About This Issue

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The technical focus of this issue of *Statistical Science* is the evaluation of various proposals for Markov chain Monte Carlo (MCMC) computational methods. The four MCMC articles in this issue illustrate that this is a subject area in rapid development and one in which a plethora of interesting questions remain. In an effort to capture some of the current trends and developments in research in comparing MCMC methods, Richard Tweedie, in early 2001, began constructing the technical part of the current *Statistical Science* issue. Richard had just begun his term as Executive Editor and by the Spring of 2001 his MCMC initiative was well underway. He was rightly pleased with the impressive array of papers that would constitute this special issue. The Galin Jones and James Hobert paper on "honest MCMC exploration" and the Louis Billera and Persi Diaconis paper on the Metropolis algorithm were almost ready to go. In addition, a draft of a paper from Antonietta Mira on ordering Markov chains had been received and a commitment from Gareth Roberts and Jeff Rosenthal to survey some recent MCMC scaling results was in hand.

Tragically, Richard Tweedie died of a heart attack on June 7, 2001. Efforts to complete Richard's ambitious MCMC project began in July 2001. This continuation of his work facilitated the publication of the four technical papers herein that collectively give a broad view of an exciting research area. Several people have helped make this possible. The authors and referees produced amazingly short turnaround times on revisions, reports and corrections. On the administrative front, special thanks go to Leon Gleser, Gareth Roberts, George Casella and Sally Olander whose efforts helped spread the *Statistical Science* editorial load during a difficult time.

With Richard's death, the statistics/probability community lost a tireless contributor to the development and dissemination of theoretical and applied work. He was internationally known for his work in stochastic processes and, in particular, for his award-winning book, written with S. P. Meyn, *Markov Chains and Stochastic Stability*. In recent years, Richard had grown increasingly interested in research related to convergence issues in MCMC algorithms. This MCMC issue of *Statistical Science* was initiated and inspired by a good friend and outstanding scientist, Richard Tweedie.

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