
2008 Summer Workshop Notice

Northeastern Illinois Chapter
American Statistical Association

DATE: Thursday June 05, 2008

Time: 8:30 – 4:40

LOCATION: Wyndham Glenview Suites, 1400 Milwaukee Ave. Glenview IL 60025

RESERVATIONS: Advance reservations are required and must be received by 4 PM May 29 2008. Cancellations cannot be accepted after this date, and "no shows" will be billed.

ATTIRE: Business Casual.

FEES:

	Session		NIC
	Member	Non-Member	Membership Only
Regular (Corp./Govt.)	\$150.00	\$160.00	\$10.00
Full-time Student	\$35.00	\$36.00	\$1.00

Since membership is held on a calendar year basis, if you have not expressly joined the Chapter this year, you should pay the non-member rate. Doing so will make you a member for 2008.

PAYMENT: Make checks payable to: Northeastern Illinois Chapter, ASA

REGISTRATION: Please mail, e-mail, or fax (no call-ins) the registration form to:

Zhen Zhao	Phone: (224) 554-6364
Takeda Global Research & Development	Fax: (224) 554-7861
One Takeda Parkway	Email: zzhao@tgrd.com
Deerfield, IL 60012	

NORTHEASTERN ILLINOIS CHAPTER MEETING REGISTRATION/MEMBERSHIP DUES

Name _____

Company _____ Department _____

Street Address _____ Work _____ Home _____

Telephone (____) _____ Work _____ Home _____ E-mail address _____

I will not be attending the meeting and am enclosing my _____ Membership Dues Only.

2008 NIC/ASA member prior to this registration? (See FEES for details) _____ Yes _____ No

Circle one of the following: (1) Regular (Corp./Govt.); (2) Academic (Univ./H.S.); (3) Full-Time Student

Tax Identification Number 52-1665956

DIRECTIONS TO THE MEETING

Location: Wyndham Glenview Suites
1400 Milwaukee Ave.
Glenview IL 60025

Hotel Web Site <http://www.wyndham.com/hotels/ORDGV/main.wnt>

Driving directions from O'Hare International Airport: Head east on I-190 and then north on I-294. Exit at Willow Rd. Turn left onto Sanders Rd and then left onto Milwaukee Ave. Proceed one mile to the hotel on the right.

Alternative directions can be obtained at www.mapquest.com.

Applied Longitudinal Analysis
A one-day workshop taught by
Garrett Fitzmaurice, ScD
ASA Fellow

About the workshop

Applied Longitudinal Analysis

The goal of this workshop is to provide an introduction to statistical methods for analyzing longitudinal data. The main emphasis is on the practical rather than the theoretical aspects of longitudinal analysis. The workshop begins with a review of established methods for analyzing longitudinal data when the response of interest is continuous. A general introduction to linear mixed effects models for continuous responses is presented. When the response of interest is categorical (e.g., binary or count data), a number of extensions of generalized linear models to longitudinal data have been proposed. We present a broad overview of two main types of models: "marginal models" and "generalized linear mixed models". While both classes of models account for the within-subject correlation among the repeated measures, they differ in approach. Moreover, these two classes of models have regression coefficients with quite distinct interpretations and address somewhat different questions regarding longitudinal change in the response. In this workshop we highlight the main distinctions between these two types of models and discuss the types of scientific questions addressed by each.

The presentation follows Chapters 1-2, 8, 10-13 of the textbook: Fitzmaurice, G.M., Laird, N.M. and Ware, J.H. (2004). *Applied Longitudinal Analysis* (Wiley Series in Probability and Statistics). **Attendees may purchase the textbook at a 20% discount (see attached flyer).** The textbook is not required for the workshop.

Who will benefit

The goal of this workshop is to provide an introduction to statistical methods for the analysis of longitudinal data at a level that is accessible to a broad audience of statisticians, graduate students, and researchers employed in academic settings, governmental agencies, non-governmental organizations, and the pharmaceutical industry. Attendees should have a strong background in linear regression and some minimal exposure to generalized linear models (e.g., logistic regression).

About the Instructor

Garrett Fitzmaurice is Associate Professor of Biostatistics at the Harvard School of Public Health, Associate Professor of Psychiatry (Biostatistics) at the Harvard Medical School and Foreign Adjunct Professor of Biostatistics at the Karolinska Institute, Sweden. He is a Fellow of the American Statistical Association and a member of the International Statistical Institute. He has served as Associate Editor for the *Journal of the Royal Statistical Society (Series B)*, *Biostatistics*, and *Biometrics*; currently, he is Statistics Editor for the journal *Nutrition*, Editor of the *Wiley Series in Probability and Statistics*, and Editor of the *Chapman & Hall/CRC Series of Handbooks of Modern Statistical Methods*. His research and teaching interests are in methods for analyzing longitudinal and repeated measures data. A major focus of his methodological research has been on the development of statistical methods for analyzing repeated binary data and for handling the problem of attrition in longitudinal studies. Much of his collaborative research has concentrated on applications to mental health research, broadly defined.

He is the co-author of a recently published textbook on "Applied Longitudinal Analysis" (Wiley, 2004) and co-editor of a new book "Longitudinal Data Analysis", to be published by Chapman & Hall/CRC in Spring 2008. He has taught several courses and workshops on this topic in universities as well as industry, both in the US and abroad. He received the 2006 award for *Excellence in Continuing Education* from the American Statistical Association for this tutorial presentation at the Joint Statistical Meetings.

Agenda and Workshop Content:

8:30-10:10 Linear Mixed Effects Models for Longitudinal Data

10:10-10:30 Refreshment Break

10:30-12:00 Extensions of Generalized Linear Models to Longitudinal Data (Part I)

12:00-1:00 Lunch Break

1:00-2:30 Extensions of Generalized Linear Models to Longitudinal Data (Part 2)

2:30-2:50 Refreshment Break

2:50-4:00 Contrasting Marginal and Mixed Effects Models for Longitudinal Data

4:00-4:20 Questions and Answers/Concluding Remarks