

DEPARTMENT OF PLANT MOLECULAR BIOLOGY
UNIVERSITY OF DELHI SOUTH CAMPUS
NEW DELHI – 110021

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

January 29, 2019

E-tender is invited from national firms/institutes 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 ; 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 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 h disk.
- 5) No intellectual property / knowledge / insight / information generated during the course rendering such services can be retained or shared with any third party by the serv provider / vendor. Such IPR / knowledge remain the property of DU. Samples / da reports shall remain the property of DU and vendor shall have to furnish the non-disclo 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 B
- 7) Firm must have past experience of supply of items/service as per this tender requirem Proof of the same is required. The Technical Qualification will be based on fi experience and documentary proof submitted with application form mentioned above. 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 preferred.
- 9) Firm must provide evidence of satisfactory services to this requirements rendered various customers.
- 10) Scientists from DU will be visiting the lab premises where the work is proposed to 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 ass the progress of the project.
- 12) Tender should be uploaded only at CPPP website: <https://eprocure.gov.in/eprocure/app>
- 13) Payment by bank transfer will be made only after the receipt of the complete data in accorda with criteria already mentioned in the tender document. If data does not fulfill the above deta criteria, the data will not be accepted and payment will not be made. If timely delivery of dat not done, penalty may be applied. If vendor does not follow the above mentioned detailed crit the client has the full right to cancel the agreement with the vendor at any time. In that case payment would be made.



Professor Paramjit Khurana
Principal Investigator
Professor Paramjit Khurana
प्रधान अन्वेषक / Principal Investigator
DBT Project "Genetic....Genome Sequencing"
(Network Project 1)
पादप आणविक जीव विज्ञान विभाग
Department of Plant Molecular Biology
दिल्ली विश्व विद्यालय दक्षिण परिसर
University of Delhi South Campus
नई दिल्ली-110029 / New Delhi-110021