

**OBJECT: NOTICE OF EXPRESSION OF INTEREST, ACTIVITY NO. 1, FOR THE DIRECT ASSIGNMENT OF SCIENTIFIC CONSULTING SERVICES FOR THE IMPLEMENTATION OF THE PROJECT "INTEGRATED ANALYSIS OF STRUCTURAL AND FUNCTIONAL MRI MEASURES FOR REVEALING CLINICALLY RELEVANT MULTIMODAL PATTERNS IN MULTIPLE SCLEROSIS BRAINS" IN REFERENCE TO THE CASCADE CALL FOR SMALL AND MEDIUM-SIZED ENTERPRISES, SPOKE NO. 2, MNESYS, PROJECT CODE PE000006, CUP B83C22004960002.**

**Siena Imaging Srl  
Via Fiorentina 1, 53100 Siena (Italia)  
Date of announcement: 12/11/2024**

Scope of reference:

Siena Imaging has signed a binding agreement with the 'University of Campania "Luigi Vanvitelli"' for the project entitled "Integrated analysis of structural and functional MRI measures for revealing clinically relevant multimodal patterns in multiple sclerosis brains", which started on July 1, 2024 and is scheduled to end on June 30, 2025, unless extended.

The objective of the project is to evaluate on an independent dataset, a new fusion MRI approach developed by Siena Imaging, in order to obtain more accurate MRI indices in correlation with clinical scales. Considering that, specialized consultations are therefore required.

Recipients are research institutions, universities, hospitals, individuals and legal entities in Italy and abroad with at least 5 years of experience in the required research topics.

Company description.

Siena Imaging srl, located in Via Fiorentina 1, 53100 Siena (Italy). Siena Imaging is a local company operating internationally in the field of biomedical imaging. As the promoter of the present call, we are looking for external consultants, either freelancers or public entities or companies, for the direct contracting of scientific consulting services.

### Scope of the assignment

The purpose of the contract is to provide scientific advice to support and implement the activities outlined in the project "Integrated analysis of structural and functional MRI measures for revealing clinically relevant multimodal patterns in multiple sclerosis brains" for Activity No. 1:

- Support in developing an artificial intelligence (AI) module designed to perform two separate tasks: given an image, provide an estimate of the severity of any imaging artifacts that may be present (e.g., motion artifact, low signal(contrast)/noise ratio, presence of inhomogeneity, and so on). This first estimate, saved as a N-dimensional vector of real numbers, will then be the input to an AI-based classifier that will provide an image classification into good, sufficient or mediocre (the latter to be discarded for subsequent analysis). This classification will also depend on the specific task the image will be used for (e.g. brain segmentation). The successful applicant will be required to have both theoretical and practical knowledge of Artificial Intelligence architectures and image analysis techniques, that will be used to extract severity indices of the different imaging artifacts. Knowledge of the main Python modules for artificial intelligence, such as TensorFlow and/or Pytorch, is also required.

The selected consultants will be expected to provide specific expertise in the above area.

### How to submit an expression of interest

Those interested in participating in the selection process are invited to submit their expression of interest, which should include:

- Contact details of the professional/company/institution;
- Brief presentation of the professional/company/institution (attach curriculum vitae or company profile);
- Reference of the expression of interest (please indicate project title, project code and CUP);
- Relevant experience and skills in the chosen area of scientific consulting;
- Portfolio of completed major projects, if available;

- Budget requested for the provision of the service, indicating the amount requested in EUR, excluding VAT, with details of the total number of days to be provided and the amount per day.

The offer must guarantee, under penalty of suspension or withdrawal of funding in case of proven violation, the respect of the principle "Do No Significant Harm" (DNSH) in the implementation of the project, in accordance with Article 17 of Regulation (EU) 2020/852, as well as the transversal principles foreseen in the NRP, such as the principle of gender equality

#### Deadline and submission instructions

Expressions of interest should be sent within 15 days from the date of publication [insert date of publication of the notice] by e-mail to the PEC address: [sienaimagingsrl@legalmail.it](mailto:sienaimagingsrl@legalmail.it) and to the e-mail address: [info@sienaimaging.it](mailto:info@sienaimaging.it) specifying in the subject line "Scientific Consultancy N 'X' BAC SPOKE 2 Mnesys ("Integrated analysis of structural and functional MRI measures for revealing clinically relevant multimodal patterns in multiple sclerosis brains") CUP B83C22004960002. "

It is recommended to adhere to the DSNH ("Do No Significant Harm") overarching principles for individuals and the principle of gender equality and the obligation to protect and promote young people for companies or public bodies.

#### Evaluation of Expressions of Interest.

Expressions of Interest received will be evaluated on the basis of relevance of skills, prior experience, and reasonableness of proposed budget. The Company reserves the right to request further clarification or additional documentation as necessary.

#### Contact Information

For further information or clarification, you can contact the selection officer (Dr. Chiara Gentile) at [info@sienaimaging.it](mailto:info@sienaimaging.it).

Siena Imaging thanks in advance all those who will express their interest and contribute to the success of the project.