The Ron Melzack Student Award is awarded annually to recognize the single best poster presented by a trainee at the annual CPA meeting. At the most recent CPA meeting, however, choosing a single award-winner proved to be an impossible task for the awards committee; as a result, two trainees, tied for first place, were honoured with the award.

Kharah Ross, PhD  
CIHR Postdoctoral Fellow  
University of Calgary

Dr. Kharah Ross was honoured with the Ron Melzack Student Award at CPA 2019 for her poster presentation, entitled “Change in anxiety and depressive symptoms during pregnancy and executive function and attention in 2-year-olds”. The project examined the long-term effects of maternal mental health on offspring among 336 mother-child dyads from the Alberta Pregnancy Outcomes and Nutrition (APhON) study. Women were recruited to participate in the project early in their pregnancy and were asked to complete measures of anxiety and depression during their second and third trimesters. When their child was 2-years-old, maternal reports of executive function and attention were collected. Results revealed that higher second-trimester anxiety was associated with poorer child executive functioning and attention and that an increase in anxiety from the second to the third trimester was associated with poorer executive functioning. In contrast, depressive symptoms were not associated with cognitive functioning.

This project is in line with Dr. Ross’ overarching research interests, which involve examining the relationships between maternal and child health, and the potential role of the immune system in mediating these relationships. For example, she currently has one paper in progress exploring the influence of maternal distress on immune epigenetic profiles at 3 months of age. Dr. Ross has also been involved in a pilot project examining a community intervention for at-risk mothers aimed at to supporting and improving mother-child relationships.

At the time of the award, Dr. Ross was a CIHR-funded postdoctoral fellow at the Alberta Children’s Hospital Research Institute at the University of Calgary, under the supervision of Dr. Nicole Letourneau. However, Dr. Ross has since happily accepted a tenure-track position at Athabasca University in the Department of Psychology, where she continues her work in perinatal psychoneuroimmunology. She continues to collaborate with the University of Calgary’s Owerko Centre and remains a member of the Alberta Pregnancy Outcome and Nutrition (APhON) study team. Currently, Dr. Ross is in the process of adapting to her new role as an independent researcher; says Ross, “It’s a bit of a learning curve but I’m enjoying the process”.

Did you know?
The point prevalence of major depression in pregnancy is 11%; for anxiety disorders, it’s 13%.

Ms. Tomasiello was also presented with the Ron Melzack Student award for her poster presentation, entitled “Sleep and dietary patterns of children with externalizing problems or in comorbidity with internalizing and/or attentional problems”. This longitudinal study explored differences in sleep and dietary patterns among various groups of children with conduct problems; those with conduct problems alone, those with co-morbid anxiety, co-morbid depression, co-morbid ADHD, or all three comorbidities combined. A sample of children with no mental disorders were also included for comparison. Parent-reported symptoms of conduct problems, depression, and ADHD were first assessed when the children were a mean age of 8.5 years. Sleep and dietary patterns were assessed years later, when the participants were a mean age of 15.5 years. Results revealed that, with regards to diet, children with comorbid conduct problems and ADHD had significantly poorer diets than children with comorbid conduct problems and depression and that all groups with conduct problems had poorer diets than controls. With regards to sleep, children with comorbid conduct problems and depression, as well as children with conduct problems and co-morbid depression and ADHD, were found to have significantly worse sleep than the other groups.

These findings are part of Ms. Tomasiello’s master’s research exploring the long-term risk behaviour of children with early externalizing problems. In the future, she aims to look more carefully at the link between early externalizing behaviour and later risk for comorbid mental health difficulties. Ms. Tomasiello is currently in the second year of her M.A. in Counselling Psychology at McGill University, under the supervision of Dr. Caroline Temchref. Ms. Tomasiello plans to pursue a Ph.D. focused on similar work and hopes that her research will inform mental health service delivery for children with externalizing problems.