

CURRICULUM VITAE

A. GENERATION INFORMATION

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|--|---|
| 1. Name: | OBEMBE , Olawale Olaleye |
| 2. Date and Place of Birth: | 24 th May, 1981; Ife |
| 3. Gender: | Male |
| 4. Nationality: | Nigerian |
| 5. State of origin: | Osun State |
| 6. Local Government Area: | Ilesa East |
| 7. Marital status: | Married |
| 8. Name/Ages of Children: | Temidayo, 16years; Abiola, 14years; Mary, 11years |
| 9. Name/Relationship of Next of Kin: | Obembe Temidayo, Son, 08062177556 |
| 10. Permanent contact address: | Block 6, Road 4A, Temidire Estate, Jakan, Ibadan |
| 11. E-mail address: | olawale.obembe@uniosun.edu.ng |
| 12. Registration with Research Gates: | Yes |
| 13. Research Gate Link: | researchgate.net/profile/Olawale-Obembe/publications |
| 14. If No, Why: | Not applicable |
| 15. Registration with Google Scholar: | Yes |
| 16. Link: | https://scholar.google.com/citations?hl=en&authuser=0&user=egfK2I8AAAAJ |
| 17. If No, Why: | Not applicable |
| 18. Cell Phone number: | 08033516858 |
| 19. College/ Faculty | Health Sciences/ Basic Medical Sciences |
| 20. Department: | Physiology |
| 21. Position on 1 st appointment: | Assistant Lecturer |
| 22. Present position/Salary: | Associate Professor (CONUASS 06/04) |
| 23. Date of Present Position: | 1 st October, 2023 |
| 24. Is your appointment confirmed: | Yes |
| 25. If No, Why Not: | Not applicable |
| 26. Date of Confirmation of Appointment: | 25 th February 2015 |

B: EDUCATIONAL BACKGROUND**1. Educational institutions attended with dates:**

University of Ibadan	December 2009 - July 2014
University of Ibadan	September 2005 - February 2007
University of Ilorin, kwara State	January 2000 - November 2003
Ilesa Grammar School, Ilesa, Osun State	October 1992 - May 1998

2. Academic and Professional Qualification with Dates/ Issuing Authority:

Ph.D (Physiology)	(University of Ibadan. July, 2014)
M.Sc (Physiology)	(University of Ibadan. April, 2007)
B.Sc (Physiology) Second Class Honors, Upper Division	(University of Ilorin. Dec 2003)

3. Other Relevant Qualification: None**4. Honours, Awards and Distinctions**

Eme E. Osim prize for the most Outstanding Research Output at the 33 rd Scientific conference of the Physiological Society of Nigeria (PSN)	(2014)
IUPS Travel Grant Award	(2013)
UNIOUSUN ETF/TETFUND Ph.D Research Grant	(2011)
Faculty Outstanding Graduating Student	(2003)
Best Departmental Graduating Student	(2003)
Federal Government Scholarship Award	(2002)
Club 56/60 Scholarship Award for Outstanding Student	(1995- 1998)

5. Research Fellowships with date None**C: WORK EXPERIENCE OUTSIDE THE UNIVERSITY SYSTEM:** None**D: WORK EXPERIENCE IN OTHER UNIVERSITIES:**

Department of Physiology, College of Health Sciences, University of Maiduguri (NYSC).	2004 - 2005
DUTY: Lecture and conduct practicals	

E: WORK EXPERIENCE IN OSUN STATE UNIVERSITY

Associate Professor	2023 - Date
Senior Lecturer	2019 - 2023
Lecturer I, Department of Physiology	2016 - 2019
Lecturer II, Department of Physiology	2013 - 2016
Assistant Lecturer, Department of Physiology	2009 - 2013

F: CO-CURRICULAR PROFESSIONAL EXPERIENCE:

Associate Editor - Western Nigeria Journal of Medical Sciences, Osun State Teaching Hospital.

Reviewer for several Journals including – Elsevier Journals, Springer Nature Journals, Middle East Fertility Society Journal, Journal of Developmental Origin of Health and Diseases, Brazilian Journal of Pharmaceutical Sciences, Nigerian Journal of Physiological Sciences amongst others.

External Examiner for several Universities.

G: MEMBERSHIP OF PROFESSIONAL BODIES:

British Physiological Society – Membership Number 140814

The Physiological Society of Nigeria (PSn)

Developmental Origins of Health and Disease (DOHaD)

H: SERVICE:

- (i) University
 - a. Department:
 - Acting Head of Department: 2024 – 2026
 - MBBS Programme Coordinator: 2020 – 2022
 - Acting Head of Department: 2017 – 2020
 - Review of Students' Handbook
 - Development of Student Practical Laboratory Manual
 - Curriculum development and review coordinator
 - Timetable coordinator
 - b. Faculty:
 - Member, Faculty Academic Board
 - Member, Faculty Research Committee

- c. College:
 - Chairman, CHS Capacity Building Workshop Committee
 - Member, Health Research and Ethics Committee
 - Chairman, College Library Committee
 - Member, Health Sciences Grant Seeking Committee
 - Member, College Journal Verification Committee
 - Member, College Staff Development Committee
- d. University:
 - Member, Committee for review of tuition and ancillary fees
 - Member, University Ceremonials Committee (2019-2022)
 - Member, University Wide Consultancy Outfit Committee
 - Member, Editorial Board, Western Nigerian Journal of Medical Sciences
- (ii) Community
 - a. Contribution to renovation of dilapidated building at Ogidan Secondary School, UNIOSUN road, Osogbo
 - b. Provision of 24 hours portable Borehole water to two communities
- (iii) National - Selfless service to the Federal Road Safety Corps (NYSC)
- (iv) International - None

I: COURSES TAUGHT DURING THE CURRENT ACADEMIC SESSION:

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|---|---|-----------|
| 1 | Neuro Physiology I | (PHS 302) |
| 2 | Neuro Physiology II | (PHS 401) |
| 3 | Selected Topics in Physiology | (PHS 402) |
| 4 | Comprehensive Physiology | (PHS 404) |
| 5 | Literature Review and Seminar | (PHS 405) |
| 6 | Final Year Research Project (18 students) | (PHS 406) |
| 7 | CardioPulmonary Physiology | (PHS 407) |

8	Respiratory Physiology	(PHS 701)
9	General Physiology	(PHS 705)
10	Instrumentation/ Research Methodology	(PHS 708)
11	Neuro Physiology	(PHS 710)
12	Graduate Seminar	(PHS 712)

J: GRADUATE STUDIES SUPERVISION:

1. M.Sc. Physiology Osun State University
 - (i) Name of Candidate: George Taiwo Emmanuel
 - (ii) Thesis Title: Motor functions and cognition parameters post-withdrawal of 3,4-methylenedioxymethamphetamine (MDMA) treatment in male Sprague-Dawley rats.
 - (iii) Completed/Ongoing: Completed
 - (iv) Year of Completion: 2025

2. M.Sc. Physiology Osun State University
 - (i) Name of Candidate: Mustapha Rukayat Abisola
 - (ii) Thesis Title: Effects of acyclovir on neurobehavioral and biochemical markers of male Wistar rats.
 - (iii) Completed/Ongoing: Completed
 - (iv) Year of Completion: 2024

3. M.Sc. Physiology University of Ibadan (co-supervision)
 - (i) Name of Candidate: Alabi, Opeyemi Gladys
 - (ii) Thesis Title: Comparative evaluation of oxytocin, prostaglandin and acetylcholine mimetic activity of *Senna alata* on isolated Wistar rat uterus.
 - (iii) Completed/Ongoing: Completed
 - (iv) Year of Completion: 2022

4. M.Sc. Physiology University of Ibadan (co-supervision)
 - (i) Name of Candidate: Owonikoko, Stephen Temitayo
 - (ii) Thesis Title: Developmental programming of reproductive functions in male

offspring of sleep deprived Wistar rat dams treated with vitamin E.

- (iii) Completed/Ongoing: Completed
 - (iv) Year of Completion: 2020
5. Ph.D Physiology University of Ibadan (co-supervision)
- (i) Name of Candidate: Busari, Afsat Motunrayo
 - (ii) Thesis Title: Uterotonic effect of ethanolic leaf extract of *Annona muricata* in female Wistar rats.
 - (iii) Completed/Ongoing: Ongoing
 - (iv) Year of Completion: 2028
6. Ph.D Physiology
- (i) Name of Candidate: Adetoro Kehinde Emmanuela
 - (ii) Thesis Title: Isolation and characterization of bioactive compounds of *Buchholzia coriacea* seeds – a potential male contraceptive agent
 - (iii) Completed/Ongoing: Ongoing
 - (iv) Year of Completion: 2028
7. Ph.D Physiology Osun State University
- (i) Name of Candidate: Mustapha Rukayat Abisola
 - (ii) Thesis Title: Developmental neurotoxicity of food additive mixtures: Roles of oxidative stress, neuroinflammation and synaptic dysfunction in Wistar rat offspring.
 - (iii) Completed/Ongoing: Ongoing
 - (iv) Year of Completion: 2028
8. Ph.D Physiology Osun State University
- (i) Name of Candidate: George Taiwo Emmanuel
 - (ii) Thesis Title: Motor functions and cognition parameters post-withdrawal of 3,4-methylenedioxymethamphetamine (MDMA) treatment in male Sprague-Dawley rats.
 - (iii) Completed/Ongoing: Ongoing
 - (iv) Year of Completion: 2028

K: PUBLICATIONS

- i. Books (authored/co-authored) - None
- ii. Books (edited/co-edited) - None
- iii. Monographs - None
- iv. **Chapters in books**

- 1. Bayo-Olugbami, A.A., Arogundade, T.T., George, E.T., Asuku, A.O., **Obembe, O.O.**, Adeniyi, P.A., & Owoyele, B.V. (2026). Chapter 11: 6-Gingerol for Managing and Treating Dementia. In: Abrahan OA, Ajibare AA, Olaniyan OT editors. Bioresources for Managing and Treating Dementia. 1st ed. London: Taylor & Francis Group; pp 103-110
doi.org/[10.1201/9781003657385-11](https://doi.org/10.1201/9781003657385-11)

Taylor & Francis, United Kingdom. Offshore

- v. **Articles in learned journals**

- 2. **Obembe, O.O.**, George, E.T., Mustapha, R.A., & Akhigbe, R.E. (2026). Effects of MDMA treatment and cessation on sexual behaviour and testicular functions in male sprague-dawley rats. BMC Pharmacology Toxicology 27(1): 1-10. doi.org/10.1186/s40360-026-01131-1.
- 3. **Obembe, O.O.**, Oyeniyi, G.A., Ashonibare, P.J., Akhigbe, T.M., Ashamu, E.A., & Akhigbe, R.E. (2026). L-arginine mitigates endocrine and spermatogenesis disruptions in cisplatin-exposed male Wistar rats by modulating iNOS/NO/NF-kB and Nrf2/HO-1 signaling. Steroids, 226, 109738. <https://doi.org/10.1016/j.steroids.2025.109738>

Elsevier, Netherlands. Offshore

- 4. **Obembe, O.O.**, Oladipo, A.A., Ajao, O., Akhigbe, T.M., Saka, W.A., & Akhigbe, R.E. (2026). L-arginine attenuates cisplatin-induced sexual dysfunction in male Wistar rats by modulating circulating testosterone and NO/CGMP signaling. JBRA Assisted Reproduction 30(1):89-98. doi:10.5935/1518-0557.20250166. PMID: 41248201; PMCID: PMC13055187.

An official publication by both the Brazilian Society of Assisted Reproduction and Brazilian Association of Embryologist, Brazil. Offshore.

5. Abayomi, T.A., Olaniyan, O., Tokunbo, O., Adediran, C., Ogunleye, P., Ogundipe, T., **Obembe, O.O.**, Benson, I., Osuntokun, O., Ilesanmi, D., Fatoki, J., & Ajao, M. (2025). Cucurbitacin E modulates cognitive impairment associated with insulin resistance-induced diabetes via its anti-inflammatory properties and activation of the PI3K/AKT signaling pathway. *Nigerian Journal of Neuroscience* 16(3):81-89. doi: 10.47081/njn2025.16.3/002
An official publication of the Neuroscience Society of Nigeria. Onshore
6. **Obembe, O.O.**, Mustapha, R.A., George, E.T., Bayo-Olugbami, A.A., Tokunbo, O.S., & Akhigbe, R.E. (2025). Neurotoxic effects of acyclovir: Impacts on oxidative stress, inflammation, and neurotransmitter dynamics in male Wistar rats. *Metabolic Brain Disease* 40 (255): 1-14. <https://doi.org/10.1007/s11011-025-01694-8>.
Springer, United Kingdom. Offshore
7. **Obembe, O.O.**, Mustapha, R.A., George, E.T., Dare, B.J., Atere, T.G., & Akhigbe, R.E. (2025). Acyclovir induces testicular damage and impairs HPT axis by upregulating oxidative enzymes and inflammatory cytokines in male Wistar rats. *JBRA Assisted Reproduction* 29(3): 481-487 Doi: 10.5935/1518-0557.202500
An official publication by both the Brazilian Society of Assisted Reproduction and Brazilian Association of Embryologist, Brazil. Offshore.
8. Dare, B.J., Kolawole, B.O., Dare, P.A., Adeleke, O.S., Ebele, C. & **Obembe, O.O.** (2025). Testicular Histological changes and Ki-67 expression in lead (II) oxide toxicity among neonatal Wistar rats and modulatory role of retinol. *Archives of Razi Institute* 80 (2): 461-471. Doi:10.32592/ARI.2025.80.2.361
Official Journal of Razi Vaccine and Serum Research Institute, Iran. Offshore
9. Ogundipe, J.O., Ojetola, A.A., Oyeyipo, I.P., Ladele, M.O., Arokoye, D.S., **Obembe, O.O.**, Akinpelu, O.S., Osirim, E., Afolabi, D., Fasakin, A.O., & Ayandokun, A.A. (2024). Effects of amitriptyline on lipid profile, antioxidants and hormones of first filial generation of Wistar rats. *Sebha University Journal of Medical Sciences* 19 (1): 27-32. Doi: [org/10.51984/joms.v19i1.2869](https://doi.org/10.51984/joms.v19i1.2869)
Official Journal of Sebha University, Libya. Offshore.

10. Dare, B.J., Babawale, D.O., Alabi, A.P., Adebiyi, A., **Obembe, O.O.**, Ebele, C., & Fatoki, J.O. (2024). Cadmium implication in massive hepatocellular necrosis and hepatic amyloidosis and the protective role of ivermectin and *Allium cepa* in adult Wistar rats (*Rattus Novergicus*). European Journal of Anatomy 28(5): 591 – 600. Doi.org/10.52083/ZZNX4761
Official Journal of the Spanish Society of Anatomy, Spain. Offshore.

11. Besong, E.E., Akhigbe, T.M., Obimma, J.N., **Obembe, O.O.**, & Akhigbe, R.E. (2023). Acetate abates arsenic-induced male reproductive toxicity by suppressing HDAC and Uric acid driven oxido-inflammatory NFKb/iNOS/NO response in rats. Biological Trace Element Research 202(6): 2672-2687. <https://doi.org/10.1007/s12011-023-03860-4>
Springer, United Kingdom. Offshore.

12. Adeyemi, D.H., **Obembe, O.O.**, Hamed, M.A., & Akhigbe, R.E. (2023). Sodium acetate ameliorates doxorubicin-induced cardiac injury via upregulation of Nrf2/HO-1 signaling and downregulation of NFkB-mediated apoptotic signaling in Wistar rats. Naunyn-Schmiedeberg's Archives of Pharmacology 397(1): 423-435. <https://doi.org/10.1007/s00210-023-02620-4>
Springer, United Kingdom. Offshore.

13. Tokunbo, O., Abayomi, T., Blessing, S., Abayomi, O., & **Obembe, O.O.** (2023). Methanolic fraction of *Buchholzia coriacea* seed extract up-regulates hippocampal BDNF expression and ameliorate cognitive deficits in manganese-induced parkinson-like neuropathology. Western Nigeria Journal of Medical Sciences 6(1): 74-85. <https://wnjms.com.ng/journal/index.php/wnjms/article/view/110>
Journal of Osun State University Teaching Hospital, Nigeria. Onshore

14. Besong, E.E., Ashonibare, P.J., **Obembe, O.O.**, Folawiyo, M.A., Adeyemi, D.H., Hamed, M.A., Akhigbe, T.M., & Akhigbe, R.E. (2023). Zinc protects against lead-induced testicular damage via modulation of steroidogenic and xanthine oxidase/uric acid/caspase 3-mediated apoptotic signalling in male Wistar rats. The Aging Male 26(1): 2224428 <https://doi.org/10.1080/13685538.2023.2224428>
Taylor and Francis, United Kingdom. Offshore

15. Tokunbo, O.S., Arogundade, T.T., Abayomi, T.A., Lewu, S.F., Abayomi, O.A., **Obembe, O.O.**, Bayo-Olugbami, A.A., Ilesanmi, D.O., Keji, S.T., & Enaibe, B.U. (2023). African walnut (*Tetracarpidium cocophorum*) extract upregulates glucocerebrosidase activity and circumvents Parkinsonian changes in the Hippocampus via the activation of heatshock proteins. *Journal of Chemical Neuroanatomy* 130: <https://doi.org/10.1016/j.jchemneu.2023.102271>
Elsevier, Netherlands. Offshore

16. **Obembe, O.O.**, Ojetola, A.A., Atere, T.G., Abayomi, T.A., Dare, B.J., Adeyemi, D.H., & Oyeyipo, I.P. (2023). *Buchholzia coriacea* seed induce antifertility by interfering with steroidogenic enzymes and inflammatory cytokines in rat testis. *Journal of Reproductive immunology* 157: 103923. <https://doi.org/10.1016/j.jri.2023.103923>
Elsevier, Netherlands. Offshore

17. **Obembe, O.O.** Abayomi, T.A., Tokunbo, O.S., Dare, B.J., & Usman, T.O. (2023). Sex hormones, antioxidants and lipid profile of aqueous *Cucumis sativus* L. (cucumber) treated male rats. *International Journal of Medicine and Health Development* 28: 114-118.
Doi: 10.4103/ijmh.IJMH_45_22
A publication of College of Medicine, University of Nigeria, Nsukka, Nigeria. Onshore.

18. Dare, B.J., Folorunsho, A.F., Adekilekun, T.A., Dare, P.A., Fatoki, J.O., Adeleke, O.S., & **Obembe, O.O.** (2022). Testicular Histoarchitecture in adrenalectomized rat model treated with dexamethasone. *Journal of Morphological Sciences* 39: 379-388.
Doi: 10.51929/jms.39.379.2022
A publication of Brazilian Society of Anatomy, Brazil. Offshore.

19. Dare, B.J., **Obembe, O.O.**, Giwa, K.A., Soliudeen, A.A., Fatoki, J.O., Dare, P.A., & Oyekanmi, B.A. (2022) Finger pattern size and palmar traits distribution in blood cell typing. *Tropical Journal of Medical Research* 21(1): 67-74. Doi: 10.5281/zenodo.6821418
A publication of College of Health Sciences, Nnamdi Azikwe University, Nigeria. Onshore

20. Dare, B.J., **Obembe, O.O.**, Azeez, D.J., Badmus, I.A., Dare, P.A., Fatoki, J.O., & Adeleke, S.O. (2022). Ivermectin and *Allium cepa* protect against cadmium-induced ovarian and uterine damage in adult Wistar rats. *Pan African Journal of Life Sciences* 6(2): 437-446. Doi: 10.36108/pajols/2202/60.0210
A publication of Faculty of Basic Medical Sciences, LAUTECH. Nigeria. Onshore
21. Atere, T.G., Oladokun, O.O., Osuntokun, O.S., Adedokun, K.I., Fatoki, J.O., Olawumi, S.A., Tokunbo, O.S., **Obembe, O.O.**, & Afolabi, O.S. (2022). Modulatory effects of phenolics extract of *Costus afar* leaves on cadmium induced nephrotoxicity and hepatotoxicity in Wistar rats. *Toxicology and Environmental Health Sciences* 14(2):157-172. Doi.org/10.1007/s13530-022-00125-w
Springer, United Kingdom. Offshore
22. Ola, D., Adeyemi, D.H., **Obembe, O.O.**, Ogooluwa, A.A., Ladele, M.O., Owonikoko, S.T., Olowu, R., & Oyeyipo, I.P. (2021). Nicotine exacerbates reproductive biomarkers via generation of free radicals in female Wistar rats: Protective role of Quercetin. *Research Journal of Health Sciences* 9(4): 378-388. Doi.org/10.4314/rejhs.v9i4.6
A publication of CHS, Osun State University, Nigeria. Onshore
23. **Obembe, O.O.**, Usman, T.O. & Raji, Y. (2021). Hepatoprotective effects of *Quassia amara* stem bark against cadmium-induced toxicity in male Wistar rats. *Journal of Basic Clinical Physiology and Pharmacology* 32(6): 1131-1136. Doi.org/10.1515/jbcpp-2020-0128
A publication of Walter de Gruyter GmbH, Berlin/Boston, Germany. Offshore.
24. **Obembe, O.O.** (2021). *Buchholzia coriacea* seeds (wonderful kola) induce male reproductive toxicity by suppressing the pituitary-gonadal axis in Wistar rats. *Brazilian Journal of Pharmaceutical Sciences* 56: e19016 1-10. dx.doi.org/10.1590/s2175-97902020000419016
A publication of School of Pharmaceutical Sciences, University of Sao Paulo, Brazil. Offshore.
25. **Obembe, O.O.**, Olatoke, T.F., & Atere, T.G. (2019). Reproductive indices and oxidative stress biomarkers of male Wistar rats prenatally exposed to cigarette smoke. *Nigerian Journal of Physiological Sciences* 34 (1): 91-98.

<https://www.ojshostng.com/index.php/njphysiologicalsciences/article/view/1931>

An official publication of Physiological Society of Nigeria. Onshore.

26. **Obembe, O.O.** (2019). Sex hormones and oxidative stress biomarkers of male Wistar rats treated with *Moringa oleifera* seed fractions. JBRA Assisted Reproduction 23 (4): 408-413.

Doi: 10.5935/1518-0557.20190047

An official publication by both the Brazilian Society of Assisted Reproduction and Brazilian Association of Embryologist, Brazil. Offshore.

27. Abayomi, T.A., Tokunbo, O.S., David, O., **Obembe, O.O.**, & Dare, B.J. (2019). Neuroprotective effects of *Buchholzia coriacea* seed extract on Sodium azide-induced induced neurotoxicity of the prefrontal cortex of Wistar rats. Anatomy Journal of Africa 8 (2) 1635-1646. Doi.org/10.4314/aja.v8i2.189707

Official Journal of the Anatomical Society of Africa, Nairobi. Offshore.

28. **Obembe, O.O.** & Olatoke, T. (2019). Reproductive and biochemical parameters of tramadol and vitamin E acutely treated male Wistar rats. African Journal of Medicine and Medical Sciences 48 (1): 243-249. Doi: 10.6084/m9.figshare.10304327

A publication of University College Hospital, Ibadan, Nigeria. Onshore.

29. **Obembe, O.O.** & Raji, Y. (2018). Effects of aqueous extract of *Moringa oleifera* seed on cadmium-induced reproductive toxicity in male Wistar rats. African Health Sciences 18(3): 653-663. Doi.org/10.4314/ahs.v18i3.23

A publication of Faculty of Medicine, Makerere University, Uganda. Offshore.

30. **Obembe, O.O.** & Raji, Y. (2017). Morphometric variables of offspring of *Quassia amara* treated male rats. Research Journal of Health Sciences. 5 (2): 74-81. Doi.org/10.4314/rejhs.v5i2.3

A publication of CHS, Osun State University, Nigeria. Onshore.

31. **Obembe, O.O.** & Ige, A.O. (2016). Sperm parameters of male Wistar rats treated with *Anacardium occidentale* L. leaf extract. Research Journal of Health Sciences. 4 (1): 83-89.

<https://www.ajol.info/index.php/rejhs/article/view/143254>

A publication of CHS, Osun State University, Nigeria. Onshore.

32. Onasanwo, S.A., **Obembe, O.O.**, Faborode, S.O., Adisa, R.A., & Elufioye, T. (2013). Neuro-pharmacological potentials of *Buchholzia Coriacea* (Engl.) seeds in laboratory rodents. African Journal of Medicine and Medical Sciences. 42: 131-142.

<https://www.ojshostng.com/index.php/ajmms/ro/article/view/959>

A publication of University College Hospital, Ibadan. Onshore.

33. **Obembe, O.O.**, Onasanwo, S.A., & Raji, Y. (2012). Preliminary study on the effects of *Buchholzia coriacea* seed extract on male reproductive parameters in rats. Nigerian Journal of Physiological Sciences. 27: 165-169. <https://pubmed.ncbi.nlm.nih.gov/23652231/>

An official publication of Physiological Society of Nigeria. Onshore.

vi. **Review Articles**

34. Falana, B.A., **Obembe, O.O.**, Adeleke, O.S, Adefolaju, G.A., & Tokunbo, O.S. (2023) Impact of Coronavirus disease (Covid19) on reproductive health. International Journal of Medicine and Health Development 28: 93:98. Doi: 10.4103/ijmh.IJMH_53_22

A publication of College of Medicine, University of Nigeria, Nsukka. Onshore.

vii	Refereed conference proceedings	-	none
viii	un-refereed conference proceedings	-	none
ix	Book reviews	-	none
x	Technical reports	-	none
xi	Patents and inventions	-	none
xii	Online journal article	-	none

L: CURRENT RESEARCH ACTIVITIES:

i. Funded research

- a. Molecular mechanism(s) of reproductive toxicity of pure compounds isolated from *Buchholzia coriacea* seeds on male Wistar rats.

ii. Self-sponsored research

- b. Ameliorative effects of *Buchholzia coriacea* seed fractions on fructose-induced metabolic derangement liver, kidney and pancreas of Wistar rats.

- c. Ameliorative effects of Vitamin E on Tramadol-induced androgen toxicity.
- d. Nociceptive and Inflammatory response of diabetic rats treated orally with Magnesium.

M: CONFERENCES ATTENDED

- 1 40th Annual Scientific conference of the Physiological Society of Nigeria (2023). **Venue:** Faculty of Basic Medical Sciences, University of Ibadan. **Paper:** Oxidative stress status of F1 generation female rats maternally exposed to nicotine before and during gestation.
- 2 College of Health Sciences Osun State University Scientific conference (2022). **Paper:** Yellow Mombin (*Spondias mombin* L.) prevents D-galactose induced cognitive deficits, oxidative stress and neuro-degeneration in Wistar rats brain.
- 3 Future Physiology (2021) by The Physiological Society. **Paper:** Reproductive markers of male Wistar rats treated with tramadol- role of vitamin E.
- 4 Future Physiology (2020) by The Physiological Society. **Paper:** Hepatoprotective effects of *Quassia amara* stem bark against cadmium-induced toxicity in male Wistar rats.
- 5 38TH World Congress of the International Union of Physiological Sciences (2017). **Venue:** Riocentro Convention Centre, Rio de Janeiro, Brazil. **Paper:** Aqueous extract of *Moringa oleifera* seeds induced reproductive damage that is comparable with cadmium in male Wistar rats.
- 6 10th World Congress on Development Origins of Health and Diseases (2017). **Venue:** De Doelen Congress Centre, Schouwburgplein, Rotterdam, Netherland. **Paper:** Reproductive parameters and oxidative stress biomarkers of male Wistar rats prenatally exposed to cigarette smoke.
- 7 2014/2015 session College of Health Sciences Research Fair, Osun state University, Osogbo (2015). **Venue:** Osun State University Auditorium, Main Campus. **Paper:** Role of natural products of plant origin on the physiology of sperm – current update.
- 8 International Conference on Developmental origins of Adiposity and Long-Term Health- The Power of Programming (2014). **Venue:** The University Hospital, Munich-Großhadern,

Munich, Germany. **Paper:** Morphometric variables of offspring of *Quassia amara* treated albino male rats.

- 9 XXXIIIrd annual scientific conference of the Physiological Society of Nigeria (2014). PHYSIOLOGY- The Laboratory, The Hospital and The Society. **Venue:** The International Conference Centre, U.I., Ibadan. **Paper:** Effect of Quassin on epididymal *Hongres1* protein expression.
- 10 37TH Congress of the International Union of Physiological Sciences (2013). **Venue:** The International Convention Centre, Birmingham, United Kingdom. **Paper:** *In vivo* and *In vitro* Reproductive Toxicity of *Quassia amara* Extract and Quassin.
- 11 International Union of The Physiological Society (IUPS) and ADInstruments Physiological Teaching Workshop (2013). **Venue:** University of Bristol, United Kingdom.
- 12 3rd Unibadan Conference of Biomedical Research, (2012). Biotechnology for health and Sustainable Development. **Venue:** Conference Centre, University of Ibadan, Nigeria. **Paper:** Male reproductive parameters of Wistar rats treated with *Buchholzia coriacea* seed extract.
- 13 XXXTH Physiological Society of Nigeria Annual Scientific Conference, Lagos (2010). Global climate change and body functions. **Venue:** Medical research centre, LASUTH COMPLEX, Ikeja, Lagos.

N: EXTRA-CURRICULAR ACTIVITIES: Soccer and Tourism

O: OTHER RELEVANT INFORMATION: None

P: SUMMARY OF CONTRIBUTION TO KNOWLEDGE

My educational background and professional academic experiences as reflected in my qualifications and research have culminated in a total of thirty-four (34) publications in the last seventeen (17) years and have broadened my intellectual understanding of human functions in two major areas. First is how some drugs and beneficial medicinal plants, many with antimalaria and

antibiotic properties, induce male reproductive toxicity. Second is the mechanism by which some of these compounds impact the neuroendocrine system.

My contribution to knowledge in the field of reproductive physiology is evident in my Ph.D thesis and twenty-two of my published articles, which dealt with reproductive toxicity potentials of some medicinal plants and how this system specific toxicity can be taken advantage of to develop a novel male contraceptive agent.

One of such medicinal plants is *Buchholzia coriacea* seeds. Four of my articles (numbers 16, 24, 27 and 33) extensively reported the mechanisms of action by which this seed induces reproductive toxicity, and the toxicity was imminently specific to the male reproductive system. *Buchholzia coriacea* induced damage on male reproductive physiology by inducing testicular oxidative damage and suppressing the pituitary-gonadal axis. Fractions responsible were isolated and documented, and the testis as the most probable site of reproductive toxicity action was further affirmed by results which indicted interference with steroidogenic enzymes and inflammatory cytokines. Investigation on the impact of this seed on the nervous system showed that it had neuroprotective effects (articles 13, 27 and 32). Other medicinal plants with toxicity proven to be specific and limited to the male reproductive physiology include *Moringa oleifera* seeds (16 and 29), *Quassia amara* stem bark (30) and *Anacardium occidentale* leaves (31).

Some pharmacological agents have been proven to have beneficial effects on the male reproductive physiology. Some of these agents include L-arginine (3 and 4), acetate (11 and 12) and zinc (14). Also, *Allium cepa* was shown to have protective effects on male reproductive system (20). Pharmacological agents which negatively impaired male reproductive physiology include MDMA (2), acyclovir (7), lead (8), amitriptyline (9), nicotine (22), cigarette smoke (25) and tramadol (28). Gingerol (1), cucurbitacin (5) and African walnut (15) were all documented to have neuroprotective effects.

Olawale Olaleye **OBEMBE**, *Ph.D.*

30/06/2026

Name

Signature

Date