

The Imagination to Innovate;
The Stamina to Succeed

Innovatis

Ernest C. Manning Awards Foundation

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2009 Nominees Issue

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Glimpsing the Future

Innovation has a tendency to emerge during times of economic downturn. And as *The Globe and Mail's* Eric Reguly wrote in early January, new products do more than emerge – they can spark consumer demand, industrial activity – and recharge the economy. The article cited some iconic examples: from the Great Depression's nylon, synthetic rubber and washing machine through to the emergence of Apple and Microsoft during the oil-shocked, stagflation-ridden 1970s.

But more interesting is the transformational impact the combination of a turbulent economy, new innovations and determined entrepreneurs can have. In the 1970s, the intersection of these forces: stagflation, Bill Gates' Microsoft and Steve Jobs' Apple thrust the world into the digital age, stimulating new sectors, transforming others.

Over nearly three decades, the Ernest C. Manning Awards Foundation has seen early evidence of ideas that intimated at massive changes slowly gaining critical mass. Current economic turbulence, fed by environmental uncertainties and questions about sustainable energy sources, have raised longstanding themes evident amongst our Laureates into global action items. In 2005, the establishment of the C40 [the Large Cities Climate Leadership Group], led this year by a Canadian Mayor, has applied significant pressure throughout North America, Europe and Asia, resulting in critical economic stimulus that is expected to catapult industrial nations into a new "sustainable" economy.

Internationally, and across Canada, at all levels of government, infrastructure renewal projects resilient to climate change stressors, technologies that reduce greenhouse gas production and simulate green industries and green jobs have emerged as the way of the future.

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A portent of things to come? John Hollick's SolarWall® [1995, Innovation Award]. There are over 1000 SolarWall systems in 25 countries, including at the 2008 Beijing Olympic Village [top] and in Germany [right].



The Imagination to Innovate; The Stamina to Succeed



Fred Dimmick [1993, Innovation Award], Energy-efficient lighting



Dr. David Schindler [1993, Award of Distinction]: led to the ban of phosphates in detergents



Dr. Pierre Côté [2000, Principal Award]: ZeeWeed water filtration system



Arnold & Phil Hennessy [2008, Innovation Award]: Flapperless Tip-Bucket Toilet

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From Fred Dimmick and his energy-efficient lighting technology; Dr. David Schindler's "Whole lake experiments", that demonstrated the harmful effects of phosphates; John Hollick's SolarWall®; Dr. Pierre Côté's Zee-Weed water filtration system through to Arnold and Phil Hennessy's water-conserving Flapperless Tip-Bucket Toilet, innumerable qualified nominees and award winners have hinted that the environment was set to become an important issue.

Successful internationally; recognized internationally. But not household names here in Canada. At least not yet. But as a greener, more sustainable economy is poised to be the next evolution amongst industrial nations, that may soon change.

And amongst the nominees vying for the 2009 Manning Innovation Awards may just be an early glimpse of the economy to come.

That's the thing about innovators and innovation. It takes time. It takes stamina. And it takes Canadians.

Qualified Nominees for the 2009 Manning Innovation Awards

Every year, applicants for the Manning Awards provide an interesting snapshot of the country: its concerns and interests. In a country renowned for its health care, it's no surprise that medical/healthcare innovations are always well-represented, as are energy, safety, communication, knowledge sharing, agriculture and the environment.

Over the next few months, Chapters across the country will be holding Nominee Recognition Events to celebrate this year's qualified applicants.



Watch for award-winner announcements in advance of the National Awards Ceremony starting in early September.

2009 Nominee Recognition Events

Atlantic Chapter: Wednesday, 1 April

Manitoba Chapter: Thursday, 28 May

Northern and Southern Alberta, British Columbia, Ontario and Quebec will be finalized shortly

Welcoming Dr. Morley Hollenberg to the Selection Committee



The Ernest C. Manning Awards Foundation is pleased to welcome the University of Calgary's **Dr. Morley Hollenberg** to the Selection Committee. A professor in the departments of Pharmacology & Therapeutics and Medicine in the Faculty of Medicine, Dr. Hollenberg's work focusses on bio-synthesis and the actions of peptide hormones and the molecular pharmacology and pathophysiology of receptor-mediated signaling by growth factors and G-protein coupled receptors. A Rhodes Scholar, member of the Royal Society of Canada [Academy of Science, Life Sciences Division] and former member of the Gairdner Foundation's Advisory Board, he is a tremendous addition to the Selection Committee who will maintain the rigorous assessment standards of the Manning Innovation Awards.

The Imagination to Innovate; The Stamina to Succeed



The NRC's George Klein and Robert Owens at work on the prototype electric wheelchair, in the early 1950s. The prototype can be seen at the Canada Science and Technology Museum in Ottawa.



Demonstrating the Step-Climbing Wheelchair at the 2006 Canada-Wide Science Fair in Saguenay, Quebec.

“This award...served as a source of motivation and encouragement for me. The Award of Distinction recognized my work in creating awareness of the potential of people living with a spinal cord injury and related disabilities. I believe that the impacts of the Manning Innovation Awards will continue to benefit future generations and will leave lasting legacies.”

RICK HANSEN, 2006

Innovation: Unpredictable and Invaluable

Innovation takes unexpected turns.

In what came to be regarded as “one of the greatest artifacts in the history of Canadian science, engineering and invention”, a team led by George Klein at the National Research Council of Canada, developed the world’s first practical motorized wheelchair.

Thanks to the efforts of John Counsell, a paraplegic war veteran, Canada became the first country to purchase a large number of manual wheelchairs for its veterans. Helpful to paraplegics, they provided little independence for quadriplegics.

In an unprecedented collaboration between scientists, engineers, patients and doctors, the NRC spearheaded the development of a motorized wheelchair, one of the world’s first examples of “rehabilitation engineering”.



Far left: Rick Hansen at the 1989 National Awards Gala.

Middle: Colby Mainil and Michael Ehman, 2006 Young Canadian Innovation Award winners, for the Step-Climbing Wheelchair.

Left: Colby Mainil, Rick Hansen and Michael Ehman, at the 25th Anniversary Manning Innovation Awards ceremony in Calgary, 2006.

Then came another Canadian – Rick Hansen – who took aim at improving the autonomy of para- and quadriplegics in an entirely new way.

Hansen embarked on an audacious initiative that would transform the lives of para- and quadriplegics – his Man in Motion Tour. Setting off in 1985, he wheeled through four continents, raising millions of dollars for spinal cord research and profoundly changing the way the world perceived and valued citizens in wheelchairs. In Canada, laws and building codes changed. Communities became more accessible: sidewalks, buildings, public transportation, workplaces changed to accommodate – even welcome – citizens in wheelchairs.

In 2006, this very Canadian story of both technical and social leadership made another appearance at the Ernest C. Manning Awards Foundation. Two high school students from Saskatchewan, Michael Ehman and Colby Mainil, invented the Step-Climbing Wheelchair. With some inexpensive hardware, they could equip almost any wheelchair – from modern North American models to the old-style manual versions that are often all that are available in the developing world – with a device that would let even a paraplegic with limited upper body strength climb a curb or a step in their wheelchair without assistance

Winners of a Young Canadian Innovation Award, Michael and Colby received their award at the 25th anniversary Ernest C. Manning Awards Foundation celebration – from none other than Rick Hansen. A man who wheeled around the world, but could still be obstructed by a simple road curb.

Innovation.

From technical to social to technical.

Unpredictable. Invaluable.

FOUNDATION NEWS



Congratulations to Trustee **Don Pether** appointed to the Board of Directors of Emera Inc. A former Chair of the Board [and CEO] of Dofasco Inc., he is currently Chair of the Board of the Hamilton Health Sciences Foundation, Vice-Chair of the Board of Governors for McMaster University, and Chair of the Board of the McMaster Innovation Park. He sits on the Council of Governors for the Art Gallery of Hamilton and the Board of Directors of Samuel Manu-Tech Inc. and is a former trustee of the Fording Canadian Coal Trust.



Trustee and son of Ernest C. Manning, **Preston Manning** was elevated to Companion by the Order of Canada in December 2008. The nation's highest civilian honour recognizing lifetime achievement, he was first appointed in 2007. Preston has an undergraduate degree in physics, and is not only a passionate advocate for science, he has a rich history of personal innovation in political and social realms. He was founder and leader of the Reform Party, and most recently established the Manning Centre for Building Democracy.



In January, **France Côté**, Trustee and Quebec Chapter Chair established a new patent agency firm, Benoît & Côté. Previously, she was a co-founding partner of Bereskin & Parr's Montreal office [2005-2008] and Chair of Ogilvy Renault's Montreal IP group [2003-2005].

Manning Innovation Awards in the Media



2008 Principal Award winner **Janusz Pawliszyn, PhD**, on the cover of *Laboratory Focus*, a national publication reaching 20,000 scientists and technicians.



The *Edmonton Commerce News* featured an article on the Ernest C. Manning Awards Foundation in their annual Entrepreneurship issue. It reaches an audience of over 160,000



Atlantic Canada's *Progress* magazine dedicated two pages and the issue's editorial to Manning Innovation Award winners. *Progress* reaches over 25,000 people throughout the region.



In January, the *Waterloo Region Record* ran a number of feature articles celebrating 10 years of the BlackBerry. One story showcased laureate Gary Mousseau, co-winner, with Mike Lazaridis, of the 2002 Principal Award, who recounts the shock when project "PocketLink" was renamed "BlackBerry".

THANKS TO OUR PARTNERS



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