

November 14, 2017

Dr. A. C. Davison
Editor-in-Chief
Biometrika

Dear Dr. Davison,

Please find enclosed a copy of manuscript titled "A bivariate semiparametric stochastic mixed model" that Dr. Joel A. Dubin and myself would like to submit for consideration of publication in Biometrika.

In this manuscript, we propose a novel bivariate longitudinal model which assumes parametric covariate effects and nonparametric time courses and models within-subject and between-response correlation using a bivariate Gaussian field and random effects, respectively; and provides estimation procedures for all relevant model parameters and variance components. We believe this is an exciting new approach that could be of use in various applications in which bivariate longitudinal data arises.

We have not submitted the manuscript for publication elsewhere, and look forward to your review and comments.

Sincerely yours,

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