Brian Michael Paciotti

Ph.D., M.S.

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(530)-219-8306 www.data-decide.com

Skills

Data Science

Statistical Analyses and Data Mining

- Predictive modeling (regression, neural networks)
- Cluster analysis association rules mining

Visualization

- Tableau dashboards
- Graphical displays in SAS and R

Statistical Programming

- R, SAS, Enterprise Guide, JMP, STATA, WEKA
- Certified SAS programmer

Database Programming

- SQL (Teradata, SQL Server, MySQL)
- MS Access, Visual Basic

Data Management

- Administration of large relational databases
- Performing SQL queries on large datasets
- Writing data scripts to improve data quality

Implementation of Business Intelligence Systems

SAS Business Intelligence Platform

Risk Adjustment

- HCC risk adjustment analytics
- ACA Exchanges and Medicare Advantage

Writing

Medical/Technical Writing

- Publishing scientific research, technical reports
- Ghost writing for medical doctors
- Concise writing style, proficient at English grammar

Management / Consulting

Project Management

- Agile software development
- Management of high-performance software teams

Consulting

- Defining requirements and scope of projects
- Sales presentations and client analytical support

Health Care

Health Care Policy Analysis

- Medicaid and Medicare Policy
- Interpretation of clinical and evidence-based research

Health Informatics

- Electronic health records
- Design of decision support applications

Healthcare Outcomes Research / Quality

- Performance measurement, risk-adjustment
- Methods to implement evidence-based medicine
- Total cost of care

Education

Ph.D. Human Ecology, University of California, Davis 2002

- Organizational behavior, public health, disease ecology, statistical methods
- Research about the impact of cultural processes on teamwork and cooperation

M.S. Health Informatics, University of California, Davis 2010

- <u>Thesis</u>: Text mining, cluster analysis, and visualization techniques to evaluate under-reporting of medical errors. Evaluation of cluster analyses for risk-adjustment of hospital outcomes
- <u>Coursework</u>: Electronic health records, coding standards, clinical decision support, project management, telemedicine, object-oriented programming, database management, construction of ontologies

B.S. Natural Resource Management, Second Major, Anthropology Colorado State University, 1994

Graduated Cum Laude.

Certifications

• SAS statistical software (Certified Base Programmer 9.2, Winter 2008)

Employment History

University of California, Davis, Davis California

Data Scientist, Consultant to California Medicaid, Nov. 2012 - Present

Institute for Population Health Improvement

- Analysis of claims and encounter data to evaluate utilization patterns and costs
- Complex SQL queries using Teradata and Business Objects
- Creation of a "total cost of care" performance measure
- · Analysis and publication of health disparities report
- Analysis of eligibility and enrollment for various Medicaid programs
- Healthcare simulation modeling and cost effectiveness analyses using Archimedes software

Volunteer Clinical Faculty Member, Aug. 2014 – Present

Department of Public Health Sciences

• Mentorship of public health masters students

Programmer Analyst, March 2011 - Nov. 2012

Biomedical Informatics, University of California Davis Health System

- Data manager for the Autism Phenome Project (UC Davis MIND Institute)
- Construction of relational databases, migration of spreadsheets into databases, SQL queries to retrieve data
- Implementation of electronic data capture tools (REDCap)
- Statistical modeling (generalized linear models, data visualization)

Pulse8 Inc., Annapolis Maryland

Vice President of Analytics, March 2014 - Aug. 2014

- Management of small analytical development team
- Predictive modeling to understand gaps in diagnostic medical coding
- Actuarial modeling to estimate expected transfer payments under ACA risk adjustment program
- Sale presentations and client analytical support

Consultant and Partnership in Startup Company, April 2012 - Feb. 2014

- Founding member of successful start-up company
- Statistical modeling to develop HCC risk-adjustment software for ACA and Medicare Advantage health plans
- Development of long-term care analytical products
- Technical writing, marketing research, and organizational planning

State of California, Sacramento California

Research Scientist, 2005 - 2011

Office of Statewide Health Planning and Development

- Creating hospital quality "report cards" using statistical risk-adjustment methodology
 - o Hospital Mortality Indicators for California; Patient Safety Indicators: A Preliminary Report
 - o Community-Acquired Pneumonia: Hospital Outcomes in California 2003-2005

- Implementation of SAS Business Intelligence Platform to automate reports and check the quality of data
- Applying biostatistics and data mining algorithms to access the quality of healthcare data
- Presentation of sensitive scientific results to medical industry stakeholders

Research Program Specialist, Dec. 2005 - Aug. 2006

California Department of Corrections and Rehabilitation.

- Development of a performance measurement system
- Creation of business intelligence dashboards to monitor evidence-based practices
- Evaluation of program effectiveness using statistical models

California State University, Chico Chico, California

University Lecturer, 2005

• Statistics, Criminology, Ethnic Conflict.

National Consortium on Violence Research

Research Fellow, 2002-2004

- Quantitative and qualitative analyses of homicide events
- Participation in annual research conferences

University of California, Davis, Davis California

University Lecturer, 2002-2005

Department of Sociology. Criminology (5 quarters) Social Psychology (8 quarters) Social Conflict (1 quarter).

Post-Doctorate Researcher, 2003-2005

• Evaluating the influence of culture on cooperative behavior.

Teaching Assistant, 1995-2001

• Social Problems, Immigration, Social Movements, Human Evolutionary Biology, Human Ecology, Cultural Ecology, Environmental Political Science.

Research Assistant, 1995-1998

Department of Anthropology. Determinates of Children's Health in Tanzania, East Africa.

Museo de Terrapaca, Arica Chile

Research Assistant, 1995

• Health characteristics of the "Chinchorro Mummies" from the Chilean Atacama Disease

Buffalo Bill Historical Center, Cody Wyoming

Research Assistant 1994-1995

• Evaluation how Native American groups impacted bison populations.

Publications

Journal Articles

- Backman, D., Kohatsu, N., Paciotti, B., Kizer, K. (submitted) Characteristics of Health Promotion Interventions
 Delivered by Medi-Cal Plans. The American Journal of Managed Care.
- Breece, E., Paciotti, B., Nordahl, C., Ozonoff, S., Van de Water, J., Rogers, S., Amaral, D., Ashwood, P. (2013)
 Myeloid dendritic cells frequencies are increased in children with autism spectrum disorder and associated with amygdala volume and repetitive behaviors. Brain, Behavior, and Immunity 31(69-75).
- Paciotti, B., Efferson, C., Richerson, R., McElreath, R., Lubell, M., Waring, T., Baum, W. (2011) Evaluating How Much Religious Variables Influence Altruistic Behavior. Research in Economic Anthropology
- Efferson, C., Richerson, R., McElreath, R., Lubell, M., Waring, T., Paciotti, B., Baum, W. (2006) Learning, Productivity, Noise: An experimental study of cultural transmission on the Bolivian Altiplano. Human Behavior and Evolution.

- McElreath, R., M. Lubell, P.J. Richerson, T.M. Waring, W. Baum, E. Edsten, C. Efferson, B. Paciotti. (2005) Applying evolutionary models to the laboratory study of social learning. Evolution and Human Behavior.
- Paciotti, B and Craig Hadley (2005) Large-Scale Cooperation among Sungusungu "Vigilantes" of Tanzania: Conceptualizing Micro-economic and Institutional Approaches. Research in Economic Anthropology.
- Paciotti, B and M. Borgerhoff Mulder (2004). Sungusungu: The Role of Preexisting and Evolving Social Institutions among Tanzanian Vigilante Organizations. Human Organization 63 (1).
- Baum, W., Richerson, P., Efferson, C. and Paciotti. B. (2004) An Experimental Model of Cultural Evolution Including both Verbal and Nonverbal Traditions. Human Evolution and Behavior 25(5)
- Paciotti, B. (2004) Homicide in Seattle's Chinatown, 1900-1940. Homicide Studies 9(3).
- Paciotti, B and Craig Hadley (2003) The Ultimatum Game among Sympatric Ethnic Groups in Southwestern Tanzania: Ethnic Variation and Institutional Scope. Current Anthropology

Book Chapters

- Paciotti, B and Peter Richerson (2004) Cultural Evolutionary Theory: A Synthetic Theory for Fragmented Disciplines (Van Lange, P. A.M. (Ed.). Bridging social psychology: The benefits of transdisciplinary approaches. Hillsdale, NJ, Erlbaum.).
- Richerson, P., Boyd R. and B. Paciotti, (2002) "An Evolutionary Theory of Commons Management." In The Drama of the Commons edited by Paul Stern. National Research Council.

Popular Articles

 Paciotti, B., C. Hadley, C. Holmes and M. Borgerhoff Mulder (2005) Grass-roots Justice in Tanzania. American Scientist.

Selected Presentations

- Cohort Discovery Marketing: Expanding the Process Knowledge Base for New Users. AMIA March 2013.
- Using Data Mining Techniques to Explore Hospital Coding Practices of Adverse Events in Administrative Datasets. March 2013.
- Using the REDCap Application Programming Interface to Streamline Research Recruitment. AMIA Annu Symp Proc. November 2012
- A Multi-disciplinary Approach to Electronic Case Report Form Design. AMIA Annu Symp Proc. November 2012
- The Challenge of Transferring User Permissions from Research Databases to a Central Reporting Application. AMIA Annu Symp Proc. 2012. November 2012
- Using Suunto Monitors to Evaluate Heart Rate Variability. American Medical Informatics Association. Fall 2009
- Administrative Data for Creating Hospital Report Cards. OSHPD Data Users Conference. Spring 2009
- Evaluation of the AHRQ Patient Safety Indicators: Hospital-Level Patterns and Trends. NAHDO Conference 2009
- A Sub-County Geographic Analysis of Ambulatory Care Sensitive Conditions in California. American Public Health Association. Fall 2009
- Care for Community-Acquired Pneumonia in California Hospitals: A Report Card. Sacramento Statistical Association.
 Spring 2007
- Applications of Experimental Economics to Assessment of Business Organizational Culture. Cultural Evolution and Application to Business Workshop. Fall 2005

Awards

- Institute for Research on Unlimited Love Grant. Funded \$100,000.
- Summer Research Fellowship, University of California, Davis. 2001
- National Science Foundation Dissertation Improvement Grant. Funded \$10,920. 1998
- Citizens Appreciation Award. City of Davis, California. 1998

Memberships

- American College of Preventive Medicine (2014)
- American Medical Informatics Association (2010-2012)
- Academy Health (2005-2007)
- American Public Health Association (2005)

- Society for Human Resources Management (2010)
- Western Society of Criminology (2006-2010)
- Association for Criminal Justice Research (California) 2004-2011
- Society of Applied Anthropology (2002-2004)

Service

- Board member, Association for Criminal Justice Research (California) 2004-2010
- Vice President, Association for Criminal Justice Research (California) 2005-2006
- Conference Organizer, Sacramento, March 30-31, Association for Criminal Justice Research (California)
- Manuscript Reviews for Human Nature, Criminal Justice Review
- Reviews of Criminology textbooks for Sage Publications and Allyn & Bacon

Languages

• Swahili - Conversational proficiency in 2002 (not much practice since then)