



The Dr. Karen Pape Program in Neuroplasticity - 2019-2020 Progress Report

The first full year of the Dr. Karen Pape Program in Neuroplasticity has been a productive one despite the delays caused by the COVID-19 pandemic. The following is an outline of key activities and progress to date:

Recruitment of the Inaugural Dr. Karen Pape Fellow

In early spring, SickKids announced the inaugural Dr. Karen Pape Fellow in Neuroplasticity had been awarded to Dr. Mehmet Cizmeci. The three-year Fellowship supports clinical training in Neonatal Follow-Up as well as research training in the field of Neuroplasticity. Dr. Cizmeci is currently completing his dual clinical fellowship in neonatal neurology and neonatal transport medicine at The Hospital for Sick Children. He completed his paediatric residency in Istanbul and neonatology fellowship in Ankara, Turkey and has been an attending neonatologist in a Level-III NICU since 2013. He was promoted to become a lecturer in 2015 and pursuing his passion for neonatal neurology, he started a research fellowship in 2017 at Utrecht University & Brain Center Rudolf Magnus. Dr. Cizmeci is currently increasing his experience in the neurocritical care unit and his PhD research focus is intraventricular hemorrhage and related complications. Dr. Cizmeci formally began this fellowship in July 2020.

KPP Clinical Research Program

The transformation of the Neonatal Follow Up Clinic from an assessment focus to an intervention and research focus is in progress, working to fill a gap in the current standard of care for babies between 6 weeks and 18 months using a novel means of diagnosing and treating Cerebral Palsy.

The team has spent considerable time establishing the process of delivering virtual care, addressing any potential privacy concerns at a Hospital level and trouble-shooting any issues that may arise.

As part of the Research Ethics Board (REB) process for prospective studies, there was a requirement to submit to the Neonatal Research Committee for scientific review and feasibility evaluation. This was completed in September 2019 and included input from a large team made up of experts in Neonatal Follow-Up, Neurology, Neuroradiology, Health Economics, Biostatistics and

SickKids Foundation
525 University Ave Suite 835
Toronto ON M5G 2L3
Phone: 416.813.6166
Fax: 416.813.5024
Toll Free: 800.661.1083

www.sickkidsfoundation.com

Canada Revenue Agency
Charitable Business Number:
10808 4419 RR0001



Clinical Trial skills. The input resulted in several suggestions to ensure the strength of the research program. One of the outcomes the team intends to measure is from the health economics lens, as this has the potential to enable the development of a proposal to the Ministry of Health to fund the program as a system change fairly soon after the trial has been completed.

Additionally, recruitment for the research coordinator and the OT/PT positions is currently underway. The program is anticipating final Research Ethics Board approvals any day which will allow for the official launch this Fall.

The primary goal for year 2 of the KPP is to continue to refine the virtual care model and continue patient recruitment. One positive outcome of the pandemic is an increased willingness by patient families to engage in virtual care options.

Inaugural Dr. Karen Pape Health Outcomes Grant Awarded

The Brain & Mental Health Outcomes catalyst grant competition is a strategic initiative of the Centre for Brain & Mental Health (C-BMH) at SickKids. The purpose of this competition is to improve the brain and mental health outcomes of children and youth by supporting the development of new ideas and interventions that would not qualify for funding through typical granting agencies. A focus on health outcomes is key. Projects must implement unique concepts, approaches or methodologies that will catalyze improved paediatric brain and mental health outcomes.

The inaugural Dr. Karen Pape Health Outcomes Grant was awarded to Dr. Mahmoud Slim for his Vascular Endothelial Dysfunction and Stroke in Early Life Study (VESSELS).

Dr. Slim's proposal was reviewed by a committee of scientific experts and ranked among the highest. The following is an excerpt from Dr. Slim's application *"demonstrating that vascular endothelial dysfunction is a primary mechanism of childhood stroke, we have the opportunity to dramatically reduce the occurrence of stroke in childhood by implementing primary prevention strategies, diet and exercise and/or pharmacological therapy – all tailored to the individual needs of the child."* The proposal was deemed to be highly relevant to Dr. Karen Pape's vision: early assessment equals opportunity for early intervention to enhance recovery and harness the power of neuroplasticity in the developing brain.