BIOGRAPHICAL SKETCH

Provide the following information for the key personnel and other significant contributors in the order listed on Form Page 2.
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NAME	POSITION TITLE
Kathryn Chaloner	Professor and Head, Department of Biostatistics
eRA COMMONS USER NAME (credential, e.g., agency login) kathryn-chaloner	

EDUCATION/TRAINING *(Begin with baccalaureate or other initial professional education, such as nursing, and include postdoctoral training.)*

INSTITUTION AND LOCATION	DEGREE *(if applicable)*	YEAR(s)	FIELD OF STUDY
Somerville College, Oxford University (UK)	BA	1972-75	Mathematics (hons)
University College, London University (UK)	MSc	1975-76	Statistics (Distinction)
Carnegie-Mellon University	PhD	1978-82	Statistics

A. Positions and Honors.

Professional Experience

1982-88 Assistant Professor, School of Statistics University of Minnesota
1988-96 Associate Professor, School of Statistics University of Minnesota
1996-2002 Professor, School of Statistics University of Minnesota
2002- Professor and Head, Department of Biostatistics University of Iowa
2002- Professor, Dept of Statistics and Actuarial Science (Secondary) University of Iowa

Other Experience and Professional Memberships

1992-95 *Journal of Statistical Planning and Inference*; Associate Editor
1992-95 *Technometrics*; Associate Editor
1993-95 *Journal of American Statistical Association*; Associate Editor
1999-2000 *Biometrics*; Associate Editor

Honors
1994 Elected Fellow of the American Statistical Association
1995 Elected Fellow of the International Statistical Institute
2003 Elected Fellow of the American Association for the Advancement of Science

B. Selected peer -reviewed publications.

1. Chaloner K. Optimal Bayesian experimental design for linear models. Annals of Statistics 12:283-300, 1984.
2. Chaloner K. A Bayesian approach to the estimation of variance components for the unbalanced one-way random model. Technometrics 29:322-337, 1987.
3. Chaloner K, Larntz K. Optimal Bayesian design applied to logistic regression experiments. Journal of Statistical Planning and Inference 21:191-208, 1989.
4. Chaloner K. Bayesian residual analysis in the presence of censoring. Biometrika 78:637-644, 1991.
5. Chaloner K, Larntz K. Optimal Bayesian design for accelerated life testing experiments. Journal of Statistical Planning and Inference 33:245-259, 1992.
6. Atkinson AC, Chaloner K, Herzberg AM, Juritz J. Optimal experiment design for properties of a compartmental model. Biometrics 49:325-337, 1993.
7. Chaloner K. A note on Bayesian optimal design for nonlinear problems. J Stat Plan & Inf 37:229-235, 1993.
8. Chaloner KM, Church T, Matts, JP, Louis TA. Graphical elicitation of a prior distribution for a clinical trial. The Statistician 42:341-353, 1993.
9. Carlin B, Chaloner KM, Church T, Matts JP, Louis TA. Bayesian approaches for monitoring clinical trials with an application to Toxoplasmic encephalitis prophylaxis. The Statistician 42:355-367, 1993.

10. Gjerdingen DK, Chaloner K. Mothers' experiences with household roles and social support during the first postpartum year. Women and Health 21(4):57-74, 1994.
11. Gjerdingen DK, Chaloner K. The relationship of women's postpartum mental health to employment, childbirth and social support. Journal of Family Practice 38:465-472, 1994.
12. Chaloner K, Verdinelli I. Bayesian experimental design: a review. Statistical Science 10:273-304, 1995.
13. Carlin BP, Chaloner KM, Louis TA, Rhame FS. Elicitation, monitoring and analysis for an AIDS clinical trial (with discussion). Case Studies in Bayesian Statistics, 2, eds. Gatsonis C, et al eds, Springer-Verlag, New York, 48-89, 1995.
14. Clyde MA, Chaloner K. The equivalence of constrained and weighted designs in multiple objective design problems. Journal of the American Statistical Association 91:1236-1244, 1996.
15. Gjerdingen DK, Ireland M, Chaloner K. Growth of Hmong Children. Archives of Pediatric and Adolescent Medicine 150:1295-1298, 1996.
16. Gjerdingen DK, Tran D, Chaloner K. Shorter Ultrasonic femur lengths in Hmong fetuses. International Journal of Gynecology and Obstetrics 63:191-193, 1998.
17. Shlay J, Chaloner K, Max M, Flaws B, Reichelderfer P, Wentworth D, Hillman S, Brizz B, Cohn D, for the Community Program for Clinical Research in AIDS. A randomized placebo controlled trial of a standardized acupuncture regimen, and amitriptyline, for pain caused by HIV-related peripheral neuropathy. Journal of the American Medical Association 280:1590-1595, 1998.
18. Gjerdingen DK, Neff JA, Wang M, Chaloner K. Older persons' opinions about life-sustaining procedures in the face of dementia. Archives of Family Medicine 8:421-425, 1999.
19. Agin M, Chaloner K. Optimal Bayesian design for a logistic regression model: geometric and algebraic approaches. *Multivariate Analysis, Design of Experiments and Survey Sampling*, edited by Ghosh S, Dekker M, New York, 609-624, 1999.
20. Fan S, Chaloner K. Optimal Designs for a Continuation-ratio Model. *Model Oriented Data Analysis 6*. Atkinson AC, Hackl P, Muller WG, Physica, Heidelberg (eds), 77-85, 2001.
21. Tsai C, Chaloner K. Using prior opinions to examine sample size in a clinical trial: two examples. *Case Studies in Bayesian Statistics 5*, Kass RE, et al (eds), Springer-Verlag, New York, 409-423, 2002.
22. Han C, Chaloner K and Perelson AS. Bayesian analysis of a population HIV dynamic model. *Case Studies in Bayesian Statistics 6*, Gatsonis C, et al (eds), Springer-Verlag, New York, p. 223-237, 2002.
23. Chaloner K, Rhame FS. Quantifying and documenting prior beliefs in clinical trials. Statistics in Medicine 20:581-600, 2001.
24. Fisher EJ, Chaloner K, Cohn DL, Grant LB, Alston B, Brosgart CL, Schmetter B, El-Sadr W, Sampson J, for the Terry Beirn Community Programs for Clinical Research on AIDS. The safety and efficacy of adefovir dipivoxil in patients with advanced HIV disease: a randomized, placebo-controlled trial. AIDS 15(13):1695-700, 2001.
25. Clyde MA and Chaloner K. Constrained design strategies for improving normal approximations in nonlinear regression problems. Journal of Statistical Planning and Inference 104:175-196, 2002.
26. Fan SK and Chaloner K. A geometric method for singular c-optimal designs. Journal of Statistical Planning and Inference 113:249-257, 2003.
27. Han C and Chaloner K. D-and c-optimal designs for exponential regression models used in pharmacokinetics and viral dynamics. Journal of Statistical Planning and Inference 115:585-601, 2003.
28. Han C and Chaloner K. Bayesian experimental design for nonlinear mixed-effects models with application to HIV dynamics. Biometrics 60:25-33, 2004.
29. Han C and Chaloner K. A note on optimal design for two or more treatment groups. Statistics and Probability Letters 69:81-89, 2004.
30. Fan S and Chaloner K. Optimal designs and limiting optimal designs for a trinomial response. Journal of Statistical Planning and Inference 126:347-360, 2004.
31. Stapleton JT and Chaloner K. Correspondence. GB virus C and survival in HIV-positive people (Letter to Editor). AIDS 18(17):2343-4, 2004. [Response to: "GB virus C during the natural course of HIV-1 infection: viremia at diagnosis does not predict mortality", by Bjorkman et al. AIDS 18:1-12, 2004.]
32. Han C and Chaloner K. Design of Population Studies of HIV Dynamics. *In*: Deterministic and Stochastic Models of AIDS Epidemics and HIV Infections with Intervention. Tan W-Y and Wu H (eds). World Scientific Publishing Company, p. 525-547, 2005.

33. Souza IE, Zhang W, Diaz RS, Chaloner K, Klinzman D, Stapleton JT. Effect of GB virus C on response to antiretroviral therapy in HIV infected Brazilians. HIV Medicine 7:25-31, 2006.
34. Zhang W, Chaloner K, Tillmann H, Williams C, Stapleton J. Effect of early and late G virus C viraemia on survival of HIV-infected individuals: a meta-analysis. HIV Med 7(3):173-180, 2006.
35. Chen C and Chaloner K. A Bayesian stopping rule for a single arm study: with a case study of stem cell transplantation. Statistics in Medicine 25:2956-2966, 2006.
36. Souza IE, Allen JB, Xiang J, Klinzman D, Diaz R, Zhang S, Chaloner K, Zdunek D, Hess G, Williams F, Benning L and Stapleton JT. Effect of primer selection on estimates of GB virus C (GBV-C) prevalence and response to antiretroviral therapy for optimal testing for GBV-C viremia. Journal of Clinical Microbiology, 44(9): 3105-3113, 2006.
37. Zhang W, Chaloner K, Cowles MK, Zhang Y, Stapleton JT. A Bayesian analysis of doubly censored data using a hierarchical Cox model. Stat Med 27:529-542, 2008.
38. Zhang W, Zhang Y, Chaloner K, Stapleton JT. Imputation Methods for Doubly Censored HIV Data. In press, Journal of Statistical Computation and Simulation.
39. Stapleton JT, Chaloner K, Zhang J, Klinzman D, Souza IE, Landay A, Fahey J, Pollard R, Mitsuyasu R. GBV-C viremia is associated with reduced CD4 expansion in HIV-infected people receiving HAART and interleukin-2 therapy. In press, AIDS. [AIDS 2009 Jan 31 Epub ahead of print].

C. Research Support.
Ongoing Research Support

N01-AI-30040 Apicella, Michael A. (PI) 12/1/07-7/31/10
NIH
Basic and Clinical Approaches to Controlling Human
Respiratory Pathogens (P. Winokur, Project PI)
Role: Co-Principal Investigator

1 U01 DK070431 Clarke, William R. (PI)
National Institute of Health 9/30/04-7/31/09
Clinical Islet Transplantation: Data Coordinating Center
Role: Co-PI
The CTSDMC will work with the study clinical centers and the NIH to develop and execute important clinical investigations to help address the consortium's goals to develop and execute important mechanistic and clinical investigations to understand and improve islet cell transplantation in patients with type I diabetes.

1 T32 GM077973 Chaloner, Kathryn (PI)

National Institute of Health/NIGMS 8/1/06-6/30/11
Statistics in Microbiology, Infectious Diseases & Bioinformatics
Role: PI
The goal of this training program is to train biostatisticians to take a leadership role in developing new interdisciplinary scientific research. This will be achieved by providing rigorous training in the disciplines of statistics and microbiology, and also providing interdisciplinary training in bioinformatics. This training program will provide a structure that will strengthen existing collaborations, and train a new generation of biostatisticians to advance biomedical and clinical research.

NIH 1 P01 HL091842 Welsh, Michael (PI)
National Institute of Health 9/1/08-7/31/13
Airway Physiology and Pathophysiology in a Porcine CF Model
Role: Co-Investigator
Controversies surround the pathogenesis of airway disease, current treatments are inadequate, and cystic (CF) remains a lethal disease. A major impediment to progress has been lack of a CF animal model other than the mouse. We disrupted the CFTR gene in the pig, whose lungs resemble those of humans. In these projects, we will discover how loss of CFTR causes airway epithelial and submucosal gland dysfunction and how that contributes to airway inflammation and infection in the pig model.

5 UL1 RR024979-02 Hunninghake, Gary (PI)
National Institute of Health 09/17/07-05/31/12
Institute for Clinical & Translational Science
Role: Co-Investigator, Biostatistician
Biostatistical expertise for the University of Iowa Clinical and Translational Science Program.

Pending:

None