What is Epidemiology? Epidemiology is the study of factors that affect the health and illness of populations and the scientific investigation of optimal interventions for public health, clinical practice, health services and policy. Epidemiologists are medical detectives, trained to discover new and emerging health problems such as SARS and Avian flu; to investigate the causes and consequences of disease; to identify ways to prevent disease and promote health; and to evaluate new methods of diagnostic investigation and treatment. Epidemiologists are responsible for some of the most important discoveries in health care including identifying the mode of transmission of cholera, the deleterious effects of cigarette smoking, the role of HPV (human papillomavirus) as a cause of cervical cancer, the benefits of water fluoridation in preventing dental caries, and the role of seatbelts in reducing the risk of death in car crashes.

Career Opportunities in Epidemiology Career opportunities for epidemiologists span the public and private sectors, as well as academia. Epidemiologists at the master’s and doctoral levels are heavily recruited for positions in public health, health planning, and quality monitoring in local, regional, federal, and international health authorities, statistical and technology assessment agencies (e.g., Statistics Canada, Public Health Agency of Canada), the pharmaceutical industry, and in clinical and academic research organizations as scientific directors, study coordinators, and research associates. Epidemiologists are also recruited as professors and researchers in university-based Schools of Public Health and Faculties of Medicine, Departments of Community Health and Epidemiology and many Clinical departments (e.g., medicine, surgery, pediatrics).

Why Study Epidemiology at McGill? The McGill Department of Epidemiology, Biostatistics, and Occupational Health is the largest academic group of its kind in Canada. Partnerships between some of the foremost scientists in epidemiology and biostatistics provide novel training opportunities in the master’s and doctoral level programs in epidemiology. Students are actively engaged in formal coursework and student activities in the Department and at the University, and enjoy opportunities for field experience, research assistantships, and supervision in the diverse hospital, community, and international research settings of the faculty.

The wide range of active research programs of over 80 McGill department faculty includes ground-breaking research in cancer, pharmacoepidemiology, health services research, population and public health, aging, global health, health and social policy, infectious disease, health informatics, genetic epidemiology, cardiovascular and respiratory epidemiology, neuro and psychiatric epidemiology, perinatal and child health, injury prevention, women’s health, occupational and environmental health, and clinical epidemiology.

McGill graduates are known for their strong conceptual, quantitative, and methodological skills. As scientists of international renown, they have assumed senior leadership positions in public health agencies, served as chairs of academic departments in a number of countries, and worked as chief executive officers of clinical research organizations.

McGill is ranked among the foremost universities in Canada and in the world. As part of its continued leadership in international research training, McGill charges all Canadian and international students the same doctoral tuition as students from Quebec. New funding opportunities are also available for master’s and doctoral students through federally and provincially funded research training initiatives.

Who Should Apply? Students from the natural and quantitative sciences (e.g., microbiology, biology, computer science, statistics), social sciences (e.g., sociology, economics, geography, psychology, anthropology), or health professional sciences (e.g., medicine, nursing, social work, nutrition) with strong conceptual, analytic, and quantitative skills at the undergraduate or master’s level are encouraged to apply.

Les cours sont donnés en anglais, mais les étudiant(e)s peuvent intervenir en classe et remettre leurs travaux en français.

For further information, see our website: http://www.mcgill.ca/epi-biostat-occh/grad/epidemiology