Science-related Research Projects
Paula E. Stephan

- Issues related to foreign-born scientists and engineers trained in the United States. Work includes studying the country of origin of Ph.D. recipients, especially recipients who are not citizens at the time of graduation. Data for this work comes from the Survey of Earned Doctorates. This work, and other work that Stephan and coauthors have done on the foreign-born and foreign-educated in science and engineering, can be found on
http://www.gsu.edu/%7Eecopes/foreignscientists/index.htm

- The role that new doctorates play in transmitting knowledge. This line of research analyzes data that Stephan and coauthors have developed from the Survey of Earned Doctorates concerning the placement of new Ph.D.s at firms in the United States. To the best of our knowledge, this is the first study that examines firm placements of Ph.D.s being awarded and uses the placement measure to examine the degree to which knowledge spillovers, embodied in new graduates, are geographically bounded.

- Factors that affect the duration of time spent in the postdoctoral appointments. This work proposes to estimate a hazard model of duration for individuals holding one or more postdoctoral positions. We focus on duration because it is a fundamental characteristic of the postdoctoral market that has changed substantially in recent years and because lengthening duration contributes significantly to the dissatisfaction associated with the postdoctoral position and the resulting pressure on the research enterprise to "solve" the postdoc crisis in the U.S. The work is joint with Jennifer Ma of the TIAA-CREF Institute.

- The degree to which patents and publications are substitutes or complements among university research faculty. The research uses micro-level data to estimate patent equations and determine the elasticity of patenting with regard to publishing.

- Bioinformatics. This work, which is joint with Grant Black, is surveying bioinformatics programs at universities in the United States concerning their programs and placement outcomes of their students. The work is a follow-up to work that Black and Stephan did several years ago and which can be found at
http://www.gsu.edu/%7Eecopes/reports/adtable.htm
http://www.gsu.edu/%7Eecopes/reports/sloan_b1999-12.pdf
The work is supported by a grant from the Alfred P. Sloan Foundation.

- Retention of women and minorities in the IT workforce. This work uses the SESTAT database to examine patterns of retention and recruitment of women and minorities into the IT workforce. The work, which is joint with Sharon Levin, uses longitudinal data to determine if individuals working in IT in 1993 remain in IT in 1999. Conversely, we examine factors that lead individuals not working in IT in 1993 to move into an IT occupation by 1999. See for a discussion:
http://www.gsu.edu/%7Eecopes/itworkforce/index.htm