<p align="center">PROGRAM</p>

<p align="center">**EIGHTH U.S. ARMY CONFERENCE ON APPLIED STATISTICS**</p>

<p align="center">**McKimmon Center, North Carolina State University**
October 30 – November 1, 2002
Hosted by the U.S. Army Research Office</p>

Monday, October 28

0800 - 0830 REGISTRATION

0830 - 1200 TUTORIAL (McKimmon Center)

Statistical Data Mining
Edward J. Wegman, George Mason University
Jeff L. Solka, Naval Surface Warfare Center

1200 - 1315 Lunch

1315 - 1600 TUTORIAL

Tuesday, October 29

0830 - 1200 TUTORIAL (McKimmon Center)

1200 - 1315 Lunch

1315 - 1600 TUTORIAL

1830 - Social and Registration (Holiday Inn, Brownstone)

Wednesday, October 30

0800 - 0830 REGISTRATION

0830 - 0900 CALL TO ORDER

Barry Bodt, Conference Chair, U.S. Army Research Laboratory
Robert Launer, Conference Host, U.S. Army Research Office

0900 - 0945 GENERAL SESSION I: Keynote Address

Chair: Robert Launer, U.S. Army Research Office

Improving Confidence Intervals for Proportions, Differences of Proportions, and Odds Ratios
Alan Agresti, University of Florida

0945 - 1000 Break

1000 - 1200

SPECIAL SESSION I: STATISTICAL RESEARCH AT NORTH CAROLINA STATE UNIVERSITY

Chair: Leonard Stefanski, North Carolina State University

Skew-elliptical Distributions and Their Applications
Marc G. Genton

Time Series Models for Zero-Inflated Data with Application to Nuclear Power Plants
Sujit Ghosh

A Simple Boolean Model for Assessing Particle Flow from Type II Counter Data
Jason A. Osborne

Testing Monotonicity of Regression
Subhashis Ghosal

SPECIAL SESSION II: STATISTICAL SOFTWARE

Chair: Edward Wegman, George Mason University

Development of Statistical Software
James Gentle, George Mason University

A Tour of New Directions in SAS Statistical Software
Robert Rodriguez, SAS Institute

Using SAS/IML Workshop for Dynamic Statistical Graphics
Simon L. Smith, SAS

1200 - 1300 Lunch

1300 - 1430

CONTRIBUTED SESSION I

Chair: Pat Jones, U.S. Army Research Laboratory

Efficient Simulation Experimental Designs
LTC Thomas M. Cioppa, TRADOC Analysis Center, TRAC-Monterey
Thomas W. Lucas, Naval Postgraduate School

Estimating Probabilities for Simulation
D.H.Frank, Indiana University of Pennsylvania

A Space-time Model that Combines Simulations and Flight Test Data for Assessing Missile Launches from the F-22 Prototype Aircraft
Dave Higdon, Los Alamos National Laboratory
Mark McNulty, Los Alamos National Laboratory
Bruce Lettallier, Los Alamos National Laboratory

CONTRIBUTED SESSION II

Chair: David Cruess, Uniformed Services University of the Health Sciences

Evaluation of the Mental Health Impact of 9/11: Results from the Pentagon Post Disaster Health Assessment Survey
Nikki Jordon, Center for Health Promotion and Preventive Medicine

Performance Evaluation of Temporal Alerting Algorithms for ESSENCE Syndromic Surveillance Data
Eugene Elbert, Walter Reed Army Institute of Research
Dr. Howard S. Burkom, Johns Hopkins Applied Physics Laboratory
Dr. Kevin Nelson, Walter Reed Army Institute of Research

Effects of Missing or Incomplete Data on Military Medical Research
T.E. Powers, Walter Reed Army Institute of Research
Y. Li, Walter Reed Army Institute of Research
L.B. Trofimovich, Walter Reed Army Institute of Research

CONTRIBUTED SESSION III

Chair: David Kim, United States Military Academy

A Comparison of the Outcomes of a Course Taught in the Traditional Classroom Setting with the Outcomes of the Same Course Taught in the Distance Learning Format (Developing a Methodology)
Gene Dutoit, Troy State University

A Probability Programming Language: Software to Automate Probability Theory
LTC Andrew Glen, United States Military Academy
Diane Evans, Rose-Hulman University
Larry Leemis, The College of William and Mary

A Lemma Useful in Combinatorics and Some of its Applications
Bernard Harris, University of Nebraska, Lincoln

1430 - 1445 Break

1445 - 1615

CLINICAL SESSION I

Chair: Gene Dutoit, Troy State University

Panel: James R. Thompson, Rice University; Paul J. Deason, U.S. Army TRADOC Analysis Center WSMR

Multivariate Goodness-of-Fit Testing for M256 Gun Tube Profiles
David W. Webb, Army Research Laboratory
Mark L. Bundy, Army Research Laboratory

Study Design to Assess Autonomous Mobility of the Experimental Unmanned Vehicle (XUV)
Barry A. Bodt, Army Research Laboratory
Ann Brodeen, Army Research Laboratory

CONTRIBUTED SESSION IV

Chair: Bernard Harris, University of Nebraska, Lincoln

New Binomial and Multinomial Distributions From Graph Theory
Milton Sobel, University of California, Santa Barbara
Yontha Ath, California State University, Dominguez Hills

A Graph Theoretic Framework for Latent Class Discovery
J.L. Solka, Naval Surface Warfare Center
C. E. Priebe, Johns Hopkins University
D.J. Marchette, Naval Surface Warfare Center

Encoding of Text to Preserve Meaning
A.R. Martinez, Naval Surface Warfare Center, Dahlgren Division
E.J. Wegman, George Mason University
W.L. Martinez, Office of Naval Research

1615 - 1630 Break

1630 - 1715 GENERAL SESSION II

Chair: Barry Bodt, U.S. Army Research Laboratory

A Study of Denial of Service Attacks on the Internet
David Marchette, Naval Surface Warfare Center

1830 - 2100 WILKS AWARD BANQUET (Holiday Inn, Brownstone)

1830 - SOCIAL
1930 - DINNER
2015 - BANQUET ADDRESS

Considerations of Inspection for Homeland Security with Cross Linkages to Quality Control, Game Theory, and Stochastic Simulation
James R. Thompson, Noah Harding Professor of Statistics, Rice University

2045 - AWARD PRESENTATION

Robert Launer, U.S. Army Research Laboratory

Thursday, October 31 (Boo!)

0830 - 1000 GENERAL SESSION III

Chair: Carl Russell, CTR Analytics

Stress-Strength Testing: Some Classical Approaches and Some New Formulations and Results
Francisco J. Samaniego, University of California, Davis

Random Disambiguation Paths
Carey Priebe, Johns Hopkins University

1000 - 1015 Break

1015 - 1145

CONTRIBUTED SESSION V (Conference Center)

Chair: Lee Dewald, Virginia Military Institute

Benefits of Non-Destructive Evaluation (NDE) vs. Destructive Testing for Bayesian Reliability Estimation
Paul Deininger, Los Alamos National Laboratory
Shane Reese, Los Alamos National Laboratory & Brigham Young U.
Michael Hamada, Los Alamos National Laboratory
Robert Krabill, Los Alamos National Laboratory

Munitions Stockpile Reliability Assessment
Alyson Wilson, Los Alamos National Laboratory
Nicholas Hengartner, Los Alamos National Laboratory

Hierarchical Models for Software Testing and Reliability Estimation
Todd L. Graves, Los Alamos National Laboratory
John C. Kern II, Duquesne University

CONTRIBUTED SESSION VI

Chair: Robert Burge, Walter Reed Army Institute of Research

An Almost Natural Application of Bayesian Statistics in Packaging Quality Assurance/Control
Major John A. Wasko, United States Military Academy
David Kim, United States Military Academy

Relationship Between Toxicity Values for the Healthy Subpopulation and the General Population
Ronald B. Crosier, Edgewood Chemical Biological Center
Douglas R. Sommerville, Edgewood Chemical Biological Center

Finding The Season Effect And Trend Of Attrition: Detect The Attrition Changes In The Early Stage
T.E. Powers, Walter Reed Army Institute of Research
Y. Li, Walter Reed Army Institute of Research

1145 - 1245 Lunch

1245 - 1445

CONTRIBUTED SESSION VII

Chair: Robyn Lee, U.S. Army Center for Health Promotion and Preventive Medicine and U.S. Army Medical Research Institute of Chemical Defense

Determination of the LD50 for Chemical and Biological Threat Agents
Nancy A. Niemuth, Battelle

Homogeneity of the Loss Rate and Individual Factor Effect Across MEPS: A Meta-Analysis on Attrition
Y. Li, Walter Reed Army Institute of Research
T.E. Powers, Walter Reed Army Institute of Research

Relationship Between the Dose-Response Curves for Lethality and Severe Effects for Chemical Warfare Nerve Agents
Douglas R. Sommerville, Edgewood Chemical Biological Center

A Method for Assessing Randomness in the United States Army's Biochemical Testing Program
Captain Kevin P. Romano, United States Military Academy

CONTRIBUTED SESSION VIII

Chair: Jackie Telford, Johns Hopkins Applied Physics Laboratory

The Analytic Challenges of the Army's Network-enabled Future Combat Systems
LTC Duane E. Brucker, U.S. Army TRADOC Analysis Center WSMR
Paul J. Deason, U.S. Army TRADOC Analysis Center WSMR

Threat Management Using Passive Inference of Network Infrastructure Topology
John Rigsby, Naval Surface Warfare Center
Jeff Solka, Naval Surface Warfare Center

Automatic Target Recognition in Satellite Imagery
Bart Wilburn, Recognition Research

Finding Clusters
Jon R. Kettenring, Telcordia Technologies

1445 - 1500 Break

1500 - 1700 SPECIAL SESSION III: COMMAND, CONTROL AND
COMMUNICATION

Chair: Wendy Martinez, Office of Naval Research

Assessing Uncertainty in Mesoscale Numerical Weather Prediction
Montserrat Fuentes, North Carolina State University
Adrian Raftery, University of Washington

Local Probability Propagation Algorithms for Approximate Inference in Graphical Models
Martin Wainwright, University of California-Berkeley
Tommi Jaakkola, Massachusetts Institute of Technology
Alan Willsky, Massachusetts Institute of Technology

C4ISR and the Future Force
Monica Farah-Stapleton, Communications-Electronics Command

Particle Filtering and Spatial Prediction in the Battlespace
Noel Cressie, Ohio State University
Mark Irwin, Ohio State University
John Kornak, Ohio State University

Friday, November 1

0830 - 0915 GENERAL SESSION IV

Chair: Linda Moss, U.S. Army Research Laboratory

A Microarray Lesson from Dear Old DAD (Design-Analyze-Display)
Russell Wolfinger, SAS Institute

0915 - 0930 Break

0930- 1100

CONTRIBUTED SESSION IX

Chair: Alyson Wilson, Los Alamos National Laboratory

Statistical Techniques for Breaking Steganography
R. Chandramouli, Stevens Institute of Technology

Classifier Optimization Via Graph Complexity Measures
J.L. Solka, Naval Surface Warfare Center
D.A. Johannsen, Naval Surface Warfare Center

Statistical Classification Based on Contours
Mark Fitzgerald, University of Colorado-Denver
Karen Kafadar, University of Colorado-Denver

CONTRIBUTED SESSION X

Chair: Paul J. Deason, U.S. Army TRADOC Analysis Center WSMR

A Human Dimension Methodology for Assessing Future Combat Systems' C4SRI
Jock O. Grynovicki, U.S. Army Research Laboratory
Kragg Kysor, U.S. Army Research Laboratory

Assessing and Removing Unexpected Collinearity in Designed Experiments
Trevor A. Craney, Pratt & Whitney

1100- 1115 Break

1115 - 1200 GENERAL SESSION V

Chair: Barry Bodt, U.S. Army Research Laboratory

SiZer for Simple, Direct Inference in Exploratory Data Analysis
Steve Marron, University of North Carolina, Chapel Hill

1200 - ADJOURN