

Position Announcement

**Postdoctoral Position at University of California, Berkeley
“Practical Tools for Multilevel/Hierarchical Modeling”**

The Graduate School of Education (GSE) at the University of California, Berkeley, is seeking a fulltime postdoctoral fellow to work with Sophia Rabe-Hesketh in the Quantitative Methods and Evaluation (QME) Program. The position is funded by a joint grant with Andrew Gelman and Jingchen Liu at Columbia University, entitled “Practical Tools for Multilevel/Hierarchical Modeling in Education” (from the Institute of Education Sciences, Department of Education).

The project addresses the problem that (restricted) maximum likelihood estimation of multilevel/hierarchical models often yields estimates on the boundary, such as zero variances or perfect correlations. The proposed solution is to specify weakly informative prior distributions – that is, prior distributions that will affect inferences only when the data provide little information about the parameters. Existing software for maximum likelihood estimation will be modified to perform Bayes posterior modal estimation with such weakly informative priors. The Berkeley team will implement the methods in Stata, whereas the Columbia team, including a postdoc to be recruited there, will implement the methods in R.

The Berkeley postdoc will contribute to all aspects of this research, including model specification, programming in Stata, simulations, presentations at conferences, and publications. The Berkeley and Columbia groups will communicate with each other on a regular basis (funding is available for mutual visits), and there will be annual workshops with outside panels of experts.

Applicants should have a Ph.D. in Statistics or a related area and have strong programming skills, preferably with some experience in Stata. Experience with multilevel modeling and/or Bayesian methods would be a great advantage.

The expected duration of the fellowships is 2 ½ years with an approximate start date of September 1, 2010. The annual salary is \$49,452, with health insurance and an allowance for travel and research support.

Please submit a statement of interest, not exceeding 5 pages, and your CV to:

Vicki Savitt
Graduate School of Education
1501 Tolman Hall
University of California,
Berkeley, CA 94720-1670,
dvs@berkeley.edu

by a postdate of **April 15, 2010**.