

# STATISTICAL SCIENCE

Volume 25, Number 2

May 2010

---

The Future of Indirect Evidence .....	<i>Bradley Efron</i>	145
Comment: The Need for Syncretism in Applied Statistics .....	<i>Sander Greenland</i>	158
Bayesian Statistics Then and Now .....	<i>Andrew Gelman</i>	162
Comment: How Should Indirect Evidence Be Used? .....	<i>Robert E. Kass</i>	166
Rejoinder: The Future of Indirect Evidence .....	<i>Bradley Efron</i>	170
The Random Walk Metropolis: Linking Theory and Practice Through a Case Study .....	<i>Chris Sherlock, Paul Fearnhead and Gareth O. Roberts</i>	172
Stochastic Approximation and Modern Model-Based Designs for Dose-Finding Clinical Trials .....	<i>Ying Kuen Cheung</i>	191
Continual Reassessment and Related Dose-Finding Designs .....	<i>John O'Quigley and Mark Conaway</i>	202
Dose Finding with Escalation with Overdose Control (EWOC) in Cancer Clinical Trials .....	<i>Mourad Tighiouart and André Rogatko</i>	217
Bayesian Models and Decision Algorithms for Complex Early Phase Clinical Trials .....	<i>Peter F. Thall</i>	227
Approximate Dynamic Programming and Its Applications to the Design of Phase I Cancer Trials .....	<i>Jay Bartroff and Tze Leung Lai</i>	245
A Conversation with Martin Bradbury Wilk.....	<i>Christian Genest and Gordon Brackstone</i>	258

**Statistical Science** (ISSN 0883-4237), Volume 25, Number 2, May 2010. Published quarterly by the Institute of Mathematical Statistics, 3163 Somerset Drive, Cleveland, OH 44122, USA. Periodicals postage paid at Cleveland, Ohio and at additional mailing offices.

**POSTMASTER:** Send address changes to *Statistical Science*, Institute of Mathematical Statistics, Dues and Subscriptions Office, 9650 Rockville Pike—Suite L2310, Bethesda, MD 20814-3998, USA.

Copyright © 2010 by the Institute of Mathematical Statistics  
Printed in the United States of America