



# Chronic traumatic encephalopathy – inside and outside of the sports arena

#### SEMINAR & VISITING SPEAKER SERIES

PATE Fridav, Novembo

Friday, November 26, 2021 9:00AM

ZOOM LINK

https://us02web.zoom.us/j/83594461654?pwd=cGR6OW96WTVGSkFXRDE5MGRKaDNXZz09

MEETING ID 835 9446 1654 771772

# SPEAKER

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## віо

MD (University of Manitoba) 1978-1982

PhD (University of Manitoba - Department of Anatomy) 1983-1987

Postdoc (University of Saskatchewan - neurobiology) 1989

Residency - neuropathology (University of Toronto) 1990-1993 with FRCPC Postdoc (Université de Paris / INSERM U134 - neuro-

biology) 1994 Neuropathologist - Health Sciences Centre - Winni-

peg 1994 to present Canada Research Chair in Developmental Neuropathology (Tier 1) 2004-2018

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#### RESEARCH

Chronic traumatic encephalopathy (CTE) is a neurodegenerative phenomenon characterized by deposition of hyperphosphorylated tau protein in neurons and around blood vessels, principally at depths of cortical sulci. It is best characterized in athletes who had been engaged in contact sports and in military personal subjected to blast trauma. CTE can also occur in persons with a history of street fighting or multiple falls, especially in the context of chronic substance abuse (e.g. alcohol, drugs). CTE has rarely been reported in older women with a history of domestic violence. The pathogenesis remains unclear because high fidelity animal models do not exist. Uncertainty remains about 1) the historical details that should trigger a search for CTE; and 2) the quantity of CTE-like histologic changes necessary to render a diagnosis of CTE.

## OBJECTIVES

- 1. Describe the risk factors & diagnostic criteria for chronic traumatic encephalopathy (CTE)
- 2. Summarize the cell biology of microtubules and tau protein
- 3. Describe the limits of current understanding of CTE tauopathy





