

THE GLOBE AND MAIL

SCIENCE

McGill profs win three of five Killam awards

Tax-free prizes of \$100,000 each, described as mini-Nobels, are given to research scholars of exceptional ability

JOE FRIESEN

From Tuesday's Globe and Mail, Friday, May. 15, 2009 03:33PM EDT

McGill university scholars yesterday claimed three of the five Killam prizes - described as mini-Nobels by one winner - giving each \$100,000 in tax-free cash that, unusually for a Canadian award, doesn't have to be funnelled toward research.

Wagdi Habashi, a McGill professor of engineering, said winning the award was an indescribable feeling, a day of "joy and celebration."

"There are many honours in Canada but there's seldom an honour that combines excellence in scholarship with an amount of money that changes your life," he said.

Dr. Habashi, who plans to buy a new house with his prize, was joined by his McGill colleagues François Ricard, a professor of literature, and renowned scientist Philippe Gros in accepting congratulations yesterday.

The other winners were biologist John Smol of Queen's University and legal theorist Ernest Weinrib of the University of Toronto. The awards are given every year by the Canada Council for the Arts.

Prof. Smol said this year's prizes underline the importance of funding basic research that doesn't have an immediately obvious industrial application, something that governments can lose sight of when they're too heavily involved in choosing which research gets funded.

"When you're in the environmental field, industry is in no great rush to support a lot of this work, to be perfectly blunt. So you're really dependent on public money to do it," he said.

Dr. Habashi said he and his colleagues often field offers to go to U.S. universities that offer higher salaries, but he prefers the stable research environment in Canada.

He said the research infrastructure has improved immeasurably thanks to the funding of the Canadian Foundation for Innovation and the Canada Research Chairs, which have not only kept researchers in Canada but attracted them from around the world.

"I'm interested in staying in a research milieu where it's steady, where with a new government that comes in, research will not be coloured by their own interests," he said. "We may be seeing a blip this year, but in general Canadian research is healthy and doing extremely well."

WAGDI HABASHI

Dr. Habashi came to Canada from Egypt in the late 1960s as an undergraduate engineering student at McGill.

After quickly rising to the top of his class, he went on to get his PhD in fluid dynamics from Cornell. He returned to Montreal to teach and began a fruitful collaboration with aircraft engine manufacturers Pratt and Whitney.

"That's where I focused all my life - to do some very fundamental research at the university but always keeping in mind that it cannot be developed in isolation, that ultimately it's got to find its way into an industrial application."

He is best known for his work on wing de-icing technology, having devised a mathematical formula that allows manufacturers to test a plane's in-flight de-icing capacity before it has been built.

"You can simulate what will happen to the airplane long before you decide on the final configuration of the plane," he said.

PHILIPPE GROS

Prof. Gros is known around the world as an expert in mouse genetics.

His experiments on mice have probed a wide variety of research problems, including genetic resistance to infectious diseases such as tuberculosis and malaria, developmental defects such as spina bifida, and the molecular biology of multi-drug resistance.

At the moment, he's working on a project to identify a defective gene in mice and hoping its results can help initiate a clinical trial to treat malaria in humans.

"We don't always succeed but in a few cases we are capable of addressing real issues in humans using the mouse model as a starting point," he said.

FRANÇOIS RICARD

Dr. Ricard is a literary critic known for his writing on Quebec. He is the author of a 1996 biography of Canadian author Gabrielle Roy, and editor of a seven-volume collection of her unpublished writings. In 1992 he published *La génération lyrique*, on the Quiet Revolution, described as one of the essential texts on Quebec.

He is also the author of an acclaimed analysis of Czech writer Milan Kundera.

A past director of the literary journal *Liberté*, he is the winner of a Governor General's Literary Award for non-fiction and the Académie française's *Grande médaille de la Francophonie*.

He has taught at McGill's department of French language and literature since 1971.

JOHN SMOL

Dr. Smol is a freshwater biologist known for his work on the Arctic. He analyzes sediment at the bottom of lakes to gather historical data on how climates have evolved, pioneering the field of paleolimnology.

"One of the biggest problems in environmental research is we don't have long-term monitoring data. We usually deal with a problem once we see a problem - after the fact - and we don't know what it was like before the problem," he said.

His work in the Arctic, where even the best data goes back only 50 years, has shown the climate has undergone dramatic change, with some ecosystems disappearing completely.

"When you're in the environmental field you can get discouraged pretty easily," he said. "So it's nice to get something like this that tells you to keep going, it's important."

ERNEST WEINRIB

Prof. Weinrib has taught at the University of Toronto for more than 40 years, beginning in 1968 when he was hired as a professor of classics. One of Canada's foremost legal scholars and an expert in tort law, he is known for his work on the moral meaning of the law and his theory of corrective justice.

He is the author of *The Idea of Private Law*, published in 1995, and a well-known student casebook *Tort Law: Cases and Materials*.

He has been a visiting professor at Yale and at the University of Tel Aviv, and is a fellow of the Royal Society of Canada. He is also a foreign honorary member of the American Academy of Arts and Sciences.

© Copyright 2009 CTVglobemedia Publishing Inc. All Rights Reserved.

The Globe and Mail is a division of CTVglobemedia Publishing Inc., 444 Front St. W.,

Toronto, ON Canada M5V 2S9

Phillip Crawley, Publisher