

Antimicrobial Research Centre

Microbial diseases, especially the increasingly frequency on antibiotic-resistant pathogens, are major threats to the health of human beings. New diseases and newly mutated old diseases are puzzling clinical doctors around the world. The McMaster University Antimicrobial Research Centre hopes to battle these diseases by crossing traditional departmental boundaries in universities and hospitals that could hinder communication between researchers and clinicians. In order to achieve this goal they have opened the dialogue between these two groups through seminars, symposia and direct collaboration.

Centre for Gene Therapeutics

The Centre deals with investigating, creating and implementing the ways in which gene therapy may be delivered for treating humans and animals. A task like this involves; investigations to target gene product involvement, creation of vector systems for appropriate delivery and quickly moving promising medicines into a clinical setting. Working as a team, our scientists and clinicians will ensure a world-class institute boasting cutting-edge research facilities and provide the most up-to-date medical solutions for the people of Ontario and Canada. Current focuses include; novel cures for cancer and inflammatory diseases.

Canadian Centre for Studies of Children at Risk

The Children's Centre has a sustained research interest in the areas of conduct disorder, autism, child physical abuse and neglect, and child health in populations of native and of disadvantaged children.

Known for its early work on the Ontario Child Health Study, the centre has a long-term effort to track the health of young people in Ontario, as well as its involvement with the Mental Health Supplement.

Other on-going programmes focus on:

- *Antisocial Behaviour*: How can it be prevented or modified?
- *Autism*: Is it genetically caused? What support programs can be developed?
- *Child and Adolescent Depression*
- *Substance Abuse*: What triggers it? How can it be prevented?
- *Child Abuse*
- *Native Children*: What are their problems? How can their lives be improved? How good is their health?
- *Disadvantaged Children*
- *Foster Children*: How can they be given better care? What are the outcomes for children in foster care?
- *Recreation for children*: What are the best practices for effective recreational programmes?
- *Dissemination of research*
- *School Readiness to Learn*: Why are children from some communities better prepared for the school experience than others?



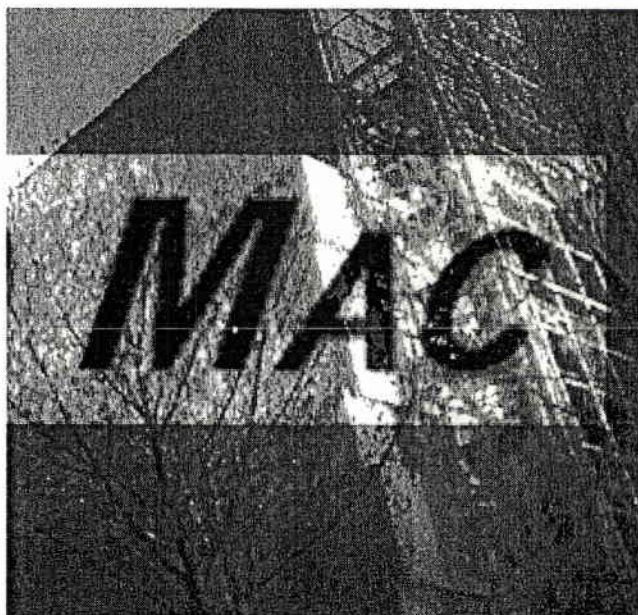
Information obtained from the health sciences' research website:

<http://www.fhs.mcmaster.ca/res.htm>

Occupational and Environmental Health Laboratory

Established by Dave Verma in 1979 at McMaster University in Hamilton, Ontario to provide occupational hygiene services to industry, labour and the general public. Due to evolving clients needs the laboratory has evolved to include a variety of environmental services to augment our strong occupational support base. The OEHL has a major commitment to research and some areas of the research investigations have included:

- Study of the relationship of dust, metals and fibres found in the lung tissue of deceased occupationally exposed workers, to the amount of exposure, lung pathology and radiology
- Exposure estimates and reconstruction of past exposure for epidemiological studies
- Determination of the particle acceptance curves of various dust sampling instruments
- Comparison of dust samplers and airborne dust characterization in Ontario hardrock mines
- Polycyclic aromatic hydrocarbons (PAHs) in foundry environments and refinery operations
- Sampling and analysis of 55 hydrocarbon components of gasoline.
- Comparison of methods of sampling and analysis for silica
- Determination of beryllium in lungs.
- Comparison of sampling and analytical methods for assessing occupational exposure to diesel exhausts



Province-Wide Nursing Project

“The Ontario Province-Wide Nursing Project was designed to prove that best nursing practice occurs when the individual practitioner employs clinical decision-making (nursing process) to implement evidence-based practice in a setting where primary nursing is the care deliver system used, and reflects upon that experience to improve both the system and individual practice. The three sites selected are Cornwall, London and Ottawa. A Research Centre to support this project has been established at McMaster University School of Nursing.”

(McMaster University, <http://hiru.mcmaster.ca/pwnp/>)

Evidenced-based Practice Centre

“Since 1997, McMaster University Evidence-based Practice Center has been contributing to the Agency of Health Research and Quality (AHRQ) as one of its 12 evidence-based practice centers (EPCs) and is the only organization designated by it outside the United States.

The program produces scientific reviews of existing knowledge in topics nominated by AHRQ, which are of importance to government, private organizations and consumer groups, and others concerned with health care. In addition, EPC manages contracts from other public sector and private organizations. It promotes research that supports development, dissemination, and application of evidence to clinical practice and policy as well as training for better understanding of the role of evidence in health care decision making.

McMaster EPC and its Partners are continuously contributing to evidence-based health care through monographs, international journals and reference books in the field of clinical epidemiology and evidence based medicine; technology assessment; economic evaluation; and health-related quality of life.”

(McMaster University, <http://hiru.mcmaster.ca/epc/>)