

# Minutes of pre-bid meeting regarding tender of Lab Equipment for KSK Jinnah campus as part of SARF KSK project.

Pre Bid Meeting held on 01-04-2019. Following queries were discussed and addressed.

1. Different vendors had reservation regarding amount of CDR. It was decided that vendors shall submit CDR money according to the amount of items that they are bidding for. Previous CDRs are being released and Finance department can be contacted in this regard.
2. Vendors can quote prices in C&F and FOR. Bank contract option should be availed for C&F.
3. All vendors are allowed to give alternate offers.
4. **Department of Pharmacology :**
  - a. (Equipment # 1 HPLC; UPLC-DAD-MS for central lab)
    - Pump pressure (Where ever mentioned): Corrected to 15,000 PSI or more.
    - Column heater/cooler temperature range corrected to 4-90 °C (where ever mentioned).
    - For mass spectrometer, vendors can make offer for both categories as main offer (single quadruple LCMS or triple quadruple LCMSMS). However prices in both categories shall be compared within their respective categories. Apart from Mass Spectrometer, **rest of the specs/requirements remain the same.**
  - b. (Equipment # 3; ELISA reader)
    - System maybe monochromatic or filter based quote separately.
  - c. (Equipment # 8); Thermal cycler qPCR/digital droplet PCR
    - Vendors can quote for both Real Time qPCR and Digital Droplet PCR separately as main offer. However, prices in both categories shall be compared within their respective categories.
5. **Department of Human Genetics:**
  - a. **Item # 29: Updated required specifications for the Next generation sequencer:**
    - The instrument should be fully automated from Library preparation to sequencing analysis (8 samples or more)
    - Throughput should be 2-130 M reads (0.3-50 GB of data output/15GB & 80 million reads).
    - The system should be flexible to support wide range of NGS needs ranging from microbial genome sequencing, targeted panel sequencing to WES applications.
    - The System should be able to perform the analysis of the DNA & RNA samples with sample volume upto 1 ng with higher sensitivity & should work for FFPE DNA or RNA samples with the maximum volume for sample required 10ng.
    - Turnaround time (seq. run plus analysis time) should be 20hrs or less for 15GB data

- There should not be more than 3-5 pipetting steps in library preparation & template designing & 30- 60 minutes total setup time for library & template prep.
- There should be no centrifugation involved from Library prep to sequencing.
- The system should be able to process single or multiple samples without wastage of consumables.
- The manufacturer should offer ready to use panels along with flexibility of custom design panels.
- The instrument should be able to perform as low as one sample in each run.
- Software:
- The Analysis software should perform base calling and alignment for single samples.
- The software should Identify and annotate the variants of interest with public or private databases, and perform multi-sample comparisons.
- The software should have Preconfigured analysis workflows for single, paired, or multiple samples.
- The software should have Cloud or local server options.
- The instrument should be quoted along with all software's to perform complete bioinformatics analysis.
- The vendor should offer foreign training for at least 2 scientists.
- The vendor should have foreign trained local bioinformatics specialist team
- The system should be quoted with ready to use panels & running consumables for at least 200 samples package.
- Illumina/Ion Torrent/equivalent.

**b. Item # 31: Updated specifications for Karyotyping system**

- For karyotyping, FISH analysis, M Banding and comparative genomic hybridization, complete with software, microscopy system and camera. Preference will be given to the company providing the compatible probes.
- System may be manual/motorized quote separately.

**c. Item # 40: Updated specifications for Filtration Assembly**

- Required for media and buffer filtration. Stainless steel body (funnel and support), 250 ml stain less steel funnel, 47 mm stainless steel Filter Holder, Stainless support frit and base; stainless steel funnel cover; anodized aluminum spring clamp; silicone stopper.

**6. Department Family Medicine:**

**BEDS:**

**Specification:**

- Dimensions: 78" x 36" x 22"
- Patient lying area in four sections
- Reinforced strips of 1mm thick MS sheet platform
- Bed frame made of 16SWG MS tubular pipe

- Back-rest and knee-rest adjustable by two individual screw cranks
  - Crank handles foldable or latched under foot end for safety
  - Stainless Steel Headboard and footboard
  - Holders for mattress at four positions on the bed
  - Hooks for urine bag and NG bag at each side of the bed
  - Holder sockets for IV pole at diagonal ends of the bed
  - Mobile on four imported 5" castors, two with swivel-type lock at diagonal end
  - Working load capacity: 200 Kg
- Including: Patient Safety Side Rails
- Optional: IV Transfusion Pole
- Foam Mattress with Cover

**7. Department of Nursing:**

**a. Defibrillator Machine**

Specification:

- **Compact 4-in-1 unit**
  - Manual Defibrillation
  - Automatic External Defibrillation
  - Non-Invasive Pacing
  - Effective CPR solution
- Technology: Biphasic truncated Exponential (BTE) waveform, auto-compensation according to patient impedance
- 7" TFT Color display with 3 waveforms assures easy viewing
- Escalating dose of 1-360J to maximize defibrillation success
- Display of HR, ECG Through paddles and leads I,II,III Patient cable
- Synchronized output with ECG
- Built in recorder for printing of full summary on 50mm paper
- 5 segment LED Charging indicator
- 7.5 Seconds for whole defibrillation operation
  - Power on in 2 seconds
  - Charge to shock in 3 seconds
  - ECG recovery in only 2.5 seconds
- Alarm for high and low heart rate, low battery warning
- Built in Rechargeable battery with charger
- Auto tester /Self check
- Intuitive contact impedance indicator
- 120 Seconds ECG Waveform Review
- Powerful data storage for up to 100 patient profiles, 1,000 events per patient, 24 hours of ECG waveforms, and 72h trend analysis
- High Contrast Display mode
- Optional NIBP and SPO2 modules
- AC Power: 100-240 V, 50-60 Hz

Accessories:

- ECG Module
- Recorder 50mm
- External Paddles (Adult & Pediatric)

Optional:

- a) Cart (Imported)
- b) 1-inch internal paddles, Reusable
- c) 2-inch internal paddles, Reusable
- d) 3-inch internal paddles, Reusable

b. CPR Mannequin (Child)

Specification are mentioned in BOQ:

Details on compression release, depth and rate, ventilation volume, and number of compressions, ventilations and cycles.

Manikin must be compatible with latest AHA guidelines and should be upgradable with electronic feedback option. It must be enabled with Bluetooth connectivity for feedback option. Any mobile/tablet (Android/IOS) can be used as feedback device along-with following features:

- Real-time feedback on compressions and ventilations
- Post-training debriefs, including overall scores and tips for improvement

c. Spine Board + Head Immobilizer:

Specification are mentioned in BOQ:

It should comply for following features:

- Floatable
- X Ray Translucent
- built in side handles
- size 6 feet x 1.5 feet
- fluid prevent contamination
- load capacity over 180 Kg
- Protection straps
- Adjustable Head immobilizer for all sizes
- Latex Free
- X Ray Compatible
- Must be CE / FDA / EN Certified



**Project Coordinator SARF**