(a) RESEARCH COMPLETED

1. **Testicular parameters, sperm and morphological characteristics of spermatozoa in male domestic animals**. The study was designed to examine and document for the first time, the testicular parameters, semen, and morphological characteristics of breeds of domestic animals in the tropics, especially in Nigeria. It is important in the Artificial Insemination programme. The results in the Boar, White Fulani Bull, and West African dwarf buck have been published in learned journals. 37,47,48,49.

2. **Response of breeding male Animals to planes of nutrition or feed supplementation.**
   The research was conducted to examine the effects of nutrition, malnutrition, starvation and planes of nutrition on spermatozoa characteristics and morphological aberrations. Various other supplements were used, such as soybean meal, meat offals and Broiler litter. The results helped to determine the acceptable level of supplement and effects of starvation on spermatogenesis and status of the semen produced. The results have been published in the learned journals using *milletia thonningii*, effects of starvation in bulks, meat offals and soybean meal supplements, planes of soymeal in Rabbit and Broiler litter. These findings have been published in both local and international journals.

3. **Effects of Coconut Milk-Citrate as an extender for West African dwarf buck spermatozoa.**
   This study was designed and conducted to ascertain the effects of locally available materials, such as Coconut milk, to serve as extenders. The results proved that we can use our locally available materials as part of semen extenders with results comparable to imported semen extenders. The result has been published in a learned journal.

4. **Comparative study of fresh Coconut Milk and Standard Egg Yolk-based semen Extender.**
   The study was designed to identify and compare the supportive capacity and capability of Coconut Milk compared with Egg Yolk-based semen extenders in terms of motility, live-dead ratio and ability to stay longer under different temperatures. The result has been published in a learned journal.

5. **Curcumin and Kolaviron Ameliorate Di-n-Butylphthalate-Induced Testicular Damage in Rats.**
   A study was conducted to identify the damage effects of Di- n- Batylphalate and the useful effects of Curcumin and Kolaviron. The result was published in Basic Clinical Pharmacology and Toxicology. Denmark.

6. **Tetracycline-induced reproductive toxicity in male Rats: effects of Vitamin C and N-acetylcysteine, oxidative stress and protective effect of selenium.**
   This research was designed to ascertain the effects of tetracycline on the reproductive performance and response of animals when Vitamin C and N-acetylcysteine were injected into tetracycline-induced male Rats. The study was published in a learned journal.

7. **The Reproductive implications of Clomiphene citrate on Sperm Cells during the Epididymal Transit of Spermatozoa in male Wistar Rats.**
This was a study conducted to identify the effects of Clomiphene citrate (a fertility drug) on the spermatozoa during the movement from caput to caudal epididymis. This helped to ascertain a good fertility drug and thus a necessary tool in improving the quality of spermatozoa before and during Artificial Insemination. The result has been published in an international journal.

8. **The Spermiogram of Male Wistar Rats treated with aqueous leaf extract of *Vernonia amygdalina.***
A study was designed and carried out to identify the effects of aqueous leaf extract of Vernonia amygdalina, a plant widely used as a herb and vegetable. This is an important aspect of ethnoveterinary medicine in theriogenology. The result has been published in a learned journal.

(b) <u>RESEARCH IN PROGRESS</u>

1. **The reproductive potential of Wistar Rats treated with Aloe Vera Gel Extract. Sponsored by University of Ibadan Senate Research Grant. Ref. SRG/FVM/2006/13A.**
This is a research proposal sponsored by the Senate of the University of Ibadan. The study is designed to assess the impact of Aloe vera Gel Extract on the blood parameters, serum chemistry and reproductive potential of both males and females. It is also designed to ascertain the effects on the progeny, especially the first filial (f1) generation. An undergraduate and Master of Veterinary Science students are involved in the execution of the research while a DVM project and MVSC dissertation will be written from the study.

2. **Exploratory Laparotomy in primiparous West African dwarf does.**
I am leading a group of Veterinarians to study the effects of gastric foreign bodies, especially in goats that have eaten polythene and feed bags alongside their feed. Gastric foreign can result in rumen impaction, hydro peritoneum which can lead to anorexia, silent estrus and /or anoestrus which are major factors in reproductive potentials. The results will be of beneficial effects to the breeders, livestock farmers, and help in the differential diagnosis of pregnancy in the breeding station.

3. **Use of Snail Mucin as part of Semen Extenders.**
It is a study designed to use Snail Mucin known to have antibacterial effects as part of semen extender. This will help as part of the extender because it will combine antibacterial effects to the extender. An MVSC dissertation is expected from the study.

4. **Reproductive Implications of Male West African dwarf goats treated with *Chaya aconitifolius* plants.**

I am leading a research team to carry out this research work. The study is aimed at studying the effects of the plant-Chaya also known as "Iyana Ipaja" vegetable on the haematology, semen characteristics, spermatozoa morphology, testicular parameters, hormonal changes and histopathological changes in testes and epididymides. This is to ascertain the effects of the plant on the health and reproductive potential of the male West African dwarf goats.

5. **Response of West African dwarf bucks with testicular degeneration to Proviron® Treatment.**

This study is designed to determine the effects of Mesterolone (Proviron®) on the vital reproductive statistics of male West African dwarf goats. Testicular degeneration has been identified as one of the limiting factors in goats' production especially in male since it decreases/reduces the rate of spermatogenesis and cause an increase in spermatozoa morphological disorders. Proviron-a fertility drug will be used to reverse the effects and observe the rate of regeneration and return of spermatogenesis to normal. An MVSC dissertation is expected from this study.