REQUEST FOR PROPOSALS MCTI/CNPq/MoH/SCTIE/Decit/Bill & Melinda Gates Foundation N° 47/2014

GRAND CHALLENGES BRAZIL: All Children Thriving

I - REQUEST FOR SELECTION OF PROJECT PROPOSALS

The National Council for Scientific and Technological Development (CNPq), the Ministry of Health (MoH) and the Bill & Melinda Gates Foundation announce to the public this Request for Proposals and invite all interested to present their project proposals, within the established terms and in conformity with the attached **RULES**, which is part of this Request for Proposals.

I.1 - GOAL

- **I.1.1** The present Request for Proposals has the goal of selecting to receive financial grants projects that intend to contribute significantly to the scientific and technologic development and to innovation.
- **I.1.2** The present Request for Proposals has the goal of selecting to receive financial grants projects that will contribute significantly to the advance of knowledge, the development of products, the formulation, implementation and evaluation of public efforts directed to the improvement of the general Brazilian population's health conditions.
- **I.1.3** Proposals must observe specific conditions established on part **II RULES**, attached to this Request for Proposals, which determines the prerequisites relative to the applicant, the timetable, financial resources to be invested on the approved proposals, source of these resources, items to be financed, deadline for project execution, eligibility criteria, criteria and objective parameters of evaluation, and additional important information.

I.2 – APPLICATION AND PROPOSAL SUBMISSION

- **I.2.1** Proposals must be submitted to CNPq exclusively via the Internet, through the Online Proposals Form, available at **Plataforma Carlos Chagas** (http://carloschagas.cnpq.br), starting on the date shown in subitem **II.1.2 RULES TIMETABLE**.
- **I.2.2** Proposals must be sent to CNPq until 23h59 (twenty-three hours and fifty-nine minutes), Brasília time, on the deadline for proposal submission, described in subitem **II.1.2 RULES TIMETABLE**. The applicant will receive an electronic receipt protocol of the proposal, which will serve as a proof of submission.
- **I.2.2.1** Technical Support through CNPq's e-mail address <u>atendimento@cnpq.br</u> or through the telephone number 0800 61 9697 will be closed at 18h30 (eighteen hours and thirty minutes) on weekdays and this fact won't be accepted as a justification for applications sent after the deadline for proposal submission.
- **I.2.2.2** The applicant will receive an electronic notification after the proposal submission, which should be considered the proof of transmission.

- **I.2.3** Proposals must be presented conforming description in subitem **II.2 ELEGIBILTY CRITERIA** in **RULES**, rigorously containing all the items expressed in this Request for Proposals.
- **I.2.4** The files attached must be created outside the Online Proposal Form and attached to it in "pdf" format, and be limited to 1 Mb (one megabyte).
- **I.2.5** If pictures, graphics, etc, are needed to clarify the proposal's argument they must not compromise the file's capacity as proposals that exceed the 1 Mb limit will not be received by CNPq's electronic ticket.
- **I.2.6** Proposals submitted in any other form will not be accepted, as well as proposals received after the deadline established in subitem **I.2.2** above.
- **I.2.7** Only one proposal per applicant will be accepted.
- **I.2.8** In case a second proposal is sent by the same applicant, within the deadline for proposals application, the second one will be considered a substitute for the first, and only the last proposal will be considered for analysis.
- **I.2.9** If deemed to be identical, the following measures will be taken:
 - a) In case of identical proposals sent by the same applicant, only the last proposal will be considered for analysis.
 - b) In case of identical proposals of different applicants, all proposals will be disqualified.

1.3 - ACCEPTANCE, ANALYSIS AND SELECTION

Selection of proposals submitted to CNPq in response to this Request will be done by way of analysis and comparative evaluation. The stages are as follows:

I.3.1 - Stage I - Analysis of Letter of Inquiry

- **1.3.1.1 Analysis by ad hoc consultants:** This stage consists of the analysis of the proposals as to the merit and relevance of each application, which will be performed by experts following the topics in the item **II.3 EVALUATION CRITERIA** of the **RULES**.
- 1.3.1.2 Pre-selection: This stage, performed by the technical group of CNPq, consists of the analysis of the proposals as to the compliance of the requirements in the items of the RULES, relative to the subitems II.2.1-ABOUT THE APPLICANT AND THE SUPPORT TEAM and II.2.3- ABOUT THE INSTITUTION (WHICH WILL IMPLEMENT), in the ELEGIBILITY CRITERIA.

I.3.1.3 – Analysis, Evaluation and Ranking of Letters of Inquiry by the Evaluation Committee

I.3.1.3.1 - Letters of Inquiry will be evaluated and ranked during this stage considering the analysis in the previous stage and the **ELEGIBILITY CRITERIA**, indicated in subitem **II. 2.2** - **ABOUT THE PROPOSAL**, and of **EVALUATION**, as indicated in subitem **II.3**. of **RULES**, which will be scored by the Evaluating Committee, made up by representatives of the Bill & Melinda Gates Foundation, of the Ministry of Health and of the national and international scientific community.

- **I.3.1.3.2** The final score of each proposal will be assessed conform established in item **II.3 EVALUATION CRITERIA** in **RULES**.
- **I.3.1.3.3** After analyzing the merit and relevance of each proposal, the Committee will:
- a) recommend or
- b) not recommend.
- **I.3.1.3.4** The Committee's review on the proposals, within the established criteria, will be registered in a spreadsheet containing the list of the proposals judged, recommended and not recommended, with the respective final scores, ranked from higher to lower, as well as other information and applicable recommendations.
- **I.3.1.3.5** It is forbidden for any Member of the Committee to:
- a) review project proposals that involve conflict of interests;
- b) publicize the results of any evaluation prior to the official CNPq announcement;
- c) make copies of processes;
- d) discriminate areas or lines of thought;
- e) not take into consideration the ad hoc consultants' evaluations in their recommendations, for no justified reason;
- f) distort the meaning of the content of the ad hoc consultants' evaluations;
- g) judge proposals in a way that contradicts the ad hoc consultants' decisions;
- h) behave as a representative of any institution or region.
- I.3.2 Stage II Analysis of Completed Projects
- **I.3.2.1 Analysis by ad hoc Consultants:** This stage will consist in the analysis of the inquiry, in relation to the merit and relevance of the proposals, to be performed by specialists that will express their opinions on topics included in item **II.3 EVALUATION CRITERIA** in **RULES**.
- **I.3.2.2 Analysis of Full Proposals by the Technical Group at CNPq:** This stage, to be performed by the technical group of CNPq, consists of the analysis of proposals presented in relation to the compliance with the provisions established in items of the **RULES**, relative to subitem **II.1.7 ALLOWABLE COSTS**.
- I.3.2.3 Analysis, Evaluation and Ranking of Full Proposals by the Evaluation Committee:
- I.3.2.3.1 Proposals will be evaluated and ranked in this stage considering analysis in previous stages and the ELIGIBILITY CRITERIA, indicated in subitem II. 2.2 ABOUT THE PROPOSAL, and of EVALUATION, indicated in subitem II.3. of RULES, which will be scored by the Evaluating Committee, made up by representatives of the Bill &

Melinda Gates Foundation, of the Ministry of Health and of the national and international scientific community.

- I.3.2.3.2 The final score for each project will be determined as established in item II. 3 EVALUATION CRITERIA in RULES.
- **I.3.2.3.3** After the analysis on merit and relevance of each proposal and the assessment of its budget, the Committee will be able to recommend:
- a) approval, with or without budget cuts, or
- b) not approval.
- **I.3.2.3.4** The Committee's review on the proposals, within the established criteria, will be registered in a Spreadsheet containing the list of the proposals judged, recommended and not recommended, with the respective final scores, ranked from higher to lower, as well as other information and applicable recommendations. For recommended proposals, the amount to be funded by the CNPq, Decit/SCTIE/MoH and the Bill & Melinda Gates Foundation will be suggested. For proposals not recommended, a decision with justification for the non-recommendation will be produced. The Spreadsheet will be signed by members of the Committee.
- **I.3.2.3.5** A consultant that has produced a proposal for this Request for Proposals or is participating in a project team cannot take part of the Evaluating Committee.
- **I.3.2.3.6** It is forbidden for any Member of the Committee to:
- a) review project proposals that involve conflict of interests;
- c) publicize the results of any evaluation prior to the official CNPq announcement;
- c) make copies of processes;
- d) discriminate areas or lines of thought;
- e) not take into consideration the ad hoc consultants' evaluations in their recommendations, for no justified reason;
- f) distort the meaning of the content of the ad hoc consultants' evaluations;
- g) judge proposals in a way that contradicts the ad hoc consultants' decisions;
- h) behave as a representative of any institution or region.

I.3.3 - Stage III - Meeting for Project Adjustments

I.3.3.1 – Project leaders whose projects have been recommended by the Evaluation Committee will have to participate, with another member of the team, in a meeting where possible adjustments for the project will have to be agreed upon. For example, the adjustments, may be methodological (to allow results to be comparable or expanded), budget related, or needed in order to avoid a juxtaposition of objectives in different proposals.

I.3.4 – Stage IV - Analysis by CNPq's Executive Board of Directors (DEX)

I.3.4.1 – After the incorporation of the adjustments agreed on Stage III, all the proposals recommended by the Committees and analyzed by the technical group will be submitted for appraisal to CNPq's Executive Board of Directors, who will emit a final decision on its approval, after hearing from the Decit/SCTIE/MoH and the Bill & Melinda Gates Foundation, taking in consideration the budget limitations of this Request for Proposals.

I.4 – EVALUATION RESULTS

- **1.4.1** The roster of full proposals approved with financial grants for the present Request for Proposals will be published on CNPq's website (www.cnpq.br), on Decit/SCTIE/MoH website (www.saude.gov.br/sctie/decit) and published in the **Diário Oficial da União**.
- **I.4.2** All applicants for this Request for Proposals will have access to the review on their proposal, but the identity of the reviewer will be kept undisclosed.

I.5 - ADMINISTRATIVE APPEAL

- **I.5.1** If the applicant has reasons to contest the result of the proposals' evaluation, he/she can appeal using a specific electronic form, available at the Plataforma Carlos Chagas (http://carloschagas.cnpq.br), within 10 (ten) days, beginning on the date the results are published on CNPq's website, as long as the decision on the applicants proposal is available at the Plataforma Carlos Chagas.
- **I.5.2** The appeal must be directed to the Permanent Commission of Appeals Analysis COPAR, who will follow-up the results for final deliberation by CNPQ's Executive Board of Directors.
- **I.5.3** The time period is counted by excluding the first day and including the deadline, and is considered as consecutive days.
- **1.5.4** The time period will only start and end on CNPq's business days.

I.6 - SUPPORT TO APPROVED PROPOSALS

I.6.1 – Approved proposals will receive funding by means of a financial grant with the Bill & Melinda Gates Foundation and/or via CNPq in the modality of Individual Aid, in the name of the Leader/Applicant, after signature of the Technological Research Project, conform established in RN 17/2011. (http://www.cnpq.br/web/guest/view/-/journal_content/56_INSTANCE_0oED/10157/25480). The Bill & Melinda Gates

Foundation will sign funding agreements with the researcher's institution. Private Forprofit institutions with approved proposals will be funded exclusively by the Bill & Melinda Gates Foundation. All funding agreements with the Bill & Melinda Gates Foundation will be subject to the rules and procedures of the Foundation, which are described in the guidelines for proposals that can be accessed at: http://www.gatesfoundation.org/grantseeker/Documents/Proposal Instructions.doc

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- **I.6.2** The signing of the **TERM OF ACCEPTANCE** will be subordinated to the previous existence of a **Technical Cooperation Protocol**, agreed between the institution that implements the project and CNPq, conform established in internal norms of CNPq.
- **I.6.3** The existence of any type of default by the applicant with the Federal Public Administration, directly or indirectly, constitutes an impediment for the implementation of the project.

1.7 - GRANT CANCELATION

The granting of financial support can be cancelled by CNPq's Executive Board of Directors, if during its implementation a serious occurrence justifies the cancelation, without impact to other appropriate measures by means of a reasoned decision.

I.8 - PUBLICATIONS

- **I.8.1** Scientific publications and all other media disseminating the research done with support of the present Request for Proposals must cite the support of the funding institutions and agencies.
- **I.8.2** Advertising campaigns concerning projects and works funded by the Union (the Federal Government) must rigorously observe the guidelines that regulate this type of activity.

I.9 - CONTESTING THE REQUEST FOR PROPOSALS

- **I.9.1** The applicant who does not contest until the second to the last business day before the deadline for submitting the proposals will lose the right of contesting the terms of this Request for Proposals.
- **I.9.2** The applicant who has accepted this Request for Proposals without objections will not have the recourse to appeal in the future, after the evaluation, for possible faults or imperfections.
- **I.9.3** The appeal/contest must be directed to CNPq's Executive Board of Directors, by e-mail, to the e-mail address: **presidencia@cnpq.br.**

1.10 - REVOCATION OR CANCELATION OF THIS REQUEST FOR PROPOSALS

At any time, the present Request for Proposals can be revoked or annulled, totally or partially, by unilateral decision from CNPq's Executive Board of Directors, or for reasons of public interest, or for legal reasons, by means of a reasoned decision, and this event does not imply any rights for indemnity/compensation or complaints of any sort.

I.11 - SPECIAL PERMITS AND AUTHORIZATIONS

It is the exclusive responsibility of each applicant to take care of all the necessary special authorizations and permits, of legal or ethical nature, for the execution of the project.

I.12 – GENERAL PROVISIONS

- **I.12.1** The scientific articles resulting from funded projects should be published in open access magazines, preferably.
- **I.12.2** During the stage of project execution, all and every communication with CNPq must be done via e-mail to the Coordination of the Research Program on Biosciences COBIO (cobio@cnpq.br).
- **I.12.3** Any alterations relative to the execution of the project must be requested by the project lead to CNPq, with a relevant justification, and must be authorized to be considered in effect.
- **I.12.4** At the end of the period for the project execution, the applicant must present an expense and a technical report, according to what has been established in the **TERMS OF ACCEPTANCE** and other CNPq norms, otherwise, resources may have to be reimbursed to CNPq and other penalties established in the legislation may be applied.
- **I.12.5** During the execution, the project will be monitored and evaluated, in all its phases, according to the established in the **TERMS OF ACCEPTANCE**.
- **I.12.6** CNPq reserves the right to organize on-site seminaries, during the project execution or at the end of it, for partial or final evaluation, and to promote technical visits or request additional information with the intent to improve the Evaluation and Monitoring system.
- **I.12.7 –** The information generated with the implementation of the selected proposals and made available at CNPq's data base will be public domain, following the topics below:
- **I.12.7.a)** The projects submitted to this RFP, as well as any technical reports presented by the researchers and/or grantors for the CNPq, that contain information about the projects in progress, will have access restricted by decisive action regarding the final approval by the CNPq. (Law 12.527/2011 of November 18 of 2011, art 7, §3, and Decree 7.724/2012 of May 16 of 2012, art 20).
- **I.12.7.b)** Those researchers whose projects are submitted to the CNPq, approved or not, and/or their technical reports presented that may generate, entirely or in part, results that are potentially objects of Patent for Invention, Utility Model, Industrial Design, Computer Program or any other form of record of Intellectual Property and similar must explicitly express the interest in restriction of access on submission of the project and/or of the sending of the technical report.
- **I.12.7.b1)** The obligations of seal and restriction of public access provided in the above clause shall continue for the period of 5 (five) years from the request for the restriction.
- **I.12.7.b2)** Regarding the possibility of restriction of access, this does not reduce, however, the responsibility that the researchers, their teams and institutions have, as members of the research community, for maintaining, as much as possible, the results

of the research, data and collections available to other researchers for academic purposes.

- **I.12.7.c)** Parties must ensure that each of their employees, officials, public and subcontracted agents who have access to restricted access information, have agreed to fulfill the obligations of restriction of access to the information.
- **I.12.7.d)** CNPq shall make available, as they consider appropriate, the basic information of all the projects, such as: title, summary, object, applicant(s), executing institutions, and resources applied by the entity.
- **I.12.8** In case the project or the report *per se* may come to acquire commercial value or may lead to the development of a product or method involving the creation of a patent, the exchange of information and the rights reserved, in each case, will follow according to the established in the Innovation Law number 10,973, from December 2nd, 2004 and regulated by the Decree number 5,563, from October 11th, 2005, and the Industrial Property Law (No. 9.279 of May 14, 1996) and by internal norms of CNPq that regulate the topic.
- **I.12.9** The present Request for Proposals is regulated by the precepts of public law inserted in the *caput* of article 37 of the Federal Constitution, by the precepts of law number 8.666/93, and, in special, by the internal norms of CNPq.
- I.12.10 CLARIFICATIONS AND ADDITIONAL INFORMATION ON THE CONTENT OF THIS REQUEST FOR PROPOSALS, THE FILLING OF THE ONLINE PROPOSAL FORM, AND THE LEGISLATION THAT REGULATES THIS REQUEST FOR PROPOSALS CAN BE OBTAINED IN ITEMS II.5 AND II.6 OF THE RULES.

I.13 – RESERVATION CLAUSE

CNPq's Executive Board of Directors reserves the right to resolve cases not covered and unseen circumstances in this Request for Proposals.

Brasília, November, 14, 2014

REQUEST FOR PROPOSALS MCTI/CNPq/MoH/SCTIE/Decit/Bill & Melinda Gates Foundation N° 47/2014

GRAND CHALLENGES BRAZIL: All Children Thriving

II - RULES

The present RULES intend to define the activities that will receive financial grant and the conditions to implement the financial support, by means of a selection process through this Reguest for Proposals for project execution.

II.1. ON SPECIFIC PROVISIONS (PROGRAM STRUCTURE)

The CNPq/MCTI, the Decit/SCTIE/Brazilian Ministry of Health and the Bill & Melinda Gates Foundation have formed a strategic alliance around shared priorities, including vaccines, innovative research on maternal and child health, and infectious disease control. As part of this alliance, the partners launched Grand Challenges Brazil to support health research and innovation. The first Grand Challenges Brazil grant program was *Reducing the Burden of Preterm Birth*, which funded 12 projects to investigators across Brazil.

Here we announce the second grant program, *All Children Thriving*. This program focuses on new measurement tools and new combinations of approaches to ensure all children thrive – that they not only survive, but also have the chance to live a healthy productive life. The ultimate goal is to determine what packages of interventions should be delivered to which group of individuals at what point in their life cycle to reduce the burden of preterm birth, stunted physical growth, and impaired cognitive development.

This program joins the global *All Children Thriving* platform, which links Grand Challenges programs targeting healthy birth, growth, and development, including the global programs *Saving Brains* and *Saving Lives at Birth* and programs launched through Grand Challenges Brazil and Grand Challenges India. The platform supports the expansion of a global network of investigators working on similar issues; fostering linkages between the individual programs; building on existing databases, biorepositories, and clinical trial sites; and increasing opportunities for exchanging ideas and lessons learned.

Funding for this request for proposals

Grants will go to Brazilian researchers, but we encourage partnerships with researchers in other countries, especially where the opportunity exists to build on existing collaborations. Projects can target impact in Brazil with the expectation that this impact will ultimately extend beyond Brazil, or it can include a component to specifically test solutions developed for Brazil for their impact in other countries.

This request for proposals from Brazilian researchers is being launched in parallel with invitations to researchers in low- and middle-income countries under equivalent grant programs issued through country-specific Grand Challenges partnerships and through a global program, Creating and Measuring Integrated Solutions for Healthy Birth, Growth, and Development. All those funded will join the All Children Thriving Grand Challenges research community, which includes Brazilian investigators already funded through Grand Challenges Brazil: Reducing the Burden of Preterm Birth.

II.1.1 - GOALS OF THE REQUEST FOR PROPOSALS

This Request for Proposals aims to support scientific and technological research and innovation though the selection of proposals to provide grants to research projects with innovative approaches that aim to assess:

- 1) What combinations of interventions are most effective for prevention and treatment of unhealthy birth, growth, and development;
- 2) When in the human lifecycle they are most effectively applied; and

3) How they are most effectively and practically integrated into a continuum of care, encompassing preconception, conception to birth, birth to two years, childhood, adolescence, and adulthood.

Interventions of interest include - but are not limited to - those focused on preconception and maternal nutrition (e.g., adequate micronutrient intake); exclusive breastfeeding to 6 months of age; complementary feeding from 6 to 24 months of age; broadly addressing malnutrition, including the links between undernutrition and obesity; food security and dietary diversity (e.g., accommodating seasonality); farm productivity and women farmers' income generation; infection control (e.g., vaccines, drugs, clean water access, sanitation, food hygiene, hand washing); reduced toxin exposure (e.g., indoor air pollution, aflatoxin, pesticides); reducing the burden of unhealthy pregnancy, fetal growth delays (e.g., maternal stress, preeclampsia, gestational includina diabetes); reducing the burden of preterm birth (e.g., reduction in delivery by Csection); birth assistance and strategies to reduce infant mortality associated with preterm birth and the perinatal period; fostering newborn care (e.g., immediate initiation of breastfeeding, kangaroo care); family planning (e.g., uptake of intrauterine devices) and birth spacing; infant nurturing and early child stimulation; addressing violence and abuse; and addressing the role of socioeconomic status and gender norms.

II.1.1.1 - To reach these objectives, we are looking for projects that propose innovation in the following areas:

- Measurement tools: Pilot tests of new measurement tools, such as those based on a new technology or new biomarkers of linear growth, cognitive function, or gestational age, including rapid response indicators of intervention success or failure
- Intervention packages: Tests of new interventions especially combinations of interventions –that a) develop a new human cohort with unique advantages over existing cohorts, such as the potential for developing a unique biorepository; or b) add an activity, such as a prospective pilot trial of an intervention or new measurement tool, to ongoing work with a human cohort, including at sites of intervention trials and sites for public health surveillance
- Analytical tools: Pilot tests of new analytical tools that use existing biorepositories or existing health and development databases for retrospective analysis

II.1.2 - BACKGROUND

Globally, over 6 million children under the age of five die each year, and approximately 165 million (26%) of the world's children have stunted growth jeopardizing subsequent physical as well as cognitive development. Brazil made significant progress in the reduction of child mortality and stunted growth in the last decades. The country has seen the deaths of Children under 5 falling by 77% since 1990, and steady decline in stunting, which has been reduced, nationwide, more than 80% since 1975. However, major challenges remain in both areas. Every year 26 000 Brazilian babies die before completing 30 days of life. A significant proportion of neonatal deaths are associated with preterm birth, which has recently increased to 11.3% of all births in the country.

Stunting, undernutrition or micronutrient deficiencies are more prevalent in certain areas of the country, and often closely related with higher poverty rates or limited access to services. Obesity and overweight are also growing concerns throughout

Brazil, according to a recent study, 12% of the Brazilian children under five years are overweight, an increase of 64% since 2009.

Much remains unknown about the root causes of unhealthy birth, growth, and development. Current evidence suggests that the causes – whether based on malnutrition, infectious disease, social or other factors – are interwoven, and that addressing them one at a time can solve only a small fraction of the problem. Furthermore, stunted growth and development can reduce human productivity and perpetuate poverty.

We need to know how and when to most effectively intervene to ensure all children thrive – that they not only survive, but also have the chance to live healthy productive lives. The ultimate goal of this challenge is to determine what packages of interventions should be delivered to which group of individuals at what point in their life cycle to reduce the burden of fetal growth impairment and preterm birth, stunted postnatal growth, and impaired cognitive development.

II.1.3 - PROGRAM SCOPE

II.1.3.1 - Characteristics of successful proposals

II.1.3.1.1 - We will give highest priority to those projects that:

- Build on ongoing work in some way, especially by building on clinical trial sites
 where the sustained availability of descriptive data has had demonstrable
 success in helping design interventions, stratifying populations by risk factor,
 and enabling an understanding of the community that includes barriers and
 constraints to delivery of interventions and to implementation of government
 programs;
- Incorporate multiple of the areas of innovation listed above, e.g., testing multiple
 interventions, especially sets of interventions targeting combinations of
 outcomes spanning healthy birth, growth, and development; combining a new
 measurement tool with a new intervention; or combining retrospective analysis
 of a database with the design and piloting of a new intervention;
- Clearly incorporate measures of success reasonable for the timespan of the grant, such as a series of measurements to monitor trends or an early measurement useful to predict success at the end of the grant period;
- Have a project plan whereby after two years the end of the seed grant period and the halfway point for the full grant period – grantees will be in a position to participate in initial collaborative meetings to explore how the results from their project could inform the design of more extensive intervention packages for testing in single large cohorts;
- Could contribute to a portfolio of funded projects that addresses Brazil's regional diversity and the need to provide health equity for diverse vulnerable populations;

• Explain how proposed interventions will be tested in Brazilian communities so that they have the highest likelihood of being relevant for implementation more broadly in the Brazilian public health system.

II.1.3.1.2 - We seek proposals that clearly demonstrate the attributes below:

- Potential to lead to prevention and treatment solutions with substantial **impact**;
- **Innovation**, including creativity of the project's approach and clear differentiation from existing approaches;
- Scientific and technical excellence, including a clear and rigorous conceptual framework for research activities;
- Unique project **resources**, including investigator and organization capabilities and potential for collaboration;
- **Value** in terms of appropriateness of the budget and timeline relative to project complexity, risk, and potential impact.

II.1.3.2 – Examples of what we are looking for:

- Approaches to clinical trial design that allow testing combinations of interventions and relatively rapidly determining which subsets of interventions are yielding impact;
- Approaches that help determine how to effectively and efficiently deliver all necessary interventions together as a package to promote children thriving and health equity;
- Approaches that reveal the interplay of biological pathways associated with stress, inflammation, and nutrition, and how such pathways might be targeted to simultaneously prevent multiple pathologies, such as intrauterine growth retardation and preterm birth, stunted postnatal growth, and impaired cognitive development;
- Approaches that specifically combine interventions focused on improving child survival with those focused on improving healthy child development, including cognitive function;
- Approaches, tools, and biomarkers for stratifying populations to determine who
 would benefit from a preventive intervention package, and who is at higher risk
 and warrants a therapeutic intervention package, including determining what is
 the optimal duration of treatment to prevent relapse;
- Approaches, tools, and biomarkers for stratifying populations to reduce the risk of interventions causing unintended harm (e.g., metabolic disease, including obesity);
- Approaches for 1) rapid measurement of physical growth velocity and body composition; 2) measuring brain function and development, with a focus on tests that are simple, reliable, non-invasive, objective, universally applicable, and include those appropriate for fetal life, newborns, or early infancy; 3) measuring gestational age, with a focus on tests that are simple, reliable, non-invasive, universally applicable, and include those that can be applied to pregnant women or to the newborn or infant; 4) predicting or identifying metabolic complications or diseases in pregnancy that affect birth or postnatal outcomes; 5) measuring individual food intake, including validated and simple

markers to assess exclusive breastfeeding practices; 6) developing integrated markers of systemic inflammation; and 7) developing combinations of tests – either new or preexisting tests – that when evaluated in combination provide better predictors of the outcomes of interest than any single test;

- Approaches that specifically address the roles of women as perceived by society – from adolescence to motherhood – creating new or better opportunities to improve children's health and development (e.g., new uses of women's self-help groups);
- Approaches that determine how to shift the emphasis to earlier prevention within the first 1,000 days of life, including determining the value of intervening in the first 100 days and preconception;
- Approaches that yield actionable knowledge by characterizing populations for which there has been striking progress in children thriving.

II.1.3.3 - Examples of what we are NOT looking for:

- Basic research that does not provide a clear path to development and testing of prevention and treatment strategies;
- Studies that lead to solutions applicable to only a small fraction of the population (e.g., because of a focus on a specific disease or condition with limited incidence):
- Projects without the potential to expand in scale to provide solutions to a greater number or diversity of people;
- Studies that propose interventions that detract from favorable family practices (e.g., studies that would lead to inappropriate early cessation of breast feeding, deter skin-to-skin care, or disrupt routine immunizations);
- Projects lacking metrics to determine success or failure and to allow decisions about the appropriateness of follow-on funding;
- Solutions that are only slight improvements over existing approaches (e.g., replication of an approach in a new geography in the absence of added innovation).

II.1.3.4 - Collaboration

This request for proposals seeks to create a consortium of individually funded projects that will benefit from sharing information between projects. We expect that such sharing will help to ensure that the goals of the innovative approaches in individual projects are ultimately integrated with each other, thereby increasing the chances that the programs will be greater than the sum of their parts. Furthermore we expect that sharing experimental methods, data, and resources will ultimately improve the ability to compare and validate local research findings and to develop interventions and products that can have impact at a greater scale. The specific terms of the collaborative activities will be negotiated prior to the grant award. Collaborative efforts include:

• **Cohort harmonization** - When collaborating with projects with existing cohorts or establishing new cohorts, investigators will be expected to participate,

whenever possible, in cohort harmonization. Study sites will be expected to develop and follow standard operating procedures and quality control protocols for specimen collections and participate in the establishment of a minimum common set of data and specimens to be collected across the program.

• **Data sharing** - A data sharing plan will be developed that is equitable, ethical, and efficient. It will include a policy covering 1) sharing data for confidential and strictly internal use at the Gates Foundation, and 2) sharing data with the broader scientific community.

II.1.5 – TIMETABLE

Events	Date
Launching of Request for Proposals on CNPq website	11/14/2014
Launching of Request for Proposals in the Diário Oficial da União	11/17/2014
First day to submit Letters of Inquiry	11/17/2014
Application deadline for Letters of Inquiry	1/13/2015
Results on the selection of Letters of Inquiry will be published in the Diário Oficial da União and on CNPq website	3/31/2015
First day to submit Full Proposals	4/6/2015
Application deadline for Full Proposals	5/25/2015
Results on the selection of Full Proposals will be published on CNPq website	6/23/2015
Tentative date for the meeting to Adjust Projects	7/13/2015
Deadline to submit Final Proposal with agreed adjustments	7/27/2015
Announcement of results on the final selection of Full Proposals in the Diário Oficial da União and on CNPq website	From 8/10/2015
Start of implementation of approved Proposals	From 9/1/2015

II.1.6. FINANCIAL RESOURCES

II.1.6.1 - Levels of Funding

- **II.1.6.1.1** There are two categories of grants:
- **II.1.6.1.1.1** Seed or basic grants: Funded at up to R\$ 500,000.00 (five hundred thousand reais) per project for two (2) years.
- **II.1.6.1.1.1 -** This type of grant does not require preliminary data and is meant to provide an opportunity to test particularly bold ideas. Such ideas could include applying approaches from outside the field of maternal and child health. New approaches can also be inserted in the field of ongoing projects already counting on grants from the Grand Challenges program launched by the Bill & Melinda Gates Foundation or its partners, including: Saving Brains, Saving Lives at Birth, Stars in Global Health, and Grand Challenges Explorations.
- **II.1.6.1.1.2** Full grants: Funded at up to R\$ 4,000,000.00 (four million reais) per project for four (4) years.
- **II.1.6.1.1.2.1** This type of award does require preliminary data and is meant to provide an opportunity to develop, refine, and rigorously test approaches that have previously shown promise in controlled or limited settings.
- **II.1.6.1.2** The number of seed grants and full grants to be allocated will depend on the response to this Request for Proposals. In all cases, individual project budgets should be representative of the scope and magnitude of the proposed studies and carefully designed to get the best possible value out of the award.
- **II.1.6.1.3** –This Request for Proposals will fund projects with the maximum allowed value of each funding level only in exceptional circumstances and when the principal investigator present arguments and budget that justify the costs for the project development.
- **II.1.6.1.4** We expect that the funded projects in any of the funding levels that are successful and present promising results consider the opportunity to apply for additional funding to follow up on the success achieved during Phase I.
- **II.1.6.2** Proposals approved in this Request for Proposals will be granted a total estimated value up to R\$ 2,000,000.00 (two million reais) coming from CNPq's budget, R\$ 3,000,000.00 (three million reais) coming from Decit/SCTIE/MoH and R\$ 5,000,000.00 (five million reais) coming from the Bill & Melinda Gates Foundation, to be released in installments to be determined at a later stage.
- **II.1.6.2.1** Approved proposals will be financed, jointly, with resources from the Brazilian counterparts as described above, through CNPq, and by means of a Funding Agreement with the Bill & Melinda Gates Foundation. In special cases, funding may occur through one or the other way, exclusively.
- **II.1.6.2.2** Funding from the Bill & Melinda Gates Foundation will be disbursed directly by the foundation to the approved projects.
- **II.1.6.2.3** Funding from CNPq is directed exclusively for the payment of scholarships.

II.1.6.3 – The applicant can submit only one project, and apply to only one category of funding described above in item **II.1.6.1**

II.1.7. ALLOWABLE COSTS

II.1.7.1 – The financial resources of this Request for Proposals will be directed to funding items like expenses, capital and scholarship to be automatically included on the Online Proposal Form, which encompass:

II.1.7.1.1 - EXPENSES

- **a)** consumer goods, components and/or spare parts of equipment, software, and equipment installation, maintenance and repair;
- **b)** third party services occasional payment, in full or in part, of maintenance contracts and third party services, for an individual or legal entity.
- **c)** ancillary expenses, especially those related to imports and the necessary installations for the adequate work of equipments (see subitem **II.1.7.4**);
- **d)** tickets and daily expenses, up to the limit of 20% of the total amount of the proposal, and according to the table "Diárias para Auxílios".
- **II.1.7.1.1.1** Any payments to an individual have to fall within the legislation as to not constitute an employment relationship.
- **II.1.7.1.1.2** A person working in the project will not have an employment relationship with CNPq and cannot claim any payments, remaining under the exclusive responsibility of the project lead/institution executing the project.
- **II.1.7.1.1.3** The total amount requested for items costing described in paragraphs "a" through "c" should be included in the "cost" field of the Proposal Form online.
- **II.1.7.1.1.4** Values of travel and per diem shall be included under the same name on the form, following the instructions there.

II.1.7.1.2 - CAPITAL GOODS

- a) permanent equipment and materials
- **b)** bibliographic material
- **II.1.7.1.2.1** Capital goods will be allocated in the institution executing the project and will stay under the responsibility, maintenance and care of the project lead /institution executing the project.

II.1.7.1.3 - SCHOLARSHIPS

II.1.7.1.3.1 - Fellowships will be awarded in technological modalities, specifically: a) Technological and Industrial Development (DTI); b) Technological and Industrial Initiation (ITI); c) Extension in the country (EXP) and d) Technical Support Extension in the country (ATP). The resources for scholarships will automatically be included in the online project budget Proposal Form, and in the budget of the project.

- **II.1.7.1.3.2** Scholarships must be used within the deadline and criteria indicated for each category, as seen at http://www.cnpq.br/web/guest/bolsas-e-auxilios.
- **II.1.7.1.3.3** Scholarships last for the duration of the project only, and can't continue beyond its execution deadline.
- **II.1.7.1.3.4** Scholarships can't be used as payment for services rendered as this goes against the purpose of CNPq's scholarship program.
- **II.1.7.1.3.5** It is the project lead's responsibility to indicate the scholarship recipients once the Term of Acceptance for Financial Support to the Scientific and/or Technological Research Project is signed.
- **II.1.7.2** Funds from CNPg or Decit/SCTIE/MoH are not allowed to be spent on:
- **a)** with IDs, briefcases and similar goods, certificates, ornaments, cocktail drinks, dinners, shows, or entertainments of any kind;
- **b)** routine expenses such as electricity, water and telephone bills, which are considered expenses to be covered by the institution executing the project;
- c) payment of administration taxes, managing taxes, of any kind;
- **d)** civil engineering works (except installation and necessary adaptations for the adequate work of equipments, which should be justified in the detailed budget of the proposal subitem II.2.2), these expenses are to be covered by the institution executing the project;
- **e)** the purchase or renting of any kind of automotive vehicles and fuel expenses of any kind:
- f) payment of salaries or complement of salaries to technical and administrative personnel, or any other benefits, for public institutions personnel (federal, state or municipal);
- **g)** payment of any kind for consulting services or technical assistance to a public servant, or an employee of a public or semi-public company;
- h) payment on any account, to private companies that have in their corporate framework active public servant, or employee of a public company or private joint stock company, for services, including consultancy, technical assistance or similar.
- **II.1.7.2.1** Additional expenses are considered the responsibility of the applicant and /or the institution executing the project.
- **II.1.7.3** Legal and constitutional principles, as well as CNPq's norms of **Accountability**, must be observed for contract or purchase of goods and services.

- **II.1.7.4** Whenever applicable, the proposal must include ancillary expenses due to equipment imports, capital goods and consumer goods, at a ratio of up to 18% (eighteen percent) of the total anticipated for these expenses.
- **II.1.7.5** CNPq is not responsible for supplemental funds to cover expenses arising from any external factors out of their control, such as currency fluctuation.
- **II.1.7.6** In the case of innovation projects, pursuant to the Innovation Law (Law No. 10.973 /2004), operational and/or administrative expenses can be include up to 5% of the total project budget.

II.1.8. PROJECT EXECUTION TIMELINE

- **II.1.8.1** Proposals funded by this Request for Proposals have a maximum completion period of up to 24 (twenty four) months for seed or basic grants or up to 48 (forty eight) months for full grants.
- **II.1.8.2** Exceptionally, the deadline for the project execution can be extended for an extra 12 (twelve) months period upon a justified request submitted by the project's lead for approval by CNPq's Executive Board of Directors.

II.2. ELIGIBITY CRITERIA

- **II.2.1** The eligibility criteria noted below are mandatory.
- **II.2.2** The compliance to those is a must in order for the proposal to be reviewed, analyzed, evaluated and accepted.
- **II.2.3** Lack or insufficient information on any of these criteria can result in the proposal being disqualified.

II.2.4 - ON THE APPLICANT AND THE SUPPORTING TEAM:

- **II.2.4.1** The applicant, responsible for the proposal's presentation, must mandatorily meet the criteria below:
- **a)** have an up-to-date curriculum on file in the Plataforma Lattes, until the deadline for proposal's submission;
- **b)** must be the project lead;
- c) must have a formal connection with the institution executing the project. A formal connection is understood to be any and all type of existent link between the applicant, as an individual, and the institution executing the project. If there is no employment or a functional link, the connection must be characterized by means of an official document proving the agreement between the applicant and the institution executing the project to develop the research and/or teaching activity. The document must be issued by an officer of the institution and must be kept with the applicant; there is no need to send it to CNPq.
- **II.2.4.2** By submitting the proposal the applicant commits, throughout the execution of the project, to maintain all the qualifying, competence and trustworthiness conditions for the perfect accomplishment of his/her objectives, and to keep his/her personal records up-to-date with the proper registry offices.

- **II.2.4.3** The technical team can be made up by researchers, students, and technicians. Other professionals can be part of the team as collaborators.
- **II.2.4.4** Only those who have given formal written consent should be included in the project team. The written consent must be kept by the project lead.
- **II.2.4.5** Members of the technical team, nominated as researchers, must have their curricula on file at Plataforma Lattes. This requirement does not apply to foreign researchers.

II.2.5 - ON THE PROPOSAL:

II.2.5.1 - GUIDELINES FOR THE LETTERS OF INQUIRY

The letter of inquiry should not exceed 4 pages (for each language - English and Portuguese), including a project summary. The abstract of up to 250 words must include one or two sentences in bold that capture the core of your idea. The abstract should indicate the specific problem that the project seeks to solve, what is the proposed approach for solving the problem, why the project is innovative and what is the expected impact of the project - if successful – at the end of the funding period.

II.2.5.1.a. Context and Reason

Describe the project goal and how it relates to the objectives and scope of this program. Note the specific problem the project intends to challenge, why the solution proposed is innovative, and why it represents an improvement in relation to the best alternatives available. If applicable to the project, show any relevant preliminary data in the proposal.

II.2.5.1.b. Objectives and Approach

Identify the general and the specific objectives of the project and how they contribute to the goal described in section I. Write a summary of the research activity for each objective and specify any hypothesis that will be tested. Indicate how each of the research activities related to the objectives will be considered successful, highlighting important milestones that can be used to monitor the project's progress.

II.2.5.1.c. Expected Results and Opportunities

Indicate the expected results for the project, in case it's successful and, in short, what would be the next steps and how the results can lead to later advancement and innovation.

II.2.5.1.d. Competence of the Investigator and the Institution

Show how the experience and expertise of the researcher and his/her institution can contribute to reach the goals of the project. If the project includes collaboration with other individuals and organizations, note their role in the project.

II.2.5.1.e. Resources and Facilities

Describe the available resources and facilities to conduct the proposed research project, including contributions by collaborators.

II.2.5.1.f. Estimated Budget

Briefly describe how the work will be conducted within the proposed budget, detailing values to be allocated for each research objective, per year of project.

II.2.5.1.g. Language

Letters of Inquiry must be presented in two languages, Portuguese and English.

II.2.5.2 - FULL PROJECT

- **II.2.5.2.1** The project must be clearly defined as a scientific, technologic or innovation research;
- **II.2.5.2.2** The research project to be attached to the electronic form of proposals should follow the model shown in Appendix I of this request for proposals.
- **II.2.5.2.3** Projects must be submitted in two languages, Portuguese and English.

II.2.6 - ON THE INSTITUTION EXECUTING THE PROJECT:

- **II.2.6.1** The institution executing the project will be the one where the research project will be developed and with which the applicant has to show a connection, and will be from now on named "Institution Executing the Project", and can be:
- a) higher education institutions, public or private non-profit;
- b) institutes and research and development centers, public or private non-profit;
- c) public companies that perform science, technology or innovation research activities.
- **II.2.6.1.1** The institution executing the project must be found under Brazilian laws and must have its headquarters and administration in the country.
- **II.2.6.1.2** Proposals by private for-profit institutions will be funded exclusively by the Bill & Melinda Gates Foundation. Other proposals will be funded jointly by the three funding agencies (Decit/SCTIE/MoH, CNPq and the Bill & Melinda Gates Foundation).

II.3 - EVALUATION CRITERIA

II.3.1 – The following are the criteria used for ranking the proposals according to their technologic-scientific merits, health relevance and budgetary adequacy:

Criteria for analysis and decision making		Weight	Score
Α	Potential to lead to prevention and treatment solutions for preterm birth with substantial impact	2	1 to 10
В	Innovation , including creativity of the project's approach and clear differentiation from existing approaches	2	1 to 10
С	Scientific and technical excellence, including a clear and rigorous conceptual framework for research activities	2	1 to 10
D	Technical and human resources , including investigator and organization capabilities, interdepartmental collaboration, and international partnerships	2	1 to 10
Е	Value in terms of appropriateness of the budget and timeline relative to project complexity, risk, and potential impact	2	1 to 10

II.3.2 - Up to two decimals may be used for the scores.

- **II.3.3** The final scoring of each project will be assessed by the weighted average of the score attributed to each item.
- **II.3.4** Proposals will be recommended following the respective final scores, ranked from higher to lower.
- **II.3.5** In case of a tie, wins the project with the higher score on items A through E, in this order.

II.4 - MONITORING/FINAL EVALUATION/ACCOUNTABILITY

- **II.4.1** The project lead must send the final technical-scientific report and the closing of financial accounts in a specific Online Form, within 60 (sixty) days of the deadline for project execution, according to the **Term of Acceptance** and other CNPq norms.
- **II.4.1.1** The financial accountability, with expense reports in conformity with the norms of **Accountability** available at: http://www.cnpq.br/prestacaocontas/index.htm;
- **II.4.1.2** The final technical report, with all detailed activity developed during the project's execution and the record of occurrences that affected its development;
- **II.4.1.3** The performance evaluation and the individual technical report of activities developed by each scholarship recipient, including the ones that have been substituted.
- **II.4.1.4** Accountability for the Bill & Melinda Gates Foundation must meet the criteria of the Foundation in accordance with the funding agreement signed at the time of project approval.
- **II.4.1.5** Additional information or clarification on the reports may be requested by the financial agents.
- **II.4.2** When required by CNPq, the Lead of the project should fill out the project's evaluation and monitoring form.
- **II.4.2.1** When required, the Lead of the project will participate in partial and final evaluation seminars promoted by Decit / SCTIE / MoH.

II.5 - ON CLARIFICATION AND ADDITIONAL INFORMATION ON THE CONTENT OF THIS "REQUEST FOR PROPOSALS", ON FILLING THE PROPOSAL FORM ONLINE

- **II.5.1** Clarification and additional information on the content of this Request for Proposals can be obtained by sending an e-mail to: chamada472014@cnpq.br.
- **II.5.2** Technical support to applicants with difficulties in filling out the Online Proposals Form can be provided through the e-mail address atendimento@cnpg.br.
- **II.5.3** Questions and help with filling the Online Proposals Form will be answered by calling the phone number: 0800.61.9697, Monday to Friday, from 8:30am to 6:30pm,

II.6 – ON THE LEGISLATION MENTIONED:

TERM	PROVISIONS and LEGISLATION
ADVERTISING	Caput and paragraph 1° of art. 37 of the Federal Constitution
CAMPAIGNS	http://www.planalto.gov.br/ccivil_03/constituicao/ConstituicaoCompilado.htm
	IN/SECOM-PR n° 02 of 16 December, 2009
	http://www.secom.gov.br/sobre-a-secom/institucional/legislacao/instrucoes-
	<u>normativas</u>
INDIVIDUAL	RN 017/2011
SUPPORT	http://www.cnpq.br/web/guest/view/-
	/journal_content/56_INSTANCE_0oED/10157/25480
PUBLIC BIDDING	Law nº 8.666/1993
LAW	
	http://planalto.gov.br/ccivil_03/leis/l8666cons.htm
FNDCT (National	Law nº 11.540/2007
Fund for Scientific-	http://www.mlonolto.mov.hm/soidl.00/_Ata0007_0040/0007//_ai//_44540_htm
Technological	http://www.planalto.gov.br/ccivil_03/_Ato2007-2010/2007/Lei/L11540.htm
Development) INNOVATION	Innovation Law nº 10.973/2004
INNOVATION	http://www.planalto.gov.br/ccivil 03/ Ato2004-2006/2004/Lei/L10.973.htm
LDO	Law nº 12.465/2011
(Budget	http://www.planalto.gov.br/ccivil 03/ Ato2011-
Legislation)	2014/2011/Lei/L12465.htm
INTELECTUAL	RN-013/2008
PROPERTY	http://www.cnpq.br/web/guest/view/-
FROFERIT	/journal content/56 INSTANCE 0oED/10157/24829
SPECIFIC NORMS	RN-015/2010
FOR	http://www.cnpq.br/view/-
SCHOLARSHIPS	/journal_content/56_INSTANCE_0oED/10157/25314
	/Journal_content/30_INSTANCE_00ED/10137/25314
APPEAL	RN- 006/2009
NORMS	http://www.cnpq.br/web/guest/view/-
NORMO	/journal_content/56_INSTANCE_0oED/10157/25041
CONSTITUTIONAL	Caput and paragraph 1° of art. 37 of the Federal Constitution
PRINCIPLES	http://www.planalto.gov.br/ccivil 03/constituicao/ConstituicaoCompilado.htm
LEGAL	LAW nº 9.784/1999, Art. 2º
PRINCIPLES	http://www.planalto.gov.br/ccivil_03/Leis/L9784.htm
TERMS OF	RN-018/2011 which revokes RN-024/2006
ACCEPTANCE	http://www.cnpq.br/web/guest/view/-
	/journal_content/56_INSTANCE_0oED/10157/25465
MANUAL OF	http://www.cnpq.br/documents/10157/d6b5ae87-42ab-4b4c-85f6-
EFFICIENT USE OF	<u>838fedda953d</u>
RESOURCES AND	
ACCOUNTABILITY	

II.7 – ON COORDINATION RESPONSIBLE FOR THE REQUEST FOR PROPOSALS

The coordination responsible for the monitoring of this Request for Proposals is the Coordination of the Research Program on Biosciences - COBIO.