The Montreal Neurological Institute and Hospital – The Neuro, is a world-leading destination for brain research and advanced neurological patient care. Since its founding in 1934 by renowned neurosurgeon Dr. Wilder Penfield, The Neuro has grown to be the largest specialized neuroscience research and clinical centre in Canada, and one of the largest in the world. The integration of research, patient care, and training further positions The Neuro at the forefront of nervous system disorder research and treatment. The Neuro's ground-breaking Open Science Initiative will help advance neuroscience with the commitment to make all research – and all of the data associated with that research – widely available on a global level. The Neuro is also leading the way through McGill’s Healthy Brains for Healthy Lives, which unites The Neuro, McGill University, and a broad range of health-care partners to transform the way we think about, diagnose, and treat neurological conditions. The Neuro is a world-recognized leader in its field, with a global reputation for excellence in research and patient care.

**MISSION**

- To understand the nervous system, discover mechanisms of disease, and develop and deliver effective treatments for neurological conditions.
- To foster an outstanding research and clinical atmosphere by promoting interaction and collaboration.
- To train and mentor new generations of scientists and skilled health care professionals, and foster clinician scientists.

**Brain Canada** reports that one in three Canadians will be affected by a disease, disorder or injury of the brain, spinal cord, or nervous system at some point in their lives.

**Health Canada** conservatively estimates the economic burden of neurological and psychiatric disease at $22.7 billion annually.

**World-famous scientist Dr. Brenda Milner awarded major prizes for her pioneering memory research at The Neuro:**

- Balzan Prize
- Dan David Prize
- Gairdner Award
- Kavli Prize
- Killam Prize
- Killam Prize

**Why choose The Neuro?**

- The Neuro is located in Canada’s tech hub, providing access to cutting-edge technology and facilities.
- The Neuro is home to a diverse and internationally recognized team of researchers, clinicians, and trainees.
- The Neuro is a leader in brain research and patient care.
- The Neuro is a world-recognized leader in its field, with a global reputation for excellence in research and patient care.

**Supported by**

- World Leader in Neuroscience Research
- Neurological Patient Care

**Address**

3801 University Street
Montreal, Quebec, H3A 2B4
Tel: 514-398-1902
Email: communications.mni@mcgill.ca
www.mcgill.ca/neuro

**Follow us on**

- NeuroMontreal
- @TheNeuro_MNI

**NEURO FACTS**

- World leader in neuroscience research and neurological patient care

**The Neuro is brain research, patient care, and training.**

**The Montreal Neurological Institute and Hospital – The Neuro, is a world-leading destination for brain research and advanced neurological patient care.**

**Award-winning researchers, healthcare professionals, and trainees**

- 3801 University Street, Montreal, Quebec, H3A 2B4
- Tel: 514-398-1902
- Email: communications.mni@mcgill.ca
- www.mcgill.ca/neuro
- NeuroMontreal
- @TheNeuro_MNI
The Montreal Neurological Institute and Hospital – The Neuro, is a world-leading destination for brain research and advanced neurological patient care. Since its founding in 1934 by renowned neurosurgeon Dr. Wilder Penfield, The Neuro has grown to be the largest specialized neuroscience research and clinical centre in Canada, and one of the largest in the world. The integration of research, patient care, and training further positions The Neuro at the forefront of nervous system disorder research and treatment. The Neuro’s ground-breaking Open Science Initiative will help advance neuroscience with the commitment to make all research – and all of the data associated with that research – widely available on a global level. The Neuro is also leading the way through McGill’s Healthy Brains for Healthy Lives, which unites The Neuro’s strengths in clinical and research neuroscience with pioneering work in neuroinformatics from other departments across the University.

Brain Canada reports that one in three Canadians will be affected by a disease, disorder or injury of the brain, spinal cord or nervous system at some point in their lives.

The World Health Organization forecasts that diseases of the brain will surpass cancer as the second leading cause of death in Canada by 2040.

Health Canada conservatively estimates the economic burden of neurological and psychiatric disease at $22.7 billion annually.
RESEARCH HIGHLIGHTS

- Researchers’ CIHR grant success rate is 3X the Canadian average.
- Stellar publication record: 200+ peer reviewed articles each year.
- Highest publication impact for neurosciences in Canada.

RESEARCH GROUPS

- Brain Tumours
- Cognitive Neuroscience
- Epilepsy
- Neuroimmunological Diseases
- Neural Circuits
- Neurodegenerative Disorders
- Neuroimaging & Neuroinformatics
- Neuro Development
- Rare Neurological Diseases
- Interdisciplinary Neuroscience Programs:
  - Open Science
  - Ludmer Centre for Neuroinformatics and Mental Health
  - The Sandra and Alain Bouchard Intellectual Disability Research Program (BIDRP)
  - NeuroEngineering Program
  - The Neurophotonics Centre
  - Centre for Research on Brain, Language and Music (CPRBLM)

RESEARCH FACILITIES

- Microscopic Cellular Imaging Facility
- McConnell Brain Imaging Centre (BIC) – Top-three brain imaging research group in the world
- Neurosurgical Simulation Research Centre
- Cyclotron and Radiochemistry Facility
- Centre for Neurological Disease Models
- Neuro OpenScience Clinical Biologic Imaging and Genetic Repository (NeuroO C-BIGR)
- Brain Canada iPS/CRISPR Facility

RESEARCH PROFILE

- $30+ million total funding: grants and contracts per year
- 50+ research teams
- 72 principal investigators
- 100+ faculty
- $245 million in grant operation and infrastructure support over 5 years

CLINICAL CARE HIGHLIGHTS

Highest concentration of clinician-scientists in Canada.

State-of-the-art technology:
- MRI, CT, PET, angiosuite, TARGIT, ROSA

Top recruiter through the Clinical Research Unit, for clinical trials in Canada and worldwide for:
- Amyotrophic Lateral Sclerosis (ALS)
- Brain cancer
- Multiple Sclerosis (MS)
140 trials have given 1000+ patients access to new treatments.

CLINICS AND PROGRAMS

- Amyotrophic Lateral Sclerosis (ALS)
- Brain Tumour
- Epilepsy
- Movement Disorders
- Multiple Sclerosis (MS)
- Pain and Neuromodulation
- Neurovascular
- Traumatic Brain Injuries
- Rare Neurological Diseases
- Stroke
- Specialized Neurological Clinics
- Neuro Critical Care
- Neuro Palliative Care

CLINICAL CARE PROFILE

- 14 Neurosurgeons
- 32 Neurologists
- 300+ Specialized nurses and allied health care professionals
- 3 Neuroanesthesiologists
- 4 Neuropsychologists
- 3 Neuropsychiatrists
- 86 Acute care beds + 12 Neuro intensive care beds
- 2,150 Admissions/year
- 1,800 Surgeries/year
- 4 Operating rooms
- 28,000 Neuroradiology interventions/year
- 40,000 Ambulatory visits/year
- 4,500 Neuro Day Treatment Centre treatments/year
- 7,000 EEG and EMG exams/year

training the next generation of scientists and clinicians

- Integrated Program in Neuroscience is North America’s largest neuroscience graduate program
- World-renowned for training top scientists and clinicians from around the globe

- 350+ trainees (postdoctoral fellows, residents, and graduate students) from 60+ countries.
- 2000+ nurses from 20+ countries have graduated from the Neuroscience Nursing Program.

- First to map primary somatosensory cortex (Penfield Homunculus).
- First to develop a comprehensive repository of brain imaging, cellular, clinical, demographic, genetic and clinical data and samples from patients with neurological disorders.
- First to offer a Neuroscience Nursing program.
- Electroencephalography (EEG) was largely introduced and developed in Canada by Neuro scientist Herbert Jasper.
- Major neuroimaging technologies, including computer axial tomography (CAT), positron emission tomography (PET), and magnetic resonance imaging (MRI) were first used in Canada at The Neuro.
- K.A.C. Elliott identified ρ-aminobutyric acid (GABA) as the first inhibitory neurotransmitter.
- Brenda Milner revealed new aspects of brain function and through her ground-breaking studies, pioneered the field of neuropsychology.
- Wilder Penfield’s revolutionary technique for epilepsy neurosurgery became known as the Montreal Procedure.