

New Funding Announced for Canadian Mathematicians to Link with International Counterparts on Key Economic, Social issues

May 25, 2007

\$1.1 million funding boost will enable world-wide math teams to tackle terrorism, flu pandemics and information security

Vancouver, B.C. – May 25, 2007 – Canada's top mathematicians will work more closely with their international colleagues to address key global economic and social issues, thanks to new funding announced today.

\$1.1 million has been awarded by Industry Canada via the federal Network of Centres of Excellence (NCE) program and the International Research Development Centre (IDRC) to Burnaby, B.C.-based MITACS – the Mathematics of Information Technology and Complex Systems – which will apply the funds towards establishing unique international partnerships.

The funding boost will enable Canada's math experts to collaborate with the world's best mathematical minds on such topics as the spread of avian flu and SARS, the development of new drugs for Alzheimer's and other diseases, terrorist threats and managing financial risk.

"International challenges require coordinated, international responses," said Dr. Arvind Gupta, Scientific Director of MITACS, a national math research network that brings together researchers and companies in a collaborative effort to solve problems of key importance to society and industry. "The universality of mathematics as the language of science and technology will foster the exchange of ideas and strategies to combat some of the most challenging issues of our time."

A joint U.S. and Canadian collaboration will see MITACS researchers working closely with the Institute for Pure and Applied Mathematics (IPAM) at UCLA to improve the security of public buildings and spaces. By integrating computer-based information and control systems with physical components, the researchers will mathematically model roads and buildings to help identify mechanisms that could be used to attack these infrastructures and then develop methods to prevent such attacks.

Canadian mathematicians will also work with research teams from the Mathematical Centre of the Chinese Ministry of Education. This group will develop models that simulate the outbreak and control of

infectious diseases such as SARS and a flu pandemic, and devise solutions for their prevention. These mathematical models for infectious disease would ultimately be used by public health officials to gain insight into the most effective ways to deal with outbreaks, including disease containment and controlling their spread from person to person.

Other math organizations participating in the international initiative include the BioSim Network of Excellence (European Union), MATHEON (Germany) and MASCOS (Australia).

This \$1.1M in funding is part of a \$5.9M investment in international partnerships announced today by the Government of Canada ."I congratulate the Networks of Centres of Excellence that have put forward innovative proposals that support Canada's new Government's vision for a more productive economy, and extend Canada's influence around the world," said the Honourable Maxime Bernier, Minister of Industry and Minister responsible for the Networks of Centres of Excellence. "Today's announcement will ensure that Canadian researchers are at the forefront of international initiatives in areas of strategic importance for our economy and society."

About MITACS

MITACS (<u>www.mitacs.ca</u>) is a Network of Centres of Excellence (NCE) for the mathematical sciences hosted by Simon Fraser University in Burnaby, B.C. The only Canadian organization of its kind, it focuses on developing mathematical solutions in five of the economy's fastest growing sectors: biomedical and health, environment and natural resources, information processing, risk and finance and communication, networks and security. Each MITACS research project partners academic scientists and their graduate students from universities across the country with Canadian organizations. For more information about the MITACS Internship Program, visit <u>www.mitacsinternships.ca</u>.

About NCE

The NCE is comprised of 24 pan-Canadian research networks involving 830 companies, 266 public sector departments and agencies, 51 hospitals, 194 Canadian and foreign universities and more than 365 other organizations from Canada and abroad. Last year alone they collectively invested \$71 million in cash and in-kind contributions. For more information, visit www.nce.gc.ca.

- 30 -

Media Information:

Gail Bergman or Indira Tarachandra Gail Bergman PR Tel: (905) 886-1340 or (905) 886-4091

Email: gbergman@gailbergmanpr.com