



## Recent Queen's Psychology PhD graduates awarded SSHRC Postdoctoral Fellowships

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Congratulations to recent Queen's Psychology PhD graduates **Anja-Xiaoxing Cui, Haykaz Mangardich** and **Jackie Huberman** on all recently being awarded SSHRC Postdoctoral Fellowships!

According to the Social Sciences and Humanities Research Council (SSHRC) website, SSHRC Postdoctoral Fellowships support the most promising Canadian new scholars in the social sciences and humanities, and assist them in establishing a research base at an important time in their research careers. The purpose of these fellowships is to provide stipendiary support to recent PhD graduates who are undertaking original research, publishing research findings, developing and expanding personal research networks, broadening their teaching experience, preparing for research-intensive careers within and beyond academia, and preparing to become competitive in national research grant competitions. The students were in the same SSHRC competition where out of 87 applicants, they received 3 of the 19 awards.

During their PhD studies, Anja, Haykaz, and Jackie worked in the Queen's Biological Communication Centre (QBCC), a shared research facility in the Department of Psychology, where they used electroencephalography (EEG) for their research. Anja recalls that, "through using the EEG I came to work closely with Jackie and Haykaz, who were using the EEG equipment at the QBCC as well. Even though we all worked with different supervisors it felt a little bit like we were labmates!" Anja says the three encouraged each other while they were

putting together their respective SSHRC Postdoctoral Fellowship applications, so receiving her award together with Jackie and Haykaz has meant a great deal to her personally. “And now Haykaz and I will be labmates, so I am very excited about that, too!”

All three are continuing their post-doctoral work in different directions. Anja and Haykaz are at the University of British Columbia, and Jackie is at Dalhousie University in Halifax, Nova Scotia.

**ANJA-XIAOXING CUI** - As a PhD student at Queen's Anja investigated how we learn about new music. Anja's Queen's Psychology supervisors Dr. Lola Cuddy and Dr. Niko Troje helped her formulate her plan to study this topic, and through the QBCC she had the opportunity to work with Dr. Mark Sabbagh, and to use EEG as part of her project.

Continuing her lifelong interest in the intersection of music and learning, Anja is now looking at this from another angle: how we learn through learning music. Anja is studying this topic now at the University of British Columbia as part of a bigger team working on the Peter Wall Opera Project. Anja works closely with Drs. Janet Werker and Lara Boyd, and she is also being supervised by Dr. Rachel Weber and Prof. Nancy Hermiston. Together they want to answer questions about the brain mechanisms underlying transfer learning through intensive music, and more specifically, intensive opera training.

“The SSHRC Post-doctoral Fellowship will allow me to really dedicate the time and resources that I think this research question deserves”, Anja explains.

**HAYKAZ MANGARDICH** - Haykaz worked with Dr. Mark Sabbagh in the Early Experience Lab to study how young children rapidly learn new words in different social contexts. His PhD research used brain electrophysiology (EEG/ERP) to show that 4-year-olds establish semantic representations for new word-object pairs trained in a computer task. “Conducting this research in the QBCC EEG suite allowed me to collaborate with colleagues in different areas of psychology such as developmental, clinical, and cognitive neuroscience”, Haykaz says. “Through collaboration with Anja and Jackie in the QBCC, we have all developed a greater understanding about the EEG/ERP methodology”.

“The SSHRC Post-doctoral Fellowship will allow me to continue my research program and develop new exciting research streams focusing on infants' language development,” Haykaz says. “I am grateful for the opportunity and resources for research training the Post-doctoral Fellowship provides and am also very grateful for all the support I've received from my colleagues at Queen's throughout my graduate studies!”

Haykaz is now working with Dr. Janet Werker at the Infant Studies Centre at the University of British Columbia. They plan to use an exciting, new neuroimaging methodology called functional near-infrared spectroscopy (fNIRS) to investigate infants' brain responses while they coordinate attention with, and learn new words from, an adult in a live, naturalistic social interaction. “Using fNIRS to investigate word learning will provide me the opportunity to learn more about infants' language abilities around the first year of life and about using fNIRS to

investigate word learning,” Haykaz reports. “I am looking forward to developing new skills at UBC!”

**JACKIE HUBERMAN** - During her time in the Sexuality and Gender Lab at Queen’s, Jackie used multi-method approaches to study the process of sexual response. Supervised by Dr. Meredith Chivers, Jackie’s doctoral research examined early stages of sexual processing using EEG. “This was our lab’s first foray into EEG, so the resources and collaborative environment of the QBCC were essential in supporting this work”, Jackie remembers. “With guidance from Dr. Mark Sabbagh, training workshops, and regular contact with Haykaz and Anja, I was able to learn state-of-the-art methods for collecting and analyzing EEG data, and apply these to the study of sexual response”.

Up to now, Jackie’s research has explored various aspects of the sexual response process within individuals. Jackie brings her knowledge of dynamic processes into the ‘couples’ context for her post-doctoral work, by studying how couples navigate emotions and cope with sexual difficulties together. “Dr. Natalie Rosen’s Couples and Sexual Health Research (CaSH) Lab at Dalhousie will provide me with opportunities to learn daily diary and longitudinal methods for assessing dyadic factors that promote sexual wellbeing”, Jackie says. “I am so looking forward to expanding my research program in the CaSH lab!”

To Jackie, this fellowship represents her continued passion for discovery. “There is so much left to explore, and I am grateful for the opportunity to answer new questions with this award and to continue my academic career”, she says. “I am also grateful for the support I received from the SageLab and QBCC at Queen’s, that helped me grow as a researcher and enjoy the process along the way!”