Welcome to Canada/Quebec/Montreal/McGill
Shiv O. Prasher
James McGill Professor & Chair
Department of Bioresource Engineering
McGill University

OUTLINE

Quick Facts
- Canada
- Quebec
- Montreal

McGill University
- Macdonald Campus
- Faculty of Agricultural and Environmental Sciences
- Department of Bioresource Engineering

CANADA

Quick Facts
Capital: Ottawa
Official languages: English and French
Government: Federation, Parliamentary democracy
Area: Total 9,984,670 km² (2nd) 3,854,085 mi²
Water (%) 8.92 (891,163 km²/344,080 mi²)
Population: 2010 estimate 34,279,000 (36th in the world)
Currency: Canadian Dollar ($) (CAD)

British Columbia, Canada

Alberta, Canada

Canadian Dollar ($) (CAD)
Newfoundland, Canada

- St. John’s, Newfoundland & Labrador
- Ten Mile Pond, Gros Morne National Park
- A humpback whale takes a deep dive in front of the Quirpon Island Lighthouse in Newfoundland
- Fox Island River Newfoundland

Yukon, Canada

- Artesian Park, Yukon
- Fort Selkirk, Yukon, Canada
- Northern lights in Whitehorse
- Mount Tomkinson, upper south Yukon, Yukon

Northwest Territories, Canada

- Yellowknife Skyline
- Cotton grass (tundra) (live area)
- South Nahanni River, Virginia Falls
- Dog sledding near Fort Norman

Nunavut, Canada

- Nunavut Arctic College
- Wildlife Landscape
- Baffinfront approaching Pangnirtung, Nunavut
- A crest scarp of Cretaceous age sediments

Québec

**Quick Facts**

- Capital: Quebec City
- Official language: French
- Largest city: Montreal

Area: Ranked 2nd Total 1,542,056 km² (595,391 mi²)
- Land 1,365,128 km² (527,079 mi²)
- Water (%) 176,928 km² (68,312 mi²) (11.5%)


Québec in Canada

- Notre-Dame-de-Victoire in the historic Basse-Ville (Lower Town) of Québec city
- The spillway at the Robert-Bourassa generating station
- Château Frontenac in Québec city
- Nunavut Arctic College in Quebec city
Montreal from Mount Royal by E. Whitefield (1852)

MONTREAL

Quick Facts

Established: 1832
Area: City 363.33 km² (140.98 mi²)
      Urban: 1,477 km² (447 mi²)
      Metro: 4,259 km² (1,644 mi²)
Highest elevation: 233 m (764 ft)
Lowest elevation: 6 m (20 ft)
Population (2006): City 1,620,693 (2nd)
      Density: 4,439/km² (11,496/mi²)
      Urban: 3,316,615 (2nd)
      Metro: 3,635,971 (2nd)

MONTREAL

• Montreal is the second-largest city in Canada and the largest city in the province of Quebec
• Montreal has the highest concentration of post-secondary students of all major cities in North America
• Montreal is referred to as "Canada's Cultural Capital"

McGill University

Ranking in Canada: #1
Global Ranking: 19th (2011)

James McGill’s House

McGill Archives, P(02)3643
1851
McGILL UNIVERSITY

• Founded in 1821
• Two campuses
• 11 faculties and 10 schools
• More than 300 programs of study
• Over 36,000 students from 160 countries
• The McGill Alumni Network is over 200,000 strong

McGILL STUDENT LIFE

• Sports team, fitness/recreation classes, or elite varsity sports
• International Student Services
• Tutorial Service
• Health Services
• Dental Clinic
• Counselling Services
• The McGill Bookstore
• Daycare Centre
• Office for Students with Disabilities
• Ombudsperson
• Career Planning Service (CaPS)

Macdonald Campus of McGill University

McGILL RESIDENCES

• Residents are mostly for the first-year students
• McGill is able to house approximately 2,800 new first-year students

McGILL RESIDENCES

Eco-Residence
Laird Hall
Carrefour Sherbrooke
New Residence Hall
Macdonald
A Campus of advanced training, discovery and innovation

Applied biosciences
Bioengineering
Food and nutritional sciences
Environmental sciences

Faculty of Agricultural & Environmental Sciences

91 Academic Staff

- 8 Canada Research Chairs
- 6 James McGill Professors
- 3 William Dawson Scholars
- The Tomlinson-Fowler Chair of Forest Ecology
- NSERC Northern Research Chair
- Over $13 million/year in grants and research projects

Academic Units and Staff

Animal Science (11)
Bioresource Engineering (10+2)
Food Science (10)
Natural Resource Sciences (20)
Plant Science (14)
Dietetics and Human Nutrition (10)
Parasitology (11)

Networks and Centres

The Green Crop Network focuses on new ways to use crops to reduce greenhouse gases, provide alternative energy sources and mitigate climate change.

The McGill Network on Innovation in Biofuels and Bioproducts (McNIBB) - biofuels and sustainable energy, bioproducts and bioprocessing and sustainable bio-industrial processes and society.

The Sustainable Forest Management Network - government, industry, academia, Aboriginal groups and NGOs to develop integrated sustainable forest management practices.
The Brace Centre for Water Resources Management conducts research, teaching and training on issues related to water resources.

The Centre for Host-Parasite Interactions forms new research and training synergies in areas of importance for Quebec.

The United Nations Environment Program (UNEP) Collaborating Centre in Environmental Assessment offers environmental assessment related teaching, training and research.

The Centre for Indigenous Peoples’ Nutrition and Environment (CINE) works with aboriginal communities to address concerns about the integrity of traditional food systems.

Valacta, the Quebec Dairy Production Centre of Expertise, stimulates the advancement of knowledge and its transfer to dairy producers.

The Institute builds on the momentum of two highly successful McGill Conferences on Global Food Security.

Research Themes:
- Plant and Animal Biotechnology
- Biofuels
- Water, land, climate
- Markets & Trade
- Nutrition
- Food Safety

International Work
Food Science & Engineering

International Work
Water Management

McGill Institute of Food Security

GRADUATE STUDIES @ McGill

Bioresource Engineering
- Interdisciplinary program that integrates engineering, design and biological sciences
- Applies engineering principles to the enhancement and sustainability of the world's natural resources
BIORESOURCE STAFF

Shiv O. Prasher
Chair and Professor in the Department of Bioresource Engineering
- Remote sensing applications in agriculture
- Best management practices for pollution control
- Remediation systems for contaminated sites
- Machine learning methods in agriculture, machine vision

BIORESOURCE STAFF

Chandra Madramootoo
Dean and Professor in the Department of Bioresource Engineering
- Water resources management
- Irrigation, hydrology
- Soil and water conservation
- Water quality

BIORESOURCE STAFF

Suzelle Barrington
Professor in the Department of Bioresource Engineering
- Agricultural structures
- Waste management
- Environment, odour management and control
- Bioremediation

BIORESOURCE STAFF

Edward McKyes
Professor in the Department of Bioresource Engineering
- Soil mechanics
- Cultivation and tillage
- Machinery, structures
- Water resources
- Environment

BIORESOURCE STAFF

Vijaya Raghavan
Professor in the Department of Bioresource Engineering
- Heat and mass transfer
- Hybrid drying methods for quality food
- Shelf life extension of fruits and vegetables
- Food processing
- Electrotechnology for biotech applications

BIORESOURCE STAFF

Viacheslav Adamchuk
Associate Professor in the Department of Bioresource Engineering
- Precision agriculture
- Soil and crop sensing
- Spatial data management, including GIS
- Data acquisition systems
Michael Ngadi
Associate Professor in the Department of Bioresource Engineering

- Food and bioprocess engineering
- Heat and mass transfer
- Non-thermal processing of foods, microstructure, hyperspectral imaging
- Food quality and food safety

Jan Adamowski
Assistant Professor in the Department of Bioresource Engineering

- Director of the IWRM (Integrated Water Resources Management) program
- Agricultural/Urban Hydrology
- Water Resources Management

Grant Clark
Assistant Professor in the Department of Bioresource Engineering

- Ecological engineering
- Scientific computing
- Microbiological systems
- Agricultural systems and Complex adaptive systems

Mark Lefsrud
Assistant Professor in the Department of Bioresource Engineering

- Biofuels
- Biomass production
- Controlled environments
- Secondary compounds
- Proteomics

Valerie Orsat
Assistant Professor in the Department of Bioresource Engineering

- Impact of food processing on product quality and functionality
- Extraction methods and by-product recovery
- Engineered systems for functional ingredient production

STUDIES @ McGill

An international Learning Experience

- McGill is truly Canada’s most international university, and certainly one of North America’s
- The highest percentage of international students in Canada, numerous faculty members coming from across the world, and many dynamic international partnerships
- Approximately 20 per cent of our master’s students, and 30 per cent of our doctoral students come from outside of Canada, hailing from over 150 countries
- International students are eligible to obtain a work permit for up to 3 years after graduation.

http://www.mcgill.ca/gradapplicants/
Thank You!
Questions?