IX. Research:

a. Completed

1. The gross and histological effects of ischemia-reperfusion injury on intestinal anastomotic wound healing in dogs (Papers 6 and 7).

2. Bio-molecular determinants of ischemia reperfusion injury in canine and caprine intestinal and urogenital tracts and implications of gastrointestinal emergencies on fertility in farm animals (Papers 16, 17 and 18).

3. Radiographic studies on farmed catfish (Clarias gariepinus) skeletons (Paper 12).

4. Radiographic indices of heart size in Nigerian Local dogs (Papers 20 and 27).

5. Imaging the West African Mud Turtle (Pelosius castaneus) (Papers 21, 22 and 26).

6. Thoracic Radiographic Anatomy of the West African Dwarf goat. (Paper 31)

b. In Progress:

1. Radiographic assessment of hip dysplasia in cats. A study designed to assess the reasons behind request for euthanasia among cat owners and determine the attributes of hip dysplasia and contributory impact on cat owner requests for euthanasia due to difficulty in handling their pets. This will enable a current assessment of cat owner requests for euthanasia and reveal underlying disease responsible for such. This project is 80% completed.

2. Imaging in Diagnosis of Gastrointestinal Diseases. This study wishes to investigate the use of imaging in the diagnosis of gastrointestinal diseases and will compare radiography and ultrasonography and their efficacy in diagnosis. Client dogs form part of this study to enable clinical type conditions while research animals will be utilised to confirm what is observed in clinical settings. This will enable clinicians understand which imaging modality to request based on clinical signs presented. Part of this project started in 2019 50% completed

3. Imaging the Pangolin: This study attempts to provide radiographic Anatomy of the pangolin which is an endangered mammal native to Nigeria to enable characterization of the species found in Nigeria. Also to provide imaging baseline data in cases of radiographic diagnosis. This project started in 2019 and is 70% completed.

4. Ultrasonography of laboratory rats. This study wishes to investigate the normal dimensions and architecture of testes of Wistar strain of rats that are in copious use in research. Several rats will be imaged to determine the morphometry of normal testes in this specie. The results will serve as baseline data for any studies that seek to alter normal testicular morphology of these rats by pharmmacoogical agents. Data is currently being collected and will be concluded in the last quarter of 2021.