

Up to 6 postdoctoral fellowships are available at the Statistical and Applied Mathematical Sciences Institute for either of the two SAMSI Research Programs for 2015-16: Challenges in Computational Neuroscience (CCNS) and Statistics and Applied Mathematics in Forensic Science (Forensics). Appointments, for up to 2 years, will begin in August 2015, and will offer competitive salaries, travel stipend and health insurance.

Challenges in Computational Neuroscience (CCNS)

The CCNS program will develop mathematical and statistical methods for neuroscience applications to understand the underlying 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 complex dynamic behavior of the brain and nervous system. Brain theory, modeling, and statistics will be essential to turn data into better understanding of the brain. The CCNS program will address the underlying methodological, theoretical, and computational challenges. Probability and statistics, dynamical systems, geometry, and computer science will be combined with respect to theory and in applications.

Program on Statistics and Applied Mathematics in Forensic Science (Forensics)

In response to the NRC, White House, and congressional call for forensic reform, that includes a greater statistical and mathematical presence, SAMSI announces a yearlong program in forensic science. The central goal is to strengthen the statistical and applied mathematical bases of forensic science. Forensic science is, in major part, based upon statistical comparisons of the characteristics of a material left at a crime scene to characteristics of a source or suspect. These comparisons are often acknowledged by forensic scientists to be highly subjective. A series of reports by the National Research Council (NRC) has raised deep questions about major forms of forensic evidence, and has made a clear case for a needed 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. Working groups are planned on statistics and forensic science; pattern evidence; bias; imaging; quality control for forensics laboratories; identifying where statistics can have a quick impact; and educating mathematical scientists about forensics and forensic scientists about the mathematical sciences.

Application to SAMSI

In your cover letter, please indicate your interest in one of the two programs (CCNS or Forensics). Criteria for selection of SAMSI Postdoctoral Fellows include demonstrated research ability in statistical and/or applied mathematical sciences, computational skills along with good verbal and written communication abilities, and finally, a strong interest in the SAMSI program areas. The deadline for full consideration is December 15, 2014, although later applications will be considered as resources permit. SAMSI is an AA/equal opportunity employer All qualified applicants are encouraged to apply, especially women and members of minority groups.

To apply, go to mathjobs.org, SAMSIPD2015 Job #6133