

# **Dr. Charles Tator**

**Neurosurgeon, Krembil Neuroscience Centre at University Health Network**

Toronto, ON, CA

World renowned expert on concussion and spinal cord injury, prevention and treatment research

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## **Biography**

Dr. Tator's research transformed our world's understanding of spinal cord injury. He developed one of the first experimental models of spinal cord injury in small laboratory animals in 1978. He showed that post-traumatic ischemia is a major secondary injury mechanism. He invented the inclined plane technique of functional assessment. Dr. Tator was one of the first to recognize the proliferation of endogenous stem cells in the injured adult mammalian spinal cord, and to assess the therapeutic value of transplantation of adult spinal cord derived stem cells after injury. He developed the first acute spinal cord injury unit in Canada, and he is known for the introduction of halo vests for treatment.

The breadth of Dr. Tator's influence is perhaps best manifested by his work in prevention, particularly related to sports and recreation. His advocacy efforts resulted in the adoption of new legislation and guidelines to prevent spinal cord injury in hockey. In 1992, he founded ThinkFirst Canada, an organization that educates young people about safety.

A dedicated, kind and skillful surgeon, Dr. Tator's loyalty to his patients is legendary. As chair of the division of neurosurgery at the University of Toronto (1989-1999), Dr. Tator fostered the growth of Canada's surgical scientist training program, believing that aspiring academic surgeons should train in science at the highest level. His program gained national prominence and was admired by neurosurgical departments across Canada.

Dr. Tator played a key role in developing the Canadian Brain and Nerve Health Coalition (2002) which brought Canadian organizations together to promote increased research and public awareness of neurological conditions. Among many awards, Dr. Tator was appointed a Member of the Order of Canada (2000) and inducted into the Terry Fox Hall of Fame (2003).

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## **Industry Expertise**

Health and Wellness, Research, Education/Learning, Health Care - Services, Health Care - Providers, Sport - Professional, Health Care - Facilities, Safety

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## **Areas of Expertise**

Concussion, Spine, Neurosurgery, Neuroscience, Injury Prevention, Spinal Cord Research

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## **Affiliations**

Professor Department of Surgery University of Toronto, Founder ThinkFirst Canada, Board Member Parachute Canada, Senior Scientist Toronto Western Research Institute

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## **Event Appearances**

### **Keynote Speaker**

SicKids Centre for Brain & Behaviour Biennial Conference

### **Concussions and Other Brain Injuries in Athletes**

APN/NP Clinical Conference Day

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## **Education**

### **University of Toronto**

Graduate Studies Neuropathology

### **University of Toronto**

M.Sc. / Ph.D. Neuropathology

### **University of Toronto, Faculty of Medicine**

MD Medicine

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## **Accomplishments**

### **Terry Fox Hall of Fame**

Awarded to "outstanding Canadians who have made extraordinary contributions to enriching the quality of life for people with physical disabilities".

### **Order of Canada**

Elected to Canada's second highest honour for merit.

### **Former Chairman, Division of Neurosurgery, University of Toronto**

Having 29 clinical faculty, 11 research faculty, 35 residents and 20 fellows, the University of Toronto Division of Neurosurgery is among the largest neurosurgical training programs in the world. Its four teaching hospitals (St. Michael's, Sunnybrook, Toronto Western and the Hospital for Sick Children), each with their individual expertise and culture, provide diversity and breadth of experience and opportunities for residents.

### **Canadian Medical Hall of Fame**

The Canadian Medical Hall of Fame recognizes and celebrates Canadian heroes whose work has advanced health, thereby inspiring the pursuit of careers in the health sciences.

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