

**CONSULTANT FOR A POST PROCESSING THE IMAGING-DATA IN A PRE-NATAL  
EXPOSURE TO URBAN AIR POLLUTION AND PRE-/POST-NATAL BRAIN DEVELOPMENT  
(File 5/2019)**

**I. OBJECT OF THE SUBJECT**

The present document is intended to contract an expert consultant for designing, processing, analysing and interpreting the imaging data.

All the technical specifications contained in this document are considered to be part of the minimum requirements and do not exclude any other needs for compliance with the purpose of the service contracted.

**II. CONTENT OF THE WORK**

The consultant will make a collaboration with our project “Pre-natal exposure to urban AIR pollution and pre- and post-Natal Brain Development – AIR-NB (ERC -2017-ADG; 785994)”. Specifically with the task 1.3 described in the Grant Agreement “Post-processing of the imaging-data”. The neonatal brain MRI will be performed during first weeks of live to assess brain development. The image processing and analysis will be performed using mainly standard automatic procedures combined with specific probability maps for neonatal tissue, customized software, and manual delineation to reconstruct region delineations (using predefined rules to avoid inter-subject variability).

**Scope of work**

ISGlobal – Barcelona Institute for Global Health is a research center in international health whose ultimate goal is to help close the gaps in health disparities between and within different regions of the world. For this, we leverage on knowledge generation (research), transmission (training), and application (policy and global development).

ISGlobal is looking for an experienced consultant to design the acquisition protocol of neonatal MRI, (ii) supervise their acquisition, (iii) contact parents or tutors to provide medical/neurological advice in case of the presence of brain anomalies detected by the responsible neuro-radiologist, (iv) carry out the analyses of the acquired brain MRI scans according to the AIR-NB project proposal, (v) developing new analysis strategies for the specific aims of the project, (vi) interpreting the data and (vii) communicating the results to the scientific community.

**The key deliverables are:**

1. Individual maps per each baby's brain
2. Data set of the derived indicators
3. Scientific papers

**Other potential key deliverables:**

1. Personal reports
2. Neonatal mri map

### **III. PERSON RESPONSIBLE FOR THE CONTRACT**

ISGlobal will appoint a person responsible for relations with the consultant group (the "Contract Responsible"), who will coordinate with the staff of the entity and who will channel communications between the two parties.

### **IV. MANAGEMENT OF WORK AND QUALITY CONTROL**

ISGlobal and the consultant will establish by common agreement a calendar of communications that will consist of weekly or bi-weekly progress calls. Regardless of these scheduled calls, the Contract Responsible and the consultant may meet at any time if any of the two parties considers it appropriate, depending on the progress of the work hired. At any meeting the responsible person may choose to bring additional participants from ISGlobal if considered convenient. Monthly reports will be provided by the consultant.

### **V. REQUIRED QUALIFICATIONS**

- Expert knowledge neuroimaging studies in large population samples.
- Experience in neuroimaging in newborns
- Experience in epidemiological studies about the urban environment in the structure and function of the brain
- Experience in investigating the correlates between brain structure/function and behavior, development and neurological disease
- Experience in writing manuscripts

## **VI. PERIOD OF EXECUTION AND DELIVERY OF THE REPORT**

The execution of the work will be carried out through the five years of the project.

## **VII. ESSENTIAL CONTRACTUAL OBLIGATIONS**

The following will be considered as essential obligations of the successful bidder:

- a) Guarantee absolute confidentiality of the documentation received, taking the due diligence not to disclose it, or use it in any way other than the purpose of this contract. Failure to comply with this obligation will automatically imply termination of the contract and will result in a claim by ISGlobal for damages that may have been inflicted.
- b) Guarantee and take responsibility for the technical quality of the works and services developed as well as for the consequences that may occur, for ISGlobal or for third parties, due to omissions, errors, inadequate methods, or incorrect conclusions in the execution of the contract.
- c) Strict follow-up of the report audits.
- d) Deliver the works and reports hired in the manner and terms provided in the Bidding Document.

## **VIII. CONTRACT PERIOD**

The estimated start date of the contract is June 5, 2019. The contract will end at the end of the project (August 31, 2023).

## **IX. BUDGET, PRICE AND ESTIMATED VALUE OF THE CONTRACT**

The contract budget amounts to the maximum amount of

**EUR 218.000,00 (excluding VAT) for non-exempt bidders**

The award amount will not exceed this budget in any case. The price of the contract, consequently, will be that to which it rises plus the corresponding Value Added Tax, in the case of non-exempt bidders, which must be included in the separate item.

## **X. ADVERTISING**

The present contract will be published by announcement in the Contracting Profile of the entity on the website: [www.isglobal.org](http://www.isglobal.org)

#### **XI. PLACE AND DATE OF SUBMISSION OF PROPOSALS**

The economic proposals must be submitted by email to the address  
licitaciones@isglobal.org

The deadline for submitting proposals will end on 4 June, at 12:00.

#### **XII. LEGAL SYSTEM OF THE CONTRACT**

The contract is considered a private contract and is subject to private law, ruling by this Schedule, by the contract and documentation attached, and in everything not provided by the applicable civil and commercial legislation.

#### **XIII. EXPENDIENT OF RECRUITMENT, AWARD PROCEDURE OF THE CONTRACT AND DOCUMENTATION TO BE PROVIDED TENDERS**

The contracting of the reference services will be awarded by the procedure envisaged in Section IX of the Internal Contracting Instructions of the entity. From the day of publication of the tender notice, interested companies can obtain the necessary documentation to prepare their proposals through the contractor's profile on the website [www.isglobal.org](http://www.isglobal.org).

#### **XIV. PAYMENT METHOD**

The consultant will be provide an invoice for the two payments, according to the following calendar:

June 2019: First payment of 60%

June 2021: Second and last payment of 40%

Barcelona, May 29, 2019