BOSE INSTITUTE
KOLKATA

Tender No.	:	BI/T/04/2022-23
Tender date	:	06-03-2023
Type of Tender	:	Open
Tender Title	:	Designing a scientific web-based database for global display and access
Specification	:	**Attached**
Quantity	:	01
Last date & time for submission	:	21- March-2023 upto12:00 noon
Date & time for opening of bids	:	21- March-2023 at 12:30 pm
Submission of Tender (Address)	:	Tender Box, Purchase Cell, Bose Institute, Unified Academic Campus, Block EN 80, Sector V, Salt Lake,Kolkata–700091.
Venue of bid opening	:	As above
For any query the interested bidders may contact(Dept./Section/Div./ Unit)	:	registrar_office@jcbose.ac.in, bipurchase@jcbose.ac.in
GeneralTerms&Conditions:		
Type of Bid	:	One bid system
Payment terms	:	After successful execution of the job and satisfactory report from the concerned end user.
Delivery schedule	:	To be completed within 50 working days of issuance of Work Order
Documents to be submitted alongwith the bid	:	(i) Kolkata based office with ROC registration (ii) Technical literature, as applicable (iii) Documents in support of experience of carrying out similar type of job (iv) Quoted price on company letter head with banking details (v) Justification of the quoted price with necessary documents enclosed. (vi) Fall Clause Certificate (attached) (vii) PAN, GST, CIN & Trade License

<u>Name of the Item</u> and <u>tender number</u> should be mentioned on the envelope positively. Technical bids alongwith supporting documents to be submitted in separate envelope and the price bid in a separate envelope. Both the envelopes to be sealed under a common envelope

Bose Institute reserves the right to accept or reject any or all tenders either in part or in full. The reasons for rejecting the tender of a prospective bidder will be disclosed only when enquiries are made.

Registrar (Officiating)

Quotation No.......................... Date :

PROFORMA OF FALL CLAUSE CERTIFICATE

If on any subsequent date after submission of quotation or placing of supply order, the manufacturer (the term manufacturer will also include his authorized distributor / agent) reduces the sale price of such stores or sells such stores to any party at a price lower than the price charged / chargeable against supply order placed by Bose Institute, Kolkata, the manufacturer (including his authorized distributor / agent) as aforesaid in case the quotation is submitted by them and supply / service is also effected by them) will forth-with notify such reduction in sale price to Bose Institute, Kolkata and price payable for the stores to be supplied against the Supply Order after the date of such reduction in sale price coming into force shall reduced **correspondingly and will be reimbursed to the Institute**.

(Signature & Date of Bidders with Rubber Stamp)

** This certificate should be uploaded on the letter head of the company / firm / agency

Designing a scientific web-based database for global display and access

Brief description of the work

An open-access web database containing scientific information has to be prepared. The database will have about **1000 entries** for miRNAs (miRNAs are short sequences of 21-22 alphabets, each, in a sequence consisting of C,A,U and G). Each entry will have links to further information and images. There will be two types of documents associated with individual miRNA (the entry)

1) Information page for each microRNA which contains graphical images/tables in pdf or in any desired format.

2) Broad list of all entries with their information in each condition in tabular format.

The database should have a Common search option for all the entries (entry means individual miRNA, individual target gene, individual stress condition), a list of all miRNA family-wise, with an embedded link for individual miRNA information page (individual information page should have miRNA mature, precursor sequence, stem-loop structure, genome location, abundance/ stress profile, miRNA homolog in other species, predicted target gene names, target gene pathway, proven target by available degradome data reference), FTP download option.

The search option must be integrated with the data provided in such a way that information regarding a miRNA can be gathered by searching the miRNA with its name or sequence or the stress condition or the target gene. The search result will appear as a list of all the relevant entries (miRNA) with an embedded link of individual page of the specific entry in it. The database needs to be integrated with the NCBI BLAST search program (The link for which is provided below).

https://blast.ncbi.nlm.nih.gov/Blast.cgi?PROGRAM=blastn&PAGE_TYPE=BlastSearch&LINK_LOC=blasthome

The database should be editable from the backend easily by a non-programming background person. Below are the links of few already available similar biological databases for ready reference.

https://www.mirbase.org/

https://www.pmiren.com/

http://www.plantsrnas.org/

Scope of work

- Knowledge database web application design.
- Backend web admin panel.
- Front end website pages – 3 pages (aesthetically acceptable design)
    - Home
    - Help
    - Contact

Main Features:

- Open access database, users can access all knowledge related data as read only via the web application
- Around 1000 entries of data (One page per entry)
- Further links to all entries
- Search option for the entire database
- Data entry via backend admin panel
- Download option for all entries as well as search results (PDF/Excel)
- Full database schema design – a detailed document on the data format to be provided.
- Detailed list of database menus to be provided.
- Detailed codes used in database designing must be shared.
- The database should be aesthetically pleasing.

Features in the web application:

- Select & view entries via selection from dropdown list
- Select & view parameters via selection from dropdown list
- Search entries via search bar & view
- Search parameters via search bar & view
- Provision for search hierarchy for certain cases
- Search results in navigable list
- NCBI BLAST search **OR**
  Custom Search Option (Optional)

Features in Admin web-panel (CRM):

- Accounts management for authors
- Create or edit, delete data for individual miRNA information
    - Information on miRNA
    - Parameters entry
        - Add/Delete/Edit parameter name
        - Add/Delete/Edit parameter value
- Option for data upload via Excel/CSV format
- Option for image upload
- On/Off switch for data download option from the front end

Warranty / AMC: The company should provide at least 1-year comprehensive warranty and technical support/service of the database within the scope of the work from the final delivery and execution of the database.

Training: Training must be provided to the concerned personnel in Bose institute for independent use of the content management panel of this web application.

Estimated Time of Completion: 50 working days approx.

Prior work experience: The Company should provide evidence for conducting similar project previously.

N.B.: Domain and hosting space will be provided by the BI which is LINUX OS based. The company must help in deploying the database in institute web server. The concerned personnel must be kept in loop during the entire phase of the development work.

For details please contact: iamsayan17@gmail.com, pkundu00@gmail.com