Supervisor Name: Dr. Joel Fish

Hospital/Research Institution: Hospital for Sick Children

Email: Research Contact: Jennifer.zuccaro@sickkids.ca

Field of Research (2 keywords): Burns; Anesthesia

Department: Plastic Surgery/ Anesthesia & Pain Medicine

School of Graduate Studies Appointment (IMS, LMP, IHPME etc)? Yes/No:

If YES, please name: IMS

Project Title: An Investigation of the Impact of Age at Burn Injury on Post-Burn Pain Sensitivity

Brief Project Description (<300 words):

The proposed research project builds on previous work carried out by Wollgarten-Hadamek et al. (2009; 2011) who found that children who have received treatment for a severe burn injury in infancy may have altered pain responses in later childhood. Our group is specifically interested in determining if these findings are valid among burn patients treated at SickKids. As such, a retrospective chart review will be carried out to compare pain outcomes during a medical procedure in childhood between patients who were treated for a burn in infancy vs. patients treated for a burn in childhood. Given that the type of medical procedure may impact a child’s pain level (i.e. non-invasive vs. invasive), to help minimize confounding, we will only include patients that have had a laser therapy procedure to treat their resulting burn scar. We will then collect basic demographic data, information about the burn (size, depth, location, etc.), and details of the sedation/anesthesia used in each procedure. Pain sensitivity will be assessed by examining recorded pain scores, systolic and diastolic blood pressure, and opioid requirements (e.g. morphine) in the recovery room. A multiple regression analysis will be carried out to determine if patients treated for a burn injury in infancy are more sensitive to pain when adjusting for burn size, severity, anatomical location, and time to laser procedure.