Conference Program
AISC 2012 – October 5-7, 2012; UNC Greensboro

Please Note: At UNCG Campus, shuttles will always drop off and pick up from Sterling St between EUC and Walker Parking Deck

October 4, 2012, Thursday
6:00-8:00 pm
Registration Desk, Park Lane Hotel

October 5, 2012, Friday
7:30-8:00
Shuttles from Park Lane Hotel to UNCG
7:30-
Registration Desk, EUC Auditorium Lobby
9:00 – 9:30
Inaugural Remarks

October 5, Friday, Plenary Session I
9:30 – 11:00
EUC Auditorium

Chair: N. Balakrishnan – McMaster University
John Stufken - University of Georgia
Locally Optimal Designs for Nonlinear Models
Sastry Pantula - NSF & N C State University
ABC's at NSF

Coffee Break

October 5, Friday, Parallel Sessions 11:20 – 12:50
Parallel Session 1A: 144 EUC – Dogwood Room
Short Course - Bayesian Analyses using SAS
Instructor: Mike Patetta, SAS
Friday, October 5, 11:20 – 12:50

Parallel Session 1B: EUC 63: Sharpe Room
Statistical Consulting and Related Issues
Chair: Stephan Ogenstad - Statogen Consulting, LLC; Wake Forest, North Carolina
sogenstad@statogen-consulting.com
Friday, October 5, 11:20 – 12:50

Stephan Ogenstad - Statogen Consulting, LLC; Wake Forest, North Carolina
Challenges in Estimating a "Simple" Proportion With Confidence
Using Propensity Scores to Rule Out Potential Bias in a Clinical Trial

Identifiability of Species Phylogenies under the Coalescent Model

**Parallel Session 1C: EUC 66: Joyner Room**

**Risk Analysis**

**Chair: Kumer Pial Das – Lamar University & SAMSI**

[Email](mailto:kpdas@uncg.edu)

**Friday, October 5, 11:20 – 12:50**

Norou Diawara – Old Dominion University
Joint Inference and causal model for correlated small sample data

Kumer Pial Das – Lamar University & SAMSI
Parameter Estimation for Generalized Pareto Distribution

Rajan Lamichhane – Old Dominion University
Nonlinear Latent Process Models for Integrating Temporal Exposure Data from Multiple Break Points: the Otolith Data Example

**Parallel Session 1D: EUC 56: Kirkland Room**

**Statistical Methodology**

**Chair: Roland Deutsch – UNC Greensboro**

[Email](mailto:rcdeutsc@uncg.edu)

**Friday, October 5, 11:20 – 12:50**

Roland Deutsch – UNC Greensboro
Benchmark Dose Profiles for Joint-Action Quantal Data in Quantitative Risk

Bradley C. Turnbull – North Carolina State University
Unimodal Density Estimation Using Bernstein Polynomials

Linwei Hu - University of Georgia
Multi-stage optimal design for Michaelis-Menten model

**Parallel Session 1E: EUC 138: Maple Room**

**Non-parametric Methods**

**Chair: Scott Richter – UNC Greensboro**

[Email](mailto:sjricht2@uncg.edu)

**Friday, October 5, 11:20 – 12:50**

Melinda McCann – Oklahoma State University
Improved Type I Error Control For Linear Functions Of Parameters From Generalized Linear Models

Scott Richter – UNC Greensboro
Simultaneous Confidence Intervals for Location Shift Parameters Using Permutation Tests

Eddy Kwessi - Trinity University, San Antonio,
Efficient Rank Regression with wavelet Estimated Scores
Mohammed Gharaibeh - Kansas State University
Identification of Informative Genes with a Nonparametric Lack-of-fit Test of Constant Regression in Presence of Heteroscedastic Variances

Parallel Session 1F: EUC 54: Claxton Room
Applied Statistics
Chair: Vinaya Kelkar – North Carolina A&T State University
vakelkar@ncat.edu
Friday, October 5, 11:20 – 12:50
Joseph Usset - North Carolina State University
Interaction Models for Functional Data

Fiona M Callaghan - National Institutes of Health
Analysis of data that has been extracted from free-text using natural language processing: a likelihood model for misclassification with an application to medical informatics.

Suva Pal – McMaster University
EM Algorithm based Likelihood Estimation for Some Cure Rate Models

Vinaya Kelkar: North Carolina A&T State University
Physical Property Uncertainties in Physics Based Computational Modeling – A Statistical Analysis Examination

Parallel Session 1G: EUC 55: Alexander Room
Security and Network Applications
Chair: Shan Suthaharan – UNC Greensboro
s_suthah@uncg.edu
Friday, October 5, 11:20 – 12:50

Archana Polisetti – UNC Greensboro
Analysis of Network Intrusion Datasets for Attack Classifications

Weining Shen – North Carolina State University
Bayesian Methods for Network Intrusion Detection

Hugo Gomez - University of Arkansas at Pine Bluff
Cultural Informatics: Combinatorics of Social Media Trust

Pranav Dass – North Dakota State University
Dynamic Scheduling of Wireless Sensor Network to Track a Moving Object

Parallel Session 1H: 110: Azalea Room
Survey Sampling
Chair: Javid Shabbir – Quaid – I- Azam University, Islamabad, Pakistan
jsqau@yahoo.com
Friday, October 5, 11:20 – 12:50
Zaheen Khan - Federal Urdu University of Arts, Science and Technology, Islamabad
Diagonal Circular Systematic Sampling

Jeong Sep Sihm – UNC Greensboro
A Two-Stage Binary Optional Randomized Response Model

Sheela Misra – Lucknow University, India
Partial Predictive Estimation of Finite Population Variance Using Product Type Estimator

12:50-2:00 Lunch Break, EUC Cone Ball Rooms

October 5, Friday, Parallel Sessions 2:00 - 3:30

Parallel Session 2A: 144 EUC – Dogwood Room
Short Course - Bayesian Analyses using SAS
Instructor: Mike Patetta, SAS
Friday, October 5, 2:00 – 3:30

Parallel Session 2B: EUC 138: Maple Room
High-Dimensional Statistical Analysis
Chair: Dietrich von Rosen - Swedish University of Agricultural Sciences
Dietrich.von.Rosen@slu.se
Friday, October 5, 2:00 – 3:30

Muni S. Srivastava – University of Toronto
On Testing the Equality of Mean Vectors in High Dimensional Data

Mariko Yamamura - Hiroshima University, Japan
Variable Selection by Cp Statistic in Multiple Responses Regression with Fewer Sample Size than the Dimension

Takayuki Yamada - The Institute of Statistical Mathematics, Japan
Asymptotic cut-off point and comparison of error probabilities in discriminant analysis for large dimension

Wenhui Sheng – University of Georgia
Direction Estimation in Single-index Models via Distance Covariance

Parallel Session 2C: EUC 54: Claxton Room
Sampling Theory and Methods
Chair: Jerry Reiter – Duke University
jerry@stat.duke.edu
Friday, October 5, 2:00 – 3:30

Jerry Reiter – Duke University
An Overview of the Challenges of Statistical Disclosure Limitation

Daniel Manrique-Vallier – Duke University
Disclosure Risk Estimation Using Truncated Regularized Latent Class Models
Thais Paiva – Duke University
Imputation of confidential datasets with spatial locations using point process models

Satkargar Kinney – National Institute of Statistical Sciences, NC
Synthetic Longitudinal Business Data

Robin Mitra – University of Southampton
Generating Synthetic Data for the Sample of Anonymised Records

**Parallel Session 2D: EUC 56: Kirkland Room**
Statistical Methods for Wildfire Management
Chair: K. F. Turkman - University of Lisbon
kamil.turkman@fc.ul.pt
Friday, October 5, 2:00 – 3:30

D. R. Brillinger – University of California, Berkeley
Spatial-Temporal Analysis of the 2003 Cedar Fire

Alan Gelfand – Duke University
Modeling Wildfire in a Mediterranean Biodiversity Hotspot: Implications of Weather Variability and Global Circulation

**Parallel Session 2E: EUC 66: Joyner Room**
Statistical Modeling
Chair: Prajneshu – Indian Agricultural Statistical Research Institute, India
prajneshu@yahoo.co.in
Friday, October 5, 2:00 – 3:30

Donald Martin – North Carolina State University
P-Values for the Discrete Scan Statistic through Slack Variables

Prajneshu - Indian Agricultural Statistics Research Institute
Setarma Nonlinear Time-Series Model for Forecasting Cyclical Data

Volodymyr Serhiyenko – University of Connecticut
Dynamic Models for Multivariate Counts Time Series with Application to Transportation Safety

**Parallel Session 2F: EUC 63: Sharpe Room**
Software Solutions and Statistics
Chair: Ashok Kumar – Kentucky State University
ashok.kumar@kysu.edu
Friday, October 5, 2:00 – 3:30

Meenakshi Prajineshu – Deshbandhu College, University of Delhi, India
Intellectual Property Rights Issues in Computer Software and Mathematical Algorithms

Divya Gupta – North Dakota State University
Alternative Clustering Algorithms in Sensor Networks
Creating and Delivering an Effective Online Course

Parallel Session 2G: EUC 55: Alexander Room
Biostistics
Chair: Madhuri Mulekar – University of South Alabama
mmulekar@southalabama.edu
Friday, October 5, 2:00-3:30

Heejung Bang – University of California-Davis
Median-Based Incremental Cost-Effectiveness Ratio

Madhuri Mulekar – University of South Alabama
Using Bootstrap to Study Performance of a Tumor Classification Model

Lieven Nils Kennes - University Hospital RWTH-Aachen
Adjusting for selection bias in single-blinded randomized controlled clinical trials

3:30-3:50 Coffee Break

October 5, Friday, Plenary Session II
3:50 - 5:20 EUC Auditorium
Chair: Alan Gelfand – Duke University

Len Stefanski – North Carolina State University
Measurement Error and Variable Selection in Parametric and Nonparametric Models

N. Balakrishnan – McMaster University
Gamma Degradation Models and Applications

5:20 - 6:00 NC-ASA Forum, All invited
EUC Auditorium

6:00-7:30 Reception (Pizza & Beverages), EUC Cone Ball Rooms

7:30-8:00 Shuttles to Park Lane Hotel

October 6, 2012, Saturday

7:30-8:00 Shuttles from Park Lane Hotel to UNCG

October 6, Saturday, Plenary Session III
8:30-10:00 EUC Auditorium

Chair: Sastry Pantula, NSF & North Carolina State University

Richard Davis – Columbia University
Sparse Vector Autoregressive Modeling
Alan Gelfand – Duke University
Demographic Analysis of Forest Dynamics using Stochastic Integral Projection Models

10:00-10:30 Coffee Break

October 6, Saturday, Parallel Sessions 10:30 - 12:30

Parallel Session 3A: EUC 144: Dogwood Room
Dynamic Treatment Regimes
Chair: Jason Brinkley – East Carolina University
brinklevj@ecu.edu
Saturday, October 6, 10:30 – 12:30
Kristin Linn - North Carolina State University
Interactive Q-learning for Optimal Dynamic Treatment Regimes

Sherri Rose - Johns Hopkins Bloomberg School of Public Health
Constructing Confidence Sets for the Optimal Dynamic Regime

Daniel Almirall - University of Michigan
Piloting and Sizing Sequential Multiple Assignment Randomized Trials for the Development Of Dynamic Treatment Regimes

Baqun Zhang – North Carolina State University
Robust Estimation of Optimal Dynamic Treatment Regimes for Sequential Treatment Decisions

Parallel Session 3B: EUC 54: Claxton Room
Some recent developments in survival data analysis
Chair: Wenbin Lu – North Carolina State University
lu@stat.ncsu.edu
Saturday, October 6, 10:30 – 12:30
Jiajia Zhang – University of South Carolina
Induced Smoothing for the Semiparametric Accelerated Hazards Model

Pang Du – Virginia Tech
Two-Component Mixture Cure Rate Model with Spline Estimated Nonparametric Components

Lianming Wang - University of South Carolina
Frailty Probit Model for Multivariate and Clustered Interval-Censored Data

Huixia Judy Wang – North Carolina State University
Local Buckley-James Estimator for the Heteroscedastic Accelerated Failure Time Model

Yuan Geng - North Carolina State University
A Model-Free Machine Learning Method for Survival Probability Prediction

Parallel Session 3C: EUC 55: Alexander Room
Statistical Methods for Analyzing Complex Biomedical Data
Chair: Arnab Maity – North Carolina State University
amaity@ncsu.edu
Saturday, October 6, 10:30 – 12:30

Alison Motsinger-Reif - North Carolina State University
In Vitro Modeling for Genetic Mapping in Pharmacogenomics: Methods Development and Application

Jung-Ying Tzeng - North Carolina State University
Robust Similarity Regression for Population Substructure In Rare Variant Aggregation Analyses

Michael C. Wu – UNC Chapel Hill
Kernel Machine Based Methods for Gene-Environment Interaction Testing In Genetic Association Studies

Eric B. Laber - North Carolina State University
Set-Valued Dynamic Treatment Regimes for Competing Outcomes

Ana-Maria Staicu - North Carolina State University
Penalized Function-on-Function Regression

Hua Zhou - North Carolina State University
Tensor Regression with Applications in Neuroimaging Data Analysis

Parallel Session 3D: EUC 110: Azalea Room
Statistical Methods in Anthropology
Chair: Gwen Robbins Schug – Appalachian State University
robbinsgm@gmail.com
Saturday, October 6, 10:30 – 12:30

Brianne A. Beisner - University of California Davis
Sparse or Missing Data And Dominance Hierarchies: A Social Network Approach

Dwight Read - UCLA
The Uneasy Relationship between Statistical Methods and Sociocultural Research

Eric Jones – UNC Greensboro
Modeling Statistical Change in a Group Network after a Disaster

Gwen Robbins Schug - Appalachian State University
A Panel Regression Approach to Body Mass Estimation in Immature Human Skeletons, with applications for forensics and archaeology.

Sara K. Becker – UNC Chapel Hill

Parallel Session 3E: EUC 138: Maple Room
High-Dimensional Statistical Analysis
Chair: Dietrich von Rosen - Swedish University of Agricultural Sciences
Dietrich.von.Rosen@slu.se
Saturday, October 6, 10:30 – 12:30
Wenguang Sun - University of Southern California
False Discovery Control in Large-Scale Spatial Multiple Testing

Anuradha Roy – University of Texas at San Antonio
Classification of 3rd-Order High-Dimensional Data with Structured Covariance Matrix And Structured Multiplicative Or Additive Means

Yuan Xue - University of Georgia
Sufficient Dimension Folding for Regression Mean Function

D. Andrew Brown - University of Georgia
Incorporating Spatial Dependence into Bayesian Multiple Testing of Statistical Parametric Maps in Functional Neuroimaging

Dietrich von Rosen - Swedish University of Agricultural Sciences
Estimation of the Mean Parameters In The Growth Curve Model When The Size Of The Dispersion Matrix is Large

Parallel Session 3F: EUC 66: Joyner Room
Recent Advances in Survey Sampling
Chair: Evrim Oral - Louisiana State University Health Sciences Center, New Orleans
  eoral@lsuhsc.edu
  Saturday, October 6, 10:30 – 12:30

Jae-Kwang Kim – Iowa State University
Calibration Estimation Using a Prediction Model In Survey Sampling

Omer Ozturk - The Ohio State University
Finite Population Sampling Designs Using Partially Ordered Sets

Öztas AYHAN - Middle East Technical University, Ankara, Turkey
Response Reliability and Response Error Estimation in Personal Interview Surveys

Claudia Leonardi - Louisiana State University Health Sciences Center, New Orleans
Mean and Sensitivity Estimation using an Alternative Randomized Response Method

Parallel Session 3G: EUC 56: Kirkland Room
Statistical Methods for Wildfire Management
Chair: K. F. Turkman - University of Lisbon
  kamil.turkman@fc.ul.pt
  Saturday, October 6, 10:30 – 12:30

José M.C. Pereira - Technical University of Lisbon
Mapping Vegetation Burning At the Global Scale Using Remotely Sensed Data: The Fire_Cci Project

Rosa M. Crujeiras - University of Santiago de Compostela, Spain
Exploring wildfires behavior by nonparametric methods

K F Turkman - University of Lisbon
Annual Fire Risk Maps: Some Statistical Issues

**Parallel Session 3H: EUC Auditorium**

**Design of Experiments**

**Organizer:** Manohar Aggarwal, University of Memphis  
**Chair:** John Morgan, Virginia Tech  
[jpmorgan@vt.edu](mailto:jpmorgan@vt.edu)  
**Saturday, October 6, 10:30 – 12:30**

Abhyuday Mandal – University of Georgia  
Optimal Designs for Two-Level Factorial Experiments with Binary Response

Jie Yang - University of Illinois at Chicago  
Optimal Designs for Two-Level Factorial Experiments and Polynomials

Sanjoy Sinha - Carleton University  
Robust Designs for Multivariate Logistic Regression

Linda Wänström - Linköping University, Sweden  
Minimax Optimal Designs of Contingent Valuation Experiments: Willingness to Pay for Environmentally Friendly Clothes

B K Dass – University of Delhi, India  
Construction of m-Repeated Burst Error Correcting Binary Linear Code

**Parallel Session 3I: EUC 63: Sharpe Room**

**Statistical and Data Management Challenges in Big Data Analysis**

**Chair:** Venkat Gudivada – Marshall University  
gudivada@marshall.edu  
**Saturday, October 6, 10:30 – 12:30**

Yufang Bao - Fayetteville State University  
Introduction to using the EM Algorithm in Reconstructing Metabolite Images from MRSI Data

Quan Do - Marshall University  
DiscoveryViz: Discovering Trends and Relationships in Massive Datasets through Exploratory Analysis and Visualization

Liang Peng - Utah State University  
Neighborhood-Oriented Feature Selection and Classification of Duke’s Stages on Colorectal Cancer Using High Density Genomic Data

Girly Ramirez - Kansas State University  
Feature Selection and Prediction of Quantitative Traits in Genome-wide Association Studies (GWAS)

Sharad Silwal - Northland College, Ashland, Wisconsin  
Assessment of Random-noise Contamination in Digital Images via Testing on Wavelet Coefficients

Vinay B Gavirangaswamy - Western Michigan University  
Experience with Traffic Volume Prediction Using Statistical Techniques
12:30-1:45 Lunch Break, EUC Cone Ball Rooms

October 6, Saturday, Plenary Session IV
1:45 – 3:15 EUC Auditorium
Chair: Richard Davis – Columbia University

James Berger – Duke University
Reproducibility of Science: P-values and Multiplicity

Marie Davidian – North Carolina State University
More Robust Doubly Robust Estimation

3:15-3:45 Coffee Break

October 6, Saturday, Parallel Sessions 3:45 – 5:45

Parallel Session 4A: EUC 138: Maple Room
Nonstandard Analyses of Censored or Missing Data and Their Applications
Chair: Judy Wang – North Carolina State University
hwang3@ncsu.edu

October 6, Saturday, 3:45 – 5:45

Paul W. Bernhardt - North Carolina State University
Improper Multiple Imputation for Generalized Linear Models and Survival Models With Covariates Subject To Detection Limits

Guixian Lin - SAS Institute Inc
Quantile Regression Methods for Survival Data Analysis

Yanqing Sun - The University of North Carolina at Charlotte
Quantile Regression for Competing Risks Data with Missing Cause of Failure

Paramita Saha Chaudhuri – Duke University
Dynamic Thresholds and a Summary ROC Curve: Assessing the Prognostic Accuracy of Longitudinal Markers

Daowen Zhang - North Carolina State University
Variable Selection in Generalized Semiparametric Additive Mixed Models for Correlated Data

Parallel Session 4B: EUC 55: Alexander Room
Statistical Modeling and Inference in Economics And Insurance
Chair: Ricardas Zitikis - University of Western Ontario, Canada
zitikis@stats.uwo.ca

October 6, Saturday, 3:45 – 5:45

Christopher J. Bennett - Vanderbilt University
Examining the Distributional Effects of Military Service on Earnings: A Test of Initial Dominance

Vytaras Brazauskas - University of Wisconsin-Milwaukee
A Glimpse into the Actuary's Toolkit: EVT, GPD, MTM, VaR, etc

Francesca Greselin - University of Milano Bicocca, Italy
Unequal Perspectives on Inequality: A Comparison among The Evergreen Gini And The New Zenga Indices

Nariankadu D. Shyamalkumar - University of Iowa
Some Results on Statistical Inference for the Class of Haezendonck-Goovaerts Risk Measures

**Parallel Session 4C: EUC 54: Claxton Room**
Recent Developments in Environmental Statistics
Chair: Soutir Bandyopadhyay – Lehigh University
sob210@lehigh.edu
October 6, Saturday, 3:45 – 5:45

Arnab Maity – North Carolina State University
Analysis of In-Vitro Fertilization Data With Multiple Outcomes Using Discrete Time to Event Analysis

Debashis Mondal - University of Chicago
Spatial Analysis of Areal Unit Data

Rajib Paul - Western Michigan University
Selection of Knot Locations for Reduced Rank Spatial Models

Souparno Ghosh - Duke University
Joint Modeling of Climate Response Surfaces for Adult and Seedling Plants with Associated Climate Niche Creation

Soutir Bandyopadhyay – Lehigh University
Multiresolution Gaussian Process Model for the Analysis of Large Spatial Data Sets

**Parallel Session 4D: EUC 56: Kirkland Room**
Multivariate Analysis
Chair: Ravi Khattree – Oakland University
khattree@oakland.edu
October 6, Saturday, 3:45 – 5:45

Yasunori Fujikoshi – Hiroshima University
High-Dimensional AIC for Multivariate Mean Structure and Its Consistency Property

Tatjana von Rosen - Stockholm University, Sweden
Reduced Rank Regression in General Multivariate Linear Models

Carlos A. Coelho – New University of Lisbon
On the exact and near-exact distributions of the product of generalized Gamma random variables and the generalized variance

Ravi Khattree – Oakland University
Some Multivariate Problems and Antieigenvalues
Parallel Session 4E: EUC 66: Joyner Room
Statistical Methods in Weather Modeling and Prediction
Chair: Nalini Ravishanker – University of Connecticut
nalini.ravishanker@uconn.edu
October 6, Saturday, 3:45 – 5:45

Yulia R. Gel - University of Waterloo, Canada
Catching Uncertainty of Wind

Joe Guinness – North Carolina State University
Nonstationary Spatial-Temporal Modeling

Mikyoung Jun - Texas A&M University
Non-stationary Cross-Covariance Models for Multivariate Processes on a Globe

Robert Lund - Clemson University
Categorical Changepoints: Changes in North Atlantic Basin Hurricanes

Parallel Session 4F: EUC 63: Sharpe Room
Applied Semiparametrics
Chair: Ben Kedem – University of Maryland, College Park
bnk@math.umd.edu
October 6, Saturday, 3:45 – 5:45

Carolina Franco - Bureau of Census
Asymptotic Properties of Two Simple Semiparametric Estimates for Case-Control Study Model

Biao Zhang – University of Toledo
Semiparametric ROC Curve Analysis under Density Ratio Models

Wen Zhou – University of Maryland, College Park
Improving the Agresti-Coull CI Method Using Fused Generated Data.

Benjamin Kedem – University of Maryland, College Park
Semiparametric Regression Based on Multiple Sources.

Parallel Session 4G: EUC Auditorium
Design of Experiments
Organizer: Manohar Aggarwal, University of Memphis
Chair: John Stufken, University of Georgia
jstufken@stat.uga.edu
October 6, Saturday, 3:45 – 5:45

Debbie Street - University of Technology, Sydney
Comparing Designs for Choice Experiments Constructed with and without Priors: A Case Study

John Morgan - Virginia Tech
Design Optimality, Weighting, and Search Algorithms
Stelios Georgiou - University of the Aegean, Greece
A Method for the Analysis of Supersaturated Designs

Gary Bazdell - Carleton University
Single Change Covering Arrays

Kashinath Chatterjee - Visva-Bharati University, Santiniketan, India
A New Look at Search Designs

**Parallel Session 4H: EUC 144: Dogwood Room**
Inference in Medical Research: Causal, Functional, and Model Selection
Chair: Jason Brinkley – East Carolina University
brinkleyj@ecu.edu
October 6, Saturday, 3:45 – 5:45

Lan Liu – UNC Chapel Hill
Large Sample Randomization Inference of Causal Effects in The Presence Of Interference

Kyle White - North Carolina State University
Variable Shrinkage and Selection via Measurement Error Selection Likelihoods

Babette Brumback - University of Florida
Doubly Robust Testing and Estimation of Model-Adjusted Effect-Measure Modification with Complex Survey Data

Jennifer Hill – New York University
Assessing Common Support without Discarding Outcome Information

Gina-Maria Pomann - North Carolina State University
The Functional Kolmogorov-Smirnov Test

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**Editors Forum – Journal of Statistical Theory and Practice**
EUC Auditorium
All invited to attend
Host: Taylor & Francis Group

**7:00-9:00**
Conference Banquet, EUC Cone Ball Room
Banquet ticket will be collected at the gate. Please make sure you have it with you when you come to the banquet

9:00-9:30
Shuttles to Park Lane

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October 7, 2012, Sunday

**7:30-8:00**
Shuttles from Park lane to UNCG
October 7, Sunday, Plenary Session V  
8:30-10:00  EUC Auditorium  
Chair: Len Stefanski – North Carolina State University

Pranab K Sen – UNC Chapel Hill  
Statistical Perspectives in Some Genomic and Environmental Studies

Malcolm Ross Leadbetter – UNC Chapel Hill  
Extremes at Sea – A Cautionary Tale

10:00-10:30  Coffee Break

October 7, Sunday, Parallel Sessions  10:30 - 12:30

Parallel Session 5A: EUC 55: Alexander Room  
Statistical Modeling and Inference in Economics and Insurance  
Ricardas Zitikis – University of Western Ontario  
zitikis@stats.uwo.ca  
October 7, Sunday, 10:30 – 12:30

Marcel Voia - Carleton University  
Dynamic Panels with MIDAS Covariates: Estimation and Fit

Manuel Esquivel – New University of Lisbon  
On some auto-induced regime switching double threshold glued diffusions

João Beleza Sousa – New University of Lisbon  
Machine learning Gaussian short rate

Pranesh Kumar - University of Northern British Columbia  
Applications of Copula Functions in Measuring Market Risk

Ricardas Zitikis - University of Western Ontario  
Insurance Premiums and Risk Measures: Models And Estimation

Parallel Session 5B: EUC 138: Maple Room  
Recent Innovations in Pharmaceutical Statistics  
Organizer: Sujit Ghosh – North Carolina State University  
Chair: Heejung Bang – University of California, Davis  
heejungbang@msn.com  
October 7, Sunday, 10:30 – 12:30

Russell Reeve - Quintiles, Inc.  
Model-Based Drug Development and Adaptive Studies

Steven Novick - GlaxoSmithKline  
A Bayesian Approach to Parallelism Testing in Bioassay

S. Stanley Young - National Institute of Statistical Sciences
Average versus local effects

Mani Lakshminarayanan - Merck Research Laboratories
Adaptations in Clinical Trials

**Parallel Session 5C: EUC 144: Dogwood Room**
**Combinatorics**
**Chair: Gyula Katona - Renyi Institute, Hungarian Academy of Sciences**
[ohkatona@renyi.hu](mailto:ohkatona@renyi.hu)
October 7, Sunday, 10:30 – 12:30

Ryan Martin - Iowa State University
Diamond-free families of the Boolean lattice

Linyuan Lu - University of South Carolina
On Crown-Free Families of Subsets

Laszlo A. Szekely - University of South Carolina
Mixed Orthogonal Arrays, K-Dimensional M-Part Sperner Multi-Families, and Full Multi-Transversals

Eva Czabarka - University of South Carolina
Mixed Orthogonal Arrays, K-Dimensional M-Part Sperner Multi-Families, And Full Multi-Transversals II

Gyula O.H. Katona - Renyi Institute, Hungarian Academy of Sciences
Shadows and Cryptology

**Parallel Session 5D: EUC 54: Claxton Room**
**Recent Advances in Survey Sampling**
**Chair: Evrim Oral - Louisiana State University Health Sciences Center, New Orleans**
[eoral@lsuhsc.edu](mailto:eoral@lsuhsc.edu)
October 7, Sunday, 10:30 – 12:30

Evrim Oral - Louisiana State University Health Sciences Center, New Orleans
Robust Estimation in Survey Sampling via Modified Maximum Likelihood Methodology

G. N. Singh - Indian School of Mines
Effective Rotation Patterns in Successive Sampling Over Two Occasions

Rita Sousa - New University of Lisbon & Statistics Portugal
Improved Mean Estimation in Stratified Sampling Using Auxiliary Information

Nursel Koyuncu - Hacettepe University, Turkey
Calibration Estimators of Population Covariance

Javid Shabbir – Quaid-I-Azam University, Pakistan
Some Estimators of Finite Population Mean in Case of Missing Observations

**Parallel Session 5E: EUC 56: Kirkland Room**
**Long-Range Dependence - Recent Advances**
**Chair: Jan Beran - University of Konstanz, Germany**
Jan Beran - University of Konstanz, Germany
On Slow and Fast Changes In Locally Stationary Long-Memory Processes

Yuanhua Feng - University of Paderborn
The exponential FARIMA and the exponential SEMIFAR models and their applications

Rafal Kulik - University of Ottawa
Estimation of Limiting Conditional Distributions for the Heavy Tailed Long Memory Stochastic Volatility Process

Vladas Pipiras - University of North Carolina - Chapel Hill
On Distinguishing Multiple Changes in Mean And Long-Range Dependence Using Local Whittle Estimation

Parallel Session 5F: EUC 66: Joyner Room
Mathematical Biology
Chair: Jan Rychtar – UNC Greensboro
j_rychta@unCG.edu
October 7, Sunday, 10:30 – 12:30

Jan Rychtar – UNC Greensboro
Games with Information Asymmetry

David Sykes – UNC Greensboro
The Effect of Internal States on Kleptoparasitic Interactions

Tracy Spears Gill & Anna Tuck – UNC Greensboro
A Quantitative Optional Unrelated-Question Randomized Response Model

Caitlin Ross – UNC Greensboro
The Influences of Life Stages on the Evolution of Altruism

Thomas Parrish – UNC Greensboro
Behavioral Studies of P. californicus and P. boylii Through Automated Video Processing

Parallel Session 5G: EUC Auditorium
Design of Experiments
Organizer: Manohar Aggarwal, University of Memphis
Chair: Debbie Street, University of Technology, Australia
Deborah.Street@uts.edu.au
October 7, Sunday, 10:30 – 12:30

Satoshi Aoki - Kagoshima University, Japan
Markov chain Monte Carlo tests for regular fractional factorial designs and cut ideals

Dinesh G. Sarvate – College of Charleston
Decomposition of Complete Multigraphs Into Certain Multisubgraphs, K_3s And P_3s
Jinguo Gao - The Ohio State University
Rank Based Inference Based On Order Restricted Randomized Designs

Manohar Aggarwal – University of Memphis
Efficient Three-Level Screening Designs Using Weighing Matrices

**Parallel Session 5H: EUC 63: Sharpe Room**

**Statistical and Data Management Challenges in Big Data Analysis**
Chair: Rajeev Agrawal - North Carolina A & T State University
ragrawal@ncat.edu

*October 7, Sunday, 10:30 – 12:30*

Dhana Rao - Marshall University
Linear Discriminate Analysis Effect Size Method for Class Comparisons in Metagenomic Analyses

Kevin Shay - Marshall University
Scaling of PSSIM Algorithm Using OpenMP

Cameron J. Loader - Marshall University
Generation of Sentences from Images

Amogh R. Gudivada – Marshall University
DNA Microarray Data Analysis of Breast Cancer Patients

Taneaka Jenkins - North Carolina A & T State University
Emergency Facility Ranking Model Using Smartphone

Sambit Bhattacharya - Fayetteville State University
Human Gesture and Action Classification with Open Source Machine Learning Tools

12:30-1:45 Lunch Break, EUC Cone Ball Rooms

2:00-3:00 Closing Remarks & Best Paper Awards
EUC Auditorium

3:30-4:00 Shuttles to Park Lane