

# ADDENDUM NO. 01 Series of 2025

This Addendum No. 01 is issued to modify or amend items in the Bidding Documents for the **Procurement of Technical and Scientific Equipment for Molecular Biology Laboratory and Colleges.** This shall form an integral part of the Bid Documents.

Name of Project:  
 Location:  
 Brief Description:  
 Approved Budget  
 for the Contract :  
 Source of Funds:  
 Contract Duration:  
 Procurement Scheme:

**Procurement of Technical and Scientific Equipment for Molecular Biology Laboratory and Colleges**  
 CSU Campus, Ampayon, Butuan City  
 Procurement of Technical and Scientific Equipment for Molecular Biology Laboratory and Colleges  
  
**Php. 5,959,000.00**  
 RAF MC-VPAA Higher Education Program FY 2025  
 90 Calendar Days  
**Allows Partial Bid**

Please be informed of the changes in the Bidding Documents as follows:

CHANGES/ AMENDMENT				
ITEM & DESCRIPTION				
NO.	ITEM	QTY	UNIT	TOTAL COST
	<b>MOLECULAR BIOLOGY LABORATORY</b>  <b>Thermocycler/ PCR</b> "Sample Capacity: 96 well plate, 96X0.2mL PCR tube; Max. Heating/Cooling rate : 5°C/Sec; Temperature uniformity: ≤±0.3°C; around 7 inch Large color touch panel screen; ; High performance DSP and temperature control; Heating Temperature Range 4-105°C Lid Temperature Range 30-110°C; Temperature Display Accuracy ±0.1°C; Temperature Control Accuracy [at 55°C] ±0.3°C; Temperature uniformity[at 55°C] &lt;0.3°C; Max. Heating/Cooling Rate 5°C/Sec; Adapter block material aluminum; User defined file system Max. 30 segments 99 cycles; max. Power Supply 100-120V/200-240V,50/60Hz; Includes Complete installation and Training of Users; Includes Calibration- and Preventive Maintenance Visits; 1 year warranty" <b>QTY: 1 UNIT: UNIT</b>  <b>Refrigerated Microcentrifuge</b> "Capacity: 24 x 1.5/2 mL Max. Speed: 13,300 rpm Max. RCF: 17,000 x g Noise Level: 50 dB(A) Temperature Range: -9°C to +40°C Type: Benchtop Centrifuge Includes: 24 x 1.5/2.0mL rotor with biocontainment lid Description: Microcentrifuge, Refrigerated Electrical Requirements: 120 V 60 Hz Refrigerated: Yes Run Time: 1 to 99 min. (1 min. increments); HOLD Standards: IEC 61010-1, IEC 61010-2-020; Dimensions (HWD): approximately 12.9 x 11.6 x 17.5 in. (33.0 x 29.5 x 44.5 cm) Net Weight: approximately 28.0 kg Frequency: approximately 60 Hz Voltage: approximately 220 V Rotor: approximately 24 x 1.5/2 mL Rotor with Biocontainment Lid with training, warranty, and calibration" <b>QTY: 1 UNIT: UNIT</b>  <b>Gel Documenter System</b> "Camera & Optics CX4 camera: Scientific grade camera - Made in Germany 2 megapixels resolution extendable to 7.6 megapixels Passive cooling • 16-bit – 65 536 grey levels •USB-3 connection • Motorized zoom lens with feedback • Field of view:	1	Lot	₱4,429,000.00

approximately 20x20cm; Hardware: Smart Darkroom technology: • Software control of the lighting • White light led panels with automatic intensity adjustment • UV cut-off filter • Fix position transilluminator with optional protection screen Steel and stainless-steel darkroom for long lasting robustness. Wide access door with UV safety shut-off; Software: Free software for image acquisition with full GLP compliance. Molecular weight calculation, band quantification, colony counting, distance calculation, text annotation and image enhancement included; Applications DNA and RNA gels and fluorescence stain imaging: • Ethidium bromide, Sybr-Safe, Sybr-Green, Gel-Red, Gel-Green, Sybr-Gold, GFP, Pro-Q Emerald, Sypro ruby, FITC, DAPI • Colorimetric stained protein gels, X-Ray film, autorads, SSCP gels, colony dish and flask imaging and other EPI white light applications • Coomassie blue, Silver stain, Ponceau S Red, Copper stain; with training, warranty, and calibration"

QTY: 1 UNIT: UNIT

-20°C Freezer

"Temperature (Setpoint): -25°C to -15°C (-20°C) Type: High-Performance Freezer, Capacity (English): 23 cu. ft. Capacity (Metric): at least 500 L Door Style: Solid; No. of Doors: 1 Shelves: 4 Display: Microprocessor Defrost; with training, warranty, and calibration"

QTY: 1 UNIT: UNIT

Gel electrophoresis tank with agarose casting trays

"Certifications/Compliance: CE marked Description: Complete system with buffer exchange ports Type: Large, w/Buffer Exchange Ports Sample Size: 8 to 432 (16-, 24- and 36-well combs) Volume (Metric) Buffer: at least 1.2 L; Dimensions (L x W x H): at least 23x39.5x9 cm Features: Horizontal system can run from 25 to 600 samples on one gel Gel can be cast in varying lengths to help conserve agarose when fewer samples need to be run; Built-in leveling ensures flat, uniformly thick gels Large number of comb slots provides sample number and resolving distance flexibility Microwell-format combs provide fast, error-free sample loading with a multichannel pipetter Samples may be loaded directly from a 96-well plate, 8 or 12 at a time with training, warranty, and calibration"

QTY: 1 UNIT: UNIT

Blue Light Transilluminator

"Features Compact, extra-thin and portable • Safer to replace UV • Easy for gel cutting: NO need to wear amber glasses • NO DNA damage inherent to UV • Uniform blue LED trans-illumination, low noise • Optimized for use with diverse safe dyes to replace toxic EtBr • Angle adjustable filter/lid can be tilted optionally with one hand, easy for observing and cutting gels. Specifications : • Instrument dimensions (mm): at least 200D x 200W x 10H • LED Wavelength (nm): 470 • Lid/ FILTER : amber • Sensitivity: up to 0.1 ng • Uniformity: < 5% CV (coefficient of variance) • LED life: 100,000 hours with training, warranty, and calibration"

QTY: 1 UNIT: UNIT

Fume Hood

"Single Phase, Power: 220V, 60hz, Supply and Installation of unit Technical Parameters: External Size (W D H): at least 1000x600x2000mm; Work Surface Height: 820mm Max Opening: 740mm Air Velocity: 0.3~0.8m/s Noise: ≤68dB Exhaust Duct: 4.3 meters, ϕ250mm LED Lamp: 15W 2 Blower;

Built-in PP centrifugal blower(2 blowers for FH1800(P) only); Speed adjustable Front Window: Resistant to acid and alkali, manual, 5mm toughened glass, height adjustable Power Supply: AC220V±10%, 50/60Hz; 110V±10%, 60Hz Consumption: 500W Material: Main Body- Made of porcelain white PP, thickness 8mm, resistant to strong acid, alkali and anti-corrosion; Work Table- Chemical resistant phenolic resin Standard Accessory: LED light, Work table: chemical resistant phenolic resin, 4.3 meters PVC duct (2 pcs of 4.3 meters PVC dust for FH1800(P) only), Diameter: 250mm, Pipe strap 2(4 pcs for FH1800(P) only, RVV power cord (3 1.0mm² 3000mm), Base cabinet, Waterproof socket 2, Tail insert, Water tap (PP), Gas tap (PP), Water sink, PP centrifugal blower 1(2 for FH1800(P) only) Optional Accessory: PP worktable, epoxy resin board or ceramic board, Active carbon filter, Outer PP centrifugal blower 1(only need to select when the duct is more than 4m, 2 for FH1800(P) only), Splitable base cabinet (only not for FH1800(P)) Gross Weight: Main Body-180kg; Base Cabinet-114kg or 102kg (splitable); with training, warranty, and calibration"

**QTY: 1 UNIT: UNIT**

**Horizontal laminar flow cabinet**

Control System: Microprocessor controller with LCD display, graphical and digital display of the operating status of each function Work Surface Height: 750mm Airflow Velocity: Adjustable, 0.2~0.5 m/s Cabinet Construction: Main Body: Electro-galvanized steel with antimicrobial powder coating Work Zone: Stainless steel, grade 304 Manual Sliding Sash: 5 mm UV resistant tempered glass with counter-balance system and ergonomic handle Side Windows: 5 mm UV resistant tempered glass Electricity: AC220V ±10%, 50/60Hz,1P Standard Accessories Base stand

- 1. LED lamp  
1(only 2 for LCB-H6F). UV lamp  
1(only 2 for LCB-H6F). Waterproof socket
- 2. Foma casters
- 4 Wind speed sensor; Gas tap;Water tap;Casters with brakes; Hook and hook bar; with training, warranty, and calibration"

**QTY: 1 UNIT: UNIT**

**Oven dryer**

"300°C (PF 30 to PF 200) or 250°C (PF 400, PF 800) maximum operating temperatures  
28 to 910 litre chamber volumes •Equipped with the R38 digital PID temperature controller (PF 30 to PF 200) • Carbolite Gero 301 controller, with single ramp to set-point & process timer (PF 400 & PF 800) • Fan convection for rapid heating & recovery & excellent uniformity • Chemically resistant stainless steel liner • Two nickel-chrome plated wire shelves (The PF 400 is supplied with 3 wire shelves, the PF 800 with 3 perforated stainless steel shelves) • Lever latch door & airtight silicone seal with training, warranty, and calibration"

**QTY: 1 UNIT: UNIT**

**Autoclave Sterilizer**

150L vertical pressure steam sterilizer (autoclave)  
With a large capacity for heavier loads and an automated sterilization process • ensures thorough sterilization of your products, hassle-free. • Precise temperature and pressure controls, combined with advanced safety features • 150L or 158 Quart size (Equivalent to 5 All American 30 Quart Stove-top pressure cookers). • High Quality SUS 304 Stainless Steel internal construction. 6KW Electric heater (110V/60Hz, 63A) Get to pressure in 25 mins. • Quick heating means faster

	<p>turnaround times. Sterilize grain spawn perfectly. Temperature is adjustable and can be used to pasteurize. • Two stackable internal baskets make loading and unloading a breeze • safety door opening mechanism, the door remains locked as long as the chamber is under-pressure. Water level sensor with automatic shutoff &amp; over-pressure bleed off valve. with training, warranty and calibration <b>QTY: 1 UNIT: UNIT</b></p> <p><b>Dry Bath Incubator</b> Adjustable sizes for tubes and test tubes 4 block Touch Screen Dry Bath Controller: PID digital Temp range: Ambient +5° to 130°C (Ambient at 25°C) Temp control accuracy: at 37°C ≤ ± 0.5°C Temp uniformity: at 37°C ≤ ± 1°C Timer range: 0-99:59 min or continuous Voltage: 200/240 V with training, warranty, and calibration" <b>QTY: 1 UNIT: UNIT</b></p> <p><b>Laboratory Refrigerator</b> Type: High-Performance Refrigerator Capacity (English): 45.8 cu. ft. Capacity (Metric): 1297 L Temperature (Setpoint): around 2°-8°C (5°C) Refrigerant: R290 Door Style: Glass No. of Doors: 2 Shelves: 8 Wire Certifications/Compliance: UL, cUL, Display: Microprocessor Defrost: Automatic Monitoring Options: Alarm, Recorder Smart View Compatibility: Smart-Vue Compatible Dimensions (D x W x H) <b>Dimensions (L x W x H) Exterior: approximately</b> 36.6 x 56.5 x 78.5 in (93.1 x 143.5 x 199.4 cm) with training, warranty, and calibration <b>QTY: 1 UNIT: UNIT</b></p> <p><b>Micropipette (multichannel)</b> "The pipette shaft can be unscrewed and is entirely autoclavable (121 °C). Functions: pipetting, reverse pipetting, mixing, dispensing, up to 300 µl also GEL-Electrophoresis. Easy Calibration-Technique for making quick adjustments of the electronic, without tools. Limitations of use: Operating temperature of instrument and reagent should be between +15 °C and +40 °C Vapor pressure up to 500 mbar Viscosity: 260 mPas for viscous media, the speed must be adjusted if necessary. with warranty and calibration" <b>QTY: 1 UNIT: UNIT</b></p> <p><b>Vortex</b> "Lab Vortex Mixer shaker speed 0-2800rpm, orbital, diameter 4mm, 50/60 Hz Test Tube Mixer Touch and continuous modes with warranty and calibration" <b>QTY: 1 UNIT: UNIT</b></p> <p><b>Portable microcentrifuge</b> "Max Speed (rpm): 7000 Max RCF (xg): 2680×g Rotor Capacity: 0.5/1.5/2.0mL×8, 0.2mL×32 PCR tubes, 0.2mL×4 PCR 8 strips with warranty and calibration" <b>QTY: 1 UNIT: UNIT</b></p>			
2	<p><b>TECHNICAL &amp; SCIENTIFIC EQUIPMENT FOR COLLEGES</b></p> <p><b>CASAGRANDE LIQUID LIMIT APPARATUS</b> Coverage S-Log3, S- Gamut3, S-Cinetone, User LUTs Internal Mic + Inputs, USB Streaming 3" 1.03m- Dot Vari-Angle LCD Touchscreen <b>QTY: 1 UNIT: SET</b></p> <p><b>BASIC SOIL SAMPLING KIT</b> 3-1/4" Regular, Sand and Mud auger, 5/8" Thread ( 1 each) 18" Rubber coated cross handle 5/8" Thread 2" x 6" Soil Core</p>	1	Lot	₱1,530,000.00



Sampler Cup 2" Soil Core Sampler Cap, 5/8" Thread Regular  
 Slide Hammer 5/8" Thread Three 4' extensions, 5/8" Thread  
 2" x 6" Plastic liner 2" Plastic end caps (2) 12" Crescent  
 Wrench (2) Universal Slip Wrench 2" x 12" Nylon Brush Foam  
 padded carrying case with handles and wheels  
**QTY: 1 UNIT: UNIT**  
**ANALYTICAL BALANCE**  
 Digital Analytical Balance  
 Capacity: 320 g  
 Readability: 0.0001 g  
 Repeatability: ±0.0003 mg  
 Linearity: 0.0002 mg  
 Stabilization Time: Approx. 3.5 seconds  
 Weighing Chamber: 6.45 × 5.84 × 9.88 in (164 × 149 × 251  
 mm)  
 Pan Size: Ø 3.6 in 90 mm  
 Dimensions: 8.54 × 17.4 × 12.24 in (217 × 442 × 316 mm)  
 Est. Weight: Approx. 17.6 lb (8.0 kg)  
 Power: 120 VAC (AC adapter) 50/60 Hz  
**QTY: 1 UNIT: UNIT**  
  
**SIEVE SET**  
 Set of stainless-steel wire mesh sieves of 7.87-inch (200 mm)  
 diameter, with different apertures Measuring range 0.063  
 micron - 0.32 in (8 mm) Sample specification disturbed Sieves  
 diameter 7.9 in | 200 mm Sieves height 2 in | 50 mm Sieve  
 openings 0.0025 in, 0.0035 in, 0.005 in, 0.007 in, 0.01 in,  
 0.014 in, 0.02 in, 0.028 in, 0.039 in, 0.079 in, 0.158 in, 0.32 in  
**QTY: 1 UNIT: UNIT**  
  
**ANALYTICAL BALANCE**  
 Digital Analytical Balance  
 Capacity: 320 g  
 Readability: 0.0001 g  
 Repeatability: ±0.0003 mg  
 Linearity: 0.0002 mg  
 Stabilization Time: Approx. 3.5 seconds  
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 Est. Weight: Approx. 17.6 lb (8.0 kg)  
 Power: 120 VAC (AC adapter) 50/60 Hz  
**QTY: 1 UNIT: UNIT**  
  
**AUTOClave STERILIZER**  
 150L vertical pressure steam sterilizer (autoclave) • With a  
 large capacity for heavier loads and an automated sterilization  
 process • ensures thorough sterilization of your products,  
 hassle-free. • Precise temperature and pressure controls,  
 combined with advanced safety features • 150L or 158 Quart  
 size (Equivalent to 5 All American 30 Quart Stove-top  
 pressure cookers). • High Quality SUS 304 Stainless Steel  
 internal construction. 6KW Electric heater (110V/60Hz, 63A)  
 Get to pressure in 25 mins. • Quick heating means faster  
 turnaround times. Sterilize grain spawn perfectly. Temperature  
 is adjustable and can be used to pasteurize. • Two stackable  
 internal baskets make loading and unloading a breeze • safety  
 door opening mechanism, the door remains locked as long as  
 the chamber is under-pressure. Water level sensor with  
 automatic shutoff & over-pressure bleed off valve.

**QTY: 1 UNIT: UNIT**

**LABORATORY OVEN**

Nominal capacity 780 liters • Max. temperature 200°C Air convection • Forced Power 4200 W • Internal dimensions mm (approx.)(lxdxh) 815x814x1201 External dimensions mm (approx.)(lxdxh) 1213x1214x1461 • Number of grid shelves: 3 • Features Digital PID temperature control system • High temperature uniformity and precision Over temperature protection • Stainless steel internal and external lining “linen patterned” • Forced convection airflow 200°C max. temperature • Supplied complete with three grid shelves 3 Weight approx.: 200 kg Highlights • The Laboratory Ovens are specially designed for soil, aggregates, and asphalt testing. • These advanced models feature all stainless steel internal and external lining, with 60 mm thick insulation, • fast heat up, • easy-to-read digital control, and • forced convection airflow for uniform temperature throughout the oven chamber. Easy to slide shelves.

**QTY: 1 UNIT: UNIT**

**MICROSCOPE**

Type: Compound Binocular Biological Microscopes  
 Body: Aluminum die-cast metal frame, protective plastic covering

**QTY: 6 UNIT: UNIT**

**Multiparameter Tester**

waterproof portable logging multiparameter meter that monitors up to 14 different water quality parameters. The microprocessor based multi-sensor probe allows for the measurement of key parameters including pH, ORP, conductivity, dissolved oxygen,

**QTY: 1 UNIT: UNIT**

**MICROSCOPE**

Polarizing Trinocular Microscope Eyepieces and Magnification Wide field WF10X(122mm) • Dividing eyepiece (field number: 122mm) 0.10mm/Div • Four Magnifications: 50x, 100x, 400x, and 600x LED Transmitted & Reflected • Trinocular is inclined 30 and enable to shoot in 100% light flux. • 10x Eyepiece Set. PL 10x/22mm. High Eye-point for Ease of Viewing when wearing Eyeglasses. • Reverse Facing Quadruple Nosepiece! A Better Design that allows Easier Access to the Slides since Objectives are Pointed Out of the Way! • Objective Centering Screws on Nosepiece for Precise Alignment. Head – Interpupillary Distance – Diopter • Inclined Trinocular Head (Easier to View than 45 Deg. • Adjusts to the Distance Between your Eyes: 50 to 80mm InterPupillary Distance. • Diopter Adjustment to Correct for Your Specific Vision Needs. Illuminating System • 3W LED, brightness enable control. • Polarizer can be rotated 360°. • Analyzer can be rotatable 360° with scale and minimum vernier. • Integrated field and aperture diaphragm. Focus system • Coaxial Fine and Coarse Focusing Knobs on Both Sides of Microscope. • Coarse Adjustment Travel Range: 28mm. (Stage Movement Distance Up/Down). • Fine Adjustment Division: 0.002mm. • Adjustable Lock Ring Stop to Limit Coarse Range to Protect Slides. • Tension Adjustable Coarse Focusing. • w/ 14MP HDMI Camera

<b>QTY: 1 UNIT: UNIT</b>				
<b>MUFFLE FURNACE</b> Size: 680"910 870 External material: Cold rolled steel carbon steel spraying Internal material: Ceramic inner chamber Weight : 111kg Voltage: 110V-220V Product name: muffle furnace Max.Temp.(c): 1300 Capacity(L): 6 Temp.Accuracy: ±1°C Consumption(Kw): 6 Power Supply: 220/380V±10%,50/60HZ Heating Rate: 0-30°C/min Rising Time(Empty): 30 minutes Temp.Uniformity: ±5°C Heating Element: Nickel chromium alloy wire				
<b>QTY: 1 UNIT: UNIT</b>				
	<b>TOTAL AMOUNT</b>			<b>₱ 5,959,000.00</b>
***** NOTHING FOLLOWS *****				

For guidance and information of all concerned.



MICHELLE V. JAPITANA, D. Eng.

Chairperson, Bids and Awards Committee