IN - CNR - IN

Tit. VII. Cl. FINANZA, CO F.

N. 0001627   **07/06/2012**

NOTICE OF INFORMATION No **05/2012**
Public Procurement
CIG N. 4313151CCA   GARA N. 4276527

The Neuroscience Institute (IN) wishes to select Companies with an interest in being invited to tender for: Software package for biological data analysis, management and elaboration

Following IN decision to set up a contract No. 1625 of June 6 2012, in observance of art. 2 of the Public Contract Code of Legislative Decree No 163 of April 12, 2006, and subsequent amendments, in order to select the companies that will be invited as regulated in art. 125 paragraph II, of Legislative Decree No 163 of April 12, 2006, we publish this notice.

Contracting authority:
National Research Council of Italy - CNR
Institute of Neuroscience - IN Pisa

Procurement procedure:
Negotiated procedure, art. 125 paragraph l letter b) of Legislative Decree No 163 of April 12, 2006.

Object of the contract:
Software package for biological data analysis, management and elaboration

Maximun amount estimated:
Euro 14.500,00 (VAT non included)

Description of the required task:

Software for analysis of 1D gel containing fingerprintings, all kinds of chromatographic and spectrometric profiles, phenotype characters, microarrays, and DNA sequences with the possibility to combine information from various genomic and phenotypic sources into one global database and conduct conclusive analyses, including production of similarity matrices and dendrograms using different algorithms.

Awarding criteria: The most economically advantageous tender.

Tender selection criteria:

The software must have the following characteristics:

General features. The software must work on a PC running Windows XP or newer. Object-oriented relational multi-user database interface. Store information fields as text, number or date. Drag & drop linkage of multiple experiments to database entries. Search engine for combined database searches on information fields and experiment presence and/or contents (character values, sequences, ranges, bands, etc.). Creation of object queries to retrieve data from any database object. Storage and management of database queries and external attachments.

Image processing and normalization. Input of any bitmap images, densitograms, and chromatograms of unlimited file size. Image pre-editing and cleaning. Automated and manual alignment by pattern recognition using external reference patterns and/or internal reference bands.. Adjustable background subtraction and curve smoothing. Spot removal. Direct comparison of patterns normalized with different reference systems.

Quantification. Band-search algorithms with adjustable sensitivity for shoulder and double-band finding. Possibility to find and mark uncertain bands/peaks. Quantification of molecular sizes or any other metric unit using linear, logarithmic, combined logarithmic-third power regression, cubic spline or pole functions. Generation of tables and reports for unlimited numbers of patterns, indicating molecular weight, fragment length, absence/presence or absolute amounts of protein or DNA per band/peak. Search for discriminative bands/peaks between selected groups of patterns; search for unique and common bands/peaks.

Matrices generation & handling. Possibility to import externally generated similarity or distance matrices, that provide similarity between entries revealed directly by the technique, or by other software. Matrices can be linked to the database entries and used in conjunction with other information to obtain classifications and identifications. Possibility of import of similarity or distance matrices via import scripts.

Clustering functions. Data from multiple techniques can be combined into one composite clustering. Similarities can be adopted from the individual experiments and averaged using different weighting strategies. Unrooted and rooted representation for all tree inference methods. Bootstrap analysis for single or composite datasets. Display of sorted similarity matrices, shaded or with numerical similarity values. Numerous edit and publishing functions. Enhanced presentation and printing facilities, in a WYSIWYG environment. Direct interaction between database and dendrogram.

- Delivery within one week after receipt of Order
- Training included of at least one day
- Support: Free professional support by email and phone.
- Upgrades: free minor upgrades. Major upgrades at a discounted price.

Therefore, Companies interested in taking part in this selection have to send a formal Request to participate, within 20 June 2012 at the following address:

CNR - Istituto di Neuroscienze
c/o Dipartimento di Scienze Biomediche
Viale Giuseppe Colombo, 3
I-35121 PADOVA (PD)
Italy
Fax: +39 049 8276040

<u>Please write on the envelope the following information</u> **"Avviso no. 5/2012"**

Request to participate should also be sent by fax (+39 0498276040) to Elena Golin.

In case of certified mail, the date of the arrival postmark will be used to verify the date of receipt of the applications.

Any hand-delivered applications will be recorded by the Neuroscience Institute.

Once all requests have been received, we will proceed to the identification of economic operators who will be invited to tender.

The publication of this notice and the expression of interest of companies do not bind in any way our Institute to proceed to the invitation for the procedure.

Legal Manager: Prof. Tullio Pozzan

Contracting authority reserves the right to consider applications and moreover reserves the right to:
- do not proceed to next step of invitation to tender;
- do not proceed to award;
- extend the terms of the procedure;
- cancel the procedure.

The data collected will be treated in accordance with Legislative Decree no. 196/2016.

This notice is available at the following Internet address: www.urp.cnr.it section Gare e Appalti.

Director
Prof. Tullio Pozzan