
Applied Longitudinal Analysis



Garrett M. Fitzmaurice
Nan M. Laird
James H. Ware

A rigorous, systematic presentation of modern longitudinal analysis

Fitzmaurice

Laird

Ware

Longitudinal studies, employing repeated measurement of subjects over time, play a prominent role in the health and medical sciences as well as in pharmaceutical studies. An important strategy in modern clinical research, they provide valuable insights into both the development and persistence of disease and those factors that can alter the course of disease development.

Written at a technical level suitable for researchers and graduate students, *Applied Longitudinal Analysis* provides a rigorous and comprehensive description of modern methods for analyzing longitudinal data. Focusing on General Linear and Mixed Effects Models for continuous responses, and extensions of Generalized Linear Models for discrete responses, the authors discuss in detail the relationships among these different models, including their underlying assumptions and relative merits. The book features:

- A focus on practical applications, utilizing a wide range of examples drawn from real-world studies
- Coverage of modern methods of regression analysis for correlated data
- Analyses utilizing SAS®
- Multiple exercises and “homework” problems for review

An accompanying Web site features twenty-five real data sets used throughout the text, in addition to programming statements and selected computer output for the examples.

GARRETT M. FITZMAURICE, ScD, is Associate Professor of Biostatistics at the Harvard School of Public Health.

NAN M. LAIRD, PhD, is Professor of Biostatistics at the Harvard School of Public Health.

JAMES H. WARE, PhD, is Frederick Mosteller Professor of Biostatistics and Dean for Academic Affairs at the Harvard School of Public Health.

All three authors are Fellows of the American Statistical Association and members of the International Statistical Institute.

Applied Longitudinal Analysis

Subscribe to our free Statistics eNewsletter at
www.wiley.com/enewsletters

Visit www.wiley.com/statistics

 **WILEY-
INTERSCIENCE**
wiley.com



WILEY
INTER-
SCIENCE