



2025 PROMOTION EXERCISE CURRICULUM VITAE

I

- a. **Name:** Omowumi Moromoke **Femi - Akinlosotu**
- b. **Department:** Anatomy
- c. **Faculty:** Basic Medical Sciences
-

II.

- a. **First Academic Appointment:** Lecturer II
- b. **Present Post(with date):** Reader (01 October, 2022)
- c. **Date of Last Promotion:** 01 October, 2022
- d. **Date Last Considered (in cases where promotion was not through):** Not applicable

III. **University Education (with dates)**

- | | | | | |
|----|---------------------------------------|-------------|---|------|
| a. | University of Ibadan, Ibadan, Nigeria | 1997 | - | 2004 |
| b. | University of Ibadan, Ibadan, Nigeria | 2008 | - | 2012 |
| c. | University of Ibadan, Ibadan, Nigeria | 2014 - 2018 | | |

IV. **Academic Qualifications (with dates and granting bodies)**

- | | | |
|----|---------------------------------------|------|
| a. | B.D.S.(Dental Surgery) | 2004 |
| | University of Ibadan, Ibadan, Nigeria | |
| b. | M.Sc.(Anatomy) | 2012 |
| | University of Ibadan, Ibadan, Nigeria | |
| c. | Ph.D(Doctor of Philosophy) | 2018 |
| | University of Ibadan, Ibadan, Nigeria | |

V. **Professional Qualifications and Diplomas (with dates)**

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|----|-----------------------|------|---------------------------------------|
| a. | B.D.S. Dental Surgery | 2004 | University of Ibadan, Ibadan, Nigeria |
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VI. **Scholarships, Fellowships and Prizes (with dates) in respect of Undergraduate and Postgraduate work only)**

- | | | |
|----|--|------|
| a. | International Society for Neurochemistry Travel Award Grant (\$1600) | 2019 |
| b. | International Brain Research Organization Travel Award Grant (€1800) | 2020 |
| c. | International Society for Neurochemistry Travel Award Grant (\$1500) | 2022 |

	TETFUND National Research Grant (N21,000,000)	2023
e.	International Brain Research Organization World Congress Travel Award Grant (€2000)	2023
f.	International Society for Neurochemistry Travel Award Grant (\$1900)	2023
g.	Federation of European Neuroscientists Travel Grant (€2000)	2024
h.	Department of Anatomy Individual Research Grant (N200,000)	
i.	International Brain Research Organization (IBRO) Fellowship Teaching School	
j.	African Academy of Science Travel Award	
k.	University of Ibadan Thomas-Bassir Biomedical Foundation Small Research Grant	

VII. Honours, Distinctions and Membership of Learned Society:

- a. Member, Nigerian Medical Association
- b. Member, Nigerian Dental Association
- c. Member, International Association of Dental Research
- d. Member, International Brain Research Organization
- e. Member, Society of Neuroscientists of Africa
- f. Member, Neuroscience Society of Nigeria
- g. Member, International Society for Neurochemistry
- h. Member, Medical Women Association of Nigeria
- i. Member, Organization for Women in Science for the Developing World
- j. Member, Anatomical Society of Nigeria
- k. Member, Society for Medical and Dental Anatomists in Nigeria

VIII. Details of Teaching/Work Experience :

- a. **Undergraduate:**
 - i. Neuroanatomy 200 level medical students
 - ii. Neuroanatomy 300 level medical students
 - iii. Neuroanatomy 200 level dental students
 - iv. Neuroanatomy 300 level dental students
 - v. Neuroanatomy 200 level physiotherapy students
 - vi. Neuroanatomy 300 level physiotherapy students
 - vii. Dental Anatomy 200 level dental students
 - viii. Dental Anatomy 300 level dental students
 - ix. Gross Anatomy 200 level medical students
 - x. Gross Anatomy 300 level medical students

- xi. Gross Anatomy 200 level dental students
- xii. Gross Anatomy 300 level dental students
- xiii. Gross Anatomy 200 level physiotherapy students
- xiv. Gross Anatomy 300 level physiotherapy students
- xv. General and Systemic Embryology 200 level physiotherapy and nursing students
- xvi. Gross Anatomy 200 level Pharmacy, Nursing, Human Nutrition, Physiology, and Biomedical Laboratory Science students
- xvii. General and Systemic Histology 200 level Pharmacy, Nursing, Human Nutrition, Physiology, and Biomedical Laboratory Science students
- b. **Postgraduate:**
 - i. Advanced Neuroanatomy (ANA 706)
 - ii. Resource Person, Faculty of Dental Surgery, West African College of Surgeons 2011 - Date
 - iii. Resource Person, Faculty of Family Dentistry, National Postgraduate Medical College of Nigeria 2024
- c. **Administrative Duties:**
- d.
 - i. Member, Accreditation Committee, Department of Anatomy
 - ii. Member, Departmental Teaching and Laboratory Committee
 - iii. Member, Departmental Information Technology Committee
 - iv. Member, Departmental Finance Committee
 - v. Member, Departmental Research Grant Committee
 - vi. Member, University of Ibadan Senate
 - vii. Member, College of Medicine Academic Board
 - viii. Member, Faculty of Basic Medical Sciences Finance Committee
 - ix. Coordinator, MBBS & BDS Programme, Department of Anatomy
 - x. Coordinator, Nursing & Human Nutrition Programme, Department of Anatomy
 - xi. Coordinator, BDS Programme, Department of Anatomy 2008 - 2023
 - xii. Coordinator, Departmental Welfare and Counselling Committee (Staff & Students) 2008 - date
 - xiii. Member, Pedagogy Sub-Committee of College of Medicine
 - xiv. Member, E-Learning Sub-Committee of College of Medicine
 - xv. Coordinator, Departmental Welfare and Counselling Committee (Staff & Students), 2008 - date
 - xvi. Coordinator, MBBS & BDS Programme, Department of Anatomy 2021 – 2023
 - xvii. Coordinator, ANA 203 for Physiotherapy, Pharmacy, Environmental Health Sciences, BMLS, Physiology students, 2025 - date

xviii. Sub-Dean (MBBS/BDS), Faculty of Basic Medical Sciences 2023 - date

e. **Community Service:**

- f. i. Member, Local organizing committee for the 28th International Brain Research Organization (IBRO) African Neuroscience School in Ibadan 2011
- ii. Member, Local organizing committee for Neuroscience Society of Nigeria Conference in Ibadan 2013
- iii. Member, Local organizing committee for International Brain Research Organization School in Ibadan 2013
- iv. Coordinator, Young Doctors' Forum (Oyo State Branch): 2013 - 2015
- v. Secretary, Medical Women's Association of Nigeria (Oyo State Chapter) 2015 – 2019
- vi. Secretary, Association of Specialist Medical Doctors in Academics (Oyo State Chapter) 2016 – date
- vii. Member, Local Organizing Committee for Neuroscience Society of Nigeria Conference in Ibadan 2022
- viii. President, Medical Women's Association of Nigeria (MWAN) Oyo State Branch: 2023-2025
- ix. Member, Local Organizing Committee for Anatomical Society of Nigeria Conference in Ibadan 2024

IX. Research

a. **Completed**

- i. Neurotoxic effects of lead on the synapses of neurons of the brain of juvenile mice
- ii. Role of caffeine against carbon tetrachloride-induced neuroinflammation in the brain tissues of adult male mice
- iii. Embryonic outcomes and cellular dynamics with folic acid in retinoic acid-induced spinal neural tube defects in Swiss mice embryos
- iv. Postsynaptic plasticity of hippocampal pyramidal neurons in adult hydrocephalic mice

b. **In Progress**

- i. Phytochemical modulation of aquaporin 4 (AQP-4) as a potential therapeutic target to ameliorate the neonatal hydrocephalus experimentally induced piglets.

Curcumin and quercetin are phytochemical agents that hold promise for the non-surgical treatment of hydrocephalus on account of their role in the regulation of aquaporin expression and suppression of neuroinflammation and oxidative stress. In study, my collaborators and I will be examining the changes that may occur in the aquaporin content as well as the effects of neuroinflammation of the sensorimotor and visual cortices of neonatal hydrocephalic piglets. We will also explore the potential for a full or partial reversal of these events using curcumin and quercetin.

- ii. Neurotoxic effects of lead on the peripheral nerves and ocular tissues of juvenile mice

Lead exposure continues to pose significant health risks across the globe, despite various regulations and mitigation efforts. Human exposure to lead primarily arises from industrial activities such as fossil fuel combustion, mining, and smelting. Due to the slow deposition of airborne lead particles, inhalation constitutes a major route of lead intoxication. The proposed study aims to provide insights into the effects of lead exposure to the peripheral nerves (brachial plexus and sciatic nerve) as well as the ocular tissues (retina and optic nerve).

- iii. Neuroprotective Role of Corchorus Olitorius on Substantia Nigra and Striatum in Rat Model of Parkinson's Disease

Corchorus olitorius known for its antioxidant and anti-inflammatory properties, is underexplored in Parkinson's disease (PD) which is a progressive neurodegenerative disorder that affects millions globally, with increasing prevalence in low-income and middle-income countries like Nigeria. It is characterized by the selective loss of dopaminergic neurons in the substantia nigra and striatum, which results in motor impairments and cognitive dysfunction. Despite the availability of pharmacological treatments such as levodopa and dopamine agonists, these therapies only provide temporary symptomatic relief and do not halt disease progression with long term use associated with side effects. The absence of neuroprotective therapies that can slow or prevent neuronal degeneration remains a major clinical and public health challenge. This study will investigate the neuroprotective potential of Corchorus olitorius in a rotenone-induced rat model of Parkinson's disease.

- iv. Synaptic Changes in the Hypothalamus, Prefrontal Cortex, and Hippocampus of Sleep-Deprived Adolescent Mice and the Potential Modulatory Role of Nanocurcumin

Sleep deprivation is increasingly prevalent among adolescents with implications for education, mental health, and social well-being. Excessive evening light exposure and disrupted circadian rhythms impair cognitive performance, emotional regulation and memory consolidation. In Nigeria, urbanisation and digital engagement are rapidly increasing, making adolescents very vulnerable. Despite growing awareness, little is known about the biological pathways linking light-induced sleep deprivation to synaptic dysfunction during adolescence. Curcumin, the active polyphenol in

turmeric (*Curcuma longa*), possess neuroprotective, antioxidant, and anti-inflammatory properties but has poor bioavailability. Nanoparticle formulations of curcumin overcome this limitation and show enhanced therapeutic efficacy in animal models of neurodegeneration. However, its potential to protect the adolescent brain against sleep deprivation-induced synaptic and behavioural impairments has not been investigated. This study aims to investigate the influence of curcumin on synaptic changes in the hypothalamus, prefrontal cortex and hippocampus of sleep-deprived adolescent mice.

c. **Project, Dissertation and Thesis**

- i. The morphological and histological appearance of the palate in neonatal mice following brief in-utero hyperthermia. (MSc. project) Department of Anatomy, University of Ibadan.
- ii. Histomorphometric changes in the laminar architecture and pyramidal neurons of the sensorimotor cortex in neonatal hydrocephalic mice. (PhD thesis) Department of Anatomy, University of Ibadan

X. Publications

a. **Books already published: Nil**

b. **Chapters in books already published:**

1. *Olopade, F.E. and **Femi - Akinlosotu, O.M.** (2023). Synopsis of Basic and Clinical Histology. (Ed). Endocrine System Lagos: Asanza Publishers. 206-215pp. ISBN: 978-978-99 (Nigeria) (Contribution : 50%)
2. ***Femi - Akinlosotu, O.M.** and Adetona, M.O. (2023). Synopsis of Basic and Clinical Histology. (Ed). Special Senses Lagos: Asanza Publishers. 216-233pp. ISBN: 978-978-995-659 (Nigeria) (Contribution : 50%)

c. **Articles that have already appeared in Refereed Conference Proceeding: Nil**

d. **Patents and Copyrights: Nil**

e. **Articles that have already appeared in learned journals:**

3. Raji, Y. , Akinola, A. , Oyeyipo, I.P. and **Femi - Akinlosotu, O.M.** (2010). Reproductive activities of female albino rats treated with quassin, a bioactive triterpenoid from stem bark extract of Quassia amara ..*Nigerian Journal of Physiological Sciences* Vol.25.No.2:95-102pp (Nigeria) (Contribution : 30%)
4. Adejuwon, S.A. , Salawu, O.T. , Eke, C.C. , **Femi - Akinlosotu, O.M.** and Odaibo, A.B. (2011). Craniometric study of adult human skulls from Southwestern Nigeria..*Asian Journal of Medical Sciences* Vol.3.No.1:23-25pp (Nepal) (Contribution : 30%)
5. Yahaya, A. , **Femi - Akinlosotu, O.M.** , Olopade, J.O. and Kwari, H.D. (2011). A study of dental abnormalities of camels in Nigeria..*Nigerian Veterinary Journal* Vol.32.No.2:92-96pp (Nigeria) (Contribution : 30%)
6. **Femi - Akinlosotu, O.M.** and Shokunbi, T.O. (2011). Hyperthermia and palatal development: A Review..*African Journal of Oral Health* Vol.4.No.0:1-8pp (Nigeria) (Contribution : 80%)
7. Adejuwon, S.A. , **Femi - Akinlosotu, O.M.** and Salawu, O.T. (2012). Variations in the mandibular foramina of Yoruba ethnic groups of Nigeria..*Journal of Medical Sciences* Vol.12.No.6:188-192pp (Afghanistan) (Contribution : 30%)
8. Adejuwon, S.A. , **Femi - Akinlosotu, O.M.** and Omirinde, J.O. (2013). Effect of graded doses of aqueous extract of Gladiolus dalenii on the semen parameters of wistar rats..*International Journal of Indigenous Medicinal Plants* Vol.46.No.2:1191-1195pp (United Arab Emirate) (Contribution : 30%)
9. Adejuwon, S.A. , **Femi - Akinlosotu, O.M.** , Omirinde, J.O. and Aina, O.O. (2013). Morphophysiological activities of crude extract of Gladiolus dalenii on wistar rats..*International Journal of Medical Science* Vol.46.No.2:1234-1238pp (United States Of America) (Contribution : 30%)
10. Omotoso, G.O. , Ibitolu, J.O. , **Femi - Akinlosotu, O.M.** , Akinola, O.B. and Enaibe, B.U. (2013). Morphological and neurohistological changes in adolescent rats administered with nicotine during intrauterine life..*Nigerian Journal of Physiological Sciences* Vol.28.No.0:147-151pp (Nigeria) (Contribution : 30%)
11. Adejuwon, S.A. , **Femi - Akinlosotu, O.M.** , Omirinde, J.O. , Owolabi, O.R. and Afodun, A.M. (2014). Launaea taraxacifolia ameliorates cisplatin-induced hepato-renal injury..*European Journal of Medicinal Plants* Vol.4.No.5:528-541pp (Germany) (Contribution : 30%)

12. Adejuwon, S.A. , Aina, O. O. , **Femi - Akinlosotu, O.M.** and Omirinde, J. O. (2014). Anti-Clastogenic effects of Launaea Taraxacifolia leaf extract on Cisplastin-Induced micronuclei in bone marrow erythrocytes ..*Journal of Biological Innovation* Vol.3.No.2:86-92pp (India) (Contribution : 30%)
13. Adejuwon, S.A. , **Femi - Akinlosotu, O.M.** and Omirinde, J.O. (2014). Cisplastin-induced testicular dysfunction and its amelioration by Launaea taraxacifolia leaf extract..*Andrologia* Vol.47.No.5:553-559pp (Germany) (Contribution : 30%)
14. Omotoso, G.O. , Adekeye, M. , **Femi - Akinlosotu, O.M.** , Akinola, O.B. and Enaibe, B.U. (2015). Histoenzymic evaluation of the frontal cortex of young Wistar rats following prenatal nicotine administration..*Rawal Medical Journal* Vol.40.No.1:96-100pp (Pakistan) (Contribution : 30%)
15. Omotoso, G.O. , Alabi, A.S. , **Femi - Akinlosotu, O.M.** , Akinola, O.B. , Enaibe, B.U. and Caxton-Martins E.A. (2015). Gestational nicotine exposure alters oligodendrocyte morphology and axonal myelination in the lateral prefrontal cortex of young wistar rats..*Nigerian Journal of Neuroscience* Vol.7.No.1:24-49pp (Nigeria) (Contribution : 25%)
16. **Femi - Akinlosotu, O.M.** and Shokunbi, T.O. (2015). Persistence of medial edge epithelium in the palate of neonatal mice following brief in-utero hyperthermia..*Arch. Bas. App. Med.* Vol.3.No.0:1-8pp (Nigeria) (Contribution : 80%)
17. Owoeye, O. , **Femi - Akinlosotu, O.M.** and Adejuwon, S.A. (2015). Launaea taraxacifolia Aqueous Extract Attenuates Cisplatin-Induced Neurotoxicity by Decreasing Oxidative Stress and Neuronal Cell Death in Rats..*Archives of Basic and Applied Medicine* Vol.3.No.0:71-78pp (Nigeria) (Contribution : 30%)
18. **Femi - Akinlosotu, O.M.** , Olopade, F.E. and Omirinde, J.O. (2015). Prevalence of Missing Palmaris Longus Muscle in the Arm of Secondary School Children in Ibadan, Nigeria..*Arch. Bas. App. Med.* Vol.3.No.0:89-92pp (Nigeria) (Contribution : 60%)
19. Gambo, B.G. , Yahaya, A. , **Femi - Akinlosotu, O.M.** and Olopade, J.O. (2015). Investigation into dental abnormalities in Kuri cattle. ..*Sahel Journal of Veterinary Sciences* Vol.14.No.1:33-41pp (Nigeria) (Contribution : 30%)
20. Shallie, P.D. , Koya, A. K. , Shallie, O. F. , **Femi - Akinlosotu, O.M.** , Alese, O.O. and Alese, M.O (2017). Green Tea confers Protection on the Retina in MPTP Mice Model of Parkinson's Disease..*Annual Research & Review in Biology* Vol.13.No.5:1-11pp (United Kingdom) (Contribution : 25%)
21. Ajani, R.S. and **Femi - Akinlosotu, O.M.** (2017). Cadaveric assessment of kidney dimensions among Nigerians - a preliminary report. ..*Anatomy Journal of Africa* Vol.6.No.2:957-962pp (Kenya) (Contribution : 40%)
22. Arigbede, O.A. , Adeyemi, F.B. and **Femi - Akinlosotu, O.M.** (2017). Relative biocompatibility of micro-hybrid and nano-hybrid light-activated composite resins. ..*Journal of Dental Research, Dental Clinics, Dental Prospects.* Vol.11.No.1:1-6pp (Iran) (Contribution : 30%)
23. Ajani, R.S. and **Femi - Akinlosotu, O.M.** (2017). Congenital solitary functioning kidney; an incidental cadaveric dissection finding in an adult male Nigerian: Case report. ..*African Journal of Medical Sciences* Vol.46.No.0:509-514pp (Nigeria) (Contribution : 40%)
24. Igado, O. , **Femi - Akinlosotu, O.M.** , Omobowale, T. , Ajadi, R. and Nottidge, H. (2018). Dental Formula and Dental Abnormalities Observed in the Eidolon helvum (Fruit Bat) Captured from the Wild..*African Journal of Biomedical Research* Vol.21.No.1:223-226pp (Nigeria) (Contribution : 40%)
25. **Femi - Akinlosotu, O.M.** , Shokunbi, T.O. and Thajasvarie, Naicker (2019). Dendritic and Synaptic Degeneration in Pyramidal Neurons of the Sensorimotor Cortex in Neonatal Mice with Kaolin-

Induced Hydrocephalus. *Frontiers in Neuroanatomy* Vol.13.No.38:1-10pp (Switzerland)
(Contribution : 70%)

26. Omotosho, G.O. , Kadir, R.E. , Alabi, A.S. , Olayaki, L.A. and **Femi - Akinlosotu, O.M.** (2019). Alterations in the levels of female sex hormones following administration of nicotine to Wistar rats..*Centre Point (Science Edition). The Official Journal of the University of Ilorin* Vol.25.No.1:156-162pp (Nigeria) (Contribution : 25%)
27. Aderogba-Oti, A. and **Femi - Akinlosotu, O.M.** (2019). Home factors and gender gap in Science, Technology, Engineering and Mathematics (STEM).*Journal of Social Inclusion and Educational Advancement (LeadCity University, Ibadan)* Vol.1.No.0:100-106pp (Nigeria) (Contribution : 40%)
28. **Femi - Akinlosotu, O.M.** , Ogundoyin, O.O. and Akintola, M.A. (2020). The role of fluoride on eruption of mandibular molars of albino rats..*Anatomy Journal of Africa* Vol.9.No.1:1752-1761pp (Kenya) (Contribution : 70%)
29. **Femi - Akinlosotu, O.M.** and Shokunbi, T.O. (2020). Changes in neuronal density of the sensorimotor cortex and neurodevelopmental behaviour in neonatal mice with kaolin-induced hydrocephalus..*Pediatric Neurosurgery* Vol.55.No.5:244-253pp (Switzerland) (Contribution : 80%)
30. Olopade, F.E. , **Femi - Akinlosotu, O.M.** , Adekanmbi, A.J. , Ajani, S. and Shokunbi, T.O. (2020). Neurobehavioural changes and morphological study of cerebellar Purkinje cells in kaolin induced hydrocephalus..*Anatomical Science International* Vol.96.No.1:87-96pp (Japan) (Contribution : 30%)
31. Shokunbi, T.O. , Olopade, F.E. , **Femi - Akinlosotu, O.M.** and Ajiboye, E.O. (2020). Pyramidal cell morphology and cell death in the hippocampus of adult mice with experimentally induced hydrocephalus..*Nigerian Journal of Pediatrics* Vol.47.No.4:298-304pp (Nigeria) (Contribution : 30%)
32. Olugbemide, A.S. , Benneth, B-A , Bakre, A. , Ajayi, A.M. , **Femi - Akinlosotu, O.M.** and Umukoro, S. (2021). Naringenin improves depressive- and anxiety-like behaviors in mice exposed to repeated hypoxic stress through modulation of oxido-inflammatory mediators and NF-kB/BDNF expressions..*Brain Research Bulletin* Vol.169.No.0:214-227pp (United States Of America) (Contribution : 25%)
33. **Femi - Akinlosotu, O.M.** , Igado, O. and Jagun-Jubril, A. (2021). Environmental fluorosis and the neurotoxic effects of fluoride in Nigeria..*Nigerian Stethoscope.* Vol.3.No.1:21-25pp (Nigeria) (Contribution : 70%)
34. Iroegbu, J. , Ijomone, O. , **Femi - Akinlosotu, O.M.** and Ijomone, O.M. (2021). ERK/MAPK signalling in the developing brain..*Neuroscience and Biobehavioral Reviews* Vol.131.No.0:792-805pp (United States Of America) (Contribution : 30%)
35. **Femi - Akinlosotu, O.M.** , Shokunbi, T.O. , Olopade, F.E. and Igbong, P. (2021). Deficits of Learning and Spatial Memory are Associated with Increased Pyknosis of Pyramidal Neurons of the Hippocampus of Adult Rats with Chronic Hydrocephalus..*West African Journal Med* Vol.38.No.11:1042-1049pp (Nigeria) (Contribution : 60%)
36. Samuel, O.M. , **Femi - Akinlosotu, O.M.** and Olopade, J.O. (2021). Mesowear pattern of the fourth upper premolar in Tropical Raccoons (*Procyon cancrivorus*) from three Nigerian ecologic zones: Intra-specific dietary resource partitioning. *Nigerian Journal of Physiological Sciences* Vol.36.No.0:25-31pp (Nigeria) (Contribution : 40%)
37. Olopade, F.E. , **Femi - Akinlosotu, O.M.** , Adekanmbi, A.J. , Ighogboja, O.O. and Shokunbi, T.O. (2021). Chronic Caffeine Ingestion Improves Memory and Learning and Increases Neuronal Population and Dendritic Length in the Hippocampus of Adult Mice. *Nigerian Journal of Physiological Sciences* Vol.36.No.0:165-172pp (Nigeria) (Contribution : 30%)

38. Olopade, F.E. , **Femi - Akinlosotu, O.M.** , Adekanmbi, A.J. , Fejiro, O. and Shokunbi, T.O. (2021). Chronic caffeine ingestion improves motor function and increases dendritic length and arborization in the motor cortex, striatum and cerebellum.*Journal of Caffeine and Adenosine Research* Vol.11.No.1:3-14pp (United States Of America) (Contribution : 30%)
39. Olopade, F.E. , **Femi - Akinlosotu, O.M.** , Odiri, E. and Shokunbi, T.O. (2021). Differential effects of common carotid artery occlusion models of ischaemic stroke on sensorimotor function and infarct sizes in rats.*Arch. Bas. App. Med.* Vol.9.No.0:135-144pp (Nigeria) (Contribution : 30%)
40. Samuel, M.O. , **Femi - Akinlosotu, O.M.** and Olopade, J.O. (2022). Occurrence and Progression of Dental Abnormalities in the Black Fronted Duiker (*Cephalophus niger*) Due to Deficient Diet and Extreme Weather Phenomena.*Journal of Veterinary Dentistry* Vol.39.No.3:1-9pp (Australia) (Contribution : 40%)
41. Okandeji, M. , **Femi - Akinlosotu, O.M.** , Omotosho, O. and Olopade, J. (2022). Dental pathologies in the Nigerian local pigs (*Sus scrofa*)..*Archives of Anatomy and Physiology* Vol.7.No.1:1-8pp (United States Of America) (Contribution : 30%)
42. **Femi - Akinlosotu, O.M.** , Igado, O.O. and Jagun-Jubril, A.J. (2022). Ethnomedicine and Neuroscience in the developing world: plants most commonly used for neurological conditions..*Archives of Basic and Applied Medicine* Vol.10.No.1:5-16pp (Nigeria) (Contribution : 70%)
43. Olopade, F.E. , **Femi - Akinlosotu, O.M.** , Ibitoye, C. and Shokunbi, T.O. (2022). Probing Caffeine administration as a medical management for hydrocephalus; an experimental study. *Pediatric Neurology* Vol.135.No.0:12-21pp (United States Of America) (Contribution : 30%)
44. *Shokunbi, M.T. , Olopade, F.E. , **Femi - Akinlosotu, O.M.** and Oladeji, O. (2023). Astrocytic response in the striatum and corpus callosum of the brain of adult Wistar rats with global ischaemia.*Nig. J. Neurosci.* Vol.13.No.4:147-155pp (Nigeria) (Contribution : 30%)
45. ***Femi - Akinlosotu, O.M.** , Olopade, F.E. , Mustapha, O. , Adekanmbi, A. and Olopade, J. O. (2023). Morphometric analysis of the spinal cord of the *Sus scrofa* (large white and landrace crossbreed).*Anatomia, Histologia, Embryologia* Vol.52.No.2:289-299pp (Germany) (Contribution : 50%)
46. *Shokunbi, M.T. , **Femi - Akinlosotu, O.M.** , Olopade, F.E. and Winiki, C. (2023). Structural and functional deficits of the hippocampus in hydrocephalic rats: the role of age at onset and duration of disease..*Eur J Anat* Vol.27.No.1:67-79pp (Spain) (Contribution : 30%)
47. ***Femi - Akinlosotu, O.M.** , Olopade, F.E. , Obiako, J. , Olopade, J.O. and Shokunbi, M.T. (2023). Vanadium improves memory and spatial learning and protects the pyramidal cells of the hippocampus in juvenile hydrocephalic mice..*Front Neurol.* Vol.14.No.1:1116727pp (Switzerland) (Contribution : 50%)
48. *Igado, O.O. , **Femi - Akinlosotu, O.M.** and Akibu, A.O. (2023). Macroanatomical investigations of the skulls of both genders of *Heliosciurus gambianus* (Gambian sun squirrel) and *Funisciurus anerythrus* (Thomas's rope squirrel). *The Journal of Basic and Applied Zoology* Vol.84.No.22:36846142pp (Egypt) (Contribution : 40%)
49. *Foláyan, M.O. , **Femi - Akinlosotu, O.M.** , Adeoti, B. and Olorunmoteni, O.E. (2023). Untreated Early Childhood Caries and Possible Links with Brain Development..*BioMed* Vol.3.No.4:431-439pp (Switzerland) (Contribution : 30%)
50. *Ibitoye, B.O. , Ekpe, E.A. , Olaniyan, O.T. , Ibitoye, F.O. , Bashir, F.O. and **Femi - Akinlosotu, O.M.** (2023). Recent advances in the treatment and management of oligospermia in humans. *Arch. Bas. App. Med.* Vol.11.No.1:1-12pp (Nigeria) (Contribution : 25%)
51. *Bakre, A.G. , Oladipupo, F. R. , Sowunmi, A. A. , Olayemi, J. O. and **Femi - Akinlosotu, O.M.**

- (2024). Combination Antiretroviral Therapy (cART) induces CNS Neurotoxicity via Oxidative neuronal damage..*Arch. Bas. App. Med.* Vol.12.No.1:20-28pp (Nigeria) (Contribution : 25%)
52. *Okonji, A.M. , Ishola, A.G. , Ayamolowo, L.B. , **Femi - Akinlosotu, O.M.** , Mapayi, B. and Folayan, M.O. (2024). Healers that hurt: a scoping review of media reports of cases of rape in healthcare settings. *BMC Psychol* Vol.12.No.210:024-01721pp (Switzerland) (Contribution : 30%)
 53. *Olopade, F.E. , **Femi - Akinlosotu, O.M.** , Dauda, O. , Obiako, J. , Olopade, J. O. and Shokunbi, M. T. (2024). Vanadium administration ameliorates cortical structural and functional changes in juvenile hydrocephalic mice..*J Comp Neurol.* Vol.532.No.2:e25578pp (United Kingdom) (Contribution : 30%)
 54. ***Femi - Akinlosotu, O.M.** , Olopade, F.E. , Abe, B. and Shokunbi, M.T. (2024). Dose dependent ventricular enlargement, neurodegeneration and mortality rates in kaolin-induced hydrocephalus in adult mice. *Achieves of Basic and Medical Science* Vol.12.No.1:10-18pp (Nigeria) (Contribution : 60%)
 55. *Esan, O.O. , Igado, O.O. , **Femi - Akinlosotu, O.M.** , Oyagbemi, A.A. , Omobowale, T.O. , Oladele, O.A. and Nwulia, E. (2025). Alchornea laxiflora (Benth.) Pax & K. Hoffman extract protects against lead-induced neurodegeneration in cockerel chickens. *JBRO Neuroscience Reports* Vol.17.No.1:65-72pp (Canada) (Contribution : 30%)
 56. *Ajiboye E.O. , Olopade, F.E. , **Femi - Akinlosotu, O.M.** and Shokunbi M.T. (2024). Recovery of learning and memory deficits despite persistent pyknosis of the hippocampal pyramidal neurons of adult hydrocephalic mice..*J West Afr Coll Surg* Vol.14.No.4:370-379pp (Senegal) (Contribution : 30%)
 57. *Aderogba-Oti, A. , **Femi - Akinlosotu, O.M.** , Adegoke, O.O. and Omoniyi, P.O. (2024). The challenges and obstacles of ICT based home teaching and learning during the covid-19 pandemic shutdown: the perceptions of Nigerian parents. *Ibadan Journal of Child Development and Educational Foundations* Vol.5.No.1:ISSN: 2756pp (Nigeria) (Contribution : 30%)
 58. ***Femi - Akinlosotu, O.M.** , Igado, O.O. and Adeniji, K.O. (2024). Morphometrics of human skulls and mandibles obtained from Southwestern Nigeria: implications in clinical manoeuvres..*The Journal of Basic and Applied Zoology* Vol.85.No.58:00411-8pp (Egypt) (Contribution : 70%)
 59. *Adekanmbi, A. , **Femi - Akinlosotu, O.M.** and Olopade, F.E. (2024). Challenges of cadaver dissection for Anatomy teaching and learning during Covid-19 pandemic in a developing country: a review. *Western Nigeria Journal of Medical Sciences* Vol.7.No.2:144-153pp (Nigeria) (Contribution : 40%)
 60. ***Femi - Akinlosotu, O.M.** , Olopade, F.E. , Okoye, C.S. and Shokunbi. M.T. (2024). Changes in the Subcortical White Matter and the Pyramidal Neurons in the Sensorimotor Cortex of Juvenile Hydrocephalic Rats..*Niger. J. Physiol. Sci.* Vol.39.No.1:277-284pp (Nigeria) (Contribution : 60%)
 61. *Adeyemo, S.A. , Ajao, M.Y. , Ogundeyi, K.J. , **Femi - Akinlosotu, O.M.** and Bakre, A.G. (2025). Ameliorative potential of ethanol extract of Calyptrochilum emarginatum leaves on scopolamine-induced amnesia in male swiss mice..*Journal of Ethnopharmacology* Vol.336.No.1:118731pp (Ireland) (Contribution : 25%)
 62. *Onukak, C.E. , **Femi - Akinlosotu, O.M.** , Obasa, A.A. , Folarin, O.R. , Ajibade, T.O. , Igado, O.O. , Esan, O.O. , Oyagbemi, T.O. , Adeogun, A.V. , Oyagbemi, A.A. and Ola-Davies, O.E. (2025). Epigallocatechin-3-gallate mitigates diazinon neurotoxicity via suppression of pro-inflammatory genes and upregulation of antioxidant pathways..*BMC neuroscience* Vol.26.No.1:22pp (United Kingdom) (Contribution : 30%)
 63. *Oyagbemi, A.A. , **Femi - Akinlosotu, O.M.** , Obasa, A.A. , Ojo, M.S. , Salami, A.T. , Ajibade, T.O. , Onukak, C.E. , Igado, O.O. , Esan, O.O. , Oyagbemi, T.O. and Adeogun, A.V. (2025).

Apigenin mitigates oxidative stress, neuroinflammation, and cognitive impairment but enhances learning and memory in aluminium chloride-induced neurotoxicity in rats..*Alzheimers & Dementia* Vol.21.No.5:ε70223pp (United States Of America) (Contribution : 30%)

64. *Ojakovo, S.O. , Ola, O.O. , Emikpe, B.O. , Ajao, M.Y. , Olayemi, J.O. , **Femi - Akinlosotu, O.M.** , Asare, D.A. and Bakre, A.G. (2025). Protective role of cyperus esculentus linn filtrate (cef) against lead acetate-induced oxidative stress, inflammatory markers and behavioural alterations in wistar rats. .*Comparative Clinical Pathology* Vol.34.No.1:669–683pp (United Kingdom) (Contribution : 25%)
65. *Shokunbi M.T. , Olopade, F.E. , **Femi - Akinlosotu, O.M.** , Adekanmbi, A.J. and Akpoke, O.A. (2025). Kaolin-Induced Hydrocephalus in the Developing Rat Brain: Deficits of Visual Perception and Structural Changes in the Visual Cortex..*West Africa Journal of Medicine* Vol.42.No.1:11-20pp (Nigeria) (Contribution : 30%)

- f. **Books,Chapters in Books and Articles already accepted for Publication: Nil**
- g. **Technical Reports and Monographs: Nil**
- h. **Chapters in Edited Books/Revised Chapters in Edited Books: Nil**

XI. Major Conferences Attended with Papers Read (in the last 5 years):

1. Nigeria Society of Neurological Sciences (NSNS) AGM & Scientific Conference , Nigeria Society of Neurological Sciences , Lagos, Nigeria . 22nd – 24th March 2021.
2. Medical Women's International Association (MWIA) 9th Near East & Africa Regional Congress, Medical Women's International Association, Abuja, Nigeria . 24th – 27th March 2021.
3. 23rd Biennial Meeting of the International Society for Developmental Neuroscience., International Society for Developmental Neuroscience, Vancouver, Canada . 25th – 28th May 2021.

Paper Read: Vanadium improves memory and spatial learning and protects the pyramidal cells of the hippocampus in juvenile hydrocephalic mice

4. 12th European Congress of Neuropathology, European Congress of Neuropathology, Odense, Denmark . 1st – 3rd June 2021.

Paper Read: Temporal changes in the brain in neonatal hydrocephalic mice: structural and neurobehavioural findings

5. University of Ibadan ACUREC/PG School Research Ethics Workshop , ACUREC/PG School Research Ethics Committee, Ibadan, Nigeria . 28th – 29th June 2021.
6. 62nd Annual General Meeting/ Conference of Nigeria Medical Association , Nigeria Medical Association , Port-Harcourt, Nigeria . 18th – 21st May 2022.
7. 19th Annual Conference of Neuroscience Society of Nigeria , Neuroscience Society of Nigeria, Ibadan, Nigeria . 31st – 2nd August 2022.
8. Nigerian Dental Association (Oyo State Chapter) Annual General meeting & Scientific Conference , Nigerian Dental Association, Ibadan, Nigeria . 8th December 2022.
9. 20th Scientific Conference of the Neuroscience Society of Nigeria, Babcock University, Ilisan-Remo, Nigeria . 22-24 August 2023.
10. 11th IBRO World Congress of Neuroscience , International Brain Research Organization, Granada, Spain . 9-13 September 2023.

Paper Read: Recovery of learning and memory deficits despite persistent pyknosis of the hippocampal pyramidal neurons of adult hydrocephalic mice

11. Federation of European Neuroscience Forum, Federation of European Neuroscientists, Vienna, Austria . 25-29 June 2024.

Paper Read: Growth hormone assay and histological changes in the pituitary gland of post-natally induced hydrocephalic rats

12. Transmission Electron Microscope Training, University of Pretoria , Pretoria, South Africa . 8 – 19 July 2024.
13. 20th Anatomical Society of Nigeria Scientific Conference, University of Ibadan, Ibadan, Nigeria . 7 – 9 October 2024.
14. Nurturing Cognitive Science in Nigeria: Foundation for a new discipline , Center for African Newborn Health and Nutrition, University College Hospital, Ibadan, Nigeria . 5-6 November 2024.

XII. Ten Best Publications that Reflect the Totality of my Contributions to Scholarship:

1. **Femi - Akinlosotu, O.M.** , Shokunbi, T.O. and Thajasvarie, Naicker (2019). Dendritic and Synaptic Degeneration in Pyramidal Neurons of the Sensorimotor Cortex in Neonatal Mice with Kaolin-Induced Hydrocephalus. , Frontiers In Neuroanatomy Vol. 13.38. pp 1-10 (Switzerland) (Contribution : 70%)
2. **Femi - Akinlosotu, O.M.** and Shokunbi, T.O. (2020). Changes in neuronal density of the sensorimotor cortex and neurodevelopmental behaviour in neonatal mice with kaolin-induced hydrocephalus, Pediatric Neurosurgery Vol. 55.5. pp 244-253 (Switzerland) (Contribution : 80%)
3. **Femi - Akinlosotu, O.M.** , Shokunbi, T.O. , Olopade, F.E. and Igbong, P. (2021). Deficits of Learning and Spatial Memory are Associated with Increased Pyknosis of Pyramidal Neurons of the Hippocampus of Adult Rats with Chronic Hydrocephalus, West african Journal Med Vol. 38.11. pp 1042-1049 (Nigeria) (Contribution : 60%)
4. **Femi - Akinlosotu, O.M.** , Olopade, F.E. , Obiako, J. , Olopade, J.O. and Shokunbi, M.T. (2023). Vanadium improves memory and spatial learning and protects the pyramidal cells of the hippocampus in juvenile hydrocephalic mice., Front Neurol. Vol. 14.1. pp 1116727 () (Contribution : 50%)
5. Shokunbi, M.T. , **Femi - Akinlosotu, O.M.** , Olopade, F.E. and Winiki, C. (2023). Structural and functional deficits of the hippocampus in hydrocephalic rats: the role of age at onset and duration of disease., Eur J anat Vol. 27.1. pp 67-79 () (Contribution : 30%)
6. **Femi - Akinlosotu, O.M.** , Olopade, F.E. , Abe, B. and Shokunbi, M.T. (2024). Dose dependent ventricular enlargement, neurodegeneration and mortality rates in kaolin-induced hydrocephalus in adult mice. , Achieves of Basic and Medical Science Vol. 12.1. pp 10-18 (Nigeria) (Contribution : 60%)
7. **Femi - Akinlosotu, O.M.** , Olopade, F.E. , Okoye, C.S. and Shokunbi, M.T. (2024). Changes in the Subcortical White Matter and the Pyramidal Neurons in the Sensorimotor Cortex of Juvenile Hydrocephalic Rats, Niger. J. Physiol. Sci. Vol. 39.1. pp 277–284 () (Contribution : 60%)
8. Shokunbi M.T. , Olopade, F.E. , **Femi - Akinlosotu, O.M.** , Adekanmbi, A.J. and Akpoke, O.A. (2025). Kaolin-Induced Hydrocephalus in the Developing Rat Brain: Deficits of Visual Perception and Structural Changes in the Visual Cortex., West africa Journal of Medicine Vol. 42.1. pp 11-20 () (Contribution : 30%)
9. Onukak, C.E. , **Femi - Akinlosotu, O.M.** , Obasa, A.A. , Folarin, O.R. , Ajibade, T.O. , Igado, O.O. , Esan, O.O. , Oyagbemi, T.O. , Adeogun, A.V. , Oyagbemi, A.A. and Ola-Davies, O.E. (2025). Epigallocatechin-3-gallate mitigates diazinon neurotoxicity via suppression of pro-inflammatory genes and upregulation of antioxidant pathways., BMC Neuroscience Vol. 26.1. pp 22 (United Kingdom) (Contribution : 30%)
10. Oyagbemi, A.A. , **Femi - Akinlosotu, O.M.** , Obasa, A.A. , Ojo, M.S. , Salami, A.T. , Ajibade, T.O. , Onukak, C.E. , Igado, O.O. , Esan, O.O. , Oyagbemi, T.O. and Adeogun, A.V. (2025). Apigenin mitigates oxidative stress, neuroinflammation, and cognitive impairment but enhances learning and memory in aluminium chloride-induced neurotoxicity in rats., Alzheimers & Dementia Vol. 21.5. pp e70223 (United States Of America) (Contribution : 30%)

Research Focus :

My research interest in Anatomy has a special focus on Neurobiology, with an emphasis on neuronal networks in pathological states. My full interest in neurobiology started with my PhD, where I investigated the changes in the cytoarchitecture and pyramidal neurons of the brains of neonatal hydrocephalic mice, making significant contributions to the effects of later on the pyramidal neurons of the sensorimotor cortical area of this model. The behavioural and morphological alterations associated with the disease state, as well as the temporal changes associated with kaolin-induced hydrocephalus, were highlighted using basic and specialized histological techniques. The results have been disseminated through workshops, seminars, conferences, and peer-reviewed publications in both local and international fora.

I have progressed with studies on hydrocephalic states in rodents, focusing on the neuronal networks in the sensorimotor and visual cortices, hippocampus, and cerebellum. In my research on hydrocephalus, I have investigated the effects of the former on the dendritic arborizations of neurons of the sensorimotor and visual cortices, hippocampus, as well as the cerebellum, and correlated my findings with behavioural patterns such as locomotor activities, learning, and memory using relevant neurobehavioural techniques. Hydrocephalus, being a common neurological disease among children, still does not have a satisfactory cure. In line with this, I have been studying the possible ameliorative effect of vanadium (a ubiquitous trace element found in foods and beverages) on learning and memory disabilities, as well as cortical structural and functional changes associated with hydrocephalus. Along with my co-researchers, we have also assessed the population and cytoarchitecture of neurons in the visual regions of neonatal and juvenile rats and related our findings to the visual perception of the experimental models. Furthermore, I have also been able to explore the use of caffeine in ameliorating the effect of hydrocephalus on brain cells and function.

In the last few years, I have increased my collaborations with other researchers by publishing articles on experimental models of stroke by examining astrocytes' (modulator of neuronal synapses) response to the injury and detrimental effects on behaviour. I have also expanded my knowledge on the mortality rate and degree of ventricular enlargement using different concentrations of kaolin suspension in hydrocephalic rodents, as well as explored the neurotoxicity of lead, aluminium chloride, and diazinon on different regions of the brain using rodents. In addition, I have explored pockets of research on anatomy teaching and the use of cadavers, morphometrics of the human skull, and reviewed the possible relationship between untreated early childhood dental caries and brain development, thereby expanding my interest in dental and forensic anatomy.

I have also published review articles on the neurotoxic effects of fluoride, the role of extracellular regulated signalling proteins in neurodevelopment, and the use of plant extracts in neurological conditions, as well as studied the effect of stroke on the neuronal population in different parts of rodents' brains. My research focus has contributed to the generation of data geared towards the possible management of hydrocephalus, as well as insight into the basic anatomy of neuronal network diseased states.

Names

Signature

Date