



# NEWS RELEASE

## CANADA'S NANOTECHNOLOGY INSTITUTE GUIDED BY GLOBAL LEADERS IN RESEARCH AND INDUSTRY

*First Board of Trustees includes Canadian Nobel Prize winner, international researchers, and community and business leaders*

**For immediate release**

**(June 6, 2005 – Edmonton, AB)** — The research of the very small has some big advocates on the first Board of Trustees for the National Institute for Nanotechnology (NINT). Board members have a global outlook with representatives from national and international academic and research institutions, government and multinational corporations including a Canadian Nobel Prize winner and international community and business leaders.

"Alberta is a proud partner in Canada's drive to be a world leader in Nanotechnology," said Victor Doerksen, Minister of Alberta Innovation and Science. "The world class calibre of the Board of Trustees helps establish NINT as an international centre of excellence for nano research and technology commercialization."

The Board of Trustees will have two roles: to provide advice and guidance on the strategic direction of the Institute and to act as the institute's Advisory Board to the National Research Council of Canada.

"The quality of people on the Board of Trustees re-enforces that Canada's National Institute for Nanotechnology is among the elite research institutes in the world and I am proud that NRC's leading edge research teams are a key part of this initiative." said NRC President Pierre Coulombe. "I am looking forward to seeing NINT's international reputation continue to grow under the Board's direction."

"The University of Alberta played an integral role in the establishment of NINT and is a proud partner in its development," said University of Alberta President, Rod Fraser. "The Board of Trustees announced today will clearly provide the kind of advice and guidance to continue moving NINT forward as a world leader."

The National Institute for Nanotechnology conducts advanced research and fosters innovation in support of a new generation of nanotechnology-based firms. Canada's flagship nanotechnology institute, its unique multidisciplinary environment integrates National Research Council (NRC) and the University of Alberta researchers across numerous disciplines. Established in 2001, NINT is a joint initiative of the Government of Canada, the Government of Alberta, the NRC and the University of Alberta.

The first meeting of the Board of Trustees is being held today in Edmonton, Alberta.

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Biographies of the board members follow.

Additional information on National Institute for Nanotechnology is available at [www.nint.nrc.gc.ca](http://www.nint.nrc.gc.ca)

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# Backgrounder

- The institute's governance protocol determines that the Board of Trustees is appointed by and reports to the Institute's Oversight Committee which is comprised of the Presidents of the National Research Council and the University of Alberta, and the Deputy Minister of the Government of Alberta Department of Innovation and Science.
- Ex-Officio members of the Board of Trustees are:  
National Research Council Vice President David Simpson  
University of Alberta Vice President Gary Kachanoski  
Alberta Innovation and Science Assistant Deputy Minister Ron Dyck  
National Institute for Nanotechnology Director General Nils Petersen (non-voting)
- Service on the NINT Board of Trustees is on a voluntary basis.
- The budget for the National Institute for Nanotechnology is \$120 million for the first five years. Half the funds come from the Government of Canada and half from the Government of Alberta and the University of Alberta.
- Nanotechnology is defined as the application of science to developing new materials and processes by manipulating molecular and atomic particles. A nanometre is a billionth of a metre, that is, about 1/80,000 of the diameter of a human hair, or 10 times the diameter of a hydrogen atom. Nano comes from the Greek word for dwarf 'nanos'.

# Board Member Biographies

## **Dr. Robert Church**

Dr. Church is Professor Emeritus of Medical Biochemistry, University of Calgary. He previously held positions as Associate Dean (Medical Research) and Founding Professor and Head of the Department of Medical Biochemistry at the University of Calgary. Dr. Church owns Lochend Luing Ranches in Airdrie. He has been a director of various companies including Ciba-Geigy, Neurosphere Ltd., Vencap Equities Alberta Ltd., and is Chairman of the Canadian Science and Technology Growth Fund, and an AVAC Board member. He was a founding member of the Natural Sciences and Engineering Research Council, the Canadian Institute of Advanced Research and is a former member of the Medical Research Council of Canada and the Alberta Research Council.

## **Dr. Enrico Gratton**

**Professor, Department of Physics**

**University of Illinois at Urbana-Champaign**

Dr. Gratton holds a joint appointment in the Departments of Physics and Biophysics, University of Illinois at Urbana-Champaign. He is Principal Investigator of the Laboratory for Fluorescence Dynamics (LFD) – the first U.S. national facility dedicated to fluorescence spectroscopy – which he founded in 1986. The LFD has reached international recognition for the development of instrumentation for time-resolved fluorescence spectroscopy using frequency domain methods. Currently, Dr. Gratton's research group is interested in two main areas: the development of new methodologies in time-resolved biological fluorescence with direct application to physiologically relevant processes; and the general area of photon migration in tissue, as it applies to spectroscopy, physiological monitoring and imaging.

## **Mr. Chris Lumb**

**President and CEO, Micralyne, Inc.**

Mr. Lumb has been the CEO of Micralyne since 1994. This profitable, growing, MEMS (micro-electro-mechanical systems) developer and manufacturer is based in Edmonton, Alberta. Micralyne uses micro-machining technology to develop and manufacture miniaturized components that enable radical improvements in telecommunications, bioanalysis and automotive instrumentation. Micralyne has manufacturing and development partnerships in place with a number of major instrument companies, including JDS-Uniphase, Creo Products, and other market leaders worldwide. Mr. Lumb led Micralyne's transition from a university-owned not-for-profit to a privately held commercial enterprise. In the last few years Micralyne has emerged as one of North America's most prominent MEMS fabrication companies.

**Dr. David Lynch****Dean of Engineering, University of Alberta**

In his role as Dean of Engineering in the Faculty of Engineering at the University of Alberta, Dr. Lynch has been heavily involved in three main areas: recruitment of outstanding students, recruitment and retention of outstanding new faculty, and obtaining resources to provide an exceptional educational and research environment for all students and staff. His accomplishments include: dramatic growth in the number and quality of engineering students, the appointment of more than 130 new engineering professors including over 30 Chair positions, assembling of resources and construction of over one million sq. feet of space in four new buildings for engineering and natural resources education and research, and providing university leadership to establish the National Institute for Nanotechnology on the University of Alberta campus.

**Mr. Doug Maley****Assistant Deputy Minister****Western Economic Diversification, Alberta Region**

Mr. Maley was appointed Assistant Deputy Minister for the Alberta region of Western Economic Diversification (WD) in August 2001. His career in the public service began as an Economist for the Department of External Affairs and a Market Economist with Agriculture Canada. For more than 20 years, Mr. Maley has provided strong leadership and management in areas related to economic development and diversification across Western Canada. He also serves as a member of the Board and Executive Committee of TRLabs.

**Mr. Preston Manning****Senior Fellow, The Fraser Institute**

Mr. Manning was the first leader of the Reform Party of Canada, a federal political party that disbanded under his leadership to form the Canadian Alliance party. He was first elected to the House of Commons in 1993, and served as Leader of the Official Opposition from 1997 to 2000. He retired from the House of Commons in 2002. Since retiring, Mr. Manning has written his memoirs, and continues to work in consulting, business and communications. In addition to his duties as a Senior Fellow at the Fraser Institute, Mr. Manning serves as Distinguished Visitor at the University of Toronto, Distinguished Visitor at the University of Calgary, and Senior Fellow of the Canada West Foundation.

**Dr. Martin Moskovits****Dean and Professor, University of California**

Dr. Moskovits is a Professor of Physical Chemistry and the Dean of Mathematical, Life, and Physical Sciences at the University of California at Santa Barbara. His research interests have ranged over much of physical chemistry, including spectroscopy, surface chemistry, and more recently the chemistry and fabrication of materials. Dr. Moskovits has published more than 200 papers. He is a Fellow of the Royal Society of Canada, and won the Gerhard Hertzberg award from the Spectroscopy Society of Canada (1993), the Royal Society of Chemistry (London) award in Surface and Colloid Science (1993), the Johannes Marcus Marci Medal of the Czech Spectroscopy Society (1995), and the CSC EWR Steacie Award (1999). He is a member of the editorial board of the Journal of Chemical Physics and serves on the advisory board of the National Research Council's Steacie Institute for Molecular Sciences.

**Dr. William Pulleyblank****Vice President, Center for Business Optimization****IBM, USA**

Dr. Pulleyblank, a Canadian, is Vice President, Center for Business Optimization, within IBM's Business and Consulting Services. Prior to this, he was Director of Exploratory System Servers in IBM's Research Division and the Director of the IBM Deep Computing Institute. In his role with Exploratory Server Systems, Dr. Pulleyblank led a research team that provides broad-based research support to IBM's range of servers. For the Deep Computing Institute, he coordinated activities within IBM and with industry, academic and government research partners. He also served on the advisory council for the Division of Mathematical and Physical Sciences for the National Science Foundation, the board of directors of iCORE, the external advisory board of DIMACS, the advisory council of the Pacific Institute for the Mathematical Sciences, RUTCOR Operations Research International Advisory Board, and the Scientific Advisory Panel of The Fields Institute for Research in Mathematical Sciences.

**Dr. David N. Reinhoudt****Professor, University of Twente, Netherlands**

Dr. Reinhoudt became a full professor at the University of Twente in 1978, three years after joining the university. His research is focused on supramolecular chemistry and technology, with a particular emphasis on nanofabrication, molecular recognition, and non-covalent combinatorial synthesis. He is actively pursuing the application of supramolecular chemistry in electronic or optical sensor systems, catalysis, molecular materials and 'lab-on-a-chip' technology. Dr. Reinhoudt is the scientific director of the MESA+ Research Institute, chairman of the Board of NanoNed (the Dutch Network for Nanotechnology), and vice-chairman of the Dutch National Organization for Applied Science (STW). He has been honoured with the Izatt-Christensen award (1995), the Simon Stevin Mastership (1998) and Knight of the Order of the Dutch Lion (2002).

**Dr. Richard Taylor**  
**Professor Emeritus, Department of Physics**  
**Stanford University**

Richard Taylor is a Professor Emeritus at Stanford University. Dr. Taylor is the first University of Alberta graduate (B.Sc. and M.Sc. in Physics) to win a Nobel Prize. He shared the 1990 Nobel Prize in Physics for “fundamental discoveries which show the innermost structure of matter.” The experiments demonstrated the existence of the previously hypothesized quarks.

Taylor is Canadian, born and raised in Medicine Hat, Alberta. He left Alberta in 1952 for graduate studies at Stanford University, after which he spent three years in France working at the Grand Accelérateur Lineaire at Orsay. In 1962, he returned to Stanford, where, from 1962 to 1968, he was a staff member engaged in the construction of experimental facilities for the 3 kilometer long linear accelerator (SLAC). When the new accelerator became operational in 1966, he joined in experiments using electron beams that led to the Nobel Prize. He was appointed to the SLAC Faculty in 1968 and was Associate Director for Research at that institution from 1982 to 1986. Since his retirement he has maintained an interest in measurements of high energy gamma rays in space.

**Dr. Carter Tseng**  
**Founder and CEO, Little Dragon Foundation**

Dr. Tseng has more than 20 years' experience in the information and communication industries. He founded two highly successfully technology companies: E-Tech, Inc., a world leader in communications technology, and Microtek Inc, one of the first and most successful IPO companies in Taiwan. Dr. Tseng is now CEO of the Little Dragon Foundation, an organization he founded to guide entrepreneurs of tomorrow. He also sits on the board of several high-tech enterprises and educational organizations. He is an adjunct professor at City University of Hong Kong, adjunct professor of the University of Alberta, Consultant Professor at Shanghai University, and CEO Training Professor of Tsing Hua University. He is the founder of the Organization for Chinese-American Entrepreneurs Advisory Network (OCEAN) and co-founder of Monte Jade Science & Technology Association.

**Dr. Stan Williams**  
**Director, Quantum Science Research**  
**HP Labs**

Dr. Williams is a Senior HP Fellow at HP Labs, Hewlett-Packard's central research organization, and director of HP's Quantum Science Research group. He leads a scientific team that is conducting research into nanoscale science and the fundamental physics of switching, with a significant emphasis on molecular electronics. Dr. Williams' research interests are in the areas of solid-state chemistry and physics and their application to technology. He is one of the developers of the field of modern materials chemistry, which involves the synthesis of new materials with desirable optical or electronic properties and the fabrication of these materials into useful structures. His awards for scientific and academic achievement include the Dreyfus Teacher-Scholar Award, the Sloan Foundation Fellowship, the Julius Springer Award for Applied Physics and the Feynman Prize in Nanotechnology.