BIOMETRICS

About the cover:

The cover image is taken from the article by Castruccio et al. in the Biometric Methodology section. Functional magnetic resonance imaging (fMRI) provides high-resolution images of brain activity when a patient is either resting or performing an activity. The simultaneous goals in analyzing fMRI data are to identify brain locations that respond to a stimulus and to understand how different regions of the brain are connected, a nontrivial task given that standard data sets comprise of millions of data points. The main contribution of this work is a novel scalable statistical algorithm that captures both local (between locations) as well as global (between regions) dependence. The original image was created by Heno Hwang, scientific illustrator at King Abdullah University of Science and Technology (KAUST).

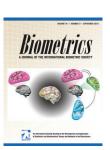


TABLE OF CONTENTS

BIOMETRIC METHODOLOGY DISCUSSION PAPER

Quantifying Publication Bias in Meta-Analysis	785
Discussion on Quantifying Publication Bias in Meta-Analysis	795
Discussion of "Quantifying Publication Bias in Meta-Analysis" by Lin et al	797
Discussion on "Quantifying Publication Bias in Meta-Analysis" by Lin and Chu	800
Rejoinder to "Quantifying Publication Bias in Meta-Analysis"	80
A Regression Framework for Assessing Covariate Effects on the Reproducibility of High-Throughput Experiments Q. Li and F. Zhang	803
Subtype Classification and Heterogeneous Prognosis Model Construction in Precision Medicine	814
A Scalable Multi-Resolution Spatio-Temporal Model for Brain Activation and Connectivity in fMRI Data	823
MILFM: Multiple Index Latent Factor Model Based on High-Dimensional Features	834
A Statistical Model for Helices with Applications	845
Statistical Inference in a Growth Curve Quantile Regression Model for Longitudinal Data H. Ryan Cho	855
Toward a Diagnostic Toolkit for Linear Models with Gaussian-Process Distributed Random Effects	863
Dynamic Borrowing through Empirical Power Priors That Control Type I Error	874
General Single-Index Survival Regression Models for Incident and Prevalent Covariate Data and Prevalent Data without Follow-Up	881
C-Learning: A New Classification Framework to Estimate Optimal Dynamic Treatment Regimes B. Zhang and M. Zhang	891
Modeling Survival Distribution as a Function of Time to Treatment Discontinuation: A Dynamic Treatment Regime Approach	900
An Alternative Robust Estimator of Average Treatment Effect in Causal Inference J. Liu, Y. Ma, and L. Wang	910
Estimating Individualized Treatment Rules for Ordinal Treatments	924
Model Selection for Semiparametric Marginal Mean Regression Accounting for Within-Cluster Subsampling Variability and Informative Cluster Size	934

Semiparametric Estimation of the Accelerated Mean Model with Panel Count Data under Informative Examination Times	944
Generalized Accelerated Recurrence Time Model for Multivariate Recurrent Event Data with Missing Event Type	954
Methods for Multivariate Recurrent Event Data with Measurement Error and Informative Censoring	966
A Wild Bootstrap Approach for the Aalen–Johansen Estimator	977
A Bayesian Nonparametric Approach to Causal Inference on Quantiles D. Xu, M.J. Daniels, and A.G. Winterstein	986
A D-Vine Copula-Based Model for Repeated Measurements Extending Linear Mixed Models with Homogeneous Correlation Structure	997
A Group Sequential Test for Treatment Effect Based on the Fine-Gray Model M.J. Martens and B.R. Logan	1006
Regression Analysis for Secondary Response Variable in a Case-Cohort Study Y. Pan, J. Cai, S. Kim, and H. Zhou	1014
Sieve Analysis Using the Number of Infecting Pathogens	1023
Model-Averaged Confounder Adjustment for Estimating Multivariate Exposure Effects with Linear Regression	1034
Regularized Continuous-Time Markov Model via Elastic Net	1045
BIOMETRIC PRACTICE	
Bayesian Enhancement Two-Stage Design for Single-Arm Phase II Clinical Trials with Binary and Time-to-Event Endpoints	1055
Motivating Sample Sizes in Adaptive Phase I Trials via Bayesian Posterior Credible Intervals T.M. Braun	1065
Detecting Treatment Differences in Group Sequential Longitudinal Studies with Covariate Adjustment	1072
A Multi-Source Adaptive Platform Design for Testing Sequential Combinatorial Therapeutic Strategies A.M. Kaizer, B.P. Hobbs, and J.S. Koopmeiners	1082
A Utility-Based Design for Randomized Comparative Trials with Ordinal Outcomes and Prognostic Subgroups	1095
New Semiparametric Method for Predicting High-Cost Patients	1104
An Approximate Joint Model for Multiple Paired Longitudinal Outcomes and Time-to-Event Data	1112
READER REACTION	
Reader Reaction on the Fast Small-Sample Kernel Independence Test for Microbiome Community-Level Association Analysis	1120
BOOK REVIEWS	1125