BOSE INSTITUTE
KOLKATA

Tender No.	DPB/Sudip/SC/2016-17/01
Tender Date	14/02/2017
Tender Type	Limited

Tender Title	**Transcriptome profiling of *Arachis hypogaea* root samples using Next Generation Sequencing technology**
Specification	1. Quality assessment of peanut RNA samples. A total of 3 samples will be provided. 2. Library preparation for illumina and accurate size selection should provide. 3. Library QC to be carried out and library image to be provided in pdf format. 4. Sequencing in Illumina platform (latest preference) using 150bp paired end chemistry to generate at least 30 million paired end reads or more. (Company/firm should provide evidence for the inhouse sequencing facility) 5. The company/Firm should be ISO certified and GLP certified (ISO and GLP certificate should be provided). 6. The company or firm should have global presence with NGS labs and should have labs which is GLP (Good Lab practice) certified. **7. Bioinformatics analysis-** I. Denovo assembly of samples with multiple assemblers II. Full functional and structural analysis of data including functional annotation of transcriptomes, III. Calculation of % AT and % GC contents; codon usage table and codon bias report, alternative splicing variant analysis. SNP discovery (both synonymous and asynonymous); in silico subtraction (c-t and t-c) to identify difference in transcripts. IV. Differential regulation of genes (digital gene expression), calculate similarity between sequence to construct haplotype and remove paralogs, homology detection, use of pattern hunters to get novel information and comparison of samples. V. GO term analysis, KEGG analysis, aligned reads with genes of interest data, followed by delivery of publication quality data, bioinformatic support should be extended if required until publication. The firm should have licensed commercial version of Blast2Go (3.3.5) for Gene ontology analysis and commercial license copy/certificate should be provided. VI. Analysis should also be carried out .The firm should have licensed version of software for assembly and analysis and a copy of the license/certificate should be provided. VII. Publication quality images should be provided such as heat map, pathway, clusters, venn diagram etc and support should be provided till publication. VIII. Visiting of one faculty/research fellow at the inhouse facility for data

	analysis and interpretation should be arranged. Preference will be given if the analysis could be extended further to integrate the data with the existing transcriptome data obtained through NGS platform. There should be a provision for visiting company-laboratory during data analysis.
Quantity	3 sample

Last Date & Time for submission	24/02/2017 upto 1:00 pm
Date & Time for opening bids	24/02/2017 at 3:00 pm
Submission of Tender (address)	Office of the Division of Plant Biology, Centenary Building, Bose Institute, Centenary Campus, P 1/12 CIT Scheme VII(M), Kolkata, West Bengal,700 054, India
Venue of bid opening	Seminar Room, Division of Plant Biology
For any query the interested bidders may contact (Dept./Section/Div./Unit)	033 2569 3297 / 3254

General Terms & Conditions

Warranty	Not applicable
Payment terms	After Delivery
Delivery schedule	Sequencing and initial data analysis including digital gene expression studies, functional annotation and pathway analysis should be completed within 3 months from receiving the samples.
Bid security (earnest money deposit) if applicable	Nil
Submission of Performance Bank Guarantee (PBG), if applicable	N/A
Any other information (if applicable)	Nil

Name of the instrument and submission of tender should be mentioned on the envelope 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.

Sr. Professor & Incharge, Registrar's Office