



A PLATFORM FOR INNOVATION

June 2017

Innovation is an area of particular focus, both globally and for Canada. It was a core theme in Budget 2017 and it underpins Canada's future economic and social prosperity. Innovation is also a key driver for the attainment of the Sustainable Development Goals by 2030.

It is an important aspect of Canada's international development assistance, and we are excited to continue to partner with Global Affairs Canada, particularly in the area of women's, children's and adolescents' health, and global mental health. So, where does Grand Challenges Canada fit within the Canadian and global innovation ecosystem?

Stephen Huddart, President and CEO of the J.W. McConnell Family Foundation, offered an interesting perspective on the importance of challenge platforms in a recent Walrus Talk:

"Our [Canada's] most widely used public challenge platform is actually better known outside Canada than within. Grand Challenges Canada focuses on improving maternal and child health in the developing world and, by 2030, aims to have saved one million lives and improved 30 to 40 million more."

To me, this comment captures two important elements of Grand Challenges Canada. First, at our core, we are an innovation platform that has spent seven years testing and refining itself in global health. Second, while it is undoubtedly true that, as an organization, we have deep expertise in global health, our core competency lies in our capacity to develop and implement programs and processes to support transformative innovations, and help them go to scale—in other words, to solve grand challenges.

As the CEO of Grand Challenges Canada, I am proud of what our team has accomplished in global health. Take, for example, the work of Audra Renyi (described in detail on the following page), which has been recognized this year through a Governor General's Innovation Award. Ms. Renyi has said several times that her innovation was unlikely to have been supported through traditional research-funding organizations; however, with support from Grand Challenges Canada, it is now remedying hearing loss in Canada's north and around the world. As excited as I am by the accomplishments of individual innovators like Ms. Renyi, as an innovator myself, I am equally excited by the possibility of expanding the Grand Challenges approach – itself an innovation – and bringing it to scale to benefit Canada and the world.

The balance of this letter is in three parts: **Our Innovation Platform** section looks at what we and our partners have achieved together in global health through the Grand Challenges approach, **Our Core Capabilities** section provides some insight into the core capabilities that enable us to have a lasting and meaningful impact, and **Our Future** section provides a more personal look at where I think the Grand Challenges approach can make a contribution to both Canada and the world in the coming years.



His Excellency the Right Honourable David Johnston, Governor General of Canada, presenting Audra Renyi with a Governor General's Innovation Award in May 2017 at Rideau Hall. © MCpl Vincent Carboneau, Rideau Hall, OSGG, 2017





Our Innovation Platform

Grand Challenges Canada's mission has always been clear: we support **Bold Ideas with Big Impact**®. To do so, we use the Grand Challenges approach, which:

1. Improves the **value for money** of innovation by taking smart risks;
2. Engages innovators and social entrepreneurs to help **solve critical challenges**;
3. Leverages the **public, private and not-for-profit sectors** to maximize impact; and
4. Advances **critical policy objectives** by delivering scalable and sustainable outcomes.

We began our work, or "proof-of-concept", with a specific focus on Grand Challenges in global health. We have supported over 800 innovations in 80 countries in this area over the past seven years.

Grand Challenges Canada's Outcomes by 2030



520,000–1.6 million lives saved by 2030

through the use of innovative products and services that save lives.

11,200 lives have been saved to date.



15–42 million lives improved by 2030

through the use of innovative products and services that improve health.

1.3 million lives have been improved to date.

Audra Renyi, Innovator: Executive Director, World Wide Hearing Foundation

Growing up in a family with hearing loss, Audra Renyi's lifelong mission has been to help children hear. In 2011, Audra launched World Wide Hearing Foundation with Founding Chairman, Claudio Bussandri, which is focused on helping the one billion people affected by hearing loss – 80% of whom live in developing countries, 180 million of whom are children, and most of whom have no access to hearing aids, due to their high cost and lack of trained personnel to fit them.

Audra's innovative solution radically reduces the cost of providing hearing aids by training local people to test for and provide affordable hearing aids. Audra is on track to screen 100,000 children in developing countries, providing access to life-changing hearing aids and hearing care.

Under Audra's leadership, World Wide Hearing is now expanding to take on hearing loss in Canada's north, where 30–60% of school-age Inuit children suffer from hearing loss, compared to just 2.6% of the Canadian population. Thanks to World Wide Hearing, Inuit children will gain access to life-changing hearing aids and hearing care, enabling them to succeed in school, find good jobs, and participate in their communities.



Audra Renyi conducting a hearing screening in Guatemala
© Claudio Bussandri, World Wide Hearing





Our Innovation Platform (continued)

These innovations are expected to save between 520,000 and 1.6 million lives, and improve between 15 million and 42 million lives by 2030. The figure below provides some insight into how lives are being improved by our innovators by 2030:



Our work has been recognized both in Canada and abroad. Last year, for example, the Honourable Bill Morneau, Canada's Minister of Finance, spoke at the 2016 World Bank and World Health Organization "Out of the Shadows" event, during which he stated that:

"Our support of the Grand Challenges Canada global mental health portfolio is something that we are proud of. It's an organization that has given real prominence to this issue and has delivered some really important initiatives around the world."

As an organization, we have always believed strongly in the importance of focus. At the core of this belief is an understanding that proven and effective ideas should be taken to scale to optimize their impact. This is true both of the innovations that Grand Challenges Canada supports and, I would argue, for the Grand Challenges Canada platform as a whole.



The Honourable Bill Morneau, Canada's Minister of Finance, speaking at the "Out of the Shadows" event at the World Bank on April 13, 2016
© Franz Mahr Photography LLC 2016





Our Core Capabilities

So what does Grand Challenges Canada's innovation platform do? Why has our model been effective thus far at enabling innovations to have impact? In past letters, I have talked about some of the core features of Grand Challenges Canada that I think are important in this regard, including flexibility to operate. At an operational level, however, our effectiveness grows out of our two core areas of expertise:

1. **Identifying** Grand Challenges, and
2. **Delivering** programs to address these challenges.

Identifying Grand Challenges

Before a challenge can be solved, it first needs to be clearly articulated. Grand Challenges Canada has developed and refined an approach to identifying Grand Challenges that we have improved over time. The first Grand Challenge identification process that we contributed to was led by the Bill & Melinda Gates Foundation in 2003 to identify Grand Challenges in global health; the second in 2007 identified Grand Challenges in chronic non-communicable diseases; and a third in 2011 identified Grand Challenges in global mental health. I had the privilege of working on these three exercises with my colleague and friend Dr. Abdallah Daar, who is the chair of our Scientific Advisory Board.

All three of these exercises demonstrated that the Grand Challenges model is able to capture public imagination and focus innovators on developing solutions to critical challenges. Moreover, they all resulted in substantial innovation programs being funded and launched to solve the challenges that had been identified, including the Bill & Melinda Gates Foundation's Grand Challenges in Global Health program, the Global Alliance for Chronic Diseases, and the Global Mental Health programs of Grand Challenges Canada and the United States National Institutes of Mental Health.

We are currently in the process of running a fourth identification exercise to articulate **Humanitarian Grand Challenges**, and I hope that this process will have a similar galvanizing impact in the area of humanitarian innovation.

Not all subjects or challenges are amenable to a Grand Challenges approach. It is most effective in addressing challenges that have the following characteristics:

1. The challenge is in a 'greenfield' sector, an area with few mature or developed solutions.
2. The challenge is likely to be tractable over a reasonable time period (roughly a ten-year timeframe).
3. There are definable challenges that can be clearly articulated.
4. The solutions that might emerge are anticipated to have the potential for significant impact.
5. The solutions that might emerge can mobilize social, business and technological innovation (Integrated Innovation®).

Once a Grand Challenge has been clearly articulated, then it is time to focus on building the necessary partnerships to fund, develop and deliver competitions to address and, ultimately, overcome the challenge.



In December 2016, I met with Dr. Dixon Chibanda, co-founder of the Friendship Bench therapy program in Zimbabwe. With Grand Challenges Canada's support, the Friendship Bench has scaled to 72 clinics in three cities in Zimbabwe. © Grand Challenges Canada





Our Core Capabilities (continued)

Delivering Grand Challenges

Over the past seven years, Grand Challenges Canada has developed and refined our infrastructure for launching seed and Transition To Scale competitions to find solutions to specific grand challenges, having done so more than 20 times across our various programs. Some of the core capacities that we have developed include:

- Delivering seed competitions, often in partnership with a broad array of public, private and not-for-profit sector foundations. A key lesson that we have learned is the importance of having regular competitions, with a continual cycle of feedback and improvement, in order to build a sustainable pipeline of innovations.
- Implementing an effective scaling model, including a unique Investment Committee approach at Transition To Scale that brings together impact investors, social entrepreneurs, subject matter and other experts to help identify those innovations with the greatest potential impact and highest likelihood of sustainable success. Another exciting innovation that we have helped to develop and implement is the *Every Woman Every Child* Innovation Marketplace, which brings together and curates successful innovations in reproductive, maternal, newborn and child health, and helps to broker deals with interested investors.
- Modeling future outcomes, in order to measure the potential impact of current investments in innovations. The outcomes of innovation – what we care about most – are in the future. As a result, most innovation programs and organizations default to measuring outputs. We feel it is critical to model, as best as possible, the potential real-world outcomes of innovations, in order to support more effective investment decisions. This approach has been further refined and developed by the International Development Innovation Alliance.

- Using non-grant finance, including an array of investment approaches, to support promising innovations as they go to scale. We have found that each innovation is unique and requires its own tailored investment approach. In many ways, Grand Challenges Canada is a Development Finance Institution focused on investments in development innovation.
- Ensuring global access, using an approach that is both effective and tailored specifically to the individual needs of development innovations as they scale.

Although all of the above core capabilities were developed and tested in the context of global health, I firmly believe that they have broader applications across the entire innovation domain.



A mother holding her premature baby in the Kangaroo Mother Care position. A study published in *Pediatrics* in December 2016, supported by the Saving Brains partnership, showed that Kangaroo Mother Care helps premature babies thrive 20 years later. © *Fundación Canguro*





Our Future

As I look to the future, I am proud of and excited for the organization that I have helped to build. Further, I was excited to see the Government of Canada internalize the potential of challenge programs through the creation of the **Impact Canada Fund** in Budget 2017. I look forward to working with and sharing our lessons learned and good practices with this exciting initiative.

I also worry about the growing movement in some parts of the world away from globalization towards a more insular and nationalist perspective. I think that there is a critically important role for the Grand Challenges movement to play in serving as a vehicle for global governance, one which enables many voices from across countries and from every sector to contribute to identifying and solving critical global challenges. The Grand Challenges approach is uniquely suited to mobilizing and coordinating a range of contributions and resources, without the need for a central, decision-making body.

There is one opportunity to leverage the Grand Challenges platform that I think is particularly significant for Canadians and could be transformative – **Indigenous Grand Challenges**. In this era of reconciliation, we have been working with Indigenous leaders and the J.W. McConnell Family Foundation to explore the potential of using the Grand Challenges approach as a platform for social and economic reconciliation. I am inspired by the vision of the Indigenous innovators with whom I have spoken, and I am excited at the potential for transformative impact in all of our communities, Indigenous and non-Indigenous.



Yours truly,

Peter A. Singer, OC
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Grand Challenges Canada is dedicated to supporting Bold Ideas with Big Impact® in global health. We are funded by the Government of Canada.

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