

Laura Poulin (Mustavich)

Concord, CA ~ (585) 687-7284
contact@laurapoulin.com

EDUCATION

Yale University, New Haven, CT

Ph.D., M.S., Computational Biology and Bioinformatics, 2010

Dissertation: Integrating Genomic and Kinetic Data to Elucidate Mechanisms of Alcohol Dependence

University of California at Los Angeles, Los Angeles, CA

B.S., Applied Mathematics, 2005

*Minor in statistics and specialization in computing, with application to biology
Magna cum laude*

EXPERIENCE

Insurance Analyst \ Predictive Modeler

CSAA Insurance Group

Nov. 2014 - July 2015

Walnut Creek, CA

Developed statistical models to standardize, streamline, and automate company processes.

- Analyzed system-wide data to compile reports and make recommendations to senior management.
- Collaborated with end-users to understand their process, establish project scope, and meet their needs.
- Coordinated with the IT and product management teams to understand the data architecture, identify possible model inputs, suggest system enhancements, and facilitate model implementation.

Lecturer, Department of Statistics

University of California at Los Angeles

July 2011 - June 2013

Los Angeles, CA

Taught courses in introductory statistics, probability, linear models, and statistical programming.

- Independently planned and prepared lectures and course materials with attention to detail, utilizing time management skills to meet constant deadlines and prioritize competing tasks.
- Supervised teaching assistants to facilitate effective course delivery, while collaborating with a team of fellow lecturers, professors, and staff to meet departmental goals.
- Initiated and managed a project to enhance a newly adopted web-based quiz system, communicating frequently with departmental stakeholders and product vendors to stay within scope and ensure successful achievement of goals.

- Used problem-solving skills to identify and take advantage of campus resources to resolve course logistical issues and accommodate the needs of approximately 280 students per quarter.
- Quickly adapted to last-minute changes in classroom technology, mandated by the department.

Graduate Research Assistantship
Yale University

Aug. 2005 - Dec. 2010
New Haven, CT

Laboratory of Hongyu Zhao, Department of Epidemiology and Public Health
Laboratory of Kenneth K. Kidd, Department of Genetics

- Managed a 4-year, multi-faceted research project, regularly presenting results to diverse audiences at lab meetings, committee meetings, conferences, and seminars and publishing findings in scientific journals.
(Complete publication and presentation list available upon request)
- Manipulated and analyzed very large, complex, multi-dimensional data sets with over 445,000 variables and roughly 1,000 observations, comprised of internal data and external data from publicly available databases.
- Developed and applied numerical methods, data mining, and mathematical and statistical techniques to develop predictive models of human disease.
- Leveraged data and results to produce meaningful medical insights, make recommendations, and direct future actions.

Teaching Fellow, Intro. Statistics
Yale University

Jan. 2007 - May 2008
New Haven, CT

Coordinated tutoring and grading efforts with professors and fellow teaching assistants.

TECHNICAL SKILLS

- Taught courses in statistical software: R, Stata, SAS, SPSS
- Software/programming languages used in research: R, Perl, Matlab, SQL
- Microsoft Word, Excel, PowerPoint, Outlook, Access, SharePoint, Project, Visio

AWARDS AND MEMBERSHIPS

- NIH training grant awardee, 2005-2010
- Phi Beta Kappa academic honor society member, awarded 2005
- Pi Mu Epsilon national mathematics honor society member, co-founder and Vice President of UCLA chapter, 2004
- National Society of Collegiate Scholars member, awarded 2002
- Alpha Lambda Delta academic honor society member, awarded 2002

PUBLICATIONS & PRESENTATIONS

Wang Y, Wang P, Bai Y, Tian Z, Li J, Shao X, Mustavich LF, Li BL. Assessment of Surface Water Quality via Multivariate Statistical Techniques: a Case Study of the Songhua River-Harbin Region, China. *Journal of Hydro-environment Research*. 2013; 7: 30-40.

Chakraborty A, Sun GQ, Mustavich LF, Huang SH, Li BL. Biochemical interactions between HIV-1 integrase and reverse transcriptase. *FEBS letters*. 2013; 587: 425-429.

Oral presentation: "Using Mathematical and Statistical Methods to Elucidate Mechanisms of Alcohol Dependence", Statistics Colloquium, University of California, Riverside, CA, May 31, 2011.

Mustavich LF, Miller P, Kidd KK, Zhao H. Using a pharmacokinetic model to relate an individual's susceptibility to alcohol dependence to genotypes. *Human Heredity*. 2010; 70: 177-193.

Li D, Sun Y, Yan L, Mustavich LF, Ou C, Zhou Z, Li S, Jin L, Li H. Genetic origin of Kadai-speaking Gelong people on Hainan island viewed from Y chromosomes. *Journal of Human Genetics*. 2010; 55: 462-468.

Poster and abstract: "A pharmacogenetic model of alcohol consumption and metabolism", annual meeting for the American Society of Human Genetics (ASHG), Philadelphia, PA, 2008.

Gan RJ, Pan SL, Mustavich LF, Qin ZD, Cai XY, Qian J, Liu CW, Peng JH, Li SL, Xu JS. Pinghua population as an exception of Han Chinese's coherent genetic structure. *Journal of Human Genetics*. 2008; 53: 303-313.

Complete publication and presentation list available upon request