

FGIC Report Revision and Update for web distribution

I was awarded a Faculty Grant for International Connections in the summer of 2011. The primary goal of the funded trip was to visit the laboratory of Dr. Rudolf Rübsamen at the University of Leipzig, Germany. Dr. Rübsamen and I had worked collaboratively for a short period several years ago. Dr. Rübsamen is widely known in auditory neuroscience for pioneering a computational method for distinguishing electrical activity derived from both pre- and postsynaptic elements of synapses in the vertebrate brain. Our original project together centered on collecting neurophysiological data for analysis with these methods. My aim for the trip was to reestablish our cooperative work. I traveled to Leipzig and spent three weeks working in Dr. Rübsamen's laboratory. I invested significant time there learning and using the software developed in his lab to analyze the data that we had collected. Additionally, I gave a lecture to his department "*The role of feedback inhibition in sound localization circuitry of birds.*" I also informally advised his students on their neurophysiology projects. However, the most significant benefit of this visit to my career was to attract a Ph.D. student from Leipzig to work in my laboratory. Jana Nerlich visited my lab for a total of 5 months in 2012-13. Her visit to Lehigh was partially funded by the German Academic Exchange and partially by my laboratory. She has already greatly impacted the work of my existing students through her insights and suggestions. Our collaborative work will be submitted to *Frontiers in Neural Circuits* for publication, a high impact journal in the neurosciences. The FGIC grant was instrumental in opening this conduit through which both laboratories can benefit from exchange of talent and ideas. I think that the FGIC grant program is an excellent mechanism to enhance scholarly and educational portfolios of our faculty. I am grateful for having had the opportunity to travel to Germany, and by doing so, having strengthened my research program at Lehigh.