

## WNAR/IMS 2009

### **Contributed 1: Statistical Methods for Genetic Association and Linkage Studies (5)**

**Chair: Zonghui Hu** (National Institute of Allergy and Infectious Diseases/National Institutes of Health, [huzo@niaid.nih.gov](mailto:huzo@niaid.nih.gov))

#### Cautions of using allele-based tests under heterosis

Bernard Omolo, Ph.D  
University of South Carolina – Upstate

#### Estimating simultaneous confidence intervals for odds ratios in GWA with biallelic marker and unknown mode of inheritance (GWA)

Ludwig A. Hothorn  
Leibniz University Hannover, Germany and The Scripps Translational Science Institute, La Jolla CA

#### Family-based and population-based studies are complementary

Yanming Di  
Department of Statistics, University of Washington

#### Selective genotyping and phenotyping in a complex trait context

Saunak Sen  
University of California San Francisco

#### The latent variable structure of genetic data on related individuals

E. A. Thompson  
University of Washington

### **Contributed 2: Survival Analysis and Correlated Data Analysis (6)**

**Chair: Luis G. Leon-Novelo** (M.D. Anderson Cancer Center, [lg1@rice.edu](mailto:lg1@rice.edu))

#### Model Selection for Clustered data: Conditional Akaike Information under Proportional Hazards Mixed Models

Florin Vaida, Ph.D.  
University of California at San Diego

#### Mixed Effects Models with Censored Response

Lin Liu, Ph.D  
University of California at San Diego

#### Joint Modeling of Survival Data and Longitudinal Measurements Under Nested Case-Control Sampling

Chi-hong Tseng  
UCLA

#### Inferences for NBUE distributions under censoring

Hari Mukerjee  
Wichita State University

[Application of Semi-Parametric Additive Hazards Model to Competing Risks Analysis in Breast Cancer Study](#)

Hyun J. Lim

Department of Community Health & Epidemiology, University of Saskatchewan, Canada

[Design considerations for recurrent events studies](#)

Elizabeth Juarez

Simon Fraser University

**Contributed 3: Statistical Methodology and Application I (7)**

**Chair: Loki Natarajan** (University of California, San Diego, [loki@math.ucsd.edu](mailto:loki@math.ucsd.edu))

[Borrowing Strength with Non-exchangeable Priors over Subpopulation](#)

Luis G. Leon-Novelo

M.D. Anderson Cancer Center

[The use of testing confidence value for “Go / No Go” decisions for phase II oncology trials](#)

Yiyi Chen, PhD

Dept. of PHPM, Knight Cancer Institute, OCTRI, Oregon Health and Science University

[A General Methodology for Determining “Crucial” P-Values,  \$P|H\_0 \text{ true} | \text{data}\$](#)

Ralph G. O'Brien

Case Western Reserve University

[Confidence intervals for the ratio of two proportions estimated from pooled samples](#)

Brad J. Biggerstaff

Centers for Disease Control and Prevention

[Testing multiple binomial equivalences](#)

Mark Delorey

Centers for Disease Control and Prevention

[Parametric three-class ROC analysis for ordinal-scale data](#)

Christopher W. Forsberg, M.S.

Seattle ERIC, VA Puget Sound Health Care System

[Supporting Healthcare Policy Initiatives through Modeling and Microsimulation Efforts: Issues of Data Capacity and Statistical Quality](#)

Steven B. Cohen

Agency for Healthcare Research and Quality

**Contributed 4: Non-parametric and Semi-parametric Statistics (6)**

**Chair: Katerina Kechris** (Colorado School of Public Health, [katerina.kechris@ucdenver.edu](mailto:katerina.kechris@ucdenver.edu))

[Inference for Comparing Two Treatments Using Kernel Density Estimation](#)

Sunil K. Dhar  
New Jersey Institute of Technology

[Misconceptions and Properties of Friedman's Test](#)

Roy St. Laurent  
Department of Mathematics & Statistics, Northern Arizona University, Flagstaff, AZ 86011-5717

[Nonparametric likelihood test for discordance of measurements with detection limits](#)

Zonghui Hu  
National Institute of Allergy and Infectious Diseases/National Institutes of Health

[Polynomial Spline Estimation for Generalized Additive Coefficient Model](#)

Oregon State University  
Lan Xue

[Generalized Additive Models and Inflated Type I Error Rates of Permutation Tests](#)

Robin Young  
Department of Biostatistics, Boston University School of Public Health

[Modelling Time Trend via Spline Confidence Band](#)

Jing Wang  
University of Illinois at Chicago

**Contributed 5: Statistical Methods for High-throughput Gene Expression Data (5)**

**Chair: Dongseok Choi** (Oregon Health & Science University, [choid@ohsu.edu](mailto:choid@ohsu.edu))

[Identifying microRNAs in Next Generation Sequencing Reads](#)

W. Evan Johnson  
Brigham Young University

[Identifying "outlier" genes across multiple microarray gene expression studies](#)

Loki Natarajan  
University of California San Diego

[Measuring the consistency of high-throughput biological experiments](#)

Qunhua Li  
University of California at Berkeley

[Motif prediction based on a phylogenetic multivariate model for cross-species sequence and expression data](#)

Katerina Kechris  
Biostatistics and Informatics, Colorado School of Public Health

[Statistical Issues in High-Throughput Genome-Wide DNA Methylation Studies](#)

Solange Mongoue-Tchokote  
Knight Cancer Institute, Oregon Health & Science University

## **Contributed 6: Longitudinal and Clustered Data Analysis (6)**

**Chair: Florin Vaida** (University of California, San Diego, [vaida@ucsd.edu](mailto:vaida@ucsd.edu))

[Analysis of longitudinal dichotomous data with non-nested grouping variables: a case study from sports science](#)

Jacob A. Wegelin  
Department of Biostatistics, Virginia Commonwealth University

[Estimation efficiency with a misspecified random effects distribution](#)

John Neuhaus  
University of California, San Francisco

[Predicting incompletely observed longitudinal endpoints in clinical trials](#)

Laura Pyle  
Department of Biostatistics and Informatics, University of Colorado Denver

[Restricted Fence Procedure in Longitudinal Studies](#)

Thuan Nguyen  
Oregon Health and Science University

[Sample size for repeated-measures autocorrelated binomial distribution](#)

Amalia S. Magaret  
University of Washington

[Identifying Subgroups in Outliers by Cluster Analysis](#)

Dongseok Choi  
Oregon Health & Science University

## **Contributed 7: Statistical methods for Biological Sciences (5)**

**Chair: Lan Xue** (Oregon State University, [xuel@stat.oregonstate.edu](mailto:xuel@stat.oregonstate.edu))

[A method for estimating the replication rate of human hematopoietic stem cells](#)

Sandra N. Catlin  
University of Nevada, Las Vegas

[Classifying Tissue Samples from Measurements on Cells: Application in Cervical Neoplasia](#)

Jose-Miguel Yamal, Ph.D.  
University of Texas M.D. Anderson Cancer Center

[Covariate Adjusted Correlation Modeling for Female Fragile-X Premutation Carrier Data](#)

Danh Nguyen  
University of California, Davis

[Preprocessing problems associated with reverse phase protein arrays](#)

E. Shannon Neeley  
Brigham Young University

[Statistical Methods for Genome Conformation Capture Data](#)

Beatrix Jones  
Massey University

**Contributed 8: Statistical Methodology and Application II (5)**

**Chair: Thau Nguyen** (Oregon Health & Science University, [nguythua@ohsu.edu](mailto:nguythua@ohsu.edu))

[Spatial Modeling of Large, Presence Only, Ecological Datasets](#)

Avishek Chakraborty  
Ph.D. student, DUKE UNIVERSITY, DURHAM, NC

[Correcting Heteroscedastic Location Errors in Maps of Alaska Earthquake Hypocenters](#)

Julie McIntyre  
University of Alaska Fairbanks

[Estimation of Transportation Price Elasticity](#)

Chien-Pai Han  
University of Texas at Arlington

[Evaluating Agreement of Ordinal or Continuous Measurements by Agreement Curve](#)

Zheng Zhang, Ph.D.  
Brown University

[Using the mean-to-sigma ratio to detect unacceptably improper ROC curves](#)

Stephen L. Hillis  
Iowa City VA Medical Center

**Contributed 9: High Dimensional Data Analysis (5)**

**Chair: Beatrix Jones** (Massey University, [M.B.Jones@massey.ac.nz](mailto:M.B.Jones@massey.ac.nz))

[Selecting a Subset from High Dimensional Data Using the Mixture Model Approach](#)

Byung S. Park  
Oregon Health & Science University

[Stability-based Regularization](#)

Chingway Lim  
UC Berkeley

[Efficient Classification for Time Course Repeated Measurements](#)

Xianlong Wang  
Fred Hutchinson Cancer Research Center

[Simultaneous curve registration and clustering for functional data](#)

Xueli Liu  
Division of Biostatistics, City of Hope

[Adaptive inference for sparse signals in functional data](#)

Andrada Ivanescu  
East Carolina University