

NSERC Invests Close to \$5 Million in Genomics Research

(Québec, Quebec) - The Honourable Brian Tobin, Minister of Industry and Minister responsible for the Natural Sciences and Engineering Research Council (NSERC), announced today an investment of \$4.8 million to support 11 genomics research projects.

"Genomics is opening the door to a veritable revolution. Our substantial investments in this field through NSERC and Genome Canada should make Canada the world leader in this field," Mr. Tobin stated.

In the Speech from the Throne, the government set a goal for Canada to become one of the top five countries for research and development performance by 2010.

The Honourable Gilbert Normand, Secretary of State (Science, Research and Development), reiterated this commitment. "By equipping researchers with the tools to excel in highly competitive fields such as genomics, we are building the foundation for an innovative Canada."

Dr. Tom Brzustowski, President of NSERC, also underlined the importance of the work conducted by the 11 researchers. "Genomics research is of key importance to Canada. This competition exists to increase Canada's ability to meet the challenges in this discipline. Discoveries in this field will lead to new agricultural and biopharmaceutical methods and products that are innovative and contribute to human health. The 11 projects here complement the recently announced initiatives of Genome Canada in the strong national effort in this vital field."

The following are among the new genomics projects receiving grants:

Dr. Louis Bernier, Professor in the Department of Wood and Forestry Science at Université Laval, is receiving a grant of \$851,500 over three years to continue his team's research on ophiostomatoid fungi, which destroy trees in Canada such as elm and spruce. His work should lead to a better understanding of the genetic basis for the pathogenicity of these species of fungi and their overall ability to adapt. His research should help the forestry industry protect itself from coloured sapstain and blue-stain damage.

Dr. Jean Bousquet, Professor at the Centre for Forest Biology Research at Université Laval, and his colleagues are receiving a grant of \$416,550 over three years to perform gene mapping of spruce, which constitutes one of the most important components in the boreal forest. Designing veritable genome road maps improves our understanding of plant development and makes it easier to select seedlings most appropriate for reforestation.

Dr. Andrew Emili, Professor in the Banting and Best Medical Research Department at the University of Toronto, has obtained \$568,518 in support over three years. His team is attempting to identify the composition of the protein Hsp90, which will be useful in microbiology, parasitology, and medicine. This essential protein acts like a "chaperone"

providing various forms of protection. It ensures that proteins interact with the right partners at the right time, and helps other proteins take on the right shape and function appropriately.

Dr. Michael Thompson, Professor in the Department of Chemistry at the University of Toronto, has obtained \$229,161 in funding to support his research on DNA carriers, which should produce a better understanding of the role that genes play in relation to infectious and genetic diseases. Using a scanning device, the Kelvin electronic microprobe, will make direct detection of biochip models possible.

The list of 11 grants is attached and is posted on NSERC's Web site, at www.nserc.ca/news/2001/p010507_t.htm. The research projects in question are in the fields of evolutionary genetics, gene expression, plant development and growth, physiology of stress, molecular genetics, bioanalytical chemistry, and life sciences research related to human health and disease.

NSERC is the primary federal agency investing in people, discovery and innovation. The Council supports both basic university research through research grants, and project research through partnerships among universities, governments and the private sector, as well as the advanced training of highly qualified people.

For more information, please contact:

Yasmine El Jamaï
Public Affairs Officer, NSERC Communications
Tel.: (613) 947-5273
E-mail: yasmine.eljamai@nserc.ca

Sonya-Kim St-Julien
Press Secretary
Office of the Secretary of State (Science, Research and Development)
(613) 943-0868