

BOSE INSTITUTE KOLKATA	
Tender No.	DPB/DB/2015-16/01
Tender Date	16.11.2015
Type of tender	Limited
Tender title	Denovo sequencing and assembly of Plant RNA samples using next generation sequencing (<i>Brassica</i>)
Specification	<p>Denovo sequencing and assembly of Plant RNA samples using next generation sequencing (<i>Brassica</i>)</p> <ol style="list-style-type: none"> 1. High quality total RNA should be extracted from the samples. 2. Read Length should be minimum 150bp paired end or more. Platform should be Illumina/Ion 3. To provide minimum 45-50 million paired end reads of >Q30. Low quality reads should be trimmed and sent. 4. Denovo assembly of data at various Kmer. Using Velvet, Oases, TopHat, Cufflinks. 5. Annotation of Assembled Transcripts to uniprot, pfam, NR DB. GO and pathway analysis, Deseq DGE, SSR prediction and SNP report. 6. Provide at least 6 publications (Co-authored and also acknowledged) to be provided for similar work on plant transcriptomes. 7. All parts of the sequencing work and analysis should be performed only in India. Sample should not be outsourced outside India. Proof of inhouse facility with installation certificate should be provided 8. Turnaround time should be mentioned while quoting. 9. Additional analysis of DGE, SNP, annotation and SSR should be carried out with already existing data of 8 similar organism. (<i>Arabidopsis thaliana</i> should be considered mainly) 10. Differential gene expression (DGE) (using previous data as control) , assembly at various Kmers,SNP, Annotation of contigs for transcripts using closest homology, Unigene cluster, SSR prediction, Pathway and gene ontology analysis. 11. Differential regulation graphs by dividing the obtained data into various classes according to the functional annotation. 12. Pathway analysis using KEGG 13. Pie charts doe GO, and COG. 14. Heat maps for differential expression of individual genes in broad classes. 15. Comparative classification of transcription factors and their fold changes. 16. Representative transcripts of all samples. 17. Fold changes expression resented in graph format for all the genes to compare between different treatments. 18. Statistical analysis of reads, contigs, transcripts and unigenes. <ul style="list-style-type: none"> • Please quote for per sample.
Quantity	One

Contd..... Pg (2)

Last date & time for submission	01.12.2015 upto 01.00 p.m.
Date & time for opening of bids	01.12.2015 at 03.00 p.m.
Submission of Tender (Address)	The Registrar, Bose Institute, P-1/12, C.I.T. Scheme VII M, Kolkata-700054.
Venue of bid opening	Seminar room, Division of Plant Biology, Centenary Building, Bose Institute, Kolkata
For any query the interested bidders may contact (Dept/Section/Div./Unit)	033 2569 3254

General Terms & Conditions	As per specification
Warranty	NA
Payment terms	Payment will be made after complete the job and satisfactorily installation
Delivery schedule	Within 6 weeks from date of order & if any defect of the supplied item is found, it should be replaced immediately from your side.
Bid security (earnest money deposit), if applicable	NA
Submission of performance Bank Guarantee (PBG), if applicable	NA
Any other information (if applicable)	NA
Name of the instrument and submission of tender should be mentioned on the envelop positively.	
Director, 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.	

Sd/-

Sr. Prof. & Incharge, Registrar's Office