

Republic of the Philippines **NUEVA ECIJA UNIVERSITY OF SCIENCE AND TECHNOLOGY** Cabanatuan City 044-463-0226 www.neust.edu.ph

The Nueva Ecija University of Science and Technology (NEUST) through the Bids and Awards Committee (BAC), hereby invites all interested entities registered with the Philippine Government Electronic Procurement System (PhilGEPS) to bid for the hereunder projects, subject to the General Conditions stated herein.

Name of Project: Supply and Delivery of Medical/Nursing Laboratory Equipment - Mannequin

Location:NEUST Cabanatuan CityApproved Budget for the Contract:PHP 14,000,000.00Contract Duration:60 Calendar DaysSource of Fund:MDSCost of Bidding Documents:Php 25,000.00

## LIST AND DESCRIPTION OF EQUIPMENT

| ITEM | Name of Equipment   | Description  | QTY | ABC Per Item |
|------|---|--|-----|--------------|
| 1    | Full body Surgical Simulator with Surgical instruments to perform laparotomy, laparoscopy, and vaginal procedures   | A high-fidelity manikin that can<br>simulate surgical procedures<br>using real surgical instruments. | 1   | 6,500,000.00 |
|      | <ul> <li>Specifications</li> <li>Full-body, adult patient simulator</li> <li>Available in light, medium, and dark skin tones</li> <li>Built-in wireless connectivity with tablet PC</li> <li>Powered from an internal rechargeable battery or wall outlet</li> <li>Up to (4) hours of tetherless operation on internal, rechargeable battery power</li> <li>Articulating head, jaw, shoulder, knees, and ankles</li> <li>Realistic rotation of the shoulder and hip joints</li> </ul> |  |     |              |

| Operates in supine or semi-recumbent position                        |  |  |
|--|--|--|
|  |  |  |
| NEURAL RESPONSES   |  |  |
| • Eyes open and close manually                                       |  |  |
| Wireless streaming audio & prerecorded responses                     |  |  |
| <ul> <li>Create and store vocal responses in any language</li> </ul> |  |  |
| • Instructor can simulate patient's voice and listen to caregivers   |  |  |
| conversation   |  |  |
| AIRWAY   |  |  |
| • Multiple upper airway sounds synchronized with breathing           |  |  |
| Perform Bag Valve Mask ventilations                                  |  |  |
| • Head tilt/ chin lift   |  |  |
| • Anatomically accurate airway including tongue, epiglottis, vocal   |  |  |
| cords, and esophagus   |  |  |
| <ul> <li>Placement of conventional airway adjuncts</li> </ul>        |  |  |
| Nasal or oral intubation   |  |  |
| <ul> <li>Endotracheal intubation using conventional ETTs</li> </ul>  |  |  |
| Placement of NG and OG tubes   |  |  |
| Sellick maneuver brings vocal cords into view                        |  |  |
| BREATHING  |  |  |
| • Spontaneous breathing and chest rise generated by internal         |  |  |
| compressor   |  |  |
| Bilateral chest rise and fall  |  |  |
| <ul> <li>Programmable rate and depth of respiration</li> </ul>       |  |  |
| Variable respiratory rates and inspiratory expiratory ratios         |  |  |
| Normal and abnormal, independent lung sounds synchronized            |  |  |
| with respiratory pattern and rate                                    |  |  |
| <ul> <li>Ventilations are detected, measured, and logged</li> </ul>  |  |  |
| CARDIAC  |  |  |
| Monitor ECG with real equipment from 4 conductive skin regions       |  |  |

| r |   |  |
|---|---|--|
|   | <ul> <li>Normal and abnormal heart sounds may be auscultated and are</li> </ul>             |  |
|   | synchronized with ECG   |  |
|   | Multiple programmable heart sounds, rates, and intensities                                  |  |
|   | Compressions are automatically detected, measured, and logged                               |  |
|   | Chest compressions generate palpable pulse and ECG artifacts                                |  |
|   | CIRCULATION   |  |
|   | <ul> <li>Measure blood pressure by palpation or auscultation real BP cuff</li> </ul>        |  |
|   | rather than a "virtual"   |  |
|   | cuff to measure blood pressure  |  |
|   | <ul> <li>Korotkoff sounds audible between systolic and diastolic pressures</li> </ul>       |  |
|   | <ul> <li>Bilateral carotid, brachial, and radial pulse sites synchronized with</li> </ul>   |  |
|   | BP and ECG  |  |
|   | <ul> <li>Oxygen saturation detected using real monitors rather than a</li> </ul>            |  |
|   | "virtual" value   |  |
|   | Bilateral IV arms with fill/drain sites   |  |
|   | Realistic flashback   |  |
|   | SubQ and IM injection sites   |  |
|   | <ul> <li>Venous and arterial bleeding, including ovarian and uterine</li> </ul>             |  |
|   | arteries and veins  |  |
|   | <ul> <li>During application of scenarios, vital signs reflect physiologic</li> </ul>        |  |
|   | changes that occur with hemorrhage  |  |
|   | SURGICAL COMPONENTS   |  |
|   | LAPAROSCOPY ABDOMINAL WALL  |  |
|   | <ul> <li>Includes eight (8) access ports on left (3), right (3), and midline (2)</li> </ul> |  |
|   | Place Laparoscopic trocars  |  |
|   | LAPAROTOMY ABDOMINAL WALL   |  |
|   | • Multi-layer insert design replicates the skin, subcutaneous fat,                          |  |
|   | fascia, muscle, and peritoneum  |  |
|   | Use real instruments for incision, dissection, and suturing                                 |  |
|   | • Can be used at least four (4) times   |  |
|   | Incorporates bleeding   |  |
| - |   |  |

| <br>Perform Pfannenstiel or vertical incision   |  |  |
|---|--|--|
| Place Laparoscopic trocars  |  |  |
|   |  |  |
| BOWEL OVERLAY   |  |  |
| • Insert that can be placed over uterine assembly for added realism                   |  |  |
| • Can be pushed aside using standard techniques                                       |  |  |
| to access underlying structures   |  |  |
|   |  |  |
| UTERINE ASSEMBLIES  |  |  |
| Uterine Assembly 1  |  |  |
| <ul> <li>Normal-sized uterus with ectopic pregnancy and uterine</li> </ul>            |  |  |
| hemorrhage. Simulates ruptured  |  |  |
| ectopic pregnancy with bleeding and severe vaginal bleeding from                      |  |  |
| uterus.   |  |  |
| Uterine Assembly 2  |  |  |
| • Enlarged uterus with dermoid cyst and ectopic pregnancy.                            |  |  |
| Simulates ruptured ectopic  |  |  |
| pregnancy with bleeding and realistic dermoid cyst.                                   |  |  |
|   |  |  |
| Uterine Assembly 3  |  |  |
| • Enlarged uterus with embedded fibroids. Simulates embedded,                         |  |  |
| bleeding fibroids, simple   |  |  |
| cyst, and endometrioma.   |  |  |
| <ul> <li>Additional procedures that are possible on all uterine assemblies</li> </ul> |  |  |
| include: unilateral   |  |  |
| oophorectomy, conization of the cervix, chromopertubation,                            |  |  |
| hysteroscopy. Existence of  |  |  |
| blood vessels allows assessment of surgical knot integrity.                           |  |  |
| <ul> <li>All uterine assemblies include ovarian and uterine veins and</li> </ul>      |  |  |
| arteries, bladder, ovaries,   |  |  |
| fallopian tubes, peritoneum, ureters, perineum with integrated                        |  |  |
| vagina, ligaments including   |  |  |
| round, uterosacral, infundibulopelvic, and cardinal.                                  |  |  |

|  | - |
|--|---|
| WORKBOOK BY MARTIN E. OLSEN, MD  |   |
| <ul> <li>Workbook of ten (10) advanced scenarios and example surgical</li> </ul>       |   |
| checklists:  |   |
| » Ruptured ectopic pregnancy   |   |
| » Pelvic mass in pregnancy   |   |
| » Septic abortion  |   |
| » Bleeding disorder - Von Willebrand's disease   |   |
| » Post-operative hemorrhage after conization of the cervix                             |   |
| » Fire in the OR   |   |
| » Malignant hyperthermia during surgery  |   |
| » Cardiac arrest in the OR   |   |
| » Anaphylaxis in the OR  |   |
| » Hypoxia in the OR  |   |
| TABLET WITH CONTROLLER SOFTWARE  |   |
| <ul> <li>Sensors automatically track and document participants actions</li> </ul>      |   |
| <ul> <li>Changes in condition and care provided are time stamped and</li> </ul>        |   |
| logged   |   |
| <ul> <li>View the actions of up to 6 care providers using a responsive menu</li> </ul> |   |
| or write narrative   |   |
| <ul> <li>Generate and share diagnostic lab results</li> </ul>                          |   |
| <ul> <li>File sharing through Vital Signs Monitor</li> </ul>                           |   |
| <ul> <li>Links with recording and debriefing system integrating the event</li> </ul>   |   |
| log with cameras and   |   |
| patient monitor 11 preprogrammed scenarios which can be                                |   |
| modified by the instructor even  |   |
| during the scenario  |   |
| <ul> <li>Create your own scenarios - add/edit</li> </ul>                               |   |
| Change simulator's condition during the scenario                                       |   |
|  |   |
| 20''ALL-IN-ONE TOUCHSCREEN PATIENT MONITOR   |   |

|   | <ul> <li>Interactive virtual patient monitor displays vital signs in real-time</li> <li>Display up to 10 numeric parameters</li> <li>Display up to 6 dynamic waveforms</li> <li>Customizable layout mimics real patient monitors</li> <li>Program custom threshold alarms</li> <li>Share images such as ultrasounds, CT Scans, lab results, etc.</li> </ul> INCLUDES <ul> <li>Surgical Patient Simulator</li> <li>Control Tablet PC preloaded software</li> <li>Software License including 11 scenarios</li> <li>20" Touchscreen All-In-One monitor preloaded with Virtual Monitor Software</li> <li>RF Communications Module</li> <li>Battery charger/Power Supply</li> <li>Four(4) abdominal wall inserts</li> <li>Twelve(12) uterine assemblies, four(4) of each type</li> <li>Workbook by Martin E. Olsen, MD.</li> <li>Soft-sided case with rollers</li> </ul> |   |   |              |
|---|---|---|---|--------------|
| 2 | Obstetrics and Gynecology Patient Simulator With electric delivery<br>bed<br>Specifications<br>Maternal   | A complete simulation-based<br>obstetric acre education and<br>training for students with<br>newborn and simulator control<br>software. | 1 | 7,500,000.00 |
|   | <ul> <li>Wireless and Tetherless and fully responsive even while<br/>being transported using RF signal (not Wi-fi of<br/>Bluetooth) for more stable connection</li> <li>Wireless control at distances of up to 300ft.</li> <li>Internal rechargeable battery provides up to 3 hrs. of<br/>tetherless operation</li> <li>Supports continuous operation on AC power</li> </ul>  |   |   |              |

| -        | Pneumatic and fluid reservoirs are housed inside the                  |  |   |
|----------|---|--|---|
|          | body  |  |   |
| Labor aı | nd Delivery   |  |   |
| -        | Fetus-Newborn wireless link capability                                |  |   |
| -        | Automatic and fully programmable birthing mechanism                   |  |   |
|          | simulates descent and cardinal movements                              |  |   |
| -        | Precise labor scenario repeatability for competency-                  |  |   |
|          | based training and assessment   |  |   |
| -        | Programmable normal, breech, shoulder dystocia,                       |  |   |
|          | instrument-assisted delivery, and C- section                          |  |   |
| -        | 9 Labor and Delivery SLEs   |  |   |
| -        | Facilitator's Guidebook   |  |   |
|          | Supports Leopold's Maneuvers and external cephalic version            |  |   |
| -        | Epidural placement and needle detection; palpable                     |  |   |
|          | anatomical landmarks and skin layers                                  |  |   |
|          | Force sensors monitor traction applied to the fetus in real-time      |  |   |
| -        | Anatomic landmarks include bilateral ischial spines,                  |  |   |
|          | coccyx, and pubic bone  |  | I |
| -        | Realistic birth canal with dilating cervix                            |  | I |
| -        | Fetus rotates, dips, and rises during delivery                        |  |   |
| -        | Palpable contractions   |  |   |
| -        | Programmable intrapartum bleeding                                     |  | I |
| -        | Supports McRoberts maneuvers  |  | I |
| -        | Supports Woods' screw, arm sweeps, and Lovset                         |  |   |
|          | Postpartum: palpable fundus with programmable<br>uterine contractions |  |   |

|    |   | - |
|----|---|---|
|    | <ul> <li>Uterine bleeding: manage uterine hemorrhage using</li> </ul>     |   |
|    | medications or a balloon tamponade  |   |
|    | <ul> <li>Episiotomy repair inserts simulate human tissue that</li> </ul>  |   |
|    | can be sutured closed repeatedly  |   |
| N  | Neurological  |   |
| IN | Neurological  |   |
|    | - Programmable blinking, dilation, and eye response to                    |   |
|    | light   |   |
|    | <ul> <li>Programmable duration and intensity of convulsions</li> </ul>    |   |
|    | - Prerecorded responses   |   |
|    | <ul> <li>Wireless streaming voice: be the voice of Noelle and</li> </ul>  |   |
|    | listen to the participants' responses via a wireless                      |   |
|    | headset   |   |
|    |   |   |
|    |   |   |
| Ai | Airway  |   |
|    | <ul> <li>Program tongue edema and pharyngeal swelling</li> </ul>          |   |
|    | <ul> <li>Multiple upper airway sounds synchronized with</li> </ul>        |   |
|    | breathing   |   |
|    | <ul> <li>Supports nasal and oral intubation</li> </ul>                    |   |
|    | <ul> <li>Sensors detect depth of intubation</li> </ul>                    |   |
|    | <ul> <li>Supports Bag-Valve-Mask ventilation</li> </ul>                   |   |
|    | <ul> <li>Supports conventional airway adjuncts</li> </ul>                 |   |
|    |   |   |
| Bi | Breathing   |   |
|    | <ul> <li>Automatic chest rise is synchronized with respiratory</li> </ul> |   |
|    | patterns  |   |
|    | <ul> <li>Normal and abnormal breath sounds</li> </ul>                     |   |
|    | <ul> <li>Independent left or right lung sounds synchronized</li> </ul>    |   |
|    | with breathing  |   |
|    | <ul> <li>Ventilation may be assisted using BVM, ETT, or LMA</li> </ul>    |   |

| - Ventilations are meas   | ured and logged  |      |
|---|--|------|
| Cardiac   |  |      |
| ventilation rate, and e<br>trainer features vocal<br>reports.<br>- Chest compressions g | pression depth, no-flow time,<br>excessive ventilation. The smart<br>cues and outputs performance<br>enerate palpable blood pressu |      |
| waveform and ECG ar<br>- Normal and abnormal  |  |      |
| <ul> <li>Heart sounds synchro</li> </ul>  |  |      |
| -   | real time with physiologic   |      |
| Circulation   |  |      |
| <ul> <li>Measure blood pressu<br/>using real instruments</li> </ul>                     | <pre>ire by palpation or auscultatior</pre>  | 1    |
| <ul> <li>Korotkoff sounds audi<br/>pressures</li> </ul>                                 | ble between systolic and diast   | olic |
| <ul> <li>Oxygen saturation det</li> </ul>   | tected using real monitors   |      |
| <ul> <li>Bilateral carotid, radia<br/>synchronized with ECC</li> </ul>                  | •  |      |
| -   | ed with BP and heart rate  |      |
| - Bilateral IV arms with  | fill/drain sites   |      |
| <ul> <li>Optional drug recogni</li> </ul>   | -  |      |
| <ul> <li>SubQ and IM injection</li> </ul>   |  |      |
| -   | re measured and logged   |      |
| <ul> <li>ECG monitoring using<br/>or converters</li> </ul>                              | real devices without using box   | es   |
| <ul> <li>Defibrillate, cardiover<br/>without using boxes o</li> </ul>                   | t, and pace using real devices r converters  |      |

| Virtu | al Patient and Toco Monitor                                 |  |  |
|-------|---|--|--|
| -     | Touchscreen patient monitor preloaded with Vitals           |  |  |
| -     | Programmable uterine activity                               |  |  |
| -     | Control frequency, duration, and intensity of               |  |  |
|       | contractions, resting tone, and decels                      |  |  |
| -     | Program fetal heart rate and baseline variability           |  |  |
| -     | Control episodic, periodic, and variable changes            |  |  |
| -     | Generate FHR patterns at any time                           |  |  |
| -     | Virtually monitor FHR via External Fetal Monitoring or      |  |  |
|       | the Fetal Spinal Electrode Mode                             |  |  |
| -     | Review up to 2 hours of recorded fetal tracings             |  |  |
| -     | Save/print fetal tracings for debriefing                    |  |  |
| -     | Interactive virtual patient monitor displays vital signs in |  |  |
|       | real time   |  |  |
| -     | Customizable layout mimics real patient monitors            |  |  |
| -     | Display simulated ultrasounds, CT scans, lab results, x-    |  |  |
|       | rays  |  |  |
| Capat | bilities :  |  |  |
|       | Advanced Life Concert (Desig Life Concert                   |  |  |
| -     | Advanced Life Support/Basic Life Support                    |  |  |
| -     | Articulating full size adult                                |  |  |
| -     | Birth canal with dilating cervix<br>BP using real cuffs     |  |  |
| -     |   |  |  |
| -     | Circulation multiple heart sounds                           |  |  |
| -     | Pulse sites   |  |  |
| -     |   |  |  |
| -     | Computer control<br>Convulsions and tremors                 |  |  |
| -     | Defibrillate, cardiovert and pace                           |  |  |
| -     | Denomiale, caluiovert and pace                              |  |  |

| - Deliveries include vertex, instrumented, shoulder   |
|---|
| dystocia, breech, "C" section, prolapse and previa  |
| - Display ECG using REAL monitor  |
| - Display oxygen saturation using REAL oximeter   |
| - Dynamic perinatal monitor displays uterine activity and   |
| FHR ECGs (Virtual) generated in real time   |
| - Episiotomy repair   |
| <ul> <li>Fetus is fully articulating with fontanelles/sutures</li> </ul>                                  |
| - Fetus delivered with precise, repeatable control  |
| - Fetal manipulations   |
| - Fetal force/torque/positioning graphed in real time   |
| Intubatable airway and IV arm   |
| - Maternal vital signs monitor  |
| - Post partum hemorrhage/fundal massage   |
| - Preprogrammed scenarios, modify them, or create new   |
| ones Share images such as x-rays, CT scans, lab results   |
| - Streaming Audio   |
| - Training Guide with basic and advanced scenarios  |
| - Tetherless manikin  |
| - Virtual oxygen saturation measurement   |
| Other features  |
| - Software  |
| <ul> <li>Practice epidural procedures</li> </ul>  |
| <ul> <li>Realistic fetal palpation with amniotic sac Pelvic</li> </ul>                                    |
| landmarks   |
| - Contraction Stomach   |
| <ul> <li>Contraction stomach</li> <li>C-section using real surgical instruments Lifelike birth</li> </ul> |
| canal   |
| - Realistic episiotomy repair   |
|   |

| - Streaming audio included  |   |  |  |
|---|---|--|--|
| Perfect fit into stirrups   |   |  |  |
| Electric Bed:   |   |  |  |
| Electric Table gynecologic surgical for mate<br>gynecological surgery. The leg panels are re<br>adjustment and is made from double deck<br>It has a button to lift and down, safe and re                      | movable, convenient<br>blate with high streng |  |  |
| Length: approx. 1850mm<br>Width: Approx. 600mm<br>Adjustable range of height: Approx. 1000-7<br>Back Section raised from the horizontal: ap<br>Reversed: approx. +22"/-22"<br>Dimension: approx. 1355X725X885 |   |  |  |

The summary of the bidding activities is as follows:

| Activities                                   | Schedule                                  |
|--|---|
| 1. Advertisement/Receipt of Letter of Intent | August 17-24, 2022                        |
| 2. Issuance of Bid Documents                 | August 25 to September 9, 2022            |
| 3. Pre-bid Conference                        | August 25, 2022 9:00AM (via Zoom)         |
| 4. Deadline for Submission of Bids           | September 06, 2022, until 4:00PM          |
|  | Late bids shall not be accepted           |
| 5. Opening of Bids                           | September 07, 2022, 9:00 AM – President's |
|  | Office Conference Room, Gen. Tinio (St.)  |
|  | Campus, Cabanatuan City                   |
| 6. Post Qualification                        | September 08, 2022, 9:00 AM (via Zoom)    |

## **GENERAL CONDITIONS:**

All particulars to the Eligibility Statement and Screening, Bid Security, Performance Security, Pre-bidding Conference, Evaluation of Bids, Post Qualification and Award of Contract shall be governed by the pertinent provisions of R.A. 9184 and its Implementing Rules and Regulations.

Bidding will be conducted through open competitive bidding procedures using a non-discretionary "pass/fail" criterion as specified in the 2016 Revised Implementing Rules and Regulations (IRR) of Republic Act (RA) 9184, otherwise known as the "Government Procurement Reform Act".

Bidding is restricted to Filipino citizens/sole proprietorships, partnerships, or business organizations with at least sixty percent (60%) interest or ownership of at least 60% of the outstanding capital stock belonging to citizens of the Philippines, and to citizens or business organizations of a country where the laws or regulations of which grant similar rights or privileges to Filipino citizens, pursuant to RA 5183.

A complete set of Bidding Documents may be acquired by interested Bidders from **August 25**-**September 06**, **2022** upon payment of the applicable fee for the Bidding Documents, pursuant to the latest Guidelines issued by the GPPB. It may also be downloaded free of charge from the website of the Philippine Government Electronic Procurement System (PhilGEPS) and the website of the Procuring Entity, provided that Bidders pay the applicable fee for the Bidding Documents not later than the deadline for submission of bids.

Bids must be duly received by the BAC Secretariat at the address below on or before **September 06**, 2022, until 4:00PM. All Bids must be accompanied by a bid security in any of the acceptable forms and in the amount stated in the PBD. Late bids shall not be accepted.

On the last day for the submission of bids and no prospective bidder/s submitted its bid documents or only one (1) bid was submitted for the abovementioned project, the same is deemed extended until September 14, 2022, 4:00 PM. This is to protect the interest of the University and full opportunity for a competitive bidding may be achieved;

The University likewise reserves the right to cause extension or postponement of the filing of bids should similar situation arises.

Bid opening shall be on **September 07**, 2022, 9:00 AM at President's Office Conference Room, Gen. Tinio (St.) Campus, Cabanatuan City unless extended. Bids will be opened in the presence of the bidder or his/her/its duly authorized representative/s. Failure to attend during the opening of bids shall be considered a waiver on the part of the bidder who likewise waives his/her/its right to raise questions during the bidding procedures.

The Nueva Ecija University of Science and Technology reserves the right to reject any and all bids, declare a failure of bidding, or not award the contract at any time prior to contract award in accordance with Section 41 of RA 9184 and its IRR, without thereby incurring any liability to the affected bidder or bidders.

For more information concerning this bidding, please contact the following:

ENGR. JOEL G. DE MESA Head, BAC Secretariat for Goods and Services NEUST Gen. Tinio St., Cabanatuan City Telephone No. (044) 463-0226 Email Address: neustproc.unit@gmail.com

Approved by: DR. HONORATO P. PANAHON

BAC Chairperson