

Republic of the Philippines BENGUET STATE UNIVERSITY La Trinidad, Benguet



IB 2024- 28 SUPPLY, DELIVERY AND INSTALLATION OF PLASTINATED HUMAN CADAVER (FEMALE) AND REGIONAL SPECIMEN OF HUMAN BRAIN

ABC: 9,141,000.00 Source of Fund: 2023 GAA Capital Outlay- FLR Delivery Date: 60 calendar days Bidding by: sub lot End User: College of Medicine (COM)

1. Sub lot 1 - 1 lot Supply, Delivery and Installation of 1-unit Plastinated Human Cadaver, Female ABC: 7,000,000.00

Female, Adult, Whole Body. A detailed layered dissection of the whole FEMALE body in a standing life-like position. Museum quality standard.

<u>Head and Neck area.</u> The cranial cavity is opened to display the brain within it. Dissection of the head demonstrates the facial muscles, nerves, arteries, and blood vessels, and inter-related glands of the area. Frontal cut permits viewing of the oral, nasal and paranasal cavities; from behind, orbital structures can be observed. Both sides display the muscles of the triangles of the neck, organs and other structures. One side dissected deeper than the other to show the main nerve bundles, jugular veins and the carotid arteries with their branches.

<u>Thorax, Abdomen, and Pelvis</u>. A large window cut out from the anterior thoraco-abdominal wall serving as a door to show the thoracic and abdominal cavities. The mammary glands should be well preserved on the thoracic wall serving as a trap door to the thoracic and abdominal cavity. All organs of the thorax and abdomen are well exposed and are presented in situ. Thoracic cavity should clearly show mesenteric arteries, porta hepatis and porta lienis. Half of the stomach is taken off to show gastric mucosa. The FEMALE genital system should be distinctly dissected to show its correlation with the urinary system in the pelvic cavity.

<u>Extremities</u>. Combined superficial and deep dissection of the upper and lower musculoskeletal system and related neurovascular structures. Right side superficial versus Left side deep dissection or vice versa. The origins and insertions of each muscle are clearly demonstrated, and the muscles themselves are separated from each other along their pathways. Dissection of main nerves and arteries which are listed in anatomical nomenclature.

<u>Spinal Column</u>. Should show partial or whole laminectomy to show spinal cord and relationships of the cervical, thoracic, and lumbar nerves from the foramen magnum to the sacrum.

The plastinated cadaver should:

- a. Been preserved using specialized silicone or compound for whole body and regional parts;
- b. Be cleanly dissected to reveal specific anatomical parts and not twisted, deformed or distorted;

c. Have a life-like natural color;

d. Be completely dry to touch not gluey, sticky or watery;

e. Be odorless and should not emit any odor/ foul smell or when stored in glass containers;

f. Be non-toxic and does not possess any allergic reactions to the eyes, nose, skin etc.;

g. Be portable i.e not heavy;

h. Have a 3-Dimensional feature; be durable enough that it can be stored in free air (not airconditioned) indefinitely, humidity ranges below 60% and can withstand temp range of 20-30 degrees Celcius.

Height of the cadaver: 5'4" to 5'8".

<u>Sturdy metallic stand</u>. Stainless steel; at least 20" x 20" x 2"; with 4-wheel caster, 2 front casters with lock.

After sales

- 1. Supplier should replace the plastinated specimen when it does not conform to the conditions above;
- 2. Supplier should be able to provide repair when specimens are damaged.
- 3. Warranty Period: a. Shall commence from the date of acceptance by the end user after installation, testing, and commissioning. b. At least Three (3) years on parts and service. c. Free quarterly preventive maintenance for 5 years or at least during the warranty period.

Product Training: on-site product training for at least 5 personnel on the use and basic maintenance.

Additional Terms and conditions:

- 1. The equipment must be delivered ready to use. Cables, connectors, adapters and accessories even not specified but are essential for the unit to function must be provided free by the winning bidder;
- 2. When awarded, the supplier shall provide a demo cadaver (loaner) while waiting for the brandnew cadaver.
- 3. Notarized Certification that the product is brand new, not reconditioned/refurbished including parts and accessories.

4. Notarized Certification from the manufacturer and local supplier that in the event of a change of local supplier, preventive maintenance, warranty and services agreed here upon will be honored by the principal manufacturer.

2. Sub lot 2. 1 lot Supply and Delivery of the Regional Specimen of Human Brain (8 items) ABC: 2,141,000.00

General Specifications:

- 1. Plastinated specimens are preserved using specialized silicone or compound for whole body or regional parts.
- 2. Plastinates should be cleanly dissected to reveal specific anatomical parts and not twisted, deformed or distorted.
- 3. Plastinates should have a life-like natural color.
- 4. Plastinates should be completely dry to touch not gluey, sticky or watery.

5. Plastinates should be odorless and should not emit any odor/ foul smell or when stored in glass containers

6. Plastinates should be non-toxic and does not possess any allergic reactions to the eyes, nose, skin etc.

7. Plastinates should be portable

8. Supplier should replace the plastinated specimen when it does not conform to the conditions above.

9. Plastinates should have a 3-Dimensional feature

10. Plastinates can be stored in free air (not airconditioned) indefinitely. Humidity ranges below 60% and can withstand temp range of 20-30 $^\circ C$

11. Supplier should render free aftersales and preventive maintenance service for at least 5 years.

12. Supplier should be able to provide repair when specimens are damaged.

13. Housing: mounted in a glass

Other Terms and Conditions:

1. The equipment must be delivered ready to use. Cables, connectors, adapters and accessories even not specified but are essential for the unit to function must be provided free by the winning bidder.

2. Warranty Period: a. Shall commence from the date of acceptance by the end user after installation, testing, and commissioning. b. At least Three (3) years on parts and service. c. Free quarterly preventive maintenance for 5 years or at least during the warranty period.

3. Notarized Certification that the product is brand new, not reconditioned/refurbished including parts and accessories.

4. Notarized Certification from the manufacturer and local supplier that in the event of a change of local supplier, preventive maintenance, warranty and services agreed here upon will be honored by the principal manufacturer.

Breakdown:

a. 1-unit Plastinated External features of the brain – 250,000.00 -Dissected to show the external features of the whole brain

b. 1-unit Plastinated brain and 12 pairs of cranial nerves- 260,000.00

-The human brain with the dura mater and the pia mater removed revealing the gyri of the cerebrum, with the 12 pairs of cranial nerves intact.

c.1-unit Plastinated Medial sagittal section of the brain – 180,000.00

- <u>Half of whole brain specimen with the pia mater removed, showing the medial structures of the</u> <u>cerebral hemisphere, brainstem, and cerebellum.</u>

d. 1-unit Plastinated horizontal section of the whole brain – 365,000.00

- Whole brain, horizontal section, three parts, dissected to show the inner structures of the brain. Axial slice of the cerebral hemisphere at the level of the where the basal ganglia, thalami, interventricular foramina and 3rd ventricle are seen.

e. 1-unit Plastinated coronal section of the whole brain – 384,000.00

- Whole brain, coronal section, about 10-12 slices of the brain at 5 10 mm thickness from the frontal pole to the occipital poles of the cerebral hemisphere, including the brainstem and cerebellum.
- f. 1-unit Plastinated Optic tract and optic radiation 310,000.00
 - Dissected to show the medulla oblongata, midbrain, rhomboid and 10 pairs of cranial nerve roots.
- g. 1-unit Plastinated Cerebellum 140,000.00
 - Dissected to show the cerebellar hemisphere, vermis and dependency structures

h. 1-unit Plastinated Arteries at the base of the brain - 252,000.00

- A whole brain specimen with the Sylvian fissures dissected away to reveal the course of the middle cerebral arteries, the frontal lobes dissected or teased apart to show the anterior cerebral arteries. The 3 pairs of cerebellar arteries must be preserved and demonstrated. Ideally the anterior spinal artery should be included if possible (though often destroyed in extraction of the brain). Also, dissected to show the basilar artery, internal carotid artery and the main branches.