# **The National Research Council**

Within the federal government, the National Research Council (NRC) is active as a research partner with industry in biomedical research in life sciences, including biotechnology. Collaborative research is concentrated in the following five institutes, which are dedicated to specific sectors of the life sciences/biotechnology.

## Biotechnology Research Institute, Montreal, Quebec

The Biotechnology Research Institute (BRI) is strategically located in a cluster of pharmaceutical companies with head offices in the Montreal area. The mission of the BRI is to promote, assist and perform R&D in biochemical and molecular engineering. The BRI focuses on biochemical engineering, genetic engineering, protein engineering, pilot plant operations and pharmaceuticals.

The BRI plays a special role as a supplier of leading-edge biotechnologies for large pharmaceutical, and accomplished small and medium-sized biotechnology-based firms. The BRI works with industry and universities to create bilateral and multilateral collaborations, and provides licensing opportunities for technology transfer. Its multidisciplinary teams of scientists and engineers assist industry through collaborative research programs.

The BRI has created critical expertise in generic R&D programs in the environmental and biopharmaceutical sectors. It also has expertise in the identification and characterization of molecular targets for drug development. The Bioprocess Sector of the BRI represents one of only a few institutes in the world with the expertise, technology and instrumentation to carry out bioprocess innovation and technical development, from process inception to industrial-level production, using micro-organisms, animal cells and enzymes as biocatalysts.

### The Montreal Joint Centre for Structural Biology, Montreal, Quebec

In 1994, the BRI joined forces with researchers at the Université de Montréal and McGill University to create a structural biology research centre. The Centre's interests range from basic aspects of protein structure and structure prediction to the investigation of specific biological questions and the development of drug products. The Centre places special emphasis on creating ties with industry, either as users of the facilities, collaborators or full members of the Centre.

### Institute for Biological Sciences, Ottawa, Ontario

Working in partnership with industry, the Institute's focus is on immunochemistry, with applications in the development of immunotherapeutics and cell biology, vaccines and diagnostics, which are in turn focused on finding therapies for neurodegenerative disorders.

### Steacie Institute for Molecular Sciences, Ottawa, Ontario

The Steacie Institute has significant expertise in the areas of theoretical chemistry, molecular selectivity, and molecular structures and dynamics.

### Institute for Biodiagnostics, Winnipeg, Manitoba

This recently formed Institute employs magnetic resonance imaging and spectroscopy, infrared spectroscopy and computational analysis of biomedical data, as its core technologies for disease diagnoses.

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