179th WPI-IIIS Seminar

The neuroscience of resilience: Lessons from Autism

There are major advances in our understanding of the causal pathways leading to autism and overlapping neurodevelopmental conditions. This knowledge has been useful in improving early identification and establishing the feasibility of targeted interventions for infant risk groups before symptoms arise. However, key knowledge gaps remain, including discovery of protective factors that may mitigate the impact of risk and resilience processes which may explain why some individuals at risk for autism achieve better than expected outcomes. Moreover, little is known about the link between risk and protective factors and long term outcomes in youth and adults. The talk will describe novel and effective strategies to accelerate scientific discovery while simultaneously building community capacity for intervention. I will describe a new large scale initiative: Quebec 1,000, bringing together 6 hospitals across the province to engage over 1000 families in research. Q1K is overcoming traditional challenges in big data through an Open Science approach which focuses on enhancing accessibility of researchers to protected, valid, and usable datasets. I will also describe the application of learning health systems framework to facilitate scaling up of research innovations (e.g., diagnostic tools and interventions) in the wider community. Finally, I will present a findings from ASD Voices, a new protocol that captures first person perspectives of autistic children and youth irrespective of their level of cognitive and communication abilities.



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Date: Monday, April 17, 2023 Time: 10:00 – 11:00 Venue: 1F Auditorium, IIIS Building



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