REQUEST FOR PROPOSALS

Grand Challenges Canada / Grands Défis Canada MaRS Centre, West Tower, 661 University Avenue, Suite 1720, Toronto, Ontario M5G 1M1 T +1.416.583.5821 E savingbrains@grandchallenges.ca



Unlocking the potential for development.

Saving Brains

July 2017





AGA KHAN FOUNDATION CANADA





000





Palix Foundation UBS Optimus Foundation



Executive Summary

Early child development is an essential part of building healthy, productive societies where children both survive and thrive. A world where girls and boys thrive is envisioned through the Sustainable Development Goals (SDGs) for nutrition, education, health, gender equality and empowerment, peace and conflict, and is central to the UN Secretary General's Global Strategy for Women's, Children's and Adolescents' Health (2016–2030). In line with Canada's 2017 Feminist International Assistance Policy, Saving Brains is committed to advancing human dignity, female empowerment and gender equality for the world's most vulnerable citizens, starting in the earliest years of life. Through its investments in early childhood development in low- and middle-income countries, Saving Brains hopes to empower today's parents and the next generation of young girls and boys to grow up into healthy, strong adults, with the capacity to champion gender equality and end intergenerational cycles of poverty. Through this effort, Saving Brains seeks to help lay the foundation needed to reach SDG 5 by 2030 (to achieve gender equality and empower all women and girls).

The early years of a child's life are critical for brain development, with more than one million new neural pathways formed every second during a child's first 1,000 days. The adversity children face during this critical window in childhood – including poverty, poor health and nutrition, maltreatment, and insufficient opportunity to play and learn – disrupts this normal brain development, causing setbacks that last into adulthood. The enormity of this issue is clear: one in three children are falling behind on basic skills like learning to pay attention, playing well with others and learning the basics to be ready for school. In turn, this affects these children's education, intelligence and income. Failure to nurture children and protect them from these risks erodes the right of millions of children to develop to their full potential. At scale, this translates into massive economic losses and reinforces cycles of poverty and adversity.

With the ultimate goal of increasing human capital and tackling existing inequalities, Saving Brains seeks **bold ideas for products, services and implementation models that protect and nurture early brain development in a sustainable manner.** Through this Request for Proposals, Saving Brains will support applications for seed funding to develop and validate these bold ideas. The Saving Brains partnership currently comprises Grand Challenges Canada (funded by the Government of Canada), Aga Khan Foundation Canada, the Bernard van Leer Foundation, the Bill & Melinda Gates Foundation, the ELMA Foundation, Grand Challenges Ethiopia, the Maria Cecilia Souto Vidigal Foundation, the Palix Foundation, the UBS Optimus Foundation and World Vision Canada.

Proposals will test the proof of concept of innovative solutions relevant to poor, marginalized populations in low- or middle-income countries, and will be designed to have sustainable impact at scale. Areas of particular interest include innovations designed for use in humanitarian contexts and fragile settings, innovations that provide supports to adolescent parents, and innovations with demonstrated scale and strong paths to sustainability that have not yet measured impact on child development. Saving Brains offers up to \$250,000 CAD over a maximum of 24 months for each funded application. We will consider proposals from institutions in Canada or in eligible low- and middleincome countries. Note that all implementation activities must occur in eligible low- and middle-income countries. (See Appendix A for the eligible country list.)



In developing and evaluating these bold ideas, innovators are expected to engage end users (women and men, girls and boys) and build upon local delivery systems. The project team, led by effective, results-driven leaders, should be capable of developing, testing and refining these innovations and their delivery. Ultimately, projects must have measurable outcomes and clear results, which will support learning to accelerate progress against the Saving Brains Grand Challenge. Discovery science, capacitybuilding initiatives or ongoing programmatic funding alone will not be funded through this Request for Proposals.

Innovators are expected to take an **Integrated Innovation**[®] approach, defined as the coordinated application of scientific/technological, social and business innovation to develop solutions to complex challenges. This approach does not discount the singular benefits of each of these types of innovation alone, but rather highlights the powerful synergies that can be realized by aligning all three.

Saving Brains seeks bold ideas with real-world impact that also have the potential to be scaled up sustainably. By the end of the funding period, each project is expected to demonstrate proof of concept, i.e., provide evidence of impact on child development in a controlled or limited setting, and/or that it has reduced a barrier to impact and provided evidence of demand for the innovation. To this end, innovative approaches and sound evaluation are expected to test how the intervention should be optimized to **equitably reach the highest number of girls and boys**, to have **the most impact on each child reached**, and to **sustain impact at scale**. Innovators are required to take into account gender equality considerations, environmental impact and governance structures that can impede or assist the impact of their solution.

APPLICATION DEADLINE: October 11, 2017, at 15:00 ET

Applications MUST be submitted through Grand Challenges Canada's Community Portal (<u>gcc.fluxx.io</u>).

In order to gain access to the Portal, applicants must first create an account using the following link: <u>Create an account</u>. Once you have created an account, please allow up to one (1) business day for Grand Challenges Canada to process your account request. Once your information has been processed, you will be emailed login credentials to access the Portal to submit your application. For technical support, please contact <u>fluxxsupport@grandchallenges.ca</u>.



TABLE OF CONTENTS

ECUTIVE SUMMARY	
Table of Contents	. 4
INTRODUCTION	. 5 . 5
APPROACH 2.1 The Saving Brains Grand Challenge 2.2 Target Beneficiaries 2.3 Funding 2.4 Areas of Interest. 2.5 Focus on Results 2.6 Integrated Innovation 2.7 Scale and Sustainability. 2.8 Environmental Sustainability, Gender Equality, and Good Governance 2.9 Global Access, Data Access, and Ethics 2.10 Transition-to-scale Funding	.7 .7 .7 .9 10 11 12 13
THE SAVING BRAINS LEARNING COMMUNITY 3.1 Learning Community. 3.2 Saving Brains Platform	15
ACTIVITIES AND DELIVERABLES	16
RULES AND GUIDELINES 5.1 Eligibility Criteria 5.2 Application Instructions 5.3 Application Timeline 5.4 Review Process 5.5 Evaluation Criteria 5.6 Financial Terms and Eligible Costs 5.7 Terms of Payments 5.8 Audit 5.9 Submission Materials and Privacy Notice 5.10 Warranty 5.11 Intellectual Property 5.12 Data Access 5.13 Rights of Grand Challenges Canada 5.14 Research Assurances Appendix A: Country Eligibility Appendix A: Country Eligibility	17 18 19 21 22 23 24 25 26 26 26 27 28
	Table of Contents INTRODUCTION 1.1 Saving Brains Partners 1.2 Grand Challenges Canada 1.3 The Problem APPROACH 2.1 The Saving Brains Grand Challenge 2.2 Target Beneficiaries 2.3 Funding 2.4 Areas of Interest. 2.5 Focus on Results 2.6 Integrated Innovation 2.7 Scale and Sustainability. 2.8 Environmental Sustainability, Gender Equality, and Good Governance 2.9 Global Access, Data Access, and Ethics 2.10 Transition-to-scale Funding THE SAVING BRAINS LEARNING COMMUNITY 3.1 Learning Community. 3.2 Saving Brains Platform ACTIVITIES AND DELIVERABLES RULES AND DUDELINES 5.1 Eligibility Criteria 5.2 Application Instructions 5.3 Application Timeline 5.4 Review Process 5.5 Evaluation Criteria 5.6 Financial Terms and Eligible Costs 5.7 Terms of Payments 5.8 Audit 5.9 Submission Materials and Privacy Notice 5.10 Warranty. 5.11 Intellectual Property 5.13 Rights of Grand Challenges Canada 5.13 R



1 Introduction

1.1 SAVING BRAINS PARTNERS

The Grand Challenge of Saving Brains cannot be solved by one institution alone. Since 2014, the Saving Brains partnership has grown to leverage the expertise of partners that bring regional knowledge, global reach, scaling and implementation experience to move against the challenge. The partnership is currently comprised of Grand Challenges Canada, Aga Khan Foundation Canada, the Bernard van Leer Foundation, the Bill & Melinda Gates Foundation, the ELMA Foundation, Grand Challenges Ethiopia, the Maria Cecilia Souto Vidigal Foundation, the Palix Foundation, the UBS Optimus Foundation and World Vision Canada.

1.2 GRAND CHALLENGES CANADA

Grand Challenges Canada leads the Saving Brains partnership, which has committed over \$38 million CAD to Saving Brains projects. Grand Challenges Canada is dedicated to supporting **Bold Ideas with Big Impact**[®]. Funded by the Government of Canada and other partners, Grand Challenges Canada funds innovators in low- and middle-income countries and Canada. The bold ideas Grand Challenges Canada supports integrate science and technology, social and business innovation – known as **Integrated Innovation**[®].

One of the largest impact-first investors in Canada, and with a feminist investment approach, Grand Challenges Canada has supported a pipeline of over **800 innovations** in more than 80 countries. Grand Challenges Canada estimates that these innovations have the potential to save up to **1 million lives** and improve up to **28 million lives** by 2030.

Grand Challenges Canada is hosted in Toronto at the Sandra Rotman Centre at the University Health Network.

1.3 THE PROBLEM

Over 200 million children in developing countries are unable to fulfill their developmental potential. While different areas of the brain develop at different times and continue to adapt throughout life, most of the brain's development takes place within the first 1,000 days during the fetal and early childhood period – making this a fundamentally important time. Significant adversity early in life can disrupt the developing brain, shaping the range of abilities and learning capacities a child accumulates. All of these set a trajectory that persists into adulthood. A strong emphasis on early childhood development (ECD) can help ensure that all children have an equal opportunity to develop into thriving, healthy adults. A world where girls and boys thrive is envisioned through the Sustainable Development Goals (SDGs) for nutrition, education, health, gender equality, peace and conflict, and is central to the UN Secretary General's Global Strategy for Women's, Children's and Adolescents' Health (2016–2030). SDG Goal 4 (to ensure inclusive and quality education for all and promote lifelong learning) specifically calls for all girls and boys to have access to quality early childhood development. Supporting early childhood brain development is essential to achieving both SDG 3 (to ensure healthy lives and promote well-being for all at all ages) and SDG 5 (to achieve gender equality and empower all women and girls).



Unfortunately, those living in poverty or adverse conditions typically have higher exposure to risk factors that can impair cognitive development. These risk factors can include exposure to **violence, conflict or neglect**, and other sources of toxic stress; **poor health and nutrition**, including malnutrition during pregnancy or inadequate early child feeding; birth and newborn complications; severe or chronic infections; exposure to environmental toxins; and **lack of nurturing care**, including inconsistent and inadequate stimulation and learning environments. Exposures to these risk factors may be further impacted by gender inequalities.

Failure to nurture all children, girls *and* boys, and to protect them from these risks erodes the right of millions of children to develop to their full potential. It is also a devastating waste of human capital that leaves the next generation ill-equipped to solve the enormous challenges that lock individuals, communities and societies in poverty.

Early child development is increasingly recognized as an essential part of building healthy, productive societies. The Government of Canada has made improving the health of vulnerable mothers, babies and children its top development priority through funding for Maternal, Newborn and Child Health. Aligned with Canada's 2017 Feminist International Assistance Policy, Saving Brains is committed to advancing human dignity, female empowerment and gender equality for the world's most vulnerable citizens, starting in the earliest years of life.



2 Approach

2.1 THE SAVING BRAINS GRAND CHALLENGE

Despite the fact that children around the world grow up in diverse contexts, effective products, services, policies and delivery models can be developed that mitigate risks to early brain development in multiple settings, even when resources are limited. Innovation is needed to equitably reach the highest number of girls and boys, to have the most impact on each child reached and to sustain the impact at scale.

The ultimate goal of the Saving Brains program is to increase human capital through the development and delivery of bold ideas with real-world impact that protect and nurture **early brain development at scale in an equitable, sustainable manner**. These ideas should be innovative, equality-focused and affordable products, services and/or implementation models.

2.2 TARGET BENEFICIARIES

Saving Brains is focused on child development during the first 1,000 days (from conception to a child's second birthday). All proposals should be primarily focused on children under five (5) years of age. The ultimate goal of the Saving Brains program is to increase human capital through the development and delivery of bold ideas, with real-world impact that protects and nurtures early brain development at scale in an equitable, sustainable manner. These ideas should be innovative, equality-focused and affordable products, services and/or implementation models. Innovations should help advance gender equality and the empowerment of women and girls, to ensure all girls and boys receive the health, nutrition, nurturing care and opportunities needed to achieve their full potential.

2.3 FUNDING

Through this Request for Proposals, Saving Brains will award seed funding for **bold ideas for products, services and implementation models that protect and nurture early brain development in a sustainable manner**. Seed funding supports the development and validation of innovative ideas to protect and nurture early brain development, offering up to \$250,000 CAD each over a maximum of twenty-four (24) months.

The value of the funding may vary and will be commensurate with the proposed project. The level of funding requested should be sufficient to assure completion of the goals in the stated timeframe. Grand Challenges Canada reserves the right to fully or incrementally fund selected application(s), to partially fund selected applications(s), and to increase or decrease budgets, as it deems appropriate and at its sole discretion.

2.4 AREAS OF INTEREST

Proposals must provide innovative solutions relevant to poor, marginalized populations in low- or middle-income countries. Projects are therefore expected to work towards an effective intervention that can be feasibly delivered in a given context. Children living in poverty often face multiple risk factors, and it is preferred that innovations use a holistic view of the child's environment (i.e., address a combination of health and nutrition, enrichment, and protection, as determined by the target population's context), pay attention to gender and intersecting inequalities, engage end users (women and men, girls and boys) and build upon



local delivery systems. Innovators are encouraged to determine what works best for whom, at what level of intensity, and which aspects of interventions are most effective.

The project team, led by effective, results-driven leaders, should be capable of developing, testing and refining these innovations and their delivery. Ultimately, projects must have measurable outcomes and clear results, which will accelerate progress against the Saving Brains Grand Challenge, and potential to accelerate progress towards the Sustainable Development Goals.

Projects should be innovative and contribute uniquely to the Saving Brains portfolio of innovations. Innovations previously funded by Grand Challenges Canada will not be considered. Descriptions of the innovations currently supported by Saving Brains are available here: <u>www.savingbrainsinnovation.net/</u> and all innovations supported by Grand Challenges Canada are available here: <u>www.grandchallenges.ca/who-we-are/discover-our-innovations-and-results/</u>.

Interventions with a strong evidence basis for improving child development outcomes include¹ but are not limited to:

- Maternal health and nutrition
- Maternal well-being (reducing stress, depression and care for mental disorders)
- Parenting supports to improve nurturing care, stimulation and early learning
- Interventions to improve attachment and bonding
- Improved breastfeeding
- Appropriate micronutrient and child feeding
- Prevention of maltreatment and harsh punishment
- Early learning programs.

In addition to the above, Saving Brains is interested in innovations that **address areas of** particular interest:

- 1. Innovations designed for use in humanitarian contexts and fragile settings
 - Children are among the most vulnerable members of society and the worst impacted by humanitarian crisis and displacement, which can exacerbate existing adversities and where systems to protect children often fail. Saving Brains seeks innovations that support child development for those living in humanitarian crisis, especially those that support refugees, internally displaced populations and populations living beyond reach of governments.
- 2. Innovations that provide supports to adolescent parents
 - Pregnancy during adolescence can be a risk to both mother and child, and can reinforce intergenerational cycles of adversity and poverty. Saving Brains seeks innovations that support adolescents as new parents to improve physical, mental and economic well-being, including the economic empowerment of adolescent girls, improved nutrition for pregnant adolescent girls (and their children) and providing adolescent girls with the empowerment and services needed to choose the timing of subsequent pregnancies.
- 3. Innovations already demonstrating paths to scale and sustainability but that have not yet measured impact on child development

¹ Further described in: Britto *et al.* (2017) Nurturing care: promoting early childhood development. *The Lancet* V389, Issue 10064 (p91-102).



• Saving Brains seeks innovations that may already be operating at significant scale and with strong paths to sustainability, but have not yet established the impact of the innovation on child development directly. This priority area could be an opportunity for existing innovations to establish the proof of concept needed to qualify for Grand Challenges Canada's Transition To Scale program.

Projects in Brazil must focus on innovations in the following areas of interest; see also eligibility criteria in Section 5.1):

- Implementation of practices and public policies for early child development
- Delivery of quality early childhood education services
- Supportive services for families on nurturing parenting practices

• Innovations that help communicate and increase awareness of the importance of early child development for society.

2.5 FOCUS ON RESULTS

Funded projects are expected to demonstrate real-world impact on early child development in low- and middle-income countries for poor or marginalized populations. To this end, projects should have a monitoring and evaluation system in place to clearly quantify effects on early brain development, identify shortcomings and maximize impact. Proposals should include an overview of how results will be monitored and evaluated over the life of the project, with a description of the approach to measuring each of the core outcome metrics. (See below for more on the core metrics.) All innovators should consider in their design how a project could promote gender equality, including in their approach to measurement. Please refer to Section 2.6 for more guidance on Grand Challenges Canada's gender equality approach.

Success for seed funding is defined as:

• Evidence that the idea (i) improves early child development in individual girls and boys and (ii) is feasible to implement sustainably at scale in the target region

• Demonstrated interest, follow-on financing and/or commitments for uptake from key stakeholders, influencers and partners needed to enable scale and sustainability.

To achieve this, it is expected that projects will need to:

- Pay attention to the impact of gender and intersectional inequalities on nurturing and protecting early child development, and how these inequalities could be addressed
- Have the capacity to monitor progress and evaluate project impact
- Have the capacity to harvest and apply learning, generate and absorb best practices, and contribute to a learning community.

Communicating Results

Communicating results is also an important part of the project's accountability to Saving Brains and other key stakeholders. Proposals should include a brief overview of how the project team plans to engage stakeholders and disseminate results, the different audiences they intend to reach, and how this dissemination will contribute to the project's impact. While communicating results through scientific publications is important, this should not be the primary objective of funded projects without a well-articulated justification that publication is a critical part of the path to impact.



Grand Challenges Canada has Global Access and Data Access Policies with open access considerations that must be followed; further information on these policies is available in Section 2.9. Proposals should include adequate time within the funded period for analysis of results and drafting publications. Within this policy is a requirement that publications arising from Grand Challenges Canada-funded research be made openly accessible under a creative commons attribution (CC BY) license by publishing in open access journals. Use of open platforms, such as Grand Challenges Canada's gateway on *F1000Research*, which offers immediate publication of articles – at no cost to low- and middle-income country innovators – that go through transparent peer review, are encouraged where appropriate. Brief annual updates to Grand Challenges Canada on publication and dissemination of results is required after the funded period. Further information on Grand Challenges Canada's approach to open access can be found here: www.grandchallenges.ca/wp-content/uploads/2015/11/20161006_GCC-Open-Access-Guide-for-Innovators_EN.pdf.

Description of Core Outcome Metrics

To establish a shared language for the discussion and comparison of results across projects in the Saving Brains portfolio, a set of core outcome metrics has been developed. Monitoring and evaluation plans should be designed to track the impact, use and access to the innovations by end beneficiaries (girls and boys). Reporting on the number of caregiver/family intermediaries as well as service providers (health and non-health providers) who are trained on the use of, use and/or access these innovations is also required. Other project output and impact indicators will also be required; see Appendix B for further information and a list of potential indicators. Measurement of additional outcomes relevant to specific hypotheses is expected, and projects should be measuring impact across the Theory of Change of their projects through their monitoring and evaluation frameworks. Data should be disaggregated by gender. This set of core outcome metrics serves as a minimum set of metrics and does not limit the scope of outcomes that can be captured.

Use of metrics to capture improved **child development outcomes** should be incorporated into project plans from the proposal stage. Proposals should include a plan to measure at least one metric in each of the following domains:

- Physical growth, such as length/height-for-age, weight-for-age, head circumference, gross/fine motor skills
- Cognitive function
- Receptive and expressive language
- Socio-emotional capacities.

In special circumstances, where impact on cognitive development cannot be measured during the life of the grant, the link between the outcomes measured and the core outcome metrics should already be well established. For examples of tools used in Saving Brains projects, please visit <u>www.savingbrainsinnovation.net/</u>.

2.6 INTEGRATED INNOVATION

Projects are expected to take an Integrated Innovation approach, defined as the coordinated application of scientific/technological, social and business innovation, to develop solutions to complex challenges. This approach does not discount the singular benefits of each of these types of innovation alone, but rather highlights the powerful synergies that can be realized by aligning all three. Integrated Innovation recognizes that scientific/technological innovation has a greater chance of going to scale and achieving global impact and sustainability if it is



developed from the outset with appropriate social and business innovations. Similarly, it recognizes that social or business innovations will not be effective on their own. (Please refer to <u>http://www.grandchallenges.ca/funding-opportunities/integrated-innovation/</u>)

Proposed solutions should therefore include a combination of:

• **Scientific/Technological Innovation:** Based in the psychological, natural, health or behavioural sciences or in engineering or economics; can be simple, i.e., there is no requirement for high-tech solutions

• **Social Innovation:** Recognizes and/or addresses the broader social, structural and/or political determinants of health, with a particular focus on gender and intersectional inequalities; addresses local and/or cultural contexts that factor into implementation and scaling

• **Business Innovation:** Maximizes the value, relevance and unique quality of the solution to create demand and financial sustainability; addresses barriers to affordability and accessibility.

2.7 SCALE AND SUSTAINABILITY

Saving Brains expects that the most successful innovations it funds will eventually be scaled up through partnerships - either with the private sector, the public sector or a combination of both - and that such scaling will be carried out with the goal of achieving meaningful health impact for the poorest of the poor in low- and middle-income countries. To this end, Saving Brains is looking for solutions that have the potential to be scaled, as well as a willingness on the part of the project team to see the innovation realize impact at scale in a financially sustainable manner. The seed funding should enable innovations to be positioned along a clearer path to scale, taking into account the following factors: the state of local infrastructure; social, political and economic forces; the capacity of the institution and its leadership; potential strategic and implementation partners; available funding and revenue streams; and other potential barriers to scale. Project teams are advised to leverage local systems where this will lead to efficiencies, and to engage end users (women and men, girls and boys) to increase the likelihood of scale-up. This should include an understanding of how the innovation relates to local priorities (e.g., national/regional health plans), why the innovation would be preferred over alternatives, and factors supporting market formation and consumer demand. The plan should clearly define the geography or context of use at scale, as well as exit strategies from grant funding.

Effective Leadership and Project Teams

To achieve impact at scale, bold ideas need to be championed by effective, results- driven leaders who have the capacity to convene and engage with key influencers. Effective project teams will have expertise, or access to expertise, in the following areas: early childhood development; monitoring and evaluation; data analysis and statistics; experience working in the implementation site/region/country; scaling of projects;

entrepreneurship/business expertise; and psychological assessment (if applicable). Multidisciplinary/cross-sector teams are strongly encouraged, to ensure relevant scientific, social and business expertise is in place to allow for development of innovations that can generate sustainable impact at scale.

Understanding of Local Context

To help ensure sustainable impact at scale, it is essential that project teams include member(s) with an understanding of the local infrastructure and governance context



(including relevant laws and regulations) and the social, political and economic context. In doing so, projects can better address the health status and needs of the community, and identify risks to project success. Innovators are encouraged to work within priority areas identified by local or domestic governments. Where they exist, innovations should build upon local systems that are able to reach the target population that support health and/or development, or address broader determinants of health. Determinants of health include: poverty, inequality (including gender inequality), and access to water and sanitation resources. Innovations should be relevant to low-resource settings, and benefits of these innovations should target poor, marginalized populations of low- or middle-income countries.

Stakeholder Engagement

Early brain development is influenced by multiple factors: the family and dwelling; local communities; early childhood health and development programs and services; and regional, national and global environments³. As a result, it is anticipated that caregivers, families, communities, businesses, healthcare providers, policy-makers, governments and international agencies can all have a role to play in guiding and supporting the project. Stakeholders, especially end users (women and men, girls and boys) and those who will ultimately make decisions about the use of the solution should be engaged at the outset and throughout the life of the project. This will help to ensure that the solution will be poised for initial adoption and subsequent adaptation, leading to greater impact. Additionally, stakeholders can offer insight on their community and identify the factors necessary for project success.

2.8 ENVIRONMENTAL SUSTAINABILITY, GENDER EQUALITY AND GOOD GOVERNANCE

Innovators funded through Grand Challenges Canada must comply with the policy on Environmental Sustainability, Gender Equality and Good Governance.

Environmental Sustainability

Grand Challenges Canada and Saving Brains require that applicants commit to ensuring that the innovation will not have material adverse environmental effects, including but not limited to long-term and cumulative effects. Where possible, innovators should incorporate having positive environmental effects throughout the project.

Gender Equality

Grand Challenges Canada is committed to furthering principles of gender equality in the projects it funds, with the following objectives: (1) advancing women's equal participation with men as decision-makers in shaping the sustainable development of their societies; (2) supporting women and girls in the realization of their full human rights; and (3) reducing gender inequalities in access to, and control over, the resources and benefits of development. Please see Grand Challenges Canada's Gender Equality Brief <u>here.</u>

a. All innovations should explicitly and systematically integrate gender equality considerations (activities, outputs and results) at all stages of the project, including budgetary provisions, where possible.

² Irwin LG, Siddiqi A, Hertzman C. Early child development: a powerful equalizer – final report of the early child development knowledge network of the Commission on Social Determinants of Health. Geneva: World Health Organization, 2007.<u>http://apps.who.int/iris/bitstream/10665/69729/1/a91213.pdf?ua=1 (accessed Nov. 2, 2012).</u>



b. Grand Challenges Canada believes that supporting gender equality and the rights of women and girls are important objectives in and of themselves, and that by considering gender dimensions in the development of innovations, sustained impact can be bolstered. Applicants should include a description of how they intend to address at least one of the objectives (listed above) in the project, and describe the role and engagement in this process of local stakeholders (women and men, boys and girls), including end users for whom innovations are meant to improve health outcomes. A gender analysis (how and why gender inequalities, differences, roles and relations exist) is required for each submission. The inclusion of gender equality results should also be considered when developing a monitoring and evaluation plan and, where relevant, integrated into the measurement activities. All initiatives must include gender-disaggregated data in their reporting.

c. Female applicants are strongly encouraged to apply.

Good Governance

Grand Challenges Canada is committed to furthering principles of good governance in the innovations it funds. This includes the promotion of good governance principles of participation, inclusion, equity, transparency, accountability, efficiency and effectiveness in the applicant's project. Specific objectives for the integration of governance include: enhancing the accountability and transparency of country institutions, supporting citizen participation and ownership in development processes, and strengthening service-delivery capacity at all levels. Grand Challenges Canada is conscious of how initiatives a) contribute to poverty reduction; b) take into account the perspectives of the poor; and c) are consistent with international human rights standards. Stakeholders (e.g., governments, regulators, 'smart partners', etc.) needed for the eventual scaling of the innovation should be identified, and innovators should have a clear understanding of their current position with respect to the innovation, how that would need to change and how that change could be generated.

2.9 GLOBAL ACCESS, DATA ACCESS AND ETHICS

Grand Challenges Canada is committed to fostering meaningful access to supported innovations for the target beneficiaries of each funded project, particularly those beneficiaries among the marginalized and poor in low- and middle-income countries; promoting prompt and open dissemination of research findings and data arising from funded activities; and ensuring that funded research is conducted in a manner that complies with relevant ethical standards. These commitments are embodied in Grand Challenges Canada's <u>Global</u> <u>Access Policy</u>, <u>Data Access Policy</u>, and <u>Ethics Policy</u>, which should be carefully reviewed by all applicants before submission.

Global Access

Grand Challenges Canada is committed to ensuring that (1) funded innovations can be made meaningfully accessible, both in terms of price and availability, to the target beneficiaries of each funded project, particularly those among the marginalized and poor in low- and middle-income countries, (2) knowledge and information gained through funded projects are disseminated broadly and promptly to the global research community and beyond, and (3) commercialization of funded innovations is encouraged, so long as it is consistent with these principles.



Data Access

Grand Challenges Canada is committed to ensuring that (1) data is shared as broadly and as promptly as possible, to foster innovation and optimize prospects for the translation of knowledge into life-saving solutions, (2) respect for attribution, cultural diversity, scientific integrity, and the privacy of individuals and communities that contribute data are appropriately considered in all data access activities, (3) collection, production, sharing and use of data are consistent with applicable laws, regulations, and standards of ethical research conduct, (4) the individuals and communities who enable and support inquiry, particularly those in low- and middle-income countries, be they research participants or investigators, benefit from data to the extent possible.

Ethics

Grand Challenges Canada requires that (1) research involving human participants be conducted in a manner that demonstrates, protects and preserves respect for persons, concern for the welfare of individuals, families and communities, and justice, (2) research involving animals be conducted in a manner that ensures their humane care and treatment, and (3) certain research endeavours, including but not limited to research with recombinant DNA, biohazards and genetically modified organisms, be subject to enhanced regulation and oversight, as appropriate. Innovators must ensure that appropriate research ethics approvals are obtained and clinical trials are registered for all human subject research, and must provide associated documentation to Grand Challenges Canada.

Innovators are required to (1) commit to compliance with the above policies, (2) ensure that intellectual property rights, including those of third parties, do not impede meaningful access to innovations and widespread dissemination of knowledge, (3) grant Grand Challenges Canada a limited non-exclusive license to intellectual property rights in their innovations, applicable only in the event of an inability to secure meaningful access for target beneficiaries in low- and middle-income countries or in the context of a World Health Organization-declared Public Health Emergency of International Concern.

2.10 TRANSITION-TO-SCALE FUNDING

A limited number of innovations funded through this Request for Proposals may have the opportunity to apply for Transition To Scale (TTS) funding to support the refinement, testing and implementation of innovative solutions that have already achieved proof of concept. This opportunity is contingent upon the availability and priorities of the TTS program at the time of application. Currently, funding is only available for projects applying to the Transition To Scale program before December 2018.TTS projects should strive to demonstrate large-scale, real-world impact on early brain and child development, and require support from partners that will bring both matched funding and the necessary skillsets to build, test and/or implement a plan that moves an innovation towards sustainable scale. Please visit http://www.grandchallenges.ca/programs/transition-to-scale/ for further information on the TTS program.

While matched funding is not a requirement at the proof-of-concept stage, all innovators are encouraged to secure co-funding. Initiating early strategic partnerships can improve the sustainability of an innovation by creating early buy-in, and providing resources and expertise that can better position teams for the TTS process. Please note that one-to-one matched funding is currently required for the TTS program.



3 The Saving Brains Learning Community

3.1 LEARNING COMMUNITY

Saving Brains is a Grand Challenge that no single team or institution can solve on its own. As a result, Grand Challenges Canada developed – and continues to nurture under the Saving Brains Partnership – a learning community that is focused on the challenge of Saving Brains. This community includes Saving Brains innovators (all seed funding and transition-to-scale funding recipients), the Saving Brains Platform (with experts from leading institutions in the field of early child development) and the Saving Brains partners. Through sharing results and discussing lessons learned, the community is generating a body of evidence and practical knowledge on how to develop, refine and evaluate innovative solutions, in addition to a suite of interventions for nurturing and protecting early brain development. The Saving Brains community encourages and fosters collective action, as projects working together have greater impact than they would alone.

In addition to engaging in activities related to their proposed project, key members of the funded projects will be expected to actively participate in the Saving Brains community, including:

- Contributing to and applying learning from the Saving Brains community, including where moderated by the Saving Brains Platform
- Actively participating in the development and refinement of project-level and portfolio-level tools to track impact against the common goal of protecting and nurturing early brain development, including using the Theory of Change, incorporating the core outcome metrics into project plans and tracking project impact and outcomes via Saving Brains reporting tools
- Actively engaging with the Saving Brains Platform to develop capacities to create systems change for impact, including leadership development and evaluation frameworks.

3.2 SAVING BRAINS PLATFORM

The Saving Brains Platform is made up of mentors and experts in the field of early brain and child development, innovation systems and learning communities. As a responsive resource to maximize the impact of Saving Brains projects and to enhance the collective impact of the Saving Brains program, the platform is tasked with the following activities:

- Support projects within Saving Brains to achieve sustainable impact.
- Collect lessons and best practices arising from the Saving Brains community to improve the success of the Saving Brains innovations and to inform the wider community of learning.
- Help track and disseminate the individual and collective impact of Saving Brains innovations within the community and to relevant external stakeholders.



4 Activities and Deliverables

Innovators funded under this effort will be expected to engage in the activities and provide the specific deliverables listed below, which will help to demonstrate project progress and success:

- Quarterly performance reporting, focused on utilization of funds, performance and outcomes achieved. Please note that funds may only be advanced to innovators to cover budgeted expenses for a period of two quarters, and that advances to cover the budgeted expenses for a third quarter will be contingent on the first quarter being fully accounted for, and so on going forward. The provision of funds to innovators is subject to the release of funds to Grand Challenges Canada from our funder, Global Affairs Canada.
- 2. Dissemination of knowledge in a timely manner, including through social media, open access publications, depositing of data into publicly accessible repositories, press releases, conferences, stakeholder engagement, etc. Acknowledgement of G rand Challenges Canada and the Government of Canada will be required. Please note that innovators will be expected to publish their findings in open access journals or through on open access publishing platforms, e.g., Grand Challenges Canada's gateway on <u>F1000Research</u>, typically within 12 months of completing their seed grant.
- 3. A final report that accounts for financial expenditures and that captures a clear assessment of the impact of the project, including progress towards achieving meaningful access to innovations and widespread dissemination of knowledge. Please note that a 5% hold back of funds will be applied to all funding under this program, to be released to innovators upon submission of a satisfactory final report and full justification of costs.
- 4. Continued post-grant updates on impact, global access, data access and management of intellectual property rights in supported innovations.

Instructions for reporting will be provided to successful recipients. Written progress reports and conversations via teleconference may be required to satisfy reporting requirements. In addition to the above-mentioned activities, innovators will be expected to:

- 1. Participate in public engagement activities.
- 2. Contribute to the learning agenda for specific challenges, including through participation in meetings with other Grand Challenges Canada innovators.

Please note that funded innovators must retain supporting project documentation and may be audited by Grand Challenges Canada, Global Affairs Canada and/or the Auditor General of Canada at any time up until March 31, 2028; associated requirements will be reflected in funding agreements.



5 Rules and Guidelines

The Canadian Institutes of Health Research manages an independent scientific peer review process. Grand Challenges Canada's Board of Directors makes the final funding decisions.

5.1 ELIGIBILITY CRITERIA

- Eligible applicants include social enterprises and other recognized institutions (e.g., non-profit organizations and for-profit companies) that are formed and legally incorporated in an eligible jurisdiction, as set out in Appendix A, that can successfully execute the activities in their respective technical area, and are capable of receiving and administering grant funding. Sole proprietorships are not eligible for funding. United Nations country offices and Canadian provincial and federal government departments, agencies and ministries are not eligible to apply.
- 2. **ONLY** institutions from the list of countries given in **Appendix A** are eligible to apply to this Saving Brains Request for Proposals. Applications from institutions in countries not listed in Appendix A will not be considered. Awards may be limited to one proposal for upper-middle income country applicants other than Brazil; see Appendix A for further detail on the number of applications funded based on country of application.
- 3. All project implementation sites must be in countries other than Canada that are listed in Appendix A.
- 4. A project can have a maximum of two Project Leads, both of which must have primary affiliations to institutions in eligible countries listed in Appendix A. At least one Project Lead must be affiliated with the institution from which the proposal is being submitted.
- 5. Applicant institutions from **Canada** must apply with a co-Project Lead primarily affiliated with an institution in an eligible country listed in Appendix A, other than Canada.
- 6. A majority (greater than 50%) of the budget must be spent on activities in eligible countries other than Canada.
- 7. Applicants from Brazil:
 - May not be government entities. We strongly encourage government entities to apply in partnership with other Brazilian institutions, but they are not eligible as direct grant recipients. Universities or research centres, civil society representatives, non-for-profits and private institutions are eligible to apply.
 - Must focus on innovations in the following areas of interest: implementation of practices and public policies for early child development, delivery of quality early childhood education services, supportive services for families on nurturing parenting practices, and innovations that help communicate and increase awareness of the importance of early child development for society.



- 8. A Project Lead may only be listed on one (1) application to this Request for Proposals. An institution from an eligible country may, however, be the applicant on multiple applications, if all applications have different Project Leads.
- 9. Saving Brains WILL NOT fund discovery science, capacity-building initiatives or ongoing programmatic funding through this Request for Proposals.
- 10. Saving Brains WILL NOT consider funding projects that involve establishing proof-of-concept of innovations for which the core intellectual property rights are owned by a third-party institution, unless either (a) the third-party institution has granted the applicant sufficient license rights to the innovation to permit eventual scaling in low- and middle-income countries, or (b) the third-party institution is willing to sign an undertaking to Grand Challenges Canada committing to comply with Grand Challenges Canada's Global Access requirements.
- 11. Innovations that have been previously funded by Grand Challenges Canada are not eligible for seed funding. See <u>www.grandchallenges.ca/who-we-are/discover-our-innovations-and-results/</u> for a searchable database of innovations funded by Grand Challenges Canada.
- 12. Applications must include all required information and attachments. Only complete applications will be considered for peer review.
- 13. Grand Challenges Canada may, at any time and at its sole discretion, modify eligibility criteria with respect to individual applicants, Project Leads and/or eligible countries, to the extent that such modifications do not materially undermine the review process. (See Section 5.4.)

Please note that Grand Challenges Canada must approve any changes in applicant organization, institution or Project Lead from the originally-funded grant.

Please note that collaborations between Project Leads from eligible non-Canadian institutions (from countries listed in Appendix A) and Canadian institutions are encouraged but not required. Institutions and innovators in eligible countries and non- eligible countries may be listed as collaborators.

5.2 APPLICATION INSTRUCTIONS

Submitting an Application

Applicants will submit a proposal that describes their innovative idea, goal, objectives and activities, approach, framework for measuring success and budget.

Applications MUST be submitted through the Grand Challenges Canada Community Portal (<u>gcc.fluxx.io</u>).

In order to gain access to the Portal, applicants must first create an account using the following link: <u>Create an account</u>. Once you have created an account, please allow up to one (1) business day for Grand Challenges Canada to process your account request. Once your information has been processed, you will be emailed login credentials to access the



Portal to submit your application.

To return to the Community Portal to continue working on your application at any time, please visit <u>https://gcc.fluxx.io/</u>.

For technical support, please email <u>fluxxsupport@grandchallenges.ca</u>.

Innovator Toolbox

Applicants are encouraged to access Grand Challenge Canada's online Innovator Toolbox at <u>www.grandchallenges.ca/funding-opportunities/innovator-toolbox/</u>, which contains materials to help researchers and innovators around the world to develop their project proposals and to plan for how their innovation will go to scale, be sustained and have global impact.

Questions

Please first reference our "Frequently Asked Questions" page located <u>http://www.grandchallenges.ca/wp-content/uploads/2017/07/20170728-SB-R6-FAQ-EN.pdf</u>. Questions about this Request for Proposals may be submitted by email to <u>savingbrains@grandchallenges.ca</u>.

Answers to the questions will be posted at <u>www.grandchallenges.ca/saving-brains/</u>by the end of the day on: **August 29, September 19 and October 6, 2017.** The deadline for any questions submitted is October 3, 2017, after which we may not respond.

5.3 APPLICATION TIMELINE

Key Dates	Event
October 11, 2017	Application deadline for seed funding at 15:00 ET
	Applications MUST be submitted through Grand Challenges Canada's Community Portal (gcc.fluxx.io).
	In order to gain access to the Portal, applicants must first create an account using the following link: <u>Create an</u> <u>account</u> . Once you have created an account, please allow up to one (1) business day for Grand Challenges Canada to process your account request. Once your information has been processed, you will be emailed login credentials to access the Portal to submit your application. For technical support, please contact <u>fluxsupport@grandchallenges.ca</u> .
April 2018	Notification of application status
June–September 2018	Anticipated start date of projects

5.4 REVIEW PROCESS

The Canadian Institutes of Health Research manages an independent scientific peer review process, which includes an Eligibility Screen and Innovation Screen conducted by Grand Challenges Canada.



Eligibility Screen

Saving Brains will screen applications on the basis of the eligibility criteria outlined in Section 5.1. Applications that do not meet the eligibility criteria will be removed from the competition.

Innovation Screen

Applications will be internally scored for strategic relevance to the Saving Brains Request for Proposals. The innovation screen will evaluate only the proposed innovative idea (not the feasibility or quality of the project plan) for novelty and potential to contribute uniquely to the Saving Brains Grand Challenge. Proposals that lack innovation and relevance will be removed from the competition at this stage. We will not consider projects that are similar to projects we have already funded. See our <u>website</u> for a searchable database of innovations funded by Grand Challenges Canada.

If a large number of applications are received from upper-middle-income countries where Grand Challenges Canada is only able to fund one proposal per country, Grand Challenges Canada may cap the number of applications that proceed through the innovation screen to peer review to the top, most innovative and relevant projects from each upper-middleincome country.

Applications will be scored against the criteria below, using responses to application questions in "Section II: Innovation and Relevance", as indicated on the application. The two criteria below are equally weighted:

1. Innovation

- Are the product(s), service(s) and/or implementation model(s) aimed at nurturing and protecting early child development innovative and clearly articulated?
- Does the innovation represent more than an incremental improvement over current approaches?
- Is a coordinated application of integrated scientific/technological, social and business innovation clearly demonstrated, as defined in Section 2.4?

2. Relevance

- Does the proposed solution address the specific problem under the Saving Brains Grand Challenge, as described in Sections 1.3 and 1.4?
- Does it apply to poor, marginalized populations in low- or middle-income countries and aim to address gender inequalities?
- Is there a clear description of the potential scale at which it could be applied and the path to scale?

Peer Review

The Canadian Institutes of Health Research (CIHR) manages an independent peer review of the applications that pass the eligibility and innovation screen. A review committee of external scientific, social and business reviewers, including experts from low- and middle-income countries, will advise on the merit of proposals and rate each application based on the evaluation criteria in Section 5.5.



5.5 EVALUATION CRITERIA

1. Impact

- How transformative is the potential impact of the proposed innovation on early brain development in low-resource settings (both in terms of number of girls and boys reached, and impact per child)?
- How well does the proposal address the main adversities that limit early child development in that context?
- How appropriate is the proposed innovation for wider implementation and scaling in low-resource settings?
- Does the innovation have the potential to address inequalities, be feasibly implemented, sustained and financially supported in the target region (taking into account the state of the local infrastructure; governance context (including relevant laws and regulations); social, political and economic forces; the capacity of the institution and its leadership; potential strategic and implementation partners; available funding and revenue streams; and other potential barriers to scale)?

2. Integrated Innovation

- How bold, novel and/or a departure from incremental improvements is the innovation over current approaches?
- How clearly does the plan identify the barriers to scale and sustainability?
- How well does the proposed idea integrate scientific/technological, social and business innovation?
- Are key stakeholders and/or potential end-users of the knowledge/goods/services meaningfully engaged in the proposed project (women and men, girls and boys)?

3. Project Execution Plan

- Is the project designed to demonstrate proof of concept of the idea?
 - Will the project provide on-the-ground evidence of the impact on child development *and* how innovations may be feasibly implemented, sustained and financially supported in the target region?
- How well articulated, feasible and technically sound is the execution plan?
- Are the timelines proposed appropriate and feasible?
- How appropriate, feasible and technically sound is the monitoring and evaluation plan, including gender equality results?
- How appropriate are the metrics to evaluate progress toward achieving proof of concept?
- How well does the proposal take into account and aim to address Grand Challenges Canada's gender equality, environmental sustainability and good governance objectives?
- Is there a feasible plan to identify and apply learning for improved outcomes as the project unfolds?
- Is there a strong plan for how stakeholders would be engaged on the learnings and results of the project?
- Is there evidence provided to indicate the likelihood of success, and a rigorous assessment of risks and associated mitigation strategies?



4. Leadership Capability to Champion Change

- Does the Project Lead have the commitment and leadership potential needed to bring solutions to scale?
- Are the proposed Project Lead and key team members appropriately trained, experienced and positioned in the local community to carry out the proposed work (i.e., scientific, social and business expertise)?
- Do the proposed partnerships and composition of multi-disciplinary teams increase the likelihood of success?
- Have the Project Lead and key team members demonstrated the ability to convene necessary stakeholders who can influence systems change (e.g., business, academic and public sectors), including those new to the project and its goals, as demonstrated by letters of support for the project?

5. Value for Effort

- Are the scope of the proposed work and the funds requested reasonable and commensurate with the proposed proposal goals?
- Does the proposal represent a particularly thoughtful and efficient use of resources?

Funding Decisions

Upon completion of the peer review, Grand Challenges Canada will receive a ranking list and ratings from CIHR. Based on the results of the peer review, the Saving Brains partnership will make a funding recommendation to the Board of Directors of Grand Challenges Canada, which will make the final funding decisions at the Board's sole discretion, including its reserved rights set out in Section 4.11. Only projects rated as fundable during peer review may be recommended for funding. Due diligence, including the applicant's performance on other projects funded by Grand Challenges Canada and its partners, is taken into account for all projects recommended by peer review for funding. Based on the results of the review committee or due diligence process, refinements to the proposed project plan, structure, amount, type of funding and oversight may be required during the negotiation of a funding agreement under Saving Brains.

5.6 FINANCIAL TERMS AND ELIGIBLE COSTS

The following costs directly related to the implementation of the project, as further set out in the <u>Eligible & Ineligible Expenses Directive</u>, are eligible:

Remuneration – Organization's Employees

Daily rates paid to employees for time actually worked on the implementation of the Project, based on a work day of seven and one-half (7.5) hours, with a maximum of five (5) days per week. *Timesheet system must be in use*. Timesheets shall be signed by the employee and the employee's supervisor. Timesheets shall also indicate the Project, the name of the employee, the date, location, nature of the work, number of hours worked per day specifically on the Project, as well as the total number of hours worked per week on all projects. Rates can include the following costs: direct salaries (excluding overtime pay and bonuses) and benefits in accordance with internal policies.

Fees – Subcontractors with an Arm's Length Relationship with the Organization

The actual and justifiable cost of Subcontractors' fees under a Subcontract concluded with the Organization, where the Organization and the Subcontractor have an arm's length relationship. Individual rates or amounts negotiated shall not exceed the fair



market value that applies to the specific type of service in the regular place of work of the Subcontractor or for similar work being performed under this Agreement, and shall exclude any increased rate for overtime. The total subcontracting shall not exceed twenty percent (20%) of the total value of Grand Challenges Canada's contribution.

Reimbursable Costs

The actual and reasonable costs directly related to the implementation of the Project, such as:

- 1. Travel Costs, including the following travel costs incurred by the Organization in accordance with:
 - The cost of commercial transportation based on the lowest available fares, using the most direct routing
 - The cost of meals, incidentals and private vehicle usage
 - The cost of registration, photographs, and courier services related to obtaining a visa
 - The actual and reasonable cost of a single room in commercial accommodation
 - All other actual and reasonable travel-related costs deemed legitimate Project expenses.
- 2. Goods and Supplies: Actual and eligible costs arising from the purchase, rental, maintenance and transportation of goods, and supplies (excluding office supplies), such as publications and promotional material (i.e., business cards for Project personnel, posters and signage), provided that such costs do not exceed the fair market value that applies to the specific type of goods and supplies.
- 3. Reimbursable Equipment: All equipment that has a useful life of more than one year and costs more than \$1,000 CAD will need to be separately listed out. Costs may include the basic purchase price, freight and installation of the equipment.
- 4. Project Administration Eligible Direct Costs related to the Project:
 - Long distance communications, including means of telecommunications (internet, fax, cellular), mail and courier costs
 - Printing and production costs associated with Project reporting and production of reading material
 - Meeting, workshops and conference costs
 - Legal fees: legal costs directly related to agreements
 - Due diligence prior to signing a sub-agreement
 - Bank transfer fees.

Indirect/Overhead Costs

Indirect/overhead costs are not eligible under Grand Challenges Canada's agreements.

5.7 TERMS OF PAYMENTS

1. Advance Payments: An initial advance equal to the estimated cash flow requirements for eligible costs forecasted for the first period will be made upon signature of the Agreement. Subsequent payments will be made through quarterly advances based on the estimated cash flow requirements for Eligible Costs.



Advances will be subject to a 5% holdback on the amount forecasted.

- 2. All advance requests and financial reports submitted shall be signed by a senior executive holding a certified professional accounting designation.
- 3. Outstanding Advances: Advance payments cannot cover more than two periods and at no time shall there be outstanding advances covering the cash flow requirements of more than two periods. For example, before an advance payment is issued for a third period, the first period must be accounted for.
- 4. Separate Bank Account and Interest Earned on Advance Payments: A separate bank account, bearing interest, shall be maintained for the project.
- 5. Final payment will be subject to the following conditions:
 - a. The Project has been completed in accordance with the Agreement.
 - b. Grand Challenges Canada has received and accepted the final report.
 - c. Grand Challenges Canada has received a certificate stating that financial obligations to employees, subcontractors or suppliers with respect to Grand Challenges Canada's contribution to the Project have been fully discharged.

5.8 AUDIT

Funded innovators may be audited by Grand Challenges Canada, Global Affairs Canada and/or the Auditor General of Canada at any time up until March 31, 2028, and must retain project records during that period, all of which will be reflected in each funding agreement.

5.9 SUBMISSION MATERIALS AND PRIVACY NOTICE

All application materials submitted to Saving Brains and Grand Challenges Canada in connection with this Request for Proposals (collectively, "Submission Materials") may be shared with Global Affairs Canada, the Canadian Institutes of Health Research and/or with other funding partners, and may be publicly disclosed. By submitting any Submission Materials to Grand Challenges Canada, each applicant thereby grants to Grand Challenges Canada and Her Majesty the Queen in right of Canada ("Her Majesty") a worldwide, perpetual, irrevocable, non-exclusive, non-commercial, free of charge and royalty free license to use, reproduce, adapt, modify, improve, develop, translate, publish, disseminate, distribute, communicate to the public by telecommunication and display the Submission Materials, in whole or in part, in any form, media or technology now known or later developed, including the right to authorize others to do such acts and the right to sublicense such rights that it has in the Submission Materials in favour of Grand Challenges Canada, Her Majesty, and each of their sublicensees, successors, representatives, assigns, employees and agents.

The proposals will be subject to external review by independent subject-matter experts and potential co-funders (the results of which will be confidential), in addition to analysis by Grand Challenges Canada staff.



Please carefully consider the information included in the Submission Materials. If you have any doubts about the wisdom of disclosure of confidential or proprietary information (including information related to inventions), we recommend you consult with your legal counsel and take any steps you deem necessary to protect your intellectual property. You may wish to consider whether such information is critical for evaluating the submission and whether more general, non-confidential information may be adequate as an alternative for these purposes.

Grand Challenges Canada expressly disclaims any and all liability that may arise from disclosure of confidential information contained in Submission Materials.

5.10 WARRANTY

By providing any Submission Materials, the applicant(s) represent and warrant that they have the right to provide the information submitted and to grant the above licenses. Applicants with questions concerning the contents of their Submission Materials may contact Saving Brains by email at <u>savingbrains@grandchallenges.ca</u>.

5.11 INTELLECTUAL PROPERTY

The solutions supported by this program comprise innovative technologies, services, business models, knowledge and/or products to promote global health in low- and middle-income countries (LMICs). In order to ensure meaningful access for target beneficiaries in LMICs, the successful development and deployment of these solutions may require involvement by, support of and/or collaboration with multiple organizations, including the private sector, government and academic and/or non-profit research institutions. Accordingly, it is the intent of this program to support the formation of appropriate partnerships that are essential to meet these urgent global health needs. Successful applicants retain ownership of intellectual property rights in supported innovations, including those rights that arise in outputs of funded projects. Grand Challenges Canada aims, however, to ensure that any such intellectual property rights are utilized and managed in a manner that is consistent with achieving the goals of this program. Grand Challenges Canada's Global Access Policy will guide our approach to intellectual property, and we urge all applicants to consider their willingness to submit an application in compliance with Grand Challenges Canada's Global Access Policy.

Successful applicants will be required to commit to compliance with Grand Challenges Canada's Global Access Policy and to sign a Global Access Agreement with Grand Challenges Canada, in line with the Guiding Principles, applicable to the innovative solutions and project outputs supported by this program. The Global Access Agreement will provide a non-exclusive license to intellectual property rights in supported innovations (including background intellectual property) permitting Grand Challenges Canada and its sub-licensees to implement and disseminate products, processes, knowledge or solutions in low- and middle-income countries in which applicants or their partners are unable to achieve meaningful accessibility. Applicants should note that Grand Challenges Canada may be required to provide sub-license or sub-distribution rights to one or more persons appointed by Her Majesty, if Her Majesty reasonably determines that meaningful accessibility has not been achieved. Finally, upon request, applicants must agree to provide persons appointed by Her Majesty with a non-exclusive license to supported innovations to address an emergency situation that is subject to a declaration by the World Health Organization of a Public Health Emergency of International Concern. Applicants should note that the above global access commitments survive the end of project activities.



5.12 DATA ACCESS

Grand Challenges Canada is committed to optimizing the use of data to translate knowledge into life-saving solutions. To fulfill this objective, data must be made widely and rapidly available to Grand Challenges Canada's research community and the broader global health community through ethical and efficient data access practices. In accordance with global access, data access represents an elaboration of the second guiding principle of the Global Access Policy, which states that knowledge gained through discovery is broadly, and as promptly as possible, distributed between related projects and to the global scientific community.

At a minimum, 'data' refers to final, annotated quantitative and qualitative datasets, and accompanying information, such as metadata, codebooks, data dictionaries, questionnaires and protocols.

Grand Challenges Canada recognizes the value of intellectual property and commercialization, and the benefits of first and continuing use of data, but not prolonged or exclusive use. In some cases, intellectual property protection, laws or regulations may delay or preclude access to data. In such cases, the grantee will provide justification to warrant a partial or complete waiver of the data access requirement.

5.13 RIGHTS OF GRAND CHALLENGES CANADA

This Request for Proposals is part of a discretionary granting program. Submission of an application does not create a contractual relationship between the applicant and Saving Brains or Grand Challenges Canada.

Grand Challenges Canada reserves the right, in its sole discretion and without notice, to:

- 1. Cancel this Request for Proposals at any time and for any reason.
- 2. Amend and reissue the Request for Proposals at any time and for any reason. This Request for Proposals is valid commencing on July 28, 2017, and supersedes any previous Request for Proposals of this nature. The terms and conditions of this Request for Proposals apply to all applications submitted from July 28, 2017, going forward and may be replaced by a revised Request for Proposals in the future. We recommend checking for any revisions to the Request for Proposals prior to the submission of your application.
- 3. Accept or reject any application that is nonconforming because it does not meet the eligibility criteria, does not comply with the application instructions and/or does not comply with the instructions for allowable costs.
- 4. Not award an application based on performance on a previous Grand Challenges Canada grant or project, or based on the award of a grant to the applicant for the same or similar research by one of Grand Challenges Canada's partners or collaborating institutions.
- 5. Disqualify any application at any stage where there is an indication that the proposal was, in any way, plagiarized.
- 6. Accept or reject any or all applications, regardless of an application's ranking based on the evaluation criteria, with or without providing an explanation.
- 7. Award applications with different funding amounts, different durations and/or different conditions than set out above.
- 8. Verify any information provided by applicants through independent research or by



contacting third parties deemed to be reliable by Grand Challenges Canada, and use that information to inform Grand Challenges Canada's funding decision.

9. Provide grants in collaboration with funding partners. This may involve separate grant agreements with each institution (i.e., one with Grand Challenges Canada and one with a partner institution), as well as distinct transfers of funds. Funding partners may use different criteria for evaluation and any such funding may be subject to terms and conditions beyond those described herein. The project deliverables, however, will be aligned.

5.14 RESEARCH ASSURANCES

As noted above in Section 2.9, it is the policy of Grand Challenges Canada that research involving human subjects, research with animals and research subject to additional regulatory requirements must be conducted in accordance with the highest internationally-recognized ethical standards. In order to receive funds from Grand Challenges Canada, initially and throughout the course of a research project, researchers must affirm and document compliance with the guiding ethical principles and standards outlined below:

- Research involving human participants must be conducted in a manner that demonstrates, protects and preserves respect for persons, concern for the welfare of individuals, families and communities, and justice.⁴
- 2. Research involving animals must be conducted in a manner that ensures their humane care and treatment.
- 3. Certain research endeavours, including but not limited to research with recombinant DNA, biohazards and genetically modified organisms, may be subject to enhanced regulation and oversight.

As applicable to the individual project, Grand Challenges Canada will require that, for each venue in which any part of the project is conducted (either by your institution or a subgrantee or subcontractor), all legal and regulatory approvals for the activities being conducted will be obtained in advance of commencing the regulated activity. We will further require you to agree that no funds will be expended to enroll human subjects until the necessary regulatory and ethical bodies' approvals are obtained. For further details, please see the Grand Challenges Canada <u>Ethics Policy</u>.

Questions about this Request for Proposals may be submitted by email to <u>savingbrains@grandchallenges.ca</u>.

Answers to the questions will be posted at <u>www.grandchallenges.ca/saving-brains/</u>by the end of the day on: **August 29, September 19 and October 6, 2017.** The deadline for any questions submitted is October 3, after which we may not respond.

³ Modified from the core principles articulated in Tri-Council Policy Statement 2 (<u>www.pre.ethics.gc.ca/eng/policy-politique/initiatives/tcps2-eptc2/chapter1-chapitre1/#toc01-1b</u>).



APPENDIX A

Country Eligibility

Applicants primarily affiliated with institutions legally incorporated in countries on the following list and in Canada are eligible to apply to this Request for Proposals.

Notwithstanding inclusion below, all eligible jurisdictions remain subject to approval by Grand Challenges Canada, on the basis of compliance with all relevant Canadian and international laws and policies. Whenever possible, Grand Challenges Canada will provide reasonable notice of a determination of ineligibility for applicants located within jurisdictions listed below.

Applicants from Upper-Middle-Income Countries (UMICs): Please note that a maximum of one (1) award will be made within each UMIC, as per the table below (i.e., to the top-ranked applicant from a given UMIC); exceptions may be made in cases in which domestic funding from a given UMIC and/or funding from one or more Saving Brains partners is committed. **Such an exception has been made for Brazil because of partner funding.

Least-Developed Countries	Other Low-Income Countries (2010 per capita Gross National Income (GNI) <= \$1 005)	Lower-Middle- Income Countries and Territories (2010 per capita GNI \$1,006–\$3,975)	Upper-Middle-Income Countries and Territories (2010 per capita GNI \$ 3,976-\$12,275)*
Afghanistan Angola Bangladesh Benin Bhutan Burkina Faso Burundi Cambodia Central African Republic Chad Comoros Congo, Dem. Rep. Djibouti Equatorial Guinea Eritrea Ethiopia Gambia Guinea-Bissau Haiti Kiribati Laos Lesotho Liberia Madagascar Malawi Mali	Kenya Korea, Dem. Rep. Kyrgyz Rep. South Sudan Tajikistan Zimbabwe	Armenia Belize Bolivia Cameroon Cape Verde Congo, Rep. Côte d'Ivoire Egypt El Salvador Fiji Georgia Ghana Guatemala Guyana Honduras India Indonesia Iraq Kosovo Marshall Islands Micronesia, Federated States Moldova Mongolia Morocco Nicaragua Nigeria Pakistan Papua New Guinea Paraguay Philippines	Albania Algeria Anguilla Antigua and Barbuda Argentina Azerbaijan Belarus Bosnia and Herzegovina Botswana Brazil** Chile China Colombia Cook Islands Costa Rica Cuba Dominica Dominica Dominica Republic Ecuador Former Yugoslav Republic of Macedonia Gabon Grenada Iran Jamaica Jordan Kazakhstan Lebanon



Mauritania Mozambique Myanmar Nepal Niger Rwanda Samoa Sao Tome and Principe Senegal Sierra Leone Solomon Islands Somalia Sudan Tanzania Timor-Leste Togo Tuvalu Uganda Vanuatu Yemen Zambia	Sri Lanka Swaziland Syria Tokelau Tonga Turkmenistan Ukraine Uzbekistan Vietnam West Bank and Gaza Strip	Libya Malaysia Maldives Mauritius Mexico Montenegro Montserrat Namibia Nauru Niue Palau Panama Peru Serbia Seychelles South Africa St. Helena St. Kitts-Nevis St. Lucia St. Vincent and Grenadines Suriname Thailand Tunisia Turkey Uruguay Venezuela Wallis and Futuna
---	--	---

*While some countries' Gross National Income may have since changed, for this Request for Proposals, upper-middle-income countries remain defined as per this table.



APPENDIX B:

KeyIndicators

If your project is funded, you will be required to report on a number of outcomes and outputs, including those summarized below; note that this is not a complete list.

Ultimate Outcomes

The desired end result of the innovations or programs supported by Saving Brains is to improve child development outcomes, as described in "Description of Core Outcome Metrics" above.

- Through your innovation, the number of children with improved development outcomes including:
 - Child's cognitive development
 - o Child's development in language and communication
 - Child's social and emotional development.
- Number of children with improved lives through improved physical growth.

Intermediate Outcomes

These are the proposed short- to medium-term goals of the innovative program or technology. Intermediate outcomes are expected to contribute to improved child development. Intermediate outcomes should be realistic and achievable within the time and resource constraints of the project, and directly linked to the project's outputs.

- Number of children using an innovations designed to improve early childhood development
- Number of children with improved health and well-being outcomes through an innovation this could include:
 - o Birth outcomes
 - o Appropriate nutritional practices and/or supplementation
 - Child health
- Number of children experiencing an improved care context this could include:
 - Caregiver-child interaction
 - Home environment (community environment or access to community services)
 - Protection against abuse and exploitation
- Number of caregivers with improved well-being -his could include:
 - Caregiver physical health (including nutritional support during pregnancy)
 - o Met need for family planning products and services
 - Caregiver mental health
- Number of caregivers using innovations to improve child development that are also designed to improve their own well-being.

ImmediateOutcomes

Intermediaries are a key part of many Saving Brains projects. Intermediaries are Individuals, groups, institutions or governments who are not the ultimate beneficiary of the innovation, but who help implement the innovation or bring about the project outcomes (e.g., community leaders, local women's groups, healthcare workers, family members, policy-makers). These could include:



- Number of health workers (community-based and facility-based) using an innovation designed to improve child development outcomes
- Number of non-health sector intermediaries and stakeholders (service providers, family members, caregivers, community leaders, teachers, etc.) using an innovation designed to improve child development outcomes
- Number of facilities/sites (clinics, ECD centers, etc.) using an innovation designed to improve child development outcomes
- Number of caregivers (e.g., family members) using innovative products or services to support their children's development and well-being.

Outputs

Products or services that are directly produced or developed as part of the project but do not have a direct impact on health outcomes:

- Number of jobs created in low- and middle-income countries as a result of the innovation
- Number of jobs created in Canada as a result of the innovation
- Publication of peer-reviewed articles
- Activities and results related to the development and adoption/implementation of policies, plans, regulations or legislation by local governments.