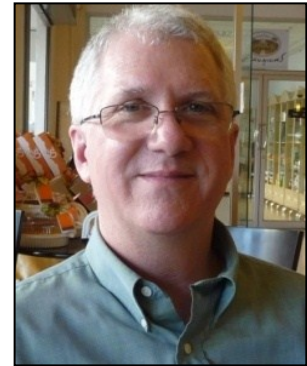


## Dr. Timothy E. O'Brien

**Professor and Graduate Program Director  
Department of Mathematics and Statistics  
Loyola University Chicago**

1032 W. Sheridan Road  
Loyola University Chicago  
Chicago, Illinois 60660-1537  
Email: [tobrie1@luc.edu](mailto:tobrie1@luc.edu)



**Biosketch:** Dr. O'Brien obtained his Ph.D. in Statistics from North Carolina State University, and he now serves as Professor and Graduate Program Director of the Applied Statistics program at Loyola University Chicago as well as campus-wide and external statistical consultant. He was a post-doctoral researcher at the Institut National de la Recherche Agronomique (France) and at the Universität Augsburg (Germany) as a part of the National Science Foundation's Postdoctoral Research program. In addition to conducting research in efficient experimental design strategies, he also teaches short courses worldwide on statistical consulting, design, and modeling, and frequently teaches statistical concepts to non-technical audiences. At Loyola, Dr. O'Brien helped establish the undergraduate Bioinformatics program, and was co-PI on an NSF grant to fund undergraduate research in bioinformatics and computational genomics. He has won numerous teaching awards, and has held Visiting Professorship positions internationally. Dr. O'Brien is a Returned Peace Corps Volunteer from Benin, West Africa, where he taught Mathematics (in French), and has thrice received William J. Fulbright scholarships at Chiang Mai University in Thailand and Kathmandu University in Nepal. Additionally, he has studied, taught or conducted research in approximately thirty countries outside the U.S., and regularly provides technical assistance to researchers at U.S. and international universities and organizations including Partners in Health, Statisticians without Borders, and the Infectious Disease Institute in Kampala, Uganda.

**Expertise:** Dr. O'Brien's expertise lies in statistical consulting, in statistical design, and modeling of systems (e.g., in environmental science and climate change, global and public health, etc.). In addition to teaching statistical concepts to diverse groups and non-technical individuals, he has also spent much of his career engaged in statistical consulting – with scientists and engineers, medical and environmental researchers, social scientists, decision- and policy-makers. He has been a post-doc or visiting professor in Belgium, France, Germany, South Africa, and Thailand. During his two Fulbright scholarships at Chiang Mai University, Dr. O'Brien founded and lead a campus-wide statistical consulting center (2006-7) and engaged in extensive training and consulting collaborations at Chiang Mai University's Faculty of Medicine (Summer 2010).

**Contributions during Jefferson Year:** During his 2011-12 fellowship, Dr. O'Brien worked under the Department of State at the U.S. Agency for International Development Office of Health, Infectious Disease and Nutrition, Bureau of Global Health (GH/HIDN) and Global Climate Change, Bureau of Economic Growth, Education, and Environment (E3/GCC). Specifically, Tim worked with the Office of Health, Infectious Disease and Nutrition in assessing the impact of various global health interventions, notably clean cookstoves, the President's Malaria Initiative, tuberculosis, maternal and child health, nutrition, and in the larger domain of monitoring and evaluation. Evaluation in these projects has proved challenging since data are limited and since interventions often occur simultaneously, and can be accomplished using mathematical modelling methods or casual modelling techniques. These models have also been used to make predictions of various scenarios, and have been extended to incorporate geographic (GIS) and meteorological data, and Dr. O'Brien's application has made a significant impact on the Agency's evaluation and assessment programs. Tim also became involved in assessing whether global health interventions are robust to the effects of climate change, including working on a related project at the AID mission in Rabat Morocco through the Embassy Science Fellow program.