Request for Quotation (RFQ) For Bioinformatics software, Protein and transcriptomics analysis

Date of issue	Thursday, 14 October 2021
Closing Date and Time	Thursday, 28 October 2021 at 16:30
RFQ Number	**5762/28/10/2021**
Contact details	For submission of quotations or any other enquiries: **tender@csir.co.za** (***Please use RFQ No. as subject reference)***

1   INVITATION FOR QUOTATION

Quotations are hereby invited for the supply of it Bioinformatics software, Protein and transcription analysis.

2   QUOTATION REQUIREMENTS

The supplier is required to quote on the following:

The software that has the capability to carryout the three mentioned below functions.

Molecular Biology

Pairwise and Multiple Sequence Alignment

- Pairwise and Multiple Sequence Alignment algorithm for faster alignments of viral genomes and 16S data sets
- High-capacity, customizable distance tables that support large data sets
- New alignment report that can be configured and exported
- Maximum Likelihood phylogenetic inference calculation
- Support for multiple phylogenetic trees in a single alignment
- Expanded sequence and alignment editing capabilities
- Perform BLAST and Entrez searching from alignment

- Export editable images to PowerPoint
- Profile alignment functionality to merge alignments or additional sequences

Sanger Sequence Assembly and Analysis

- Easily export an image of your assembly in PDF, Bitmap, or PPT format
- Vector trimming with built-in extensive vector database
- Easy multiple-sample variant analysis and visualization
- Ultra-application with better performance and increased capacity
- Assess read alignment, coverage, and SNPs
- Assemble reads de novo or against one or more reference sequences

Cloning, Primer Design, and Gene Detection

- Batch cloning to automatically clone one or more fragments simultaneously
- Enhanced support for Vector NTI, Geneious, and Clone Manager Suite file types
- PCR site-directed mutagenesis with ability to predict impact of mutation on protein structure
- Agarose gel simulation functionality
- Plasmid auto-annotation (single or batch) using curated database
- Automated virtual cloning: site-directed, TA, TOPO, Gateway, InFusion, GeneArt and Gibson
  Assembly PCR primer design

Lasergene Genomics

Next-Gen Sequence Assembly and Alignment

- Expanded viral genome assembly to support data from ARTIC protocols
- Support for de novo genome assembly with PacBio Hifi reads
- Unique, mutli-sample visualization to view and compare assembled sequences
- Support for combining multiple projects of the same type into a single project
- Project analysis with better performance and increased capacity
- Auto-analysis of hardware and data to determine if assembly should be run locally or on the Cloud
- Ability to polish Canu or Spades assemblies of PacBio and Oxford Nanopore long read data
- miRNA quantitation workflow to quantitate and analyze miRNA gene expression levels
- Quick access to NGS and Sanger project setup
- Enhanced RNA-Seq statistics
- RNA-Seq analysis for model and non-model organisms
- Gene panel workflows with control validation
- De novo genome and transcriptome assembly

Variant Detection and Analysis

- Mastermind integration to cross-reference variant data in genomic literature
- Live variant report updates variants in real-time
- Ability to compare and analyze multiple VCF files from other NGS software pipelines
- Model detected variants on protein structure with updated protein design workflow
- Combine variant and PDB annotations to predict potential effects on protein structure
- Combine SNP and CNV analysis with any workflow
- Direct comparison to dbSNP and GERP and dbNSFP databases

Lasergene Protein

Macromolecular Structure, Motion, and Function

- Ability to import UniProt files, with full support for displaying annotations
- Support for exporting data used to generate Analysis View tracks
- Protein design tools to improve fold stability and developability
- Integrated BLAST and Entrez searching
- Mutation modeling and neighbor search to analyze SNP impact on protein structure
- Protein-protein docking, analysis, and visualization
- Antibody structure prediction
- Protein function and ligand binding site prediction
- B-cell epitope prediction

3   EVALUATION CRITERIA

3.1   Selection of suppliers will be based on the 80/20 preference point system.

3.2   No B-BBEE status will equal zero points (RSA suppliers only). Please submit valid BBBEE certificate or sworn affidavit.

3.2.1   Only the following documents shall be accepted as proof of a bidder's B-BBEE Status level of contributor:

Request for Quotation 5762/28/10/2021

This is not a Purchase Order.   Page **3** of **7**

- B-BBEE Certificates issued by an accredited verification agency and bearing a SANAS logo
- Sworn affidavits
- Dtic issued sworn affidavit / BEE certificate

3.3 Indicate CSD number (National Treasury Central Supplier Database) on quotation. If not registered yet on CSD, use www.csd.gov.za to register. *(Please ensure that tax status is updated on CSD)*

3.4 No order will be issued or no contract will be signed without a valid CSD number.

4   ELIMINATION CRITERIA

4.1 Suppliers will be disqualified under the following conditions:

- Late submission;

- Quotation submitted at wrong location or email address *(Quote must submitted via email to tender@csir.co.za before the closing date and time)*;

5   PRICING QUOTATION

5.1 Price needs to be provided in South African Rand (excl. VAT), with details on price elements that are subject to escalation and exchange rate fluctuations clearly indicated.

5.2 Price should include additional cost elements such as freight, insurance until acceptance, duty where applicable, etc.

5.3 Payment will be according to the CSIR Payment Terms and Conditions.

6   OTHER TERMS AND CONDITIONS

6.1 The supplier shall under no circumstances offer, promise or make any gift, payment, loan, reward, inducement, benefit or other advantage, which may be construed as being made to solicit any favour, to any CSIR employee or its representatives. Such an act shall constitute a material breach of the Agreement and the CSIR shall be entitled to terminate the Agreement forthwith, without prejudice to any of its rights.

6.2 A validity period of 120 days will apply to all quotations except where indicated differently on the quote.

7   **No goods and/or services should be delivered to the CSIR without an official CSIR Purchase order. CSIR purchase order number must be quoted on the invoice. Invoices without CSIR purchase order numbers will be returned to supplier.**

8   **Note: This is not a Purchase Order.**

DECLARATION BY TENDERER

Only tenderers who completed the declaration below will be considered for evaluation.

RFQ No: 5762/28/10/2021

I hereby undertake to render services described in the attached tendering documents to CSIR in accordance with the requirements and task directives / proposal specifications stipulated in RFQ No 5762/28/10/2021 at the price/s quoted. My offer/s remains binding upon me and open for acceptance by the CSIR during the validity period indicated and calculated from the closing date of the proposal.

I confirm that I am satisfied with regards to the correctness and validity of my proposal; that the price(s) and rate(s) quoted cover all the services specified in the proposal documents; that the price(s) and rate(s) cover all my obligations and I accept that any mistakes regarding price(s) and rate(s) and calculations will be at my own risk.

I accept full responsibility for the proper execution and fulfilment of all obligations and conditions devolving on me under this proposal as the principal liable for the due fulfilment of this proposal.

I declare that I have no participation in any collusive practices with any tenderer or any other person regarding this or any other proposal.

I accept that the CSIR may take appropriate actions, deemed necessary, should there be a conflict of interest or if this declaration proves to be false.

I confirm that I am duly authorised to sign this proposal.

NAME (PRINT) ………………………….

CAPACITY ………………………

SIGNATURE ……………………………

NAME OF FIRM ………………………………

DATE ………………………………

WITNESSES
1 …..…………………………
2 …..…………………………
DATE: …………………………...

ANNEXURE A – SBD 1 FORM
(Form must be completed and sent b