



Grand Challenges Canada™
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News Release

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Tackling Maternal Depression, Kangaroo Mother Care for Premature Babies, Nutrition Interventions, Early Treatment for Malaria – all part of 11 Diverse Innovations to Dramatically Improve Developing World Children’s Cognitive Potential and Their Futures

Grand Challenges Canada Announces \$11.8 million in funding for Bold, Breakthrough Innovations through its Saving Brains Initiative

Toronto. As many as 200 million children fail to meet their full developmental potential because of the debilitating impact of poverty. Risk factors, such as malnutrition, infection, unhealthy pregnancy and birth complications, as well as an absence of stimulation and nurturing all contribute to the loss of cognitive potential in developing world children and condemn them to impoverished lives.

“The best way to keep a country poor is to rob its children of their full developmental potential,” said Dr. Peter A. Singer, CEO of Grand Challenges Canada. “Consistent with Canada’s commitment to women’s and children’s health, the Saving Brains initiative is a bold and transformational approach to addressing the significant challenges facing the developing world. We are investing in improving conditions in the first 1,000 days of children’s lives so they can flourish and pull themselves – and consequently their countries – out of poverty.”

Grand Challenges Canada, which is funded by the Government of Canada, today announced \$11.8 million CAD in funding over two years for 11 bold ideas from innovators in the developing world, to address health conditions causing diminished cognitive potential and stunting. These are breakthrough innovations that, in some cases, can improve women’s and children’s health in wealthy countries too. Among the 11 innovations are:

- **Maternal Depression Interventions.** Maternal depression before birth is a proven risk factor for child development. This is a significant barrier to cognitive development in poor countries, where as many as 30% of all perinatal pregnant women suffer from depression. A study in Pakistan indicates that a program to alleviate maternal depression has been extremely successful in addressing symptoms, which resulted in more play with infants up to one year old. The interaction between mother and baby may lead to significant improvements in child development. Now the study will assess the long-term benefits to children up to 12 years old when maternal depression is addressed.

- **Kangaroo Mother Care.** Premature birth is a health problem around the world, contributing to about 2 million infant deaths a year. 90% of pre-term births occur in the developing world, and in Canada there has been a gradual rise to 8.1% of all deliveries. Kangaroo Mother Care is a simple but powerful intervention that provides nutrition, warmth and bonding. Potentially, Kangaroo Mother Care is superior to incubator care for brain development. The grant will enable innovators in Colombia and collaborators in Quebec to look at the long-term impact of Kangaroo Mother Care on children's cognitive development, including school achievement, post-secondary education and entry into the workforce.



- **Nutrition Intervention.** In Bangladesh, expecting mothers and babies were given Vitamin A supplements, which reduced infant deaths by 15%. This Grand Challenges Canada grant will enable innovators to test the impact of early Vitamin A supplementation on cognitive development on older children who are 7 or 8 years old. Vitamin A may be key to brain and central nervous system development and function.
- **Early Treatment of Malaria in Children to Prevent Brain Injury.** As many as 300 million children are infected in malaria-prone countries every year; malaria can attack the brain and the central nervous system. Evidence shows that early treatment of children, using the anti-malarial drug artesunate, can minimize brain injury and improve recovery. In parts of the developing world, it can take, on average, 15 hours for a patient to reach a hospital – a deadly delay. Innovators in Thailand have proven that administering an artesunate suppository before the long trip to the hospital can ward off brain injury in children. New funding from Grand Challenges Canada will enable the innovators to identify the long-term developmental benefits of this early malaria treatment.

“These innovations are bold ideas that will have a big impact on cognitive growth in developing world children,” said Dr. Karlee Silver, Grand Challenges Canada’s Program Officer for Women’s and Children’s Health. “These ideas are proven in the short term, but now the funding will provide innovators the opportunity to study the long-term developmental potential of these interventions. For Grand Challenges Canada, it is important to understand how these innovations can impact children as they become adults, to see the real potential for improving lives.”

“I am thrilled that these new innovations are constantly being found to make life better for children,” said Mrs. Laureen Harper, Honourary Chair of the Saving Brains initiative. “What we all want is that children be all they can be. And that’s why the Saving Brains initiative and Grand Challenges Canada is so important – above all for the children themselves, but also for their families and the people around them.”

Grand Challenges Canada is funded by the Government of Canada through the Development Innovation Fund announced in the 2008 Budget. The organization’s mission is to support bold

ideas with big impact in global health. The bold ideas integrate science and technology, social and business innovation (called *Integrated Innovation*) and Grand Challenges Canada works to catalyze scale, sustainability and impact.

For further information on all 11 grants: www.grandchallenges.ca/savingbrains-grantees-en/

Please visit grandchallenges.ca and look for us on **Facebook**, **Twitter**, **YouTube** and **LinkedIn**.

About Grand Challenges Canada

Grand Challenges Canada is dedicated to supporting bold ideas with big impact in global health. We are funded by the Government of Canada through the Development Innovation Fund announced in the 2008 Federal Budget. We fund innovators in low- and middle-income countries and Canada. Grand Challenges Canada works with the International Development Research Centre (IDRC), the Canadian Institutes of Health Research (CIHR) and other global health foundations and organizations to find sustainable long-term solutions through Integrated Innovation – bold ideas which integrate science, technology, social and business innovation. Grand Challenges Canada is hosted at the Sandra Rotman Centre.
www.grandchallenges.ca

About Canada's International Development Research Centre

The International Development Research Centre (IDRC) supports research in developing countries to promote growth and development. IDRC also encourages sharing this knowledge with policymakers, other researchers and communities around the world. The result is innovative, lasting local solutions that aim to bring choice and change to those who need it most. As the Government of Canada's lead on the Development Innovation Fund, IDRC draws on decades of experience managing publicly funded research projects to administer the Development Innovation Fund. IDRC also ensures that developing country researchers and concerns are front and centre in this exciting new initiative.
www.idrc.ca

About Canadian Institutes of Health Research

The Canadian Institutes of Health Research (CIHR) is the Government of Canada's health research investment agency. CIHR's mission is to create new scientific knowledge and to enable its translation into improved health, more effective health services and products, and a strengthened Canadian health care system. Composed of 13 Institutes, CIHR provides leadership and support to more than 14,100 health researchers and trainees across Canada.

CIHR is responsible for the administration of international peer reviews, according to international standards of excellence. The results of CIHR-led peer reviews will guide the awarding of grants by Grand Challenges Canada from the Development Innovation Fund.
www.cihr-irsc.gc.ca

About the Sandra Rotman Centre

The Sandra Rotman Centre, based at University Health Network and University of Toronto, develops innovative global health solutions and helps bring them to scale where they are most urgently needed.
www.srcglobal.org

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