Name: Paul Glavin
Faculty/Area: Social Sciences / Sociology
Project title: Training in Advanced Quantitative Methods for Improving Faculty Research and Graduate Teaching

Please summarize how the FWI funds have been spent:
A summary by broad category is sufficient, line by line accounting of individual expenditures is not required unless specifically requested.
Alternatively, please provide a copy of your FAS for the accounts that have been used for the FWI funds.
Salaries and benefits:
Equipment:
Event Costs: Statistical Horizons SEM workshop $895
Travel: Return Air Ticket: Toronto – Los Angeles $908.30
Other (please specify): Hotel Cost (3 nights) $807

Balance remaining: $0
Please submit separately a maximum 2-page summary of the results of the project with particular attention to:

I requested FWI funds to undertake advanced quantitative training as part of a *faculty professional development* project. Attending the 2-day training seminar on structural equation modelling (SEM) has broadened my statistical knowledge and expertise. I am currently awaiting access to recently collected survey panel data from a CIHR-funded project that I am currently a co-investigator on. My new skills in SEM will allow me to test more complex theories of the social psychological connections between contemporary work conditions and worker health—one of my substantive research specializations. In particular, SEM will allow me to test for a reciprocal relationship between perceived job insecurity and mental health—a topic I have published frequently on, but have lacked the appropriate data and skills with which to truly test for reciprocal causation. I intend to publish a research article that addresses this issue—something that will represent a major contribution to the research literature on this subject.

In the fall of 2015, I will begin to train two graduate students in the fundamentals of SEM. Both students have research interests that can be enhanced with the use of SEM and panel data analysis techniques. Given the complexity of SEM techniques, this training will focus on providing the graduate students with a general knowledge of SEM, along with information about how it can be leveraged to answer their specific research questions.

The family of SEM techniques that I was introduced to as part of the training course turned out to be deeper and more complex than anticipated. It will therefore take a little longer for me to use my acquired skills to produce a piece of publishable research. I anticipate beginning this research paper in the winter of 2016, and submitting to a journal by the fall of 2016.

The immediate value of the training has been to widen my knowledge of advanced statistical techniques. This knowledge has allowed me to better advise prospective graduate students on additional analytical techniques that they might pursue as part of their dissertation projects. I also intend to provide an overview of the technique in an advanced quantitative course (SOC740) taught in the Sociology department this fall by Dr. Marisa Young. This lecture will introduce graduate students to the opportunities associated with using SEM techniques.