



Krembil Neuroscience Program

Neurodegenerative Disorders: Memory loss and dementia

Overview

The Krembil Neuroscience Program’s Memory Clinic at the Toronto Western Hospital provides specialized services for people with memory loss and dementia including, Alzheimer’s disease, Lewy body dementia, frontotemporal dementia and vascular dementia. The clinic specializes in the diagnosis and intervention for people concerned about changes in their memory or the memory of someone they care about.

Alzheimer’s disease is one of the more common neurodegenerative disorders. A progressive degenerative disorder of the brain, the earliest recognizable symptom of Alzheimer’s disease is memory loss. Other symptoms include a loss in judgment and reasoning, difficulty with day-to-day tasks, and changes in communication abilities, mood and behaviour. The prevalence and severity of symptoms varies between patients and the disease progression spans between three and 20 years.

UHN Milestones/Innovations

- First in the world to deduce the structure of a molecular complex in the brain involved in many functions including memory and learning. (2002)
- Identified a key protein (nicastrin) that causes nerve cell degeneration. (2000)
- First in the world to identify two genes responsible for familial Alzheimer’s disease. (1995)

Scope of Work

- Diagnosis and treatment
- Monitoring condition and ongoing care
- Information and support to understand and cope with memory changes
- Opportunities to participate in research, including clinical drug trials

Integration of Care

Physicians, clinicians and other staff members in the Memory Clinic believe the best patient care involves the integration of modalities. Patients may receive care or consultation from:

- Geriatric psychiatrists
- Geriatricians
- Behavioural neurologists
- Social workers
- Occupational therapists
- Registered nurses
- Speech pathologists
- Neuropsychologists

<p>Basic science research includes investigations into:</p> <ul style="list-style-type: none"> • Tissue banking • Distribution of SOD-1 and neuronal vulnerability • LPDs to crystallize membrane proteins • TMP21 and accumulation of beta amyloids • AZD-103 to stop accumulation of beta amyloid peptides 	<p>Clinical science research includes investigations into:</p> <ul style="list-style-type: none"> • Quality of life and disease management • Innovative drug therapies • Vitamin E for Down Syndrome subjects at risk for Alzheimer’s Disease • Fundamental mechanisms of the disease
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