

2010 Bayesian Biostatistics
The University of Texas M. D. Anderson Cancer Center
<http://biostatistics.mdanderson.org/BBC2010>

Conference Program

Wednesday, January 27, 2010

Registration will open at 7:30 am on Wednesday, January 27, 2010.

7:30 am - 8:30 am Continental breakfast (provided)

Morning Session

8:30 am - 9:30 am **Short Course – Part I: Bayesian Computation and WinBUGS**
Gary L Rosner, ScD (M D Anderson Cancer Center)

9:30 am - 11:30 am **Short Course – Part II: Missing Data**
Michael J Daniels, ScD (University of Florida)

15-minute break at 10:30 am

11:30 am - 12:30 pm **Short Course – Part III: Bayesian Computation and WinBUGS**
Gary L Rosner, ScD (M D Anderson Cancer Center)

12:30 pm - 1:40 pm Lunch (on your own)

Afternoon Session

1:40 pm - 1:50 pm Welcome and Opening Remarks

1:50 pm - 3:00 pm **Keynote Address**
Chair: Donald A Berry, PhD (M D Anderson Cancer Center)

Speaker: Thomas A Louis, PhD (Johns Hopkins University)
Title: Why Bother with Bayes?

3:00 pm - 3:15 pm Break

3:15 pm - 4:45 pm **Case Study I: I-SPY2**
Organizer: Donald A Berry, PhD (M D Anderson Cancer Center)
Chair: Stacy R Lindborg, PhD (Eli Lilly and Company)

Speakers: Laura Esserman, MD (UCSF, I-SPY2 Principal Investigator)
and Donald A Berry, PhD (M D Anderson Cancer Center)
Title: I-SPY2: A Biomarker-driven, Adaptive Bayesian Phase II Drug-screening
Clinical Trial

Discussants: Paul Gallo, PhD (Novartis) and Scott S Emerson, MD, PhD (University of
Washington)

4:45 pm- 5:00 pm Break

Evening Session

5:00 pm - 9:00pm Welcome Reception, Panel Discussion and Poster Session
(Includes heavy hors d'oeuvres and cash bar)

(5:00 pm - 6:00 pm) Poster Session

(6:00 pm - 7:00 pm) Poster Discussion

(7:30 pm - 9:00 pm) Panel Discussion

Panel Discussion

Organizer: Andrew Mugglin, PhD (University of Minnesota) – Moderator

Panelists:

Donald A Berry, PhD (M D Anderson Cancer Center)
Scott S Emerson, MD, PhD (University of Washington)
Paul Gallo, PhD (Novartis)
Telba Irony, PhD (CDRH, FDA)
Thomas A Louis, PhD (Johns Hopkins University)
Sharon-Lise T Normand, PhD (Harvard University)
Barbara C Tilley, PhD (University of Texas Health Science Center)

Thursday, January 28, 2010

Registration will open at 8:00 am on Thursday, January 28, 2010

8:00 – 9:00 am Continental Breakfast (provided)

Morning Session

9:00 am - 10:30 am **Invited Session I: Bayesian Methods for Observational Data**
Organizers: Sharon-Lise T Normand, PhD (Harvard University) and Stacy R Lindborg, PhD (Eli Lilly); **Chair:** Sharon-Lise T Normand, PhD (Harvard University)

Speaker: A Lawrence Gould, PhD (Merck)
Title: Bayesian Methods, Data Sources, and FDRs in the Evaluation of Postmarketing Safety

Speaker: Roger Lewis, MD, PhD (UCLA)
Title: Application of Bayesian Concepts in Clinical Decision Making

Discussant: Karen L Price, PhD (Eli Lilly)

10:30 am - 10:45 am Break

10:45 am - 12:30 pm **Invited Session II: Bioinformatics**
Organizers: Keith A Baggerly, PhD and Jeffrey S Morris, PhD (M D Anderson)
Chairs: Keith A Baggerly, PhD and Jeffrey S Morris, PhD (M D Anderson)

Speaker: Giovanni Parmigiani, PhD (Harvard School of Public Health)
Title: TBA

Speaker: Michael A Newton, PhD (University of Wisconsin-Madison)
Title: TBA

12:30 pm - 1:30 pm

Lunch (on your own)

Afternoon Session

1:30 pm - 3:15 pm

Case Study II

Organizer & Chair: Kathryn Chaloner, PhD (University of Iowa)

Speakers: Rebecca Miksad, MD, MPH (Harvard University) and Mithat Gonen, PhD (Memorial Sloan-Kettering)

Title: Interpreting Trial Results in Light of Conflicting Evidence: A Bayesian Analysis of Adjuvant Chemotherapy for Non-Small-Cell Lung Cancer

Discussants: Frank E Harrell, Jr, PhD (Vanderbilt University)
and Barbara C Tilley, PhD (University of Texas Health Science Center)

Case Study III

Organizer & Chair: Kathryn Chaloner, PhD (University of Iowa)

Speaker: George G Woodworth, PhD (University of Iowa) and Lili Zhao, PhD (University of Michigan)

Title: Bayesian Decision Sequential Analysis with Survival Endpoint in Phase II Clinical Trials

Discussants: Frank E Harrell, Jr, PhD (Vanderbilt University)
and Barbara C Tilley, PhD (University of Texas Health Science Center)

3:15 pm - 3:30 pm

Break

3:30 pm - 5:30 pm

Contributed Session I

Chair: Keith A Baggerly, PhD (M D Anderson Cancer Center)

(3:30 pm – 3:45 pm)

Speaker: Richard J Swartz, PhD (M D Anderson Cancer Center)

Title: Bayesian Adaptive Sequential Item Selection (BASIS): Applying Bayesian Decision Theory to Computerized Adaptive Testing

(3:45 pm – 4:00 pm)

Speaker: Yeonseung Chung, PhD (Harvard University School of Public Health)

Title: Semiparametric Bayes Variable Selection for Longitudinal Data

(4:00 pm – 4:15 pm)

Speaker: Kaushik Ghosh, PhD (University of Nevada at Las Vegas)

Title: Some Semiparametric Bayesian Techniques Useful in Cancer Surveillance

(4:15 pm – 4:30 pm)

Speaker: Mengye Guo, PhD (Harvard University and Dana-Farber Cancer Institute)

Title: Multiplicity-Calibrated Bayesian Hypothesis Tests

(4:30 pm – 4:45 pm)

Speaker: Sujit K. Ghosh, PhD (NC State University)

Title: Adaptive Bayesian Methods for Non-Inferiority Tests and Their Implications for Sample Size Calculations

(4:45 pm – 5:00 pm) **Q&A**

Friday, January 29, 2010

7:00 am - 8:00 am Continental breakfast (provided)

Morning Session

8:00 am - 9:30 am **Contributed Session II**
Chair: Telba Z Irony, PhD (CDHR, FDA)

(8:00 am – 8:15 am) **Speaker:** Thomas M. Braun, PhD (University of Michigan)
Title: A Hierarchical Bayesian Design for Phase I Trials of Novel Combinations of Cancer Therapeutic Agents

(8:15 am – 8:30 am) **Speaker:** Haoda Fu, PhD (Eli Lilly and Company)
Title: ITP (Integrated Two-Component Prediction) Model in Bayesian Biostatistics

(8:30 am – 8:45 am) **Speaker:** Xuelin Huang, PhD (M D Anderson Cancer Center)
Title: Control Covariate Imbalance in Clinical Trials with Response-Adaptive Randomization

(8:45 am – 9:00 am) **Speaker:** Corwin M. Zigler, PhD (UCLA School of Public Health)
Title: Principal Stratification for Evaluation of Surrogate Endpoints with Varying Control-Group Response

(9:00 am – 9:15 am) **Speaker:** Samer A. Kharroubi, PhD (University of York, United Kingdom)
Title: A Comparison of United States and United Kingdom EQ-5D Health States Valuations Using a Nonparametric Bayesian Method

(9:15 am – 9:30 am) **Q&A**

9:30 am - 9:35 am Break

9:35 am - 11:05 am **Invited Session III: Clinical Trials**
Organizers: Donald A Berry, PhD (M D Anderson) and Kathryn Chaloner, PhD (University of Iowa); **Chair:** Stacy R Lindborg, PhD (Eli Lilly)

Speaker: J Jack Lee, PhD (M D Anderson Cancer Center)
Title: TBA

Speaker: Scott Berry, PhD (Berry Consultants)
Title: TBA

Discussants: Telba Z Irony, PhD (CDHR, FDA) and Kathryn Chaloner, PhD (University of Iowa)

11:05 am - 11:15 am Closing remarks