

Progress Report for Brain Tumour Foundation of Canada

I would like to start off by thanking Brain Tumour Foundation of Canada for awarding me this fellowship. It has been a pleasure and honour to work with the Foundation over the past few months.

I joined the Huang lab in March 2014 as a research fellow. In the first six months of my training, I worked closely with a PhD candidate on a medulloblastoma project. We investigated the role of JPO2, an oncogenic transcription factor, in promoting growth and survival of medulloblastoma cells. I conducted experiments to assist with the completion of the study.

With the BTFC fellowship that I received in July, I started working on the exosome project. Much preparatory work was involved before I began the experiments. I had a number of meetings with industry representatives to discuss about the protocols and reagents required for the study and have made connections with other exosome researchers inside and outside our research institute. In September and October, I conducted preliminary experiments using commercially available kits for exosome isolation. Using Nanosight on site, I was able to show exosomes in the preps though the yield and purity were not optimal. Microvesicles were found in the preps as well, a problem frequently encountered in exosome isolation. As I planned to further optimize the experimental conditions for the study, I found out about my pregnancy, which later turned into a challenge as I was presented with unexpected medical conditions that required weekly ultrasounds and frequent visits to my doctor. As a result I took a sick leave for six weeks and returned to work in January. Due to my health condition, my supervisor temporarily modified my job content so that I could continue working in the lab.

I have recently completed a manuscript from a master's students' project on the genomics of central nervous system primitive neuro-ectodermal tumours (CNS-PNETs). We aim to submit the manuscript in the next few weeks. In addition, I have been involved in the organization and management of the tumour bank database and the submission of a Research Ethics Board (REB) application that will allow us to launch our newly developed global web-based rare brain tumour registry. This website provides information on our projects to clinicians and patients who are interested in participating in the study, and will serve as a new platform for us to collect more patient material for future studies.

I will be going on maternity/parental leave for 52 weeks from May 2015 to May 2016. I sincerely apologize for putting the project on hold due to my health condition during pregnancy and hope to resume the project when I return to work next year. Thank you very much for your understanding.