

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

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Ref. No. PMB/PK/F/2018-2019/

February 25, 2019

**Corrigendum E-tender for Whole Genome Sequencing**

E-tender is invited from national firms/institute for whole genome sequencing of a plant sample to be carried out as per specification below.

**Whole Genome Sequencing using Pacbio**

- 1 Plant sample
- Genome Size - Unknown
- Proposed Platform – Pacbio Sequel with latest chemistry (P6 C4 or better)
- Total Data Output – minimum 30 GB (at least 3 SMRTs)
- Library Type – CLR with minimum avg read length 15-20 KB
- Quality report of Lib to be Shared
- Size Selection using Bluepippin
- Raw reads Statistics, Raw data QC, Statistics of clean filtered reads, should be provided

**WGS ILLUMINA SEQUENCING**

- 1 Plant sample
- Libraries: 2x150 bp PE (Insert size: 500bp, 800bp, 2000bp)
- Proposed Platform – Illumina HiSeq X
- Sequencing – 2X150 bp PE
- Quality Control of each Library to be shared
- Minimum 90 GB Data total from three Libraries
- Sample Type – Fresh tissue

**Hi-C ILLUMINA SEQUENCING**

- 1 Plant sample
- 1 Hi-C Libraries/sample
- Proposed Platform – Illumina HiSeq X
- Sequencing – 2X150 bp PE
- Quality Control of each Library to be shared
- Minimum 90 GB Data
- Sample Type – Fresh tissue
- Scaffolding of the draft assembly needs to be performed with HiC data and integrated with PacBio and Illumina data and stats needs to be provided.

**OPTICAL MAPPING USING SAPHYR SYSTEM**

- 1 Plant sample
- Proposed platform – Bionano Sapphire
- Sample Type – Fresh Plant Tissue
- Library Type – 1 DLS and 1 NLRS (*BssSI/ BspQ1*) with Two Flow cell.



- Library Size – >150 KB
- Quality Control of each Library to be shared
- Data Output/Flow Cell – Minimum 100GB or Entire Flow Cell Data per library.
- Sample Quality using PFGE
- These data should be integrated with other datasets for final Assembled Scaffolds and Optical mapping data to be Submitted in Hard disk.
- Should be authorized from Bionano.

### **General terms and conditions**

- 1) DNA or library to not be outsourced of India at Any Stage, Written commitment to be submitted.
- 2) Proof of In-house installation of Illumina, Pacbio Sequel and Saphyr to be submitted.
- 3) Cost of each component mentioned above should be indicated separately.
- 4) All the data raw/clean/filtered generated/analyzed should be submitted in suitable hard disk.
- 5) No intellectual property / knowledge / insight / information generated during the course of rendering such services can be retained or shared with any third party by the service provider / vendor. Such IPR / knowledge remain the property of DU. Samples / data / reports shall remain the property of DU and vendor shall have to furnish the non-disclosure agreement with DU as regards to ensuring the secrecy of these samples / data / reports.
- 6) Methodology, Deliverables, Time frames, Milestones must be clearly indicated in the Bid
- 7) Firm must have past experience of supply of items/service as per this tender requirement. Proof of the same is required. The Technical Qualification will be based on firms experience and documentary proof submitted with application form mentioned above. The detailed service proposal /presentation can be provided with bid.
- 8) Please mention if Analysis work be Carried In India or Offshore. Work in India Will be preferred.
- 9) Firm must provide evidence of satisfactory services to this requirements rendered to various customers.
- 10) Scientists from DU will be visiting the lab premises where the work is proposed to be carried out and assess the capabilities of the firm.
- 11) Scientists of DU should be allowed to visit the lab during the project execution to assess the progress of the project.
- 12) Tender should be uploaded only at CPP website: <http://eprocure.gov.in/eprocure/app>.
- 13) Payment by bank transfer will be made only after the receipt of the complete data in according with criteria already mentioned in the tender document. If data does not full fill the above detail criteria, the data will not be accepted and payment will not be made. If timely delivery of data not done, penalty may be applied. If vendor does nor follow the above mentioned detailed criteria the client has the full right the cancel the agreements with the vendor at ay time. In that case no payment would be made.



**Professor Paramjit Khurana**  
Principal Investigator

**Professor Paramjit Khurana**  
प्रधान अन्वेषक / Principal Investigator  
DBT Project "Genetic...Genome Sequencing"  
(Network Project 1)  
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