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Republic of the Philippines University of the Philippines Mindanao Mintal, Tugbok District, Davao City Tel. No. (082) 293-0016 local 103

Date: 16 May 2019

BID BULLETIN NO. 02-2019

SUPPLY OF LABORATORY EQUIPMENT FOR THE PHILIPPINE GENOME CENTER (PGC) MINDANAO

This Bid Bulletin is issued for the amendments in the Technical Specifications for items under Lots 1 and 2. The amendments are listed under the "Remarks" column in the attached sheets.

The signed copy of this Bid Bulletin, with all its attachments, will also be submitted with the bidder's Technical Envelope requirements.

For information and guidance of all concerned.

Received by Bidder:

Name of Company

Signature over printed name/Date received

Item Description: Proteomics Workflow and Water Purification

System with accessories

Unit: Lot Otv: 1

ABC: Php 10,200,000.00

Payment Terms: Accepts Purchase Order

Delivery Terms: 90 days

1-unit Protein Staining and Imaging System with accessories

Specifications:

1) Imaging unit capable of DNA illumination, colorimetric, chemiluminescence, and multiplex RGB fluorescence

- 2) Sample size of up to 16cm by 22cm gel
- 3) Automatic correction for image distortions
- 4) High resolution camera with lens model of $f \le 0.85$ and diameter of \le 45mm
- 5) Capable of multiplex imaging
- 6) Internal cooling system
- 7) Image output of up to 16-bit tif, with grayscale and colored jpeg options
- 9) Power consumption of less than 300W
- 1) Light sources: epi-white light, UV light, RGB epi light
- 3) With stand-alone monitor and built-in CPU
- 4) 1-unit dedicated desktop computer system (with mouse and keyboard) for data analysis. The computer must have an operating system, processor and RAM capacity that is recommended for the accompanying software for data analysis.
- 5) 1-unit laptop for flexible data analysis and processing. The laptop must have an operating system, processor and RAM capacity that is recommended for the accompanying software for data analysis.
- 6) 1-unit colored printer for data reproduction
- 7) Software for qualitative and quantitative analysis (DNA illumination, colorimetric, chemiluminescence and multiplex RGB fluorescence)
- 7) Licensed software for qualitative and quantitative analysis (DNA illumination, colorimetric, chemiluminescence and multiplex RGB fluorescence)(lifetime use for at least 3 users)

3) Advanced 2D licensed software (lifetime use for at least 3

users) for 2D gel and spot analysis

REMARKS

8) 1-unit 3 KVA UPS with AVR

Equipment inclusions for Protein Staining and Imaging System as follows:

- 1) 1-unit Rocking tray for blotting
- 2) Starter Kits for Protein Staining (Fluorescence, Chemiluminescence and Colorimetric)
- 3) Advanced 2D software (lifetime use) for 2D gel and spot analysis
- 4) Delivery within 90 days
- 5) 3-years warranty on all parts and services
- 6) Annual preventive maintenance for the duration of warranty period
- 7) Transport, all installation materials and equipment installation proper by installation engineer
- 8) 2 Training sessions by field applications specialist, 1 session (basics) within 2 weeks after installation of equipment and 1 session (advance) 2-3 months after the first training. Training must include equipment operation and maintenance, troubleshooting, and data analysis and interpretation. Trainings are good for 10-15 pax.
- 9) Training certificates for training participants
- 10) Equipment calibration certificates

1-unit 2D Gel Electrophoresis system with accessories

2D gel electrophoresis workflow system:

- 1. Isoelectric focusing (IEF) unit
- a. Can run up to 12 gels or 12 strips
- b. Compatible with multiple sizes of strips (7cm, 11cm, 13cm, 18cm or 24cm

10) Equipment calibration certificates or certificate of conformity from the manufacturer

- c. Compatible with 2D-DIGE applications
- d. Open system
- e. Cooling/Heating within 15°C-35°C
- f. Safety shutdown system
- g. Power requirements: 220-240V, 50-60Hz
- 2. 2nd dimension gel tank
- a. with tank and cover
- b. can run up to 4 gels at a time
- c. built-in temperature control system
- d. compatible with 2D DIGE
- e. Power requirements: 220-240V, 50-60Hz
- 3. Densitometry scanner
- a. For scanning of colorimetric-based gels
- b. Scanning area should be compatible with largest gel size of gel tank
- c. LED based light source
- d. Produces file types compatible with 2D gel software
- e. Power requirements: 220-240V, 50-60Hz

Equipment accessories for 2D Gel Electrophoresis system as follows:

- 1) 1-unit Rehydration system for IPG gels
- 2) 1-unit Ceramic container for optimal heat control
- 3) 4 sets of gel casting accessories (casters, wedge separator, clamps, gasket, glass plates, combs and spacers) for gel tank
- 4) 2D Gel analysis software for 2D image visualization, matching, quantification, spot analysis, and statistical analysis
- 5) Complete set of cables for system connections
- 6) Control software for the system
- 7) 1-unit laptop, for control system operation, flexible data processing and analysis. The laptop must have an operating system, processor and RAM capacity that is recommended for the accompanying softwares.
- 8) 1-unit power supply compatible with gel tank
- 9) 1-unit 3 KVA UPS with AVR

Equipment inclusions for 2D Gel Electrophoresis system as follows:

- 1) 1-unit Recirculating water bath
- 2) Starter kits for 2D Gel Electrophoresis, should include sets of strips for 1st dimension protein separation
- 3) Starter supply of stock for handcast gel preparations
- 4) Starter supply of stock for buffer preparations
- 5) Starter Supply of kimwipes
- 6) 1-unit laboratory cabinet for storage of stock reagents
- 7) Delivery within 90 days
- 8) 3-years warranty on all parts and services
- 9) Annual preventive maintenance for the duration of warranty period
- 10) 2 Training sessions by field applications specialist, 1 session (basics) within 2 weeks after installation of equipment and 1 session (advance) 2-3 months after the first training. Training must include equipment operation and maintenance, troubleshooting, and data analysis and interpretation.
- Trainings are good for 10-15 pax.
- 11) Training certificates for training participants
- 12) Equipment calibration certificates
- 2-units Standard Protein Gel Electrophoresis with accessories

Specifications:

- 1) Open system for both precast and handcast gels
- 2) Can run up to 4 gels simultaneously
- 3) Triple functionality for gel casting, standard gel electrophoresis, and wet blot transfer in one unit
- 4) Power requirements: 220-240V, 50-60Hz

c. Compatible with 2D- Difference Gel Electrophoresis

d. Compatible with 2D- Difference Gel Electrophoresis

- 4) Licensed 2D Gel analysis software for 2D image visualization, matching, quantification, spot analysis, and statistical analysis (lifetime use for at least 3 users)
- 6) Licensed control software for the system
- 9) 1-unit 3 KVA UPS with AVR (separate)
- 1) 1-unit Recirculating water bath suitable for the system
- 6) 1-unit laboratory cabinet for storage of stock reagents (Dimension: 700- 900 X 450-470 X 1500-2000 mm)

12) Equipment calibration certificates or certificate of conformity from the manufacturer

Equipment accessories for Standard Protein Gel Electrophoresis as follows:

1) 2 units power supply

Equipment inclusions for Standard Protein Gel Electrophoresis as follows:

- 1) Starter supply of stock for handcast gel preparations
- 2) Starter supply of stock for buffer preparations
- 3) 2 sets of glass plates and notched plates for gel preparation
- 4) 1-unit laboratory cabinet for storage of stock reagents
- 5) 8 sets of gel casting accessories (casters, wedge separator, clamps, gasket, glass plates, combs and spacers)
- 6) 8 sets of blot transfer accessories (support grid and pads)
- 7) Delivery within 90 days
- 8) 3-years warranty on all parts and services
- 9) Annual preventive maintenance for the duration of warranty period
- 10) Transport, all installation materials and installation proper by installation engineer
- 11) 2 Training sessions by field applications specialist, 1 session (basics) within 2 weeks after installation of equipment and 1 session (advance) 2-3 months after the first training. Training must include equipment operation and maintenance, troubleshooting, and data analysis and interpretation. Trainings are good for 10-15 pax.
- 12) Training certificates for training participants
- 13) Equipment calibration certificates

13) Equipment calibration certificates or certificate of conformity from the manufacturer

1-unit Electrophoresis Blotter with accessories

Specifications:

- 1) Open system (compatible with any type of blotting system and various types of transfer membranes)
- 2) Can run up to 4 blots/gels simultaneously
- 3) Semi-dry blotting system
- 4) Operating temperature of 10°C-70°C
- 5) Built-in power supply
- 6) Power requirements: 220-240 V, 50-60Hz

Equipment inclusions for Electrophoresis Blotter as follows:

- 1) Mini blot module for 4 blots
- 2) Starter supply of blotting membranes
- 3) 1-unit laboratory cabinet for storage of stock reagents
- 4) Delivery within 90 days
- 5) 3-years warranty on all parts and services
- 6) Annual preventive maintenance for the duration of warranty period
- 7) Transport, all installation materials and installation proper by installation engineer
- 8) 2 Training sessions by field applications specialist, 1 session (basics) within 2 weeks after installation of equipment and 1 session (advance) 2-3 months after the first training. Training must include equipment operation and maintenance, troubleshooting, and data analysis and interpretation. Trainings are good for 10-15 pax.
- 9) Training certificates for training participants
- 10) Equipment calibration certificates

3) 1-unit laboratory cabinet for storage of stock reagents (Dimension: 700- 900 X 450-470 X 1500-2000 mm)

10) Equipment calibration certificates or certificate of conformity from the manufacturer

1-unit Water Purification System with accessories

Specifications:

- 1) RO water production rate: 3 16 L/h
- 2) Ultrapure water production rate: 1 2 L/min
- 3) Conductivity
- a) Ultrapure water: min. 0.055 µs/cm
- b) Pure water: min. 0.1 μs/cm

1) RO water production rate: 3 - 20 L/h

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- 4) Bacteria: < 0.01 cfu/mL
- 5) Particulate (≥0.02 μm): < 1 pc/mL
- 6) Temperature (feed water): 2 40°C
- 7) Pressure (feed water): 0.01 0.6 MPa
- 8) Conductivity (feed water): < 2000 μs/cm
- 9) External dimensions: 290-366 x 300-525 x 498-575 mm
- 10) Electrical requirement: 100-240 VAC, 50/60 Hz

Equipment accessories for Water Purification System as follows:

- 1) 2 water dispensers
- 2) I unit Storage tank, 40-60L
- 3) Piping system from faucet
- 4) 1 set of Pre-treatment pack
- 5) Filters and cartridges
- 6) Digital display

Equipment inclusions for Water Purification System as follows:

- 1) I set of spare filters and cartridge
- 2) 2 sets of emergency shower with eyewash station
- 3) 2 sets of autoclavable single-channel adjustable volume micropipettors with stand (0.1-10 μ L, 10-100 μ L, 100-1000 μ L)
- 4) 1 autoclavable 8-channel pipettor, adjustable volume (30-300 μL)
- 5) 1 electronic single channel pipettor, adjustable volume (30-300 μL)
- 6) Starter supply of pipette tips for the pipettors
- 7) Delivery within 90 days
- 8) 3-years warranty on all parts and services
- 9) Annual preventive maintenance for the duration of warranty period
- 10) Transport, all installation materials and installation proper by installation engineer
- 11) 2 Training sessions by field applications specialist, 1 session (basics) within 2 weeks after installation of equipment and 1 session (advance) 2-3 months after the first training. Training must include equipment operation and maintenance, troubleshooting, and data analysis and interpretation. Trainings are good for 10-15 pax.
- 12) Training certificates for training participants
- 13) Equipment calibration certificates

NOTE: All items without remarks remain as is.

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10) Electrical requirement: 220-240 VAC, 50/60 Hz

11) Change of filter once a year only

12) Water source is deepwell

2) 1 unit Storage tank, 40-70L

13) Equipment calibration certificates or certificate of conformity from the manufacturer

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Item Description: Assorted Laboratory Equipment

Unit: Lot Oty: 1

ABC: Php 3,590,000.00

Payment Terms: Accepts Purchase Order

Delivery Terms: 90 days

REMARKS

L Sonicator (1 unit)

Specifications:

1) Sample Capacity: between 0.2 - 100 mL

- 2) Probe (1/8", 5/64", 1/4")
- 3) Stand system with clamp
- 4) Digital display
- 5) Electrical Requirement: 200-230 V, 50/60 Hz
- 6) Wattage: 30 120 W
- 7) Operational Frequency: 20 40 kHz

Inclusions for Sonicator:

- 1)cables and wrench set included
- 2)1 AVR appropriate for the equipment's power requirements and wattage
- 3)3 years warranty on all parts and services
- 4)Annual preventive maintenance for the duration of the warranty
- 5) Shipping, Installation by Field Service Engineer and all materials needed for installation
- 6)Training by Field applications specialist good for 10-15 pax. Training should include equipment operation, maintenance, and troubleshooting
- 7)Training certificates
- 8) Equipment Calibration Certificate
- 8) Built-in Generator for equipment functionality
- 9) Built-in Converter for equipment functionality

II. Autoclave (heavy duty) with Accessories (1 unit)

Specifications:

- 1) Operating Pressure: Max 0.117 0.28 MPa
- 2) Temperature Range: RT to 137°C
- 3) Rapid cooling system
- 4) Stainless steel chamber
- 5) Temperature and pressure safety and control system
- 6) Water level and temperature sensor
- 7) Safety lock
- 8) Digital display
- 9) Capacity: 30 60 liters
- 10) Electrical requirement: 200-230 V, 50/60 Hz

Inclusions for Autoclave:

- 1)2 stainless steel baskets
- 2)1 pack Autoclavable bags (benchtop and large volume)
- 3)10 wire stand holders for autoclave bags (benchtop)
- 4)10 rolls Autoclave tapes (1")
- 5)3 sets Laboratory Permanent markers (black, blue, red)
- 6)1-unit 3kVA UPS with AVR
- 7)3 years warranty on all parts and services with annual preventive maintenance for the duration of the warranty period
- 8)Shipping, Installation by Field Service Engineer and all materials needed for installation
- 9)Training by Field applications specialist good for 10-15 pax. Training should include equipment operation, maintenance, and troubleshooting
- 10)Training certificates
- 11) Equipment Calibration Certificate

1) Minimum sample capacity: 0.2 mL 2) 1 Probe for each size (1/8", 5/64", 1/4")

6) 1-unit 3kVA UPS with AVR (separate)

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III. Tissue homogenizer (1 unit)

Specifications:

- 1) Bead mill type
- 2) Processing range: between 10 μL 2 mL
- 3) Fits 24 skirted tubes with volumes from 0.5ml to 2 mL
- 4) Has 24-tube holder with lock system to hold tubes in place
- 5) Electrical Requirement: 200 230 V, 50/60 Hz

6) tube carriage motion coupled with sample specific bead beating materials

Inclusions for Tissue Homogenizer:

- 1)Tube carriage kit
- 2)Starter kit of 100 2ml skirted tubes with RNase/DNase free ceramic beads and buffer
- 3)1 AVR appropriate for the equipment's power requirements and wattage.
- 4)3 years warranty on all parts and services including annual preventive maintenance for the duration of the warranty period
- 5)Shipping, Installation by Field Service Engineer and all materials needed for installation
- 6)Training by Field applications specialist good for 10-15 pax. Training should include equipment operation, maintenance, and troubleshooting
- 7)Training certificates
- 8)Equipment Calibration Certificate

IV. Vortex mixer (4 units)

Specifications:

- 1) Speed range: 0 3000 rpm
- 2) Shaking mode: Orbital 3) Mixing head that accommodates variable sizes of tubes from
- 0.2ul to 50ml
- 4) Electrical requirement: 200-230 VAC, 50/60 Hz

Inclusions for each Vortex Mixer unit:

- 1) I year warranty on all parts and services including preventive maintenance
- 2)Shipping, Installation by Field Service Engineer and all materials needed for installation
- 3) Training by Field applications specialist good for 10-15 pax. Training should include equipment operation, maintenance, and troubleshooting
- 4) Training certificates
- 5) Equipment Calibration Certificate

3) Mixing head that accommodates variable sizes of tubes from 0.2 ml to 50ml

V. Heat block (3 units)

Specifications:

- 1) Digital display of time and temperature
- 2) Temperature between 4-150°C
- 3) 100°C increase in temperature in less than 15-20 minutes
- 4) Interchangeable blocks
- 5) Electrical Requirement: 200 230 VAC, 50/60 Hz

Inclusions for each Heat Bloc unit:

6) 0.2ml, 1.5ml and 2ml aluminum blocks

2) Temperature range: ambient+ 5-150°C

Inclusions for each Heat Block unit:

- 7) 1 AVR appropriate for the equipment's power requirement and wattage
- 9)Shipping, Installation by Field Service Engineer and all materials needed for installation
- 10)Training by Field applications specialist good for 10-15 pax. Training should include equipment operation, maintenance, and troubleshooting
- 11)Training certificates
- 12)Equipment calibration certificates

VI. Water bath with shaker (1 unit)

Specifications:

- 1) Stainless steel with removable lid
- 2) Temperature control between 4-110°C
- 3) Shaking speed between 20-250 oscillations per minute
- 4) With timer
- 5) Digital display of time and temperature
- 6) Alarm system for temp, time, water level, etc.
- 7) 15-30L capacity
- 8) Electrical Requirement: 200 230 V, 50/60 Hz

Inclusions for Water Bath with Shaker:

- 9) 1-unit Shaking tray
- 10) 1-unit 0.5mL Microfuge Tube Rack
- 11) 1-unit 1.0mL Microfuge Tube Rack
- 12) 3 years warranty on all parts and services including annual preventive maintenance for the duration of the warranty period
- 13) Shipping, Installation by Field Service Engineer and all materials needed for installation
- 14) Training by Field applications specialist good for 10-15 pax. Training should include equipment operation, maintenance, and troubleshooting.
- 15) Training certificates
- 16) Equipment calibration certificates

VII. Hot plate with stirrer (1 unit)

Specifications:

- 1) With speed control between 30-1800 rpm
- 2) With temperature control at 0.5-1°C increments up to 400°C
- 3) With magnetic stirring system
- 4) with temperature warning and safety system
- 5) ceramic plate
- 6) digital display

Inclusions for Hot Plate with stirrer:

- 7) I set magnetic bars
- 8) 3 years warranty on all parts and services including annual preventive maintenance for the duration of the warranty period
- 9) Shipping, Installation by Field Service Engineer and all materials needed for installation
- 10) Training by Field applications specialist good for 10-15 pax. Training should include equipment operation, maintenance and troubleshooting.

- 10) 1-unit 0.5mL Microfuge Tube Rack for water bath shaker
- 11) 1-unit 1.0mL Microfuge Tube Rack for water bath shaker

1) With speed control, stirring range: 50-1500 rpm

7) 1 set magnetic bars (various standard sizes)

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- 11) Training certificates
- 12) Equipment calibration certificates

VIII. Top Loading balance (1 unit)

Specifications:

- 1) Maximum weighing capacity of at least 1kg
- 2) Digital display
- 3) stainless steel removable pan
- 4) tare system

Inclusions for Top Loading Balance:

- 5) 3 years warranty on all parts and services including annual preventive maintenance for the duration of the warranty period
- 6) Shipping, Installation by Field Service Engineer and all materials needed for installation
- 7) Training by Field applications specialist good for 10-15 pax. Training should include equipment operation, maintenance and troubleshooting
- 8) Training certificates
- 9) Equipment calibration certificates

IX. Analytical balance (1 unit)

Specifications:

- 1) Maximum weighing capacity of at least 250 g
- 2) can read up to 4 decimals
- 3) digital display
- 4) With glass housing

Inclusions for Analytical Balance:

- 5) 3 years warranty on all parts and services including annual preventive maintenance for the duration of the warranty period
- 6) Shipping, Installation by Field service engineer and all materials needed for installation
- 7) Training by Field applications specialist good for 10-15 pax. Training should include equipment operation, maintenance and troubleshooting
- 8) Training certificates
- 9) Equipment calibration certificates

X. pH meter (1 unit)

Specifications:

- 1) Benchtop
- 2) reads from -2 to 20pH up to 3 decimals
- 3) accurate at ±0.001-0.003 pH
- 4) Digital display
- 5) With temperature compensation
- 6) Calibration system using standard pH values and buffers
- 7) With alarm system for calibration

Inclusions for pH meter:

- 8) pH Buffers for calibration
- 9) 3 years warranty on all parts and services including annual preventive maintenance for the duration of the warranty period
- 8) pH Buffers for calibration and storage buffer

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- 10) Shipping, Installation by Field service engineer and all materials needed for installation
- 11) Training by Field applications specialist good for 10-15 pax. Training should include equipment operation, maintenance and troubleshooting
- 12) Training certificates
- 13) Equipment calibration certificates

NOTE: All items without remarks remain as is.

Approved:

LYRE ANNI E. MURAO, PhD Project Leader, PGC MSF