**SPECIFIC AND TECHNICAL CONDITIONS**

**to contract a service to measure Placental DNA methylation**

**in 500-700 samples of BiSC cohort**

 **(File 25/2021)**
**I. OBJECT**

The present document (the "Pliego") to contract the service of a genomics company / core facility to measure DNA methylation with the EPIC array (Illumina) in 500-700 placental samples from the BiSC study.

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**

**Scope of work**

ISGlobal – Barcelona Institute for Global Health is a research centre 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).

Children’s health is considered a priority at the international level—and also at ISGlobal. Our Childhood and Environment programme focuses on evaluating the effects of environmental pollutants on children’s health, with particular emphasis on exposure during pregnancy and the postnatal period.

In this context, placenta is a key organ for fetal development and later health. We hypothesize that exposure to environmental insults might affect placental DNA methylation, and this might impair placental function and in turn affect fetal development.

Thus, ISGlobal is looking for a contract research organization (CRO) to measure placental DNA methylation in 500-700 placental samples of the Barcelona Life Study Cohort (BiSC), using the EPIC array (Illumina).

This project

This project has been funded by Instituto de Salud Carlos III through the project "PI20/00190" (Co-funded by European Regional Development Fund “A way to make Europe”)

**Key methodological details:**

ISGlobal:

ISGlobal will provide 750 ng of DNA of each placenta sample at a concentration of 50 ng/uL. Samples will be randomized and organized in 96 well plates. Samples will be provided in two rounds:

* Round 1: 250-350 samples before June 2021
* Round 2: 250-350 samples before December 2021

Company / core facility:

The company / core facility will have to measure placental DNA methylation with the Illumina EPIC array, which contains probes for around 800.000 CpG sites. Thus, they will be responsible of the bisulfite conversion, hybridization, scanning of the arrays and an initial quality control of the data. The following data will be provided to ISGlobal:

* IDAT files and SampleSheet
* Quality control report

Results should be sent in a period of 2 months since samples have arrived at their laboratory.

**III. PERSON RESPONSIBLE FOR THE CONTRACT**

ISGlobal will appoint a person responsible for relations with the CRO (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 CRO project coordinator will establish by common agreement a calendar of communications that will consist of periodically progress calls/emails to discuss:

* shipment of BiSC samples to the CRO
* quality control of DNA methylation data of each round

Regardless of these scheduled calls, the Contract Responsible and the project management team 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.

**V. REQUIRED QUALIFICATIONS**

The CRO has to be a genomics company / core facility with proved solvency.

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

The execution of the work will be carried out through 2021.

**VII. ESSENTIAL CONTRACTUAL OBLIGATIONS**

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

1. adequacy to the methodological needs of the project (indicated above)
2. adequacy of the timings of the project (indicated above)

**VIII. CONTRACT PERIOD**

The duration of the contract will be until all samples are processed, which is planned for December 2021.

The estimated start date of the contract is May 1st, 2021.

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

The CRO will provide a quotation per sample to ISGlobal for the service indicated in this contract. The final number of samples will be defined based on the quotation and will be from 500 to 700.

Will select the most appropriate CRO by considering the following criteria:

* adequacy to the needs of the project
* cost per sample
* timings of processing
* solvency of the company / core facility

**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 25th April 2021.

**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.

**XIV. PAYMENT METHOD**

The CRO will be providing periodically invoices indicating concept and number of samples processed. Payment will always be made under invoice and 30 days invoice date by bank transfer.

Barcelona, March 31th, 2021