

## राष्ट्रीय पादप जीनोम अनुसंधान संस्थान

(जैव प्रौद्योगिकी विभाग, विज्ञान एवं प्रौद्योगिकी मंत्रालय, भारत सरकार का खायत अनुसंधान संस्थान)

## NATIONAL INSTITUTE OF PLANT GENOME RESEARCH

(An Autonomous Institution of the Department of Biotechnology, Ministry of Science and Technology, Government of India) अरुणा आसफ अली मार्ग, पो. बाक्स नं. 10531, नई दिल्ली—110067 Aruna Asaf Ali Marg, Post Box Number 10531, New Delhi-110067

संख्या: 9/2015/रा.पा.जी.अन्.सं./एस एण्ड पी

दिनांक: 02/12/2014

विषय / Subject: मुहरबंद कोटेशन का निमंत्रण / Invitation of Sealed Quotations

Sir,

We are interested to outsourcing of rice transcriptome sequencing of five samples as per the following specifications for our Institute.

## Technical specifications and requirements

- Generation of read lengths of more than 100 bp paired-ends, 60 million reads per sample with at least 6 Gb clean high-quality sequence data per sample (with less than 5% clonal/duplicated reads).
- 2. Comprehensive bioinformatic analysis of sequence data generated from 5 rice samples which should include:
- a) Quality testing of generated reads, filtering of sequence reads to obtain high-quality sequence data and de novo assembly of contigs.
- Alignment and mapping of sequence reads onto the rice reference genome (MSU pseudomolecule version 7.0; http://rice.plantbiology.msu.edu) and creation of high-quality genome assembly and sequences.
- Analysis and determination of abundance of assembled transcripts and identification of novel splice variants of genes
- functional and structural annotation of sequences (e.g., identification of CDS, UTRs, protein-coding genes, novel transcripts, signal peptides, peptide cleavage sites, and gene ontology, enrichment and pathway analysis)
- e) Hierarchical clustering of differentially expressed genes (DEGs) to verify their functional similarity, assigning GO terms to DEGs, chromosomal alignment of DEGs clusters to see if genes with similar expression have similar location and pattern of regulation.
- f) FPKM based expression quantification and differential gene expression profiling.
- g) Identification of sequence variants like SSRs and SNPs discovery and their structural and functional annotation on genes.
- h) Identification of preferential/ specific genes and splicing (both cis and trans).
- i) Gene coverage (ratio of bases of gene covered by the unique reads / total bases of that base)

You are therefore requested to please send your offer along with a copy of PAN & Tin no. certificate and maximum discount that you will be able to offer in a Sealed Envelope duly super-scribed on top of envelope as "Quotation for "Outsourcing of rice transcriptome sequencing of five samples" so as to reach to the undersigned latest by 16/12/2014 (3:00 p.m.), the same shall be opened on same day at 3:30 p.m.

धन्यवाद,

(क्य एवं भंण्डार अधिकारी)

Encl: Terms & Conditions (Annex - I)

## नियम और शर्तें:

- ➤ The quotations must accompany a Demand Draft amounting to ₹ 4,400/- (Rupees Four Thousand Four Hundred only), being the EMD in the name of Director, NIPGR, New Delhi. In the event of non fulfillment of work awarded / withdrawal of quotations, the EMD will be forfeited by the Institute.
- The rates quoted by you for the said services shall be valid for a period of one year from the date of award letter and no requests for any increase in the rates will be entertained during the contract period. No advance payment will be made.
- The Director, NIPGR reserves the right to amend any of the terms and conditions contained in the Tender Document or reject any or all applications (offers) or not to award the contract to the lowest bidder without giving any notice or assigning any reason thereof. The decision of the Director, NIPGR in this regard will be final and binding.
- The successful tenderer shall be required to deposit an interest free amount equal to 10% of the tender value of the contract in the form of Demand draft as Performance Security after adjusting the EMD, within 10 days from the date of issue of award letter, which will be released after expiry of the defect liability period of the contract.
- The bids will be accepted in respect of those companies having successfully completed one similar work costing not less than ₹ 1,76,000/- or two similar works each costing not less than ₹ 1,10,000/- or three similar works each costing not less than ₹ 88,000/- and having annual financial turnover of ₹ 2,20,000/-, during the last three financial years. Similar works means, work related to analysis of similar samples in Government National Laboratories / Institutions / Universities and reputed Organizations, engaged in the area of Research & Development. Intending tenderers must enclose documents such as Completion Certificates and Work / Supply orders / certified Balance Sheet / ITR Returns for three last financial years.

(क्य एवं भंण्डार अधिकारी)