentucky USA College of Public Health Center for Clinical and Translational Sciences	August 2008 – present
EDUCATION	<b>Harvard University</b> , Boston, Massachusetts USA Ph.D., Biostatistics • Dissertation Topic: “Statistical Issues in Genome-wide Association Studies” – Cognate: Genetics • Advisor: Dr. Christoph Lange A.M., Biostatistics	June 2008      June 2006
	<b>University of Kentucky</b> , Lexington, Kentucky USA M.S., Statistics	August 2004
	<b>Miami University</b> , Oxford, Ohio USA B.S., Mathematics and Statistics • Minors in Economics and Spanish • Summa Cum Laude	May 2000
PUBLICATIONS	<b>Fardo DW</b> , Ionita-Laza I, Lange C. 2009. On quality control measures in genome-wide association studies: A test to assess the genotyping quality of individual probands in family-based association studies and an application to the HapMap data. <i>PLoS Genetics</i> 5(7): e1000572.  <b>Fardo DW</b> , Becker D, Bertram L, Tanzi R, Lange C. 2009. Recovering unused information in genome-wide association studies: the benefit of analyzing SNPs out of Hardy–Weinberg equilibrium. <i>European Journal of Human Genetics</i> . Epub doi: 10.1038/ejhg.2009.85.  <b>Fardo DW</b> , Celedón JC, Raby BA, Weiss ST, Lange C. 2007. On Dichotomizing Phenotypes in Family-Based Association Tests: Quantitative Phenotypes are not Always the Optimal Choice. <i>Genetic Epidemiology</i> 31: 376–382.  Stephen AE, Roth SI, <b>Fardo DW</b> , Finkelstein DM, Randolph GW, Gaz RD, Hodin RA. 2007. Predictors of an Accurate Preoperative Sestamibi Scan for Single-Gland Parathyroid Adenomas. <i>Archives of Surgery</i> 142: 381–386.	
PRESENTATIONS	A novel test for quality control in family-based genome-wide association studies • Eastern North American Region - International Biometric Society Spring Meeting. March 2009, San Antonio, Texas  Quality Control Issues in Genome-wide Association Studies (INVITED)	

- American Statistical Association – Kentucky Chapter Meeting. November 2008, Frankfort, Kentucky

On quality control measures in genome-wide association studies: a test to assess the genotyping quality of individual probands in family-based association studies

- Joint Statistical Meetings. August 2009, Washington, DC
- UT-ORNL-KBRIN Bioinformatics Summit. March 2009, Pikeville, Tennessee
- American Society of Human Genetics Annual Meeting. November 2008, Philadelphia, Pennsylvania

On the magnitude of undetected genotyping error in genome-wide association studies: Using transmission rates in family data to estimate the amount of undiscovered genotyping error after quality control filtering

- Genetic Association Information Network (GAIN) Analysis Workshop III. November 2008, Philadelphia, Pennsylvania

SNPs and MOMI: Future Statistical Genetics Applications

- Clinical and Translational Science Fall Conference. October 2008, Lexington, Kentucky

Recovering Unused Information in Genomewide Association Studies: A Revision of Quality Control Convention

- American Society of Human Genetics Annual Meeting. October 2007, San Diego, California
- NIH National Graduate Student Research Festival. October 2007, Bethesda, Maryland

Why family-based association makes sense in a genome-wide world: A comparison of study power

- Joint Statistical Meetings. August 2007, Salt Lake City, Utah

Genome-Wide Family-Based Association (INVITED)

- Harvard Bioinformatics Journal Club. November 2006, Boston, Massachusetts

About Dichotomized Continuous Traits in family-based association tests: Do you really need quantitative traits?

- Eastern North American Region - International Biometric Society Spring Meeting. March 2007, Atlanta, Georgia
- 11th International Congress of Human Genetics. August 2006, Brisbane, Australia

Incorporating linkage information in testing strategies for genome-wide association studies in family-based designs

- Mathematical and Statistical Aspects of Molecular Biology. April 2006, Dublin, Ireland

Power Implications of the Dichotomized Continuous Trait FBAT

- American Society of Human Genetics Annual Meeting. October 2005, Salt Lake City, Utah
- International Genetic Epidemiology Society Annual Meeting. October 2005, Park City, Utah
- Research Students' Conference. April 2005, Cambridge, England
- Channing Laboratory Family-Based Association Analysis Working Group Meeting (INVITED). March 2005, Boston, Massachusetts

## CONFERENCES

Joint Statistical Meetings. August 2009, Washington, DC

UT-ORNL-KBRIN Bioinformatics Summit. March 2009, Pikeville, Tennessee

Eastern North American Region - International Biometric Society Spring Meeting. March 2009, San Antonio, Texas

American Society of Human Genetics Annual Meeting. November 2008, Philadelphia, Penn-

sylvania

Genetic Association Information Network (GAIN) Analysis Workshop III. November 2008, Philadelphia, Pennsylvania

Workshop on Statistical Methods in Drug Abuse and Health-Related Research. October 2008, Lexington, Kentucky

International Genetic Epidemiology Society Annual Meeting. September 2008, St. Louis, Missouri

Joint Statistical Meetings. August 2008, Denver, Colorado

American Society of Human Genetics Annual Meeting. October 2007, San Diego, California

NIH National Graduate Student Research Festival. October 2007, Bethesda, Maryland

Joint Statistical Meetings. August 2007, Salt Lake City, Utah

Eastern North American Region - International Biometric Society Spring Meeting. March 2007, Atlanta, Georgia

International Genetic Epidemiology Society Annual Meeting. November 2006, Tampa, Florida

11th International Congress of Human Genetics. August 2006, Brisbane, Australia

Mathematical and Statistical Aspects of Molecular Biology. April 2006, Dublin, Ireland

American Society of Human Genetics Annual Meeting. October 2005, Salt Lake City, Utah

International Genetic Epidemiology Society Annual Meeting. October 2005, Park City, Utah

Research Students' Conference. April 2005, Cambridge, England

## ACADEMIC EXPERIENCE

### **Harvard University**

#### **Harvard School of Public Health**

Instructor (full responsibility)

- Summer 2006 – Summer Preparatory Training Program (Probability & Operational Math)

Teaching Assistant (lab/grading responsibilities)

- Fall 2007 – BIO 232 (Methods I)
- Fall 2006 – BIO 226 (Applied Longitudinal Analysis)
- Winter 2006 – BIO 111 (Introduction to Programming in SAS)
- Fall 2005 – BIO 222 (Basics of Statistical Inference)
- Spring 2005 – BIO 211 (Regression and Analysis of Variance in Experimental Research)

#### **Derek Bok Center for Teaching and Learning**

Teaching Consultant, Biostatistics

### **University of Kentucky**

Instructor (full responsibility)

- Spring 2004 – STA 200 (Statistics: A Force in Human Judgement)
- Fall 2003 – STA 200
- Summer 2003 – STA 200

Teaching Assistant (lab/grading responsibilities)

- Summer 2004 – STA 570 (Basic Statistical Analysis)
- Spring 2003 – STA 200
- Fall 2002 – STA 570

## HONORS AND AWARDS

### **Harvard University**

Channing Laboratory / Brigham & Women's Fellow  
– Clinical Epidemiology of Lung Diseases Trainee

NIH Roadmap Fellow – Interdisciplinary Training Program in Genetics and Complex Diseases

Ruth L. Kirschstein National Research Service Award

Certificate of Distinction in Teaching

### **University of Kentucky**

R. L. Anderson Teaching Award

First Year Teaching Scholar (completed six-week program sponsored by the Teaching and Learning Center covering issues of first year students)

Daniel R. Reedy Quality Achievement Fellowship

Teaching Assistantship

### **Miami University**

William N. and Marjorie Liggett Presidential Scholarship

McFarland Prize

Mary Jeanette and Clifford Harvey Scholarship

Comer-Reynolds Award in Statistics

Corwin Smith Prize

J. Paul and John P. Albert Scholarship

Koehler Prize

Major General Benjamin T. Butler Scholarship Award

U.S. Achievement Academy National College Scholarship Grant

National College Mathematics Award

### MEMBERSHIPS

American Society of Human Genetics

American Statistical Association

Institute of Mathematical Statistics

International Genetic Epidemiology Society

Golden Key National Honor Society

Mortar Board

Phi Beta Kappa

Phi Kappa Phi

Pi Mu Epsilon

### SERVICE

#### **American Statistical Association**

Program Committee, Boston Chapter

#### **Harvard University**

Student Member, Disciplinary Board

Mentor, Summer Program in Quantitative Sciences

Biostatistics Representative, Harvard School of Public Health Student Government

Student Committee Representative & Chair, Biostatistics Department

Biostatistics Tutor, Office for Student Affairs

**University of Kentucky**

Graduate Student Representative, Statistics Department

Statistics Tutor

**Miami University**

Student Advisory Board, Mathematics & Statistics Department

Mathematics & Statistics Tutor