

**DEPARTMENT OF PLANT MOLECULAR BIOLOGY**  
**UNIVERSITY OF DELHI SOUTH CAMPUS**  
**NEW DELHI-110021**

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Ref No: PMB/ F/2021-22/1

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**Corrigendum e-Tender for RNA Sequencing**

E-tender is invited from national firms/institutes for RNA sequencing of 12 plant samples with data analysis to be carried out as per specifications below:

1. Quality control of samples should be done using Bioanalyzer, RIN (RNA integrity number) and value should be at least 6-8.
2. Required mRNA library preparation and transcriptome sequencing of 12 RNA samples using Illumina platform with 2x150 paired end sequencing chemistry.
3. Need to generate read length of more than **150 bp** paired ends, 40-50 million reads per samples.
4. **The library should be prepared using plant rRNA depletion method.**
5. The sequence data should be provided through an active FTP link.
6. The data should consist of FASTA format files with quality score for raw reads as well as for processed (quality trimming and sequencing artifacts and adapter sequence trimming).
7. Data should be publication quality along with additional sequence information.
8. **Need to carry out Bioinformatics analysis for assembly, alignment and mapping of transcript sequence data generated for the samples which includes:**
  - **High quality clean reads, Q30>85%**
  - **Mapping of transcriptome data on reference transcriptome and reference genome**
  - **Differential gene expression analysis**
  - **Significantly up and down regulated genes**
  - **Volcano plot and heat map for differentially expressed genes**
  - **Functional annotation of expressed genes in samples**
  - **Pathway analysis**
  - **Comprehensive compiled report and data**

If data does not fulfill the above criteria, the data will not be accepted.

**Sample Details:** 12 samples will be sent to the firm at one time. It will be the responsibility of the Service provider to collect the samples from the lab and transport to the sequencing center under proper conditions. The client will not provide any payment for the transportation of the samples.

**Data delivery deadline:** Sample (RNA) QC report should be submitted within 5 to 7 days after receiving the samples. Raw FastQ file, Clean FastQ file and sequencing details should reach the client in hard disk(s) within 30 days after sample QC is completed.

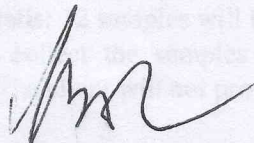
**Payment details:** Payment by bank transfer will be made only after the receipt of the complete data in accordance with criteria already mentioned in the tender document. If data does not fulfil the above detailed criteria, the data will not be accepted and payment will not be made. If vendor does not follow the above mentioned detailed criteria or delays delivery of data, the client has the full right to cancel the agreement with the vendor at any time. In that case no payment would be made.



**Other mandatory terms and conditions:**

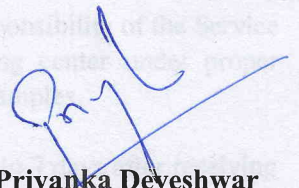
1. The selection of the firm for the above mentioned service will be based on a **two bid system viz technical and financial bids**. Financial bids of only those vendors who clear the technical specifications will be opened and vendor quoting the lowest price, will be awarded the job.
2. Tender should be uploaded only at CPPP website: <https://eprocure.gov.in/eprocure/app>
3. Details of all protocols/methods followed for sequencing, and raw as well as high quality assembled sequence data should be provided in appropriate storage devices.
4. Bioinformatics analysis should be carried out by an experienced person (with publications on the same to his/her credit) preferably a PhD degree holder.
5. Details of analysis and regular updates of work progress should be provided to the principal investigator.
6. Bioinformatics and post-analysis, which should not be limited to the above-mentioned descriptions, some of the requirements may change depending on the initial leads, bioinformatics support is required until manuscript preparation and even to satisfy reviewers' comments, if any.
7. Vendors should provide evidence of technical expertise and experience in this area for completion of this work.
8. **Vendor should provide in house Illumina HiSeq 2500/4000/NovaSeq 6000 facility certificate explicitly on the name of company OR an explicit certificate of availability and a valid Memorandum of Agreement of accessibility to such a Illumina HiSeq 2500/4000/NovaSeq 6000 facility in private-private or public-private partnership within India.**
9. Samples or data should not be outsourced outside India at any stage.
10. Performance certificate of the company for last 5 years.
11. The company should also submit satisfactory certificate (Testimonial/Feedback certificate) from customers/Scientists/Institutes.
12. Quote price per sample inclusive all taxes.
13. Compliance sheet mentioning each of the points specified in the tender should be submitted along with the technical bid.

**PLEASE NOTE: ONLY ONLINE SUBMISSIONS (AND NOT HARD COPIES) OF THE BIDS WILL BE CONSIDERED**



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