Below is the October 2015 NISS/SAMSI Affiliates Update.

### Spring Affiliates Workshop March 6 in Austin, TX

This year's annual NISS/SAMSI Affiliates Meeting will take place Sunday, March 6, 2016, in conjunction with the Eastern North American Region International Biometrics Society's (ENAR) meeting at the JW Marriott in Austin, TX. The exact room for this meeting is still TBD.

Travel support to the NISS/SAMSI Affiliates meeting is a benefit of Affiliates membership. For this meeting NISS will reimburse up to $600.00 (with receipts for travel and hotel) for one liaison, and up to $800.00 for two liaisons who attend.

The convention hotel is already sold out. They have contracted with the [Hyatt Place](https://www.hyatt.com) (across the street from the JW Marriott), for a small block of rooms at the same conference rate of $199.00. Please call the Hyatt Place directly: (512) 476-4440

### Agenda

<table>
<thead>
<tr>
<th>Tentative Schedule</th>
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<tr>
<td>8:30-9:00</td>
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<tr>
<td>Registration and Coffee</td>
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<td>9:00-9:15</td>
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<td>Welcome and Review of NISS Events</td>
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<tr>
<td>Nell Sedransk, Director, National Institute of Statistical Sciences</td>
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<td>9:15-10:30</td>
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<td>Session on Record Linkage</td>
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<td>Chair, TBA</td>
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<td>10:30-10:45</td>
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<tr>
<td>Break</td>
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<tr>
<td>10:45-11:00</td>
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<tr>
<td>Modern Bayesian Record Linkage: Some Recent Developments and Open Challenges</td>
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<td>Rebecca Steorts, Duke University</td>
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10:45- Meeting Future Needs of NISS/SAMSI Affiliates
11:45 Discussion Leader: Jane Pendergast, Duke University

Speed Session: Introduction of ENAR talks by NISS/SAMSI Affiliates

11:50-11:55: Rachel Carroll, postdoc at the Medical University of South Carolina
Multivariate Latent Structure in Bayesian Spatio-temporal Health Models

11:50-11:55: Masaki (Chien-Wei) Lin, a graduate student from the University of Pittsburgh (Biostatistics)
SeqDesign: A Framework for RNA-Seq Genome-Wide Power Calculation and Experimental Design Issues

12:00-12:10 Questions

12:10- Lunch

1:10- Session on Biosimilars
Chair: TBA

1:10-1:45: Thomas Gwise, FDA
Biosimilar Clinical Studies: Resolving Residual Uncertainty

1:45-2:10: Yulan Li, Novartis Pharmaceuticals
Statistical Challenges and Current Experience in Biosimilar Trial Designs

2:10-2:25: Floor Discussion

SAMSI Postdoc Session
Chair: TBA

2:25-2:50: Yize Zhao, SAMSI and UNC-CH
Bayesian Feature Selection for Ultra-high Dimensional Imaging Genetics Data

2:50-3:15: Zhengwu Zhang, SAMSI and Duke University
Robust brain structural connectivity analysis using HCP data

3:15- Break

Data Science Panel Discussion
Chair/Moderator: Joel Dubin, University of Waterloo

3:30- Vladimir Svetnik, Merck
Garrett Grolemund, RStudio
Eric Laber, N.C. State University

5:00
Co-Sponsored Events

Network of Greater Georgia Institutions for Neuroimaging and Statistics (NOGGINS)
When: Friday, April 15, 2016
Where: Athens, Georgia
The 4th NOGGINS Workshop provides a forum for scientific communication and collaboration between researchers in the area of neuroimaging and neuroscience. For more details, click here.

2016 Southern Regional Council on Statistics (SRCOS)
When: June 6-9, 2016
Where: Bentonville, AR
Summer Research Conference will be held at the Doubletree Suites from June 6-9, in Bentonville, AR. The program includes keynote speakers Naiysin Wang and Terry Therneau. Jim Cochran will be delivering the banquet speech. Eugene Huang of Emory University and Jacqueline Hughes-Oliver of North Carolina State University have agreed to be program co-chairs. More details here.

SAMSI Events

2016 Spring Opportunities Workshop for Women in Math Sciences
When: April 6-8, 2016
Where: SAMSI
Deadline to Apply: February 22, 2016
The workshop will (i) familiarize women and/or under-represented minorities in the mathematical sciences with professional opportunities in academia, industry, and government, and (ii) to focus on challenges currently faced by women or minorities in mathematical sciences. Additionally, it will allow attendees to explore what it takes to thrive in careers pursued by mathematical scientists and researchers. Job interview scenarios and networking will be used to illustrate the principles presented in the workshop. For details and to apply, click here.
Challenges in Functional Connectivity Modeling and Analysis

**When:** April 8-10, 2016  
**Where:** SAMSI  
**Deadline to Apply:** February 25, 2016

There will be lectures by experts who will introduce to mathematicians and statisticians the substantive issues on characterizing and modeling connectivity, both structural and neuronal, using various data modalities that capture different facets of brain anatomy and functionality. [More information here.](#)

Methodology for Precision Medicine: Integrating Statistical and Mathematical Approaches

**When:** April 11-12, 2016  
**Where:** SAMSI  
**Deadline to Apply:** February 15, 2016

The 1.5 day program will feature presentations by leading mathematical and statistical scientists and clinicians at the forefront of precision medicine and breakout sessions involving small groups of participants from diverse scientific backgrounds to identify opportunities for methodological integration and synergy and to brainstorm on initial formulation of joint research projects. Number of participants is limited to 50 (including speakers). Junior researchers interested in precision medicine are especially encouraged to apply for this workshop. [Click here](#) for details and to apply.

Games and Decisions in Reliability and Risk Workshop

**When:** May 16-20, 2016  
**Where:** SAMSI  
**Deadline to Apply:** March 28, 2016

The objective of the workshop is to present novel use of game and decision theory in reliability and risk analysis and to bring together researchers from diverse disciplines such as economics, engineering, finance, mathematics, medical sciences, probability and statistics who find themselves working with, and contributing to, this theme. The workshop at SAMSI aims also to check the feasibility of a deeper interaction, possibly through a SAMSI program, among statisticians, mathematicians, decision analysts, game theorists and researchers from the areas mentioned earlier.

Interdisciplinary Workshop for Undergraduate Students

**When:** May 22-27, 2016  
**Where:** SAMSI and NC State University  
**Deadline to Apply:** April 1, 2016

For a good part of the week, students, in teams of 3 or 4, will use data from different sources to investigate a variety of questions related to several exciting and emerging area of research ranging from the mechanisms that bridge multiple spatial and temporal scales, linking the activity of individual components (e.g., molecular
biology, genetics, and neuron networks) and their interactions to the overall complex
dynamic behavior of the brain and nervous system. The students will also explore
the statistical underpinning for forensic procedures, including fingerprints, patterns
and impressions (footprints and tire tracks), toolmarks and firearms, hair, fibers,
documents, paints and coatings, bloodstains, and fire debris. Finally, student teams
will be prepared to make short presentations on the last day of the workshop, and
have the option of having their final presentations reside on the SAMSII website. For
details and to apply, click here.

2016-17 Program on Statistical,
Mathematical and
Computational
Methods for
Astronomy
This year-long research program
focuses on the vast range of statistical
and mathematical problems arising in
modern astronomical research,
particularly due to the flood of data
produced by both ground-based and
space-based astronomical surveys at
many wave-bands. The research areas
that form the main ingredients of the
program include:
• Astronomical simulations and big
data issues
• Exoplanets
• Functional data analysis
• Gravitational wave astrophysics
• High-performance computing for
Bayesian inference and
machine learning
• Lightcurve analysis/time domain
astronomy
Opening Workshop - August 29-
September 2, 2016
For details visit
http://www.samsi.info/ASTRO

2016-17 Program on Optimization
This year-long research program aims
to produce a synergy between
mathematics, statistics and operations
research to produce ground breaking
advances in:
• Optimization for large-scale statistical
analysis
• Statistical approaches for the
numerical solution of large-scale
optimization problems
• Applications of optimization
Opening Workshop - August 22-
26, 2016
For details visit
http://www.samsi.info/OPT