# Expression of Interest for Detailed Nutritional Assessment for Phenome India participants

## About CSIR-IGIB:

CSIR Institute of Genomics and Integrative Biology (CSIR-IGIB) is a constituent national Laboratory under the Council of Scientific and Industrial Research (CSIR, India) and a premier institution engaged in research of national importance in the areas of genomics, genome biology, molecular medicine and bioinformatics. The institute has a stated mission to translate concepts developed in basic biological research to commercially viable technologies for health care.

CSIR- Institute of Genomics and Integrative Biology (CSIR-IGIB) through various projects has been working in the area of nutrition, gut microbiome, genomics, proteomics, metabolomics and their relevance in complex disorders including cardiometabolic diseases.

Introduction to Phenome India project of CSIR

Phenome India - CSIR Health Cohort Knowledgebase (PI-CHeCK) is a flagship project of the Council of Scientific and Industrial Research (CSIR). It aims to collect and assess employee data through a longitudinal cohort initially over a period of five years. As a part of this study, a validated Food Frequency Questionnaire (FFQ) for assessing the dietary intake of an individual has to be administered via interview by a dedicated team, to capture portion size and portion tools of the food taken more realistically with real food images and pictorial representations. The scope of the work and reference terms are mentioned as per S. Nos. 1 and 2. FFQ data has to be collected for an estimated 8000-10000 participants, from all CSIR Laboratories (mentioned below), with the nodal Laboratory being CSIR-IGIB.

To this end, CSIR-IGIB invites Expression of Interest for Detailed Nutritional Assessment for Phenome India participants from the interested academic and commercial organizations (start-ups/diagnostic labs /hospitals /PSU's / Industries etc) with specialized know-how/ IP/ infrastructure etc for sharing of expertise, knowledge and resources to collect, analyse food frequency related questions.

The interested service providers are requested kindly to go through the broad requirement as mentioned below:

## 1. Qualifying criteria / Minimum requirements for parties

The interested party should have been involved in nutritional assessment (administering food frequency questionnaire) in at least two community-based studies in the last 10 years from India, prospective studies, and large multi-centric cross–sectional surveys with scientifically published studies as proof of documents.

I. The interested party needs to have experience in data collection of 50 to 100 samples in a day from multiple locations in India, with expertise in total collection exceeding 10000 population size, showcasing their capacity for large-scale logistics, quality assurance, and data management. Experience working across different states, handling multilingual data collection, and maintaining rigorous data quality standards will be an added advantage.

II. The party must have a validated and published FFQ developed with respect to Indian diet and noncommunicable diseases, with proof of validation as a scientifically published document.

III. The party should be able to collect data from cities/districts/pin codes mentioned in Table 1 through their collection teams and not through outsourcing to third parties.

IV. The analysis facility where the data will be checked for quality controls, processed and analysed should be owned by the party and not aggregated/outsourced.

V. The party shall ensure the availability of a technically qualified team with proven competence in executing data collection activities strictly following standardized procedures to administer interviewer based questions.

VI. The party should ensure high-quality data collection by implementing a comprehensive training program for all field interviewers covering the study's objectives, detailed instruction on the use of data collection tools, and strong emphasis on ethical practices such as informed consent and confidentiality. The party should establish a quality control system involving regular supervision, spot checks, and feedback loops to maintain data integrity throughout the fieldwork.

VII. The party shall deploy dedicated personnel at each critical checkpoint, including quality assurance, data completeness verification, and post-collection data harmonization and analysis, to ensure the integrity and consistency of the collected data.

VIII. The party should ensure the deployment of a senior dietitian team responsible for identifying underreporting and overreporting in participants' nutrient intake data. Outlier detection and correction must be performed using a combination of manual assessments and statistically robust methodologies.

IX. The party must have a specifically designed, validated nutrition software for research purposes.

X. The party shall ensure the availability of a quick reference guide or field manual at each centre to assist participants in understanding the structure and content of the administered questionnaire.

## 2. General conditions to be met mandatorily for the FFQ collection

I. If data collected from any participants is incomplete or incorrect, then the team will report back to the coordinator of the concerned CSIR Lab/Instt, and should follow up with the participants within a week's time.

II. The party needs to agree that they will not use the data for any publication purposes or research, the data will be the property of CSIR, and when instructed, they will be required to delete it from their servers without violating GCP guidelines.

III. The party must hand over centre-wise data and all raw data / files in Excel or CSV/xml format with all labels and descriptions to the PI.

IV. Data collection procedure and analysis must remain the same for all the participants.

V. Party to provide the details of the Data collection procedure and analysis to be used.

VI. The party will provide QC check and raw data on demand.

VII. The target sample size of the project is 8000-10000.

VIII. The sample collection point will be all CSIR Laboratories located in the cities and their centres mentioned in the table-1 below. The party will be required to make suitable arrangements for all logistics, consumables, and personnel travel to the Laboratory /centre on a designated day informed beforehand by CSIR-IGIB.

IX. Wherever possible, CSIR labs will attempt to provide guest house accommodation for the personnel who will administer the questionnaire. However, logistics and payment would be the responsibility of the party. Rates applicable to outside parties may apply. However, it will be the responsibility of the selected party for all expenses thereof, and CSIR will not be responsible for nonavailability at some or all of the locations.

## Table-1 (List of CSIR Laboratories, Cities and the Pin Codes)

| Lab | City | Pincode |
|---|---|---|
| CSIR-Advanced Materials and Processes Research Institute (CSIR-AMPRI) | Bhopal | 462026 |
| CSIR-Central Building Research Institute(CSIR-CBRI) | Roorkee | 247667 |
| CSIR-Centre for Cellular Molecular Biology(CSIR-CCMB) | Hyderabad | 500007 |
| CSIR-Central Drug Research Institute(CSIR-CDRI) | Lucknow | 226017 |
| CSIR-Central Electrochemical Research Institute(CSIR-CECRI) | Karaikudi | 630003 |
| CSIR-Central Electronics Engineering Research Institute(CSIR-CEERI) | Pilani | 333031 |
| CSIR-Central Food Technological Research Institute(CSIR-CFTRI) | Mysore | 570005 |
| CSIR-Central Glass Ceramic Research Institute(CSIR-CGCRI) | Kolkata | 700032 |
| CSIR-Central Institute of Medicinal Aromatic Plants(CSIR-CIMAP) | Lucknow | 226015 |
| CSIR-Central Institute of Mining and Fuel Research(CSIR-CIMFR) | Dhanbad | 713347 |
| CSIR-Central Leather Research Institute(CSIR-CLRI) | Chennai | 600032 |
| CSIR-Central Mechanical Engineering Research Institute(CSIR-CMERI) | Durgapur | 141006 |
| CSIR-Central Road Research Institute(CSIR-CRRI) | New Delhi | 110025 |
| CSIR-Central Scientific Instruments Organisation(CSIR-CSIO) | Chandigarh | 160030 |
| CSIR-Central Salt Marine Chemicals Research Institute(CSIR-CSMCRI) | Bhavnagar | 364021 |
| CSIR Fourth Paradigm Institute(CSIR-4PI) | Bengaluru | 560037 |
| CSIR-Institute of Genomics and Integrative Biology(CSIR-IGIB) | Delhi | 110007 |
| CSIR-Institute of Himalayan Bioresource Technology(CSIR-IHBT) | Palampur | 176061 |
| CSIR-Indian Institute of Chemical Biology(CSIR-IICB) | Kolkata | 700091 |
| CSIR-Indian Institute of Chemical Technology(CSIR-IICT) | Hyderabad | 500007 |
| CSIR-Indian Institute of Integrative Medicine(CSIR-IIIM) | UT of J&K | 180016 |
| CSIR-Indian Institute of Petroleum(CSIR-IIP) | Dehradun | 248005 |
| CSIR-Indian Institute of Toxicology Research(CSIR-IITR) | Lucknow | 226001 |
| CSIR-Institute of Minerals and Materials Technology(CSIR-IMMT) | Bhubaneswar | 751013 |
| CSIR-Institute of Microbial Technology(CSIR-IMTECH) | Chandigarh | 160036 |
| CSIR-National Aerospace Laboratories(CSIR-NAL) | Bengaluru | 560017 |
| CSIR-National Botanical Research Institute(CSIR-NBRI) | Lucknow | 226001 |
| CSIR-National Chemical Laboratory(CSIR-NCL) | Pune | 411008 |
| CSIR-National Environmental Engineering Research Institute(CSIR-NEERI) | Nagpur | 440020 |
| CSIR-North - East Institute of Science and Technology(CSIR-NEIST) | Jorhat | 785006 |
| CSIR-National Geophysical Research Institute(CSIR-NGRI) | Hyderabad | 500007 |
| CSIR-National Institute For Interdisciplinary Science and Technology(CSIR-NIIST) | Thiruvananthapuram | 695019 |
| CSIR-National Institute of Oceanography(CSIR-NIO) | Goa | 403004 |
| CSIR-National Metallurgical Laboratory(CSIR-NML) | Jamshedpur | 831007 |
| CSIR-National Physical Laboratory(CSIR-NPL) | New Delhi | 110012 |
| CSIR-National Institute of Science Communication & Policy Research(CSIR-NIScPR) | New Delhi | 110012 |
| CSIR Madras Complex(CSIR-CMC) [Zonal centers of 5 labs: CECRI, CEERI, CSIO, NEERI, NML] | Chennai | 600113 |
| CSIR-Structural Engineering Research Centre(CSIR-SERC) | Chennai | 600113 |
| CSIR-HQ | Delhi | 110001 |
| CSIR-TKDL (Satsang Vihar Campus) | Delhi | 110067 |
| HRDC | Ghaziabad | 201002 |
| CSIR Pusa | Delhi | 110012 |

X. Study Duration – six months from the date of award/ commencement of the work (including data analysis and providing individualised results of the amount of consumption of various categories of food groups and macronutrients (like protein, fat, carbohydrate etc.).

XI. One contact person from the CSIR Laboratory will be assigned to coordinate this project with the party.

XII. The confidentiality of the details of the study participants is to be ensured.

XIII. The party will be provided with a Laboratory/ participant ID in numerical and barcoded format (code 128/Code 39/others) by the CSIR Laboratory on the day of sample collection for each participant; the same may be used instead of name and other identifier information required by the party.

XIV. The party will not be provided any personnel details of the participant, and should be ready with a de-identified participant ID as input for all purposes. They may use this as their primary ID or their own barcoding system secondary to the Laboratory ID we provided. However, they will need to provide the mapping sheet for all these ID's in the case they use their barcoding.

XV. A single CSIR Laboratory/centre collection will go on for 2-15 days based on the number of [participants registered; however, it may be extended in certain circumstances, which the party should agree to minimum number would be ensured to make sample collection feasible.

Interested parties may kindly go through the EOI document and send an Expression of Interest online, along with the documents required at S.N. 1 & 2 above, in the name of the Director, CSIR- Institute of Genomics and Integrative Biology, New Delhi through the CPP Portal www.etenders.gov.in. The EOI document is also available at our website www.igib.res.in.

**The interested parties who are not registered at CPP Portal (www.etenders.gov.in) must get registered at the above portal (which is free of cost) and then participate in the EOI at the earliest but latest by 16.05.2025.**

If necessary, the interested parties would be required to give presentations before a technical committee on 21st May 2025 in hybrid mode at Mall Road Campus, Delhi.

(Avatar Singh)
Principal Technical Officer