

Ann Michelle Norris
Department of Mathematics and Statistics
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Research Interests

- Bayesian Nonparametrics
- Longitudinal Diagnostic Screening for Disease
- Markov Chain Monte Carlo Methods for Statistics
- Collaborative research in physical and life sciences

Publications:

Norris, M., Johnson, W.O. and Gardner, I.A. (2009). Modeling bivariate longitudinal diagnostic outcome data in the absence of a gold standard. *Statistics and Its Interface*. **2** 171-185. ([Click here to view the manuscript in pdf format.](#))

PhD Dissertation: Parametric and Semiparametric Models for Longitudinal Data: Application to Joint Modeling of Longitudinal Diagnostic Test Outcomes
Advisor: Professor Wesley O. Johnson, UC Irvine

Education

2008	PhD in Statistics , University of California, Davis. GPA 4.0
2000-2002	Coursework for BS Electrical and Electronic Engineering , California State University, Sacramento (CSUS). GPA 3.96
1995	Master of Arts in Mathematics , CSUS. GPA 3.97
1992	Bachelor of Arts in Mathematics (Summa Cum Laude) , CSUS

Work Experience

Teaching:

2008-present	Assistant Professor , CSUS Department of Mathematics and Statistics
2007	Adjunct Professor , American River College Mathematics Dept
2006-2007	Adjunct Professor , Folsom Lake College Mathematics Dept
2003-2008	Teaching Assistant in the Department of Statistics at UC Davis
1995-2003	Adjunct Lecturer in the Dept of Mathematics and Statistics at CSUS

Research/Consulting

2007	Graduate Student Researcher , developed novel statistical methodology for diagnostic screening data with Ian Gardner and Wes Johnson
2005-2006	Graduate Student Researcher , Center for Animal Disease Modeling and Surveillance, worked on statistical models related to the evolution and spread of the foot-and-mouth disease virus with Mark Thurmond and Wes Johnson
2004	Graduate Student Researcher , developed software for teaching statistics in the R language with Wolfgang Polonik and Duncan Temple-Lang
1993-2000	Statistical Consultant , California Department of Conservation, responsible for statistical aspects of statewide recycling studies used to set statewide fees and determine refunds for the beverage container recycling program; worked with Prof. Francisco Samaniego of UC Davis to implement novel estimation methodology

Courses Taught

CSUS: Introduction to Statistics, Introduction to Probability and Statistics (calculus-based), Calculus II (Math and Engineering), Calculus for Life Sciences
Differential Equations, Intermediate Algebra, PreCalculus

Community College: Arithmetic, Pre-algebra, Elementary Algebra, Geometry,
Introduction to Probability and Statistics,

Courses Assisted at UC Davis:

Stat 10: Statistical Thinking (conceptual course with few formulas)

Stat100: Applied Statistics for Biological Sciences

Stat 103: Applied Statistics for Business and Economics

Stat 130AB: Probability and Mathematical Statistics: Brief Course

Stat 131A: Probability

Stat 145: Bayesian Statistical Inference (constructed computer labs)

Stat 232AB: Linear Model Theory (Graduate Course)

Computer Skills

Proficiency in Windows environment using the following software:

R, S-Plus, WinBUGs, Minitab, Excel, Word, WinEdit, Latex, Blackboard Academic Suite (online, integrated course management software), CyberStats (online statistics course), MapleTA (software for constructing online homework).

Familiarity with UNIX operating system and relational databases, webpage construction using html and Frontpage, SAS, Matlab, BioEdit (gene sequence alignment and editing), Mega2 (Phylogeny construction), Mr. Bayes (Phylogeny construction)

Invited Talks:

- Sacramento City College Math Day, 2009. Title “Using Statistics to Know the “Unknowable” in Disease Screening Problems”
- CSUS Society for Industrial and Applied Mathematics Colloquium. Title “Using Statistics to Know the “Unknowable” in Disease Screening Problems”
- 2008 American Public Health Association, San Diego, CA. Title “Bayesian Modeling and Statistical Inference for Longitudinal Diagnostic Outcomes”

Masters Thesis Consulting and/or Committee Member

- Mike Solt, Geology, CSUS - in progress
- Lee Calder, Biology, CSUS - in progress

Grants

2000 California Integrated Waste Management Board, co-principal investigator of \$38,000 grant to review accuracy of statistical studies for measuring solid waste diversion from landfills

Awards and Achievements

- Chancellor’s Doctoral Incentive Program Awardee, \$30,000 forgivable loan for Doctoral studies
- Continuous graduate assistanceship at UCDavis, 2003-2008
- Elected to Pi Mu Epsilon National Honorary Mathematics Society by CSUS faculty, 1991
- Paul Douglas Teaching Scholarship Awardee (\$10,000)

Service to Profession

2007 Referee for Computational Statistics and Bayesian Analysis

Community Service

2009 *Pro Bono* Statistical Consulting for **The Pain Exhibit**, a non-profit organization whose mission is to educate health care providers and the public about chronic pain through art