The $4 million challenge to transform the world of people with lower-limb paralysis

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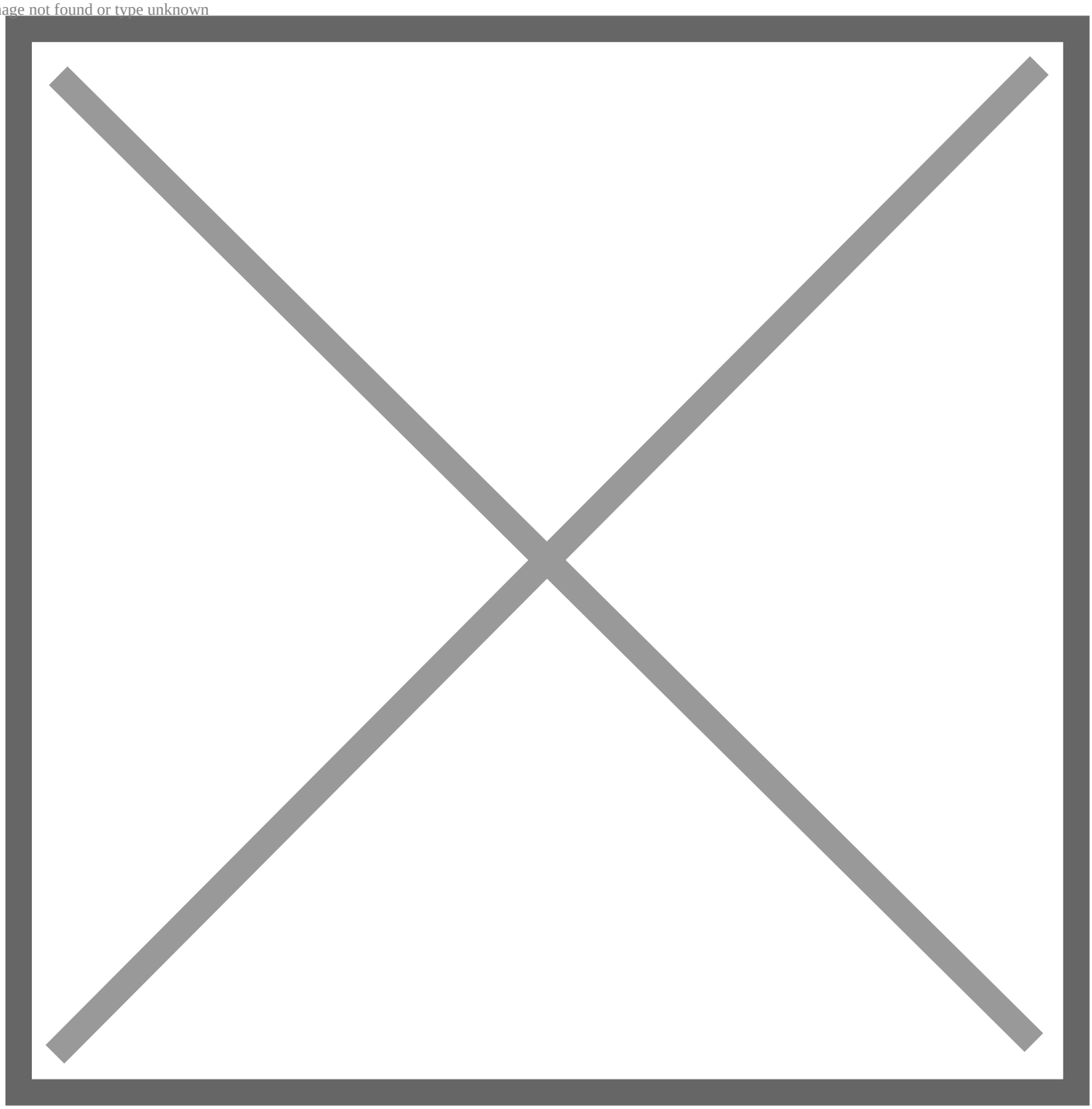

LOS ANGELES, Nov. 16, 2017 – The Toyota Mobility Foundation, in partnership with Nesta's Challenge Prize Centre, has launched a $4 million-dollar global challenge to change the lives of people with lower-limb paralysis, culminating in the unveiling of the winners in Tokyo in 2020.

The Mobility Unlimited Challenge is seeking teams around the world to create game-changing technology that will help radically improve the mobility and independence of paralyzed people.

The Mobility Unlimited Challenge aims to harness creative thinking from across the world to accelerate innovation and encourage collaboration with users to find winning devices to transform the world for people with lower-limb paralysis. The Challenge will reward the development of personal mobility devices incorporating intelligent systems.

The mobility solutions of the future could include anything from exoskeletons, to artificial intelligence and machine learning, from cloud computing to batteries.

Around the world, millions of people are living with lower-limb paralysis (the most common causes being strokes, spinal cord injury and multiple sclerosis). While there are no statistics on paralysis worldwide, the World Health Organization estimates there are 250,000-500,000 new cases of spinal cord injury globally every year.

Innovation in "smarter" mobility technology has the potential to create personal devices that are better integrated with the user's body and the environment. But the application of this groundbreaking technology is slow due to disincentives such as small and fragmented markets, regulatory burdens, and reimbursement complexities from healthcare systems and insurers.

This can make the field unattractive to small or new entrants, and prevent innovative solutions by existing innovators from getting to market. Even though huge advances have been made in improving travel between places, innovation in everyday functionality still lags.

The Mobility Unlimited Challenge Prize is supported by global ambassadors from around the world, all of whom have experience of living with lower-limb paralysis. Global ambassadors include: August de los Reyes, Head of Design at Pinterest; Yinka Shonibare MBE, Turner-Prize nominated British-Nigerian artist; Sandra Khumalo, South African Paralympic rower; Indian athlete and campaigner Preethi Srinivasan; Sophie Morgan, British TV presenter; US Paralympian Tatyana McFadden; and Rory A. Cooper, director of the Human Engineering Research Laboratories at the University of Pittsburgh.

All global ambassadors are available for interview on request. Statements by program directors as follows:

Ryan Klem, Director of Programs for Toyota Mobility Foundation:
"This is the beginning of our challenge, a three-year journey *concluding in Tokyo in 2020*. A journey where the greatest minds in technology, design and engineering, from every corner of the world, will compete to make the environment and society more accessible for people with lower-limb paralysis. We know we don't have solutions yet: this Challenge is about working with the people who can help develop them."

Charlotte Macken of Nesta's Challenge Prize Centre:
"Challenge Prizes are a way to make innovation happen. The Mobility Unlimited Challenge is about the freedom to move. It will support innovators, creating cutting-edge personal mobility devices incorporating smart technology and intelligent systems that will transform people's lives."

A panel of expert judges will pick five finalists who will each receive $500,000 to take their concepts from an intelligent insight to a prototype. The Challenge winner will receive $1 million to help get their product to market – with the winning concept unveiled in Tokyo in 2020.

The Mobility Unlimited Challenge aims to attract and support smaller innovators who might otherwise struggle to break into the assistive technology market. The Discovery Awards will provide seed funding of $50,000 for 10 groups with promising concepts, but who might otherwise lack the resources to enter the Challenge. Interested innovators can apply online at **mobilityunlimited.org**.

Building on universal design principles to create a more equitable environment, entries for the Mobility Unlimited Challenge will be user-centered. The Challenge will be a catalyst for innovation through co-creation with the people around the world who will benefit most from the solutions discovered by our entrants.

At the end of the Mobility Unlimited Challenge, the Toyota Mobility Foundation and Nesta's Challenge Prize Centre will have supported teams of innovators in creating leading edge technological solutions, opening a new chapter in personal mobility for people with lower-limb paralysis.

For more information please visit **mobilityunlimited.org**