FWI Funding Statement

Name: Dr. Judith M Shedden (Science) & Dr. Catherine E Connelly (Business)
Faculty/Area: Faculty of Science (Psychology, Neuroscience & Behaviour) and Faculty of Business (Organizational Behaviour)
Project title: Improving interdisciplinary collaboration: Effective use of web-based communication tools

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: $3790.58
Equipment: $684.42
Event Costs:
Other (please specify): $525.00
Balance remaining: 0
Please indicate how the balance will be spent and when you anticipate that the funds will be exhausted.

The Faculty of Science and the Faculty of Business matched the FWI funding with $2500 each, bringing the total to $10,000. We were able to fund student researchers (salaries and benefits) an additional $5000 for programming and image processing.

The financial and project reports can be submitted to fwi@mcmaster.ca.
Please submit separately a maximum 2-page summary of the results of the project with particular attention to the following details:

This project has fostered collaboration between Neuroscience and Business, and has attracted many students. The work is ongoing; even though the funds have been spent, the interest of the students in this project is high. We have new students joining the project for the 2015-2016 term. We describe their involvement below.

Nicole LeBarr (PhD student) is the graduate student mentor for the undergraduate projects described here. She continues to be involved in all of the projects.

Joey Legere (PNB 2QQ3 research project, PNB 3QQ3 research project, Honours Thesis, research assistant). Joey has presented his honours thesis work at the PNB conference, and has recently presented a poster at a National conference. He continues to be a valued member of the team. We are recruiting him as a MSc student beginning 2016. He has also joined the Connelly Laboratory on Organizational Behavior Research, where he provides specialised expertise related to the measurement and analysis of objective stress measures.


Ksenia Gueletina (PNB 2QQ3 research project, PNB 3QQ3 research project, Honours thesis). Ksenia has explored new methods of data analysis that we are adapting for all the branches of this research project. Honours Thesis Title: Camera angle as a modulator of first impressions in online job interviews.

Mahyar Garmsiri (PNB 2QQ3 research project, PNB 4QQ3 research project, Honours thesis): Honours Thesis Title: Influence of eye contact on hireability in online interviews.

Kyle Comishen (Honours thesis): Kyle was attracted to the project when he saw Joey Legere’s honours thesis poster displayed in the hallway of the research wing in PNB. He joined the group and expanded the research to look at synchronization between visual and audio cues. Honours Thesis Title: Effect of Audiovisual Asynchrony on Social Perceptions in Video Communications

Shahan Tariq (PNB 2QQ3 research project, PNB 3QQ3 research project). Shahan was involved at the early stages of the project. He assisted with a literature search, experimental design, and testing of scripts for the online job interview videos.

Lorenzo Rosas (Honours thesis): NSERC USRA (summer 2015), and honours thesis (2015-2016). Lorenzo is working on video processing to further develop our stimulus set, and is designing new experiments to be implemented in September.

1. How has the project fostered collaboration and interdisciplinarity?

This project has brought together researchers and students in neuroscience with a researcher in business to address questions about effective online communication, which is becoming a necessity for interdisciplinary collaboration in the digital age. The students have created a fantastic video library of controlled interview material, using professional student actors, tested scripts, and multiple camera angles. This set of versatile stimuli
will be used for years to answer a multitude of research questions. This planning and execution have been made possible via expertise from neuroscience, media science, and organizational behavior.

a. Have other projects been initiated as a result of this project?
This collaboration has inspired a further collaboration between neuroscience and business, as Connelly (Business) is now setting up a new research program using physiological measures. Joey Legere, a neuroscience student in Shedden’s lab who has been a key person on the FWI project from the beginning, is assisting with training business students to use the equipment, and to collect and analyze physiological data. We plan to share our video library with other researchers in Canada and beyond, to foster further collaborations and extended research projects. We have recruited several students (graduate and undergraduate) who are working on different facets of the project. Some have completed their studies and other projects are ongoing in 2015-2016.

2. How has the project exposed students to new or emerging research?
The students themselves have been instrumental in developing this new line of research, designing experiments, designing, creating, and testing video stimuli that will be used in different ways for years to study online communication. They have been hands-on in developing new analysis techniques.

3. How has the project offered students an experience beyond traditional borders?
The collaboration between neuroscience and business has given the students a different focus than they would have had otherwise. We approach the issues of communication from a cognitive-neuroscience perspective, but with the practical, applied perspective that is provided from the business focus.

4. How has the project challenged the confines of existing programming and advanced new paradigms of research or education?
This kind of collaboration is outside of the opportunities that were available to these students without the FWI project. It has provided a bridge for these students. Joey Legere is a very good example. He is not only continuing to work on the FWI project, but he is also working on advanced programming for other neuroscience projects in PNB, as well as providing training on physiology data acquisition and analysis for business students. This link would not have been likely without the FWI investment.

5. How will the outcomes of the project be sustained or expanded?
We have new students interested in carrying on the research in 2015-2016. The students who started the project (Joey, Ksenia, Mahyar, Nicole) have all expressed interest in continuing to be involved in this research. New students (Kyle) have joined this year, and other students (Lorenzo) have joined this summer and will continue in 2015-2016. Lorenzo won a summer NSERC USRA based on his excellent work as an undergraduate and a proposal extending the online collaboration work. We are applying for a SSHRC Insight Development grant in the winter term 2016. Our research proposal will be based on the data collected by the students over the last two years.

6. Please outline any barriers or challenges that may have prevented you from achieving some of your project goals.
Creating the video stimuli was much more challenging that we ever imagined. Our goal is to create a research environment that is close to a real-life situation (e.g., online job interview), but in a way that lets us control as many variables as possible. This required pre-testing scripts, hiring actors, having the actors memorize and deliver lines in a natural way, dealing with technical issues, and finally dealing with massive amounts of video data and video processing. This has been incredibly positive, creating a stimulus set that is likely unique, but at the same time the process has taken more resources than we expected.