

SAMSI Programs

SAMSI's research programs are large-scale efforts focusing on interfaces among statistics, applied mathematics and other disciplinary sciences. Each program runs a full academic year. SAMSI hosts long and short term research fellows from U.S. and international institutions, and SAMSI postdoctoral fellows. Graduate students from our partner universities and from other universities, both national and international, are active participants. The programs also engage researchers working in industry, governmental agencies and national laboratories.

The year kicks off with an opening workshop that begins with tutorials of the subject that will be studied during the year and a series of lectures are given on the subject to start discussions with the researchers.

Working groups form at the end of the opening workshop. Working groups meet throughout the program to pursue particular research topics identified in the kickoff workshop or subsequently expanded by the working group participants. The working groups consist of SAMSI visitors, postdoctoral fellows, graduate students, and local faculty and scientists.

A transition workshop will be held at the end of the program and will disseminate program results and chart a path for future research in the area. There will also be mid-program workshops focused on the research at hand as the need arises.



National Advisory Committee

Ricardo Cortez

Tulane

Rebecca Doerge

Purdue

Jianqing Fan

Princeton

Irene Gamba

University of Texas - Austin

Max Gunzburger

Florida State University

Mac Hyman

Tulane

Michael Mahoney

University of California -

Berkeley

Susan Murphy

University of Michigan

Habib Najm

Sandia National Laboratory

Claudia Neuhauser

University of Minnesota

Adrian Raftery

University of Washington

Michael Stein

University of Chicago

Programs 2005-2015

2014-2015

Beyond Bioinformatics

Mathematical and Statistical Ecology

2013-2014

Computational Methods in Social Science

Low-Dimensional Structure in High-Dimensional Systems

Modern Statistical and Computational for Analysis of Kepler

Data (Summer 2013)

Neuroimaging Data Analysis (Summer 2013)

2012-2013

Data Decisions on Health Care

Statistical and Computational Methodology for Massive Datasets

Nonlocal Continuum Models for Diffusion, Mechanics and Other

Applications (Summer 2012)

Computational Advertising (Summer 2012)

2011-2012

Uncertainty Quantification

2010-2011

Complex Networks

Analysis of Object Data

Semiparametric Bayesian Inference in PKPD Analysis (Summer

2010)

2009-2010

Stochastic Dynamics

Space-Time Analysis for Environmental Mapping, Epidemiology

and Climate Change

Psychometrics (Summer 2009)

2008-2009

Sequential Monte Carlo Methods

Algebraic Methods in Systems Biology and Statistics

Meta-analysis: Synthesis and Appraisal of Multiple Sources of

Empirical Evidence (Summer 2008)

2007-2008

Risk Analysis and Extreme Events

Random Media

Environmental Sensor Networks

Dynamic Treatment Regimes and Multistage Decision-Making

Geometry and Statistics of Shape Making

2006-2007

High Dimensional Inference and Random Matrices

Development, Assessment and Utilization of Complex Computer

Models

Multiplicity and Reproducibility in Scientific Studies

2005-2006

Financial Mathematics, Statistics and Econometrics

Astrostatistics

National Defense and Homeland Security

Latent Variable Models in the Social Sciences