



**MONTREAL'S CHARLES DEGUIRE NAMED WINNER OF THE  
2014 ERNEST C. MANNING INNOVATION AWARD**

**Calgary, AB.** (Sept. 23, 2014) – Charles Deguire of Montreal is a winner of this year's \$10 000 Ernest C. Manning Innovation Award for inventing and commercializing the JACO® Robotic Arm. Mr. Deguire will receive his prize at the Foundation's 33<sup>rd</sup> Innovation Awards Gala in Ottawa on Wednesday October 22<sup>nd</sup>.

For most of his life, Deguire watched his uncle Jacques live with muscular dystrophy. Despite being unable to move more than one finger, his great uncle overcame his adversity and enhanced his independence by building himself an assisting arm out of household items, which he controlled with his active finger. Deeply moved and inspired by his great uncle's experience and intuition, and motivated by his family's entrepreneurialism, Deguire decided to dedicate his life to solving mobility problems for people living with physical disabilities.

Deguire put his significant knowledge in robotics and engineering to work by analyzing all the movements needed for completing rudimentary, everyday tasks, such as drinking a cup of coffee or getting a glass of water. The robotic assisting aids on the market were unable to recreate fluid, able-bodied movement, so Mr. Deguire challenged himself to create a device that would adapt to the user's need, focusing on giving the user new manipulation capacity without limiting existing mobility.

Today the JACO® arm, named after his uncle, increases its users' independence enabling them to perform daily living tasks autonomously. Each joint of the robot has all of the sensing capabilities required to interact with its environment, mirroring the same functionality as a user with full upper limb mobility. It is composed of a six inter-linked carbon fibre segments, the last of which is a three fingered gripper, enabling the user to grasp or release almost any size or material of an object. The device's lightweight, compact, portable, safe and weatherproof design assures its durability and it can also be integrated with wheelchairs. The JACO® arm is now being used by the Government of Netherland's health authority, NASA, Toyota and more than 100 universities and research labs in 27 countries.

"The Ernest C. Manning Awards Foundation is helping to build a culture of Canadian innovation by recognizing and rewarding Canadian innovators" says Foundation President Jennifer Diakiw. "Our Awards celebrate innovators who are improving the lives of Canadians and others around the world through their commercialized innovations. They add value to our provincial and national economies by creating jobs and wealth and positioning our country as a global competitor. Our distinguished alumni are leaders in technology, business, engineering, and social innovation advancement, and we consider them Canada's most valuable resource."

For more information about the Foundation and the 33<sup>rd</sup> Ernest C. Manning Innovation Awards Gala visit [www.manningawards.ca](http://www.manningawards.ca). Follow Manning Awards on Twitter @ManningAwardsCA, or like on Facebook at [www.facebook.com/ManningAwards](https://www.facebook.com/ManningAwards).

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