CURRICULUM VITAE (C.V)

A. Personal Data

1. Full Name (Surname first): EMOJEVWE, Victor Oghenekparobo
2. Date of Birth: 15th May, 1979.
3. Details of Contact Address: Department of Physiology, Faculty of Basic Medical Sciences, University of Medical Sciences, Ondo City, Ondo State.
   a) E-mail Address: vemojevwe@unimed.edu.ng
   b) Mobile Phone Number: +2347031384473
4. Nationality: Nigerian
5. State of Origin: Delta State
6. Senatorial District: Delta Central
7. Local Government Area: Ethiope-East
8. Permanent Home Address: No. 2 Ighogboja Street, Ughelli, Delta State, Nigeria
9. Marital Status: Married
10. Numbers of Children and their Ages: Nill
11. Next of Kin Mrs Eloho Cyntha Emojevwe
12. Details of Contact Address of Next of Kin:
    a) E-mail Address: meetwithjuliet@gmail.com
    b) Mobile Phone Number: +2348139068255
13. Date of assumption of duty 4th October, 2016
14. Rank/Status on first appointment Lecturer II
15. Present Status: Senior Lecturer
16. Date of Last Promotion: 1st October, 2022
17. Present Salary, Grade Level and Step: CONUASS 05 Step 3
18. Date of Confirmation of Appointment: 1st October, 2019
19. Faculty/Directorate: Faculty of Basic Medical Sciences.
20. Department/Unit: Physiology
21. Websites/ webpage links:

    University webpage: https://www.unimed.edu.ng/staff/profile.php?sid=288

    Google scholar page: https://scholar.google.com/citations?user=IuZllrUAAAAJ&hl=en

ORCID: https://orcid.org/0000-0002-9861-5200

SCOPUS ID: 57219744460

PUBMED: https://pubmed.ncbi.nlm.nih.gov/?term=%22Emojevwe+V%22%5BAuthor%5D&sort=date

B. Educational Background/ Academic Qualifications with Dates

1. Higher Educational Institutions Attended with Date(s):

i. Delta State University, Abraka, Nigeria 2005-2008,

ii. Delta State University, Abraka, Nigeria 2011-2013

iii. Delta State University, Abraka, Nigeria 2017-2022

2. **Academic/Professional Qualifications and Distinctions Obtained with Dates:**

i	Ph.D Physiology	2022
ii	M.Sc. Physiology	2013
iii	B.Sc. Human Physiology	2008
iv	WASC	2001
v	NECO	2003

3. Other Distinctions/Awards with Dates

a. Scholarship None

b. Fellowship: None

c. Research Grants None

i. Award of TETFUND Based Research Grant (N5,000,000): Mechanistic assessment of beta (ß-) glucan and pioglitazone on hypothalamic-pituitary-testicular impairment and apoptotic-inflammatory influx in streptozotocin-induced diabetic male rats. (URC Approved) 2025

d. National Awards None

e. International Awards:

- The Physiological Society, UK awarded me £500.00 to conduct an outreach under the Institutional Engagement Award scheme. 9th Nov. 2021.
- The Physiological Society, UK awarded me £850 financial support being Grant for Society member on Covid 19 under Support and Inclusion scheme 4th June, 2020

- The Physiological Society, UK awarded me £500.00 to conduct a Departmental Seminars, under the Institutional Engagement Award scheme. March 2024.

- The Physiological Society, UK awarded me £750.00 to conduct a 2-days Scientific Conference. May, 2024.

- The Physiological Society, UK awarded me £375.00 under the Conference Attendance Awards Grant scheme. July 1, 2024.
- Best Poster Presentation award. 2025 international Conference and Symposiums, Faculty of Basic Medical Sciences, Ondo. May, 2024.

C. Work Experience with Dates

1. Previous Work Experience Outside the University System with Date(s)
   a) Science Teacher, Arolu Community High School, Surulere LGA, Oyo State (NYSC). 2009-2010
2. Previous work Experience in other Universities
   a) Lecturer I, Achievers University, Owo, Ondo State. Dec. 3, 2014- 2016
   b) Ass. Lecturer, Achievers University, Owo, Ondo State. May, 2013 – Dec. 2, 2014
3. Work Experience in the University of Medical Sciences

a Senior Lecturer, University of Medical Sciences, Ondo, Ondo State. Oct, 2022-date

b Lecturer I, University of Medical Sciences, Ondo, Ondo State. Oct, 2019- Oct. 2022

c Lecturer II, University of Medical Sciences, Ondo, Ondo State. Oct, 2016-2019

4. Courses Taught Within the Current Academic Session

- Pulmonary Physiology (PHS 812)
- Comparative Physiology (PHS 411),
- Environmental Physiology (PHS 413)
- Exercise Physiology (PHS 421)

- Molecular Physiology (PHS 423)
- Neurophysiology 1 (PHS 313)
- Autonomic nervous system (PHS 315)
- Respiratory Physiology (PHS 223)

5. Graduate Students Supervision
    - Currently ongoing: 4 (1 PhD, 3 M.Sc.)
    - Completed: 2 (1 M.Phil. and 1 M.Sc.)
6. Undergraduate Supervision
    - Current: 1 student
    - Completed: 14

D. Membership of Professional Bodies

(a). Physiological society, UK

E. Publications

1. Thesis/Dissertations

Fertility outcome in Phthalate exposed male Wistar rats treated with Zinc sulfate and N-acetylcysteine. Submitted to the Department of Physiology, Delta State University, Abraka, Nigeria. 2021.

2. **Books and Monographs:** none

3. Contribution to Books:

(i)	**Emojevwe Victor**, Igiehon Osarugue, Oyovwi Mega Obukohwo, Nwangwa Eze Kingsley and Naiho Alexander Obidike (2021). Endocrine Functions of the Testes [Online First], In: Male Reproductive Anatomy, Dr. Wei Wu, IntechOpen, DOI:10.5772/intechopen.101170. Available from: https://www.intechopen.com/online-first/79287
ii.	Mega Obukohwo, Oyovwi, Ben-Azu Benneth, Ovuakporaye Irikefe Simon, Onome Bright Oghenetega, **Emojevwe Victor**, Falajiki Y. Faith, Patrick Godwin Okwute, Rotu Arientare Rume, Okoro Ogheneyebrorue Godswill, and Nwangwa Eze Kingsley. (2023). 'Testosterone: The Male Sex Hormone, In Testosterone - Functions, Uses, Deficiencies, and Substitution. IntechOpen. doi:10.5772/intechopen.110657.

4. Published Journals Articles:

i. Adjene, J.O, **Emojevwe, V**, Idiapho D.E., (2014). Effects of long-term consumption of energy drink on the body and brain weights of adult Wistar rats. *Journal of Experimental and clinical anatomy*.**13** (1); 17-20. DOI:10.4103/1596-2393.142925

ii. Iteire, K.A and **Emojevwe, V.** (2019). A sub-acute toxicity study to assess the effects of methanol extract of date palm fruit on kidney functions in adult Wistar rats. *Progress in Medical Sciences*, 4 (1): 1–8. http://dx.doi.org/doi.org/10.47363/PMS/2018(2)116

iii. Oyovwi, M. O., Ben-Azu, B., Nwangwa, E. K., Rotue, R. A., Edesiri, T. P., **Emojevwe, V**., Igweh, J. C., & Uruaka, C. I. (2021). Prevention and reversal of chlorpromazine-induced testicular dysfunction in rats by synergistic testicle-active flavonoids, taurine and coenzyme-10. *Reproductive Toxicology (Elmsford, N.Y.), 101*, 50–62. https://doi.org/10.1016/j.reprotox.2021.01.013

iv. Mega O.Oyovwi, Benneth Ben-Azu Tesi P. Edesiri, **Emojevwe Victor,** Rume A.Rotu, Queen E.B.Ozegbe, Eze K.Nwangwa[b] Vivian Atuadu Olusegun G.Adebayo. (2021). Kolaviron abates busulfan-induced episodic memory deficit and testicular dysfunction in rats: The implications for neuroendopathobiological changes during chemotherapy. *Biomedicine & Pharmacotherapy* 142, 112022. https://doi.org/10.1016/j.biopha.2021.112022

v. Blessing O Omolaso, **Victor Emojevwe** and Bolanle Zeenat Ajao *(2021).* Effects of Methanol Fraction of Anarcardium Occidentale (Cashew) Bark Extract on Salt- Induced Hypertension in Rats. ***Progress in Medical Sciences*, 5(2):1-7.** doi.org/10.47363/PMS/2021(5)165

vi. **Emojevwe, V**., Naiho, A. O., Nwangwa, E. K., Oyovwi, M. O., Anachuna, K. K., Agbanifo-Chijiokwu, E., & Daubry, T. (2022). Duration-dependent effects of high dose of phthalate exposure on semen quality in adult male rats. *JBRA Assisted Reproduction, 26*(1), 53–61. https://doi.org/10.5935/1518-0557.20210033

vii. Lynda, E. O., Kingsley, N. E., Oyovwi, M. O., Benneth, B. A., **Victor Emojevwe**, Oghenetega, O. B., ... & Edesiri, T. P. (2022). Arjunolic acid counteracts fluoxetine-induced reproductive neuroendocrine dysfunction through inhibition of chromosomal derangements and hypercortisolism. *Songklanakarin Journal of Science & Technology*, *44*(6).

viii. **Emojevwe, V.,** Nwangwa, E. K., Naiho, A. O., Oyovwi, M. O., Igiehon, O., Ogunwole, E., Makinde-Taylor, M. S., Ayotomide, O. A., Akinola, A. O., Edesiri, P. T., Oghenetega, B. O., & Ovuakporaye, S. I. (2022). Therapeutic efficacy of N-acetylcysteine and zinc sulphate against

di-(2-ethylhexyl) phthalate-induced testicular oxide-nitrergic stress in male Wistar rat. *Andrologia*, e14508. https://doi.org/10.1111/and.14508

ix. **Emojevwe, V.,** Oyovwi, M. O., Owodunni, D. A., Naiho, A. O., Igiehon, O., & Ovuakporaye, S. I. (2022). The reversal effects of Irvingia gabonensis seed extract on ethanol-induced hypertension in male Wistar rats. *Ife Journal of Science, 24*(2), 251-263.

x. Oyovwi, M. O., Ben-Azu, B., Edesiri, T. P., Arientare, R. R., **Emojevwe, V**., Nwangwa, K. E., Edje, K. E., & Adebayo, O. G. (2022). Lutein Attenuates Cyclosporin-induced Testicular Impairment in Male Rats through Modulation of Androgenic Hormones and Enzymes. *Pharmacology and Toxicology of Natural Medicines, 2*(1), 12-24. https://doi.org/10.52406/ptnm.v2i1.17

xi. **Victor Emojevwe,** Osarugue, I., Obukohwo, O. M., Kingsley, N. E., & Obidike, N. A. (2022). Endocrine Functions of the Testes. IntechOpen. https://doi.org/10.5772/intechopen.101170

xii. Emeka W. Ugwuishi, Oghenetega, Onome B., Maduka L. Nweke, Obukohwo M. Oyovwi, Gloria E. Oghenetega, **Victor Emojevwe**, Patrick G. Okwute, and Tunde F. Abraham. (2022). "The Effects of Quercetin on Testicular Toxicity Induced by Water-soluble Fraction of Crude Oil in Male Wistar Rats." *Nigerian Journal of Biochemistry and Molecular Biology* 37(3) 222-228.

xiii. **Emojevwe Victor**, Oyovwi Mega Obukohwo, Naiho Obidike Alexander, Osigwe Elect Chinaecherem, Annonye Victoria Obianuju, Nwangwa Eze Kingsley, Ben-Azu Benneth, Enemali Felix, Uwejigho Raphael, Oghenetega Onome Bright, Ogunmiluyi Olufunmbi Ebenezer & Joseph Gregory Uchechukwu (2023). Taurine and *N*-acetylcysteine reverse reproductive and neuroendocrine dysfunctions in levetiracetam-treated epileptic male rats, Egyptian Journal of Basic and Applied Sciences, 10:1, 733-752, DOI: 10.1080/2314808X.2023.2254529

xiv. Agbonifo-Chijiokwu, E., Nwangwa, K. E., Oyovwi, M. O., Ben-Azu, B., Naiho, A. O., **Emojevwe, V**., Ohwin, E. P., Ehiwarior, A. P., Ojugbeli, E. T., Nwabuoku, S. U., Moke, E. G., & Oghenetega, B. O. (2023). Underlying biochemical effects of intermittent fasting, exercise and honey on streptozotocin-induced liver damage in rats. *Journal of Diabetes and Metabolic Disorders, 22*(1), 515–527.

xv. Obukohwo, O. M., Edesiri, T. P., Ben-Azu, B., **Victor Emojevwe**, Adebayo, O. A., Uchechukwu, J. G., Oghenetega, O. B., Rume, R. A., Simon, O. I., Agbonifo-Chijiokwu, E.,

Kingsley, N. E., Faith, F. Y., & Godwin, O. P. (2023). D-Ribose-L-Cysteine Attenuated Polychlorinated Biphenyls Mediated Neuroendocrine-Transmembrane Ionic Pump ATPase Disruption and Peroxynitrite Formation in a Rat Model: A Possible Role of Testicular Antioxidant and Androgenic Enzymes. *Trends in Sciences*, *20*(10), 5879.

xvi. Obukohwo, O. M., Oghenetega, O. B., Faith, F. Y., **Victor Emojevwe,** Rume, R. A., Uchechukwu, J. G., & Abioye, O. A. (2023). Protein kinase inhibitors affect spermatogenic functions and blood testis barrier remodelling: A scoping review. *Asian Pacific Journal of Reproduction*, *12*(3), 97-108.

xvii. Mega Obukohwo, O., Benneth, B.-A., Irikefe Simon, O., Bright Oghenetega, O., **Victor Emojevwe,** Y. Faith, F., Eze Kingsley, N. (2023). Testosterone: The Male Sex Hormone. IntechOpen. doi: 10.5772/intechopen.110657

xviii. **Emojevwe, V. O**., Oyovwi, M. O., Korede, G. O., Naiho, A. O., & Abioye, O. A. (2024). The physiology of orgasmic headache. *International Journal of Scientific Reports*, *10*(1), 25-28. https://doi.org/10.18203/issn.2454-2156.IntJSciRep20233869

xix. **Emojevwe, V. O**., Oyovwi, M. O., Adewole, K. E., Ohwin, P. E., Akinola, A. O., Naiho, A. O., Nwangwa, E. K., Omo-Idonije, V., Lade-Ige, M., & Ben-Azu, B. (2024). N-acetylcysteine and zinc sulphate abate di-2-ethylhexyl phthalate-mediated reproductive dysfunction in rats: Focus on oxidative and sex hormone receptors mechanisms. *Asian Pacific Journal of Reproduction 13*(5), 228-240. https://doi.org/10.4103/apjr.apjr_4_24

xx. Naiho, A. O., **Emojevwe, V**., Oyovwi, M. O., Ohwin, P. E., & Osamah, N. B. (2024). *Portulaca oleracea* leave extract enhanced renal function via enhancing urea and creatinine clearance in wistar rats. *European Journal of Medicinal Chemistry Reports*, *11*, 100144.

xxi. Ogunmiluyi, O. E., Naiho, A. O., **Emojevwe, V. O.,** Oladele, T. S., Adebisi, K. A., Siyanbade, J. A., & Akinola, A. O. (2024). Zinc or/and Vitamin E Supplementation Mitigates Oxidative Stress, Neuroinflammation, Neurochemical Changes and Behavioural Deficits in Male Wistar Rats Exposed to Bonny Light Crude Oil. *Journal of Toxicology*, *2024*(1), 9317271.

xxii. Ogunwole, E., **Emojevwe, V. O.,** Shittu, H. B., Olagoke, I. E., & Ayodele, F. O. (2024). Deleterious Effects of Caffeine Consumption on Reproductive Functions of Female Wistar Rats. *JBRA Assisted Reproduction*, *28*(4), 658.

xxiii. Oyovwi, M.O., Ben-Azu, B., Tesi, E.P., Ojetola, A.A., Olowe, T.G., Joseph, U.G., **Emojevwe, V**., Oghenetega, O.B., Rotu, R.A., Rotu, R.A. and Falajiki, F.Y., (2024). Diosmin protects the

testicles from doxorubicin-induced damage by increasing steroidogenesis and suppressing oxido-inflammation and apoptotic mediators. *International journal of biochemistry and molecular biology*, *15*(2), 34-50.

xxiv. Akinola, A., Oyeyemi, W., Omotoso, D., Daramola, O.O., **Emojevwe, V**., Ogunwole, E., Adetula, B. & Adeleke, O. (2025). Cadmium-Induced Adverse Alteration of Reproductive Parameters and Testicular Histoarchitecture of Wistar Rats: Protective Role of Palmitic Acid. *Annals of Health and Allied Sciences, 1*(1), 17-24

xxv. Oyovwi, M. O., Ugwuishi, E. W., Udi, O. A., Atere, A. D., Rotu, A. R., Odokuma, E. I., **Emojevwe, V. O**., Olowe, G. T., Nwangwa, E. K., & Ben-Azu, B. (2025). Epigallocatechin-gallate ameliorates polystyrene microplastics-induced oxido-inflammation and mitochondria-mediated apoptosis in testicular cells via modulation of Nrf2/HO-1, mTOR/Atg-7, and Cx-43/NOX-1 levels. *European Journal of Medicinal Chemistry Reports*, *13*, 100243. https://doi.org/10.1016/j.ejmcr.2024.100243

xxvi. Uwejigho, R. E., Enemali, F., **Emojevwe, V**., Jesuyomike, O. M., & Adeyomoye, O. I. (2025). Chromolaena Odorata and male fertility: Evidence from the testes and epididymis of Wistar Rats. *Reproduction & fertility*, *6*(1), e240102. Advance online publication. https://doi.org/10.1530/RAF-24-0102

5. Edited and Referred Conference Proceedings

S/N	Title	Place	Date
1.	Adjene, J.O, **Emojevwe, V**, Idiopho D.E. Morphological effects of long- term consumption of energy drink on intracranial auditory relay center of adult wistar rats.	Society of experimental and clinical anatomists of Nigeria. Enugu. University of Nigeria, Enugu campus.	April, 2014
2.	Ojiezeh T.I, Okoko F.J and **Emojevwe V**. Effects of cation treatment on Body- organ weight ratio and pathophysiological changes in peritoneum cavity of female new-zealand rabbits.	MLSCN CONFERENCE, AKURE	Sept. 2014

3.	**Emojevwe Victor**, Naiho Alexander Obidike, Nwangwa Eze Kingsey, Oyovwi Mega Obukohwo. Ameliorative Effect of Combined Treatment With Zinc Sulfate and N-Acetylcysteine on Sperm Acrosome Reaction, Capacitaion And Chromatin Integrity in DEHP-Induced Reprotoxicity Male Wistar Rats. PCO 088	Future Physiology, 2020. Virtual conference	July, 2020
4.	Mega Obukohwo Oyovwi, Eze K Nwangwa, John C Igweh, **Emojevwe Victor**. The sperm electrogenic pump and biochemical analysis of coenzyme q-10 and taurine in preventing chlorpromazine-induced peroxinitrite formation in rats model. PCO 071	Future Physiology, 2020. Virtual conference	July, 2020
5.	**Emojevwe V**, Oyovwi MO, Naiho OA, Igiehon O, Osigwe EC, Annonye VO, Nwangwa KE, Enemali F, Uwejigho R, Oghenetega OB, Ogunmiluyi OE. 2022. N-Acetylcysteine and Taurine Mitigated Reproductive-Neuroendocrine Dysfunctions in Levetiracetam Treated Epileptic Rats. FBMSIC. 10-12TH August, 2022,. -O17, Page 31	Delta State University, Abraka, Nigeria	10-12TH August, 2022,
6.	Agbonifo-Chijiokwu E, Nwangwa KE, Mega OO, Ben-Azu B, Naiho AO, **Emojevwe V**, Ohwin PE, Ehiwarior PA, Ojugbeli ET, Nwabuoku SU, Moke GE, Oghenetega BO. 2022. Possible transcriptional mechanisms involved in the protective effects of intermittent fasting, exercise on streptozotocin-induced liver damage in rats. FBMSIC. 10-12TH August, 2022, -P22, Page 59.	Delta State University, Abraka, Nigeria	10-12TH August, 2022,

7.	Mega OO, Edesiri TP, Ben-Azu B, **Victor E**, Nwangwa EK, Oghenetega OB, Rume RA, Simon OI, Agbonifo-Chijiokwu E, Faith FY.. 2022. D-ribose-L-cysteine Attenuated Polychlorinated Bisphenyls Mediated Neuroendocrine-Transmembrane Ionic pump ATPase Disruption and Peroxynitrite Formation in Rat Model. FBMSIC. 10-12TH August, 2022,. –O22, Page 34	Delta State University, Abraka, Nigeria	10-12TH August 2022,
8.	Edozie OL, Nwangwa EK, Oyovwi OM, Ben-Azu B, **Emojevwe V**, Ovuakporaye SI, Agbonifo-Chijiokwu E, Oghenetega BO. 2022. Arjunolic Acid Reverses Fluoxetine-Induced Alterations in Testicular Steroidogenic Enzymes and Membrane Bound Ionic Pump Imbalance Through Suppression of Oxido-Inflammatory Stress and Apoptosis. FBMSIC. 2022,. –O11, Page 27	Delta State University, Abraka, Nigeria	10-12TH August 2022,
9.	Victor Emojevwe, Alexander Obidike Naiho1, Adeniran Oluwadamilare Akinola1, Victor Oluwadamilola Ajayi, Mega Obukohwo Oyovwi, Oluwafunmbi Ebenezer Ogunmiluyi, Onoriode Andrew Udi, Eunice Ogunwole, Ifedolapo Beatrice Jolayemi, Daniel Oluwasegun Arokun, Ifedayo Victory Omole, Evelyn Akingbade. Poster Communications: N-Hexane Extract of Parkia Biglobosa Seeds Effectively Protected against Ciprofloxacin-Induced Testicular Dysfunction in Rats via Inhibition of Oxido-Inflammation and Apoptotic Pathways. Physiology in Focus 2024. Physiol Soc 59, PCA027	(Northumbria University, UK) (2024) Proc	July 2-4, 2024

6. Article accepted for publication:
   a. Oyovwi MO, Emojevwe VO, Ben-Azu B, Jeroh E. Astrocyte-Neuron Interactions in the Neuroinflammatory Cascade of Traumatic Brain Injury. *OBM Neurobiology* **2025**;

7. Manuscripts submitted for publication:
8. Creative work
9. Technical reports: None
10. Papers and Work in progress
    a) We are currently working on the article on the effects of N-Hexane Extract of *Parkia Biglobosa* on Ciprofloxacin-Induced Alteration in Semen Parameters, Testicular Apoptotic Markers and Dehydrogenases in Rats. As well as metals composition of the *Parkia Biglobosa's* oil.

F. Professional Accomplishment

- Completion of a PhD degree

G. Conferences, Seminars, Workshops Attended with Dates

1. 2nd FBMS International Conference and Symposium, University of Medical sciences, Ondo City, Nigeria, June 4-6, 2025

2. Medical Education Workshop 2025, Babcock University, Ogun State. May 28-29, 2025

3. 2-Day Physiology Conference on Advancing Physiological Research and Innovations for Better Health and Well-being, UNIMED. February 18-19, 2025

4. One day Physiology outreach tagged: Physiology: the bedrock of Preventive healthcare organized by the Department of Physiology, UNIMED-Ondo. June 10, 2022.
5. One day workshop in basic molecular techniques at the department of physiology, UNIMED, Ondo. June 1, 2022.
6. Demystifying Grant Applications. By Physiological Society, UK. 20/01/2022.
7. A 3 days' workshop on Pedagogical training. UNIMED, Ondo. November, 16-18th , 2021
8. What and How Do Students Learn Without Classroom Attendance: Lessons from Lockdown' webinar. 2 June 2020

9. Best Practice in Scientific Writing and Presenting Your Data, The Physiological Society, United Kingdom. 21st May, 2020.

10. 5 days advanced digital appreciation programme for tertiary institutions organized by, international center for information and communication technology studies and Nigeria Communications Commission. UNIMED, Ondo 26th-30th Nov. 2018

11. A 2 days' workshop on BEST PRACTICES IN ACADEMIC/CLINICAL DEPARTMENT ADMINISTRATION AND SCHORLARSHIP organized by Unimed Ondo and Chicago state university, USA on 9-10th July, 2018

12. A 2 days' workshop on Pedagogy and integrated Medical and dental curriculum. UNIMED, Ondo. July 6th- July 7th, 2017

13. 5 days advanced digital appreciation programme for tertiary institutions organized by international center for information and communication technology studies and Nigeria Communications. UNIMED, Ondo. 28th Nov. 2016 1

14. 1st Achiever National Conference on Public Policy, Achievers University, Owo, Ondo State, Nigeria. July, 2013

H. Current Research Activities

a) Assessment of the Effects of Beta (ß-) Glucan and Pioglitazone on Hypothalamic-Pituitary-Testicular Impairment and Apoptotic-Inflammatory Influx in Type-2 Diabetic Male Rats

b) We are investigating the influence of evodiamine on reproductive function and oxidative status in Wistar rats.

I. Current Relevant Information

1. Service within the Department

- Acting Head of Department 2023-date
- Chairman, Departmental postgraduate committee 2022-date
- Member, Departmental promotion review committee 2022-date
- Member, Departmental Curriculum review committee 2020-date
- Departmental Examination Officer 2017-2019
- SIWES Coordinator, Department of Physiology 2020-2022
- Seminars and Project Coordinator, Department of Physiology 2018-date
- Student' Academic Advisor, Department of Physiology 2017-2021

2. Service within the Faculty

- Sun-Dean, Faculty of Basic Medical Sciences, UNIMED-Ondo 2021-2023

- Chairman, Faculty Examination Committee 2021-2023
- Member, Faculty Curriculum Review Committee 2021-date

3. Services within the University.
   - Sun-Dean, Faculty of Basic Medical Sciences, UNIMED-Ondo 2021-2023
   - Member, University Curriculum Review Committee 2020-date
4. Services outside UNIMED.
   - Society Representative, Physiological Society (PhySoc.), UK. 2019-date

J. Contributions to Knowledge

With a background in Human Physiology, my research has concentrated on reproductive toxicology, neurotoxicology, and therapeutic interventions using natural products. Through rigorous experimentation and insightful analysis, I have made significant contributions to the body of knowledge in these interconnected areas, as detailed below:

A. Reproductive Toxicology and Therapeutic Interventions

My research has significantly advanced the understanding of the adverse effects of environmental toxicants and lifestyle factors on male and female reproductive health, specifically focusing on the mechanisms of action, functional consequences, and potential therapeutic interventions using natural products as outlined below.

a) My Work examined the impact of large-scale environmental pollutants on reproductive health. For instance, research on Bonny light crude oil [Paper 13] revealed significant effects on reproductive parameters in male Wistar rats. Further, I have also investigated the impact of lifestyle factors on reproductive health, demonstrating the deleterious effects of caffeine consumption on reproductive functions in female Wistar Rats [Paper 21].

b) A significant portion of my research focused on the endocrine-disrupting mechanisms of phthalates, a ubiquitous class of environmental contaminants [Paper 6, Paper 8, and Paper 19]. These studies established a duration-dependent negative correlation between phthalate exposure and semen quality. Furthermore, it demonstrated that phthalates unregulated testicular androgen receptors, share a binding site with testosterone, exhibit similar receptor affinity, and inhibit 5α-reductase. Functionally, these mechanisms disrupt androgen signaling, leading to impaired male reproductive function and reduced fertility.

c) My research has also elucidated the mechanisms by which various toxicants impair reproductive function. For example, studies on polystyrene microplastics established that they induce oxido-inflammation and mitochondria-mediated apoptosis in testicular cells, leading to impaired spermatogenesis and reduced testosterone production [Paper 24]. Similarly, research on cyclosporine revealed its impact on both the testes and epididymis, affecting sperm maturation and transport [Paper 10].

d) I have demonstrated the protective effects of various natural compounds against testicular damage induced by diverse toxicants. Thus, contribute to our understanding of the therapeutic mechanisms involved, including modulation of the mTOR signaling pathway, reduction of oxidative stress, inflammation, and apoptosis, leading to improved fertility outcomes. Specific examples include:

- N-acetylcysteine and zinc sulfate: Combination treatments involving these compounds protected against phthalate-induced testicular damage, resulting in improved sperm count and motility [Paper 8].
- D-ribose-L-cysteine: Protected against polychlorinated biphenyls-induced testicular damage, restoring hormone levels and spermatogenesis [Paper 14].
- Quercetin: Protected against crude oil-induced adverse alteration of reproductive parameters, improving sperm quality and testicular function [Paper 13].
- Palmitic acid: mitigated cadmium-induced alteration of reproductive parameters, normalizing hormone levels and reducing testicular damage, and consequently improving reproductive functions in rats [Paper 23].
- Epigallocatechin-gallate: Protected against polystyrene microplastics-induced oxido-inflammation and mitochondria-mediated apoptosis in testicular cells via modulation of Nrf2/HO-1, /mTOR/Atg-7, and Cx-43/NOX-1 levels thereby reducing alteration of reproductive parameters, normalizing hormone levels and reducing testicular damage, and consequently improving reproductive functions in rats [Paper 25].
- Lutein: Protected against Cyclosporine-induced testicular damage, improving testicular function and sperm quality [Paper 10].
- Diosmin: Protects the testicles from doxorubicin-induced damage by increasing steroidogenesis and suppressing oxido-inflammation and apoptotic mediators [Paper 24].

B. **Neurotoxicology**

My research has explored the neurotoxic effects of environmental pollutants and pharmaceuticals, focusing on identifying mechanisms of neurotoxicity and evaluating the neuroprotective potential of natural compounds.

a) I have contributed to the understanding of the neuroendocrine and behavioral consequences of exposure to pharmaceuticals such as chlorpromazine [Paper 2], fluoxetine [Paper 7], and levetiracetam [Paper 12], and environmental pollutants such as Bonny light crude oil [Paper 21]. These studies explore the complex relationships between chemical exposure, neuroendocrine function, and behavior. For example, exposure to Bonny light crude oil resulted in cognitive deficits and altered neurotransmitter levels in exposed animals, demonstrating the functional impact of this pollutant on the nervous system. I have established that polychlorinated biphenyls can disrupt neuroendocrine-transmembrane ionic pump ATPase activity and induce peroxynitrite formation, effects that can be attenuated by D-ribose-L-cysteine [Paper 15]

b) My research has also established the neuroprotective potential of natural compounds against various neurotoxic insults. Specifically, I have demonstrated the ameliorative effects of taurine and Coenzyme Q10 against neurotoxicity induced by various stressors [Paper 2], neuroprotective activity of Kolaviron against specific neurotoxic challenges, improving cognitive function and reducing neuronal damage [Paper 4]. Zinc and Vitamin E supplementation protected against oxidative stress, neuroinflammation, and neurochemical changes, and behavioral deficits in male Wistar rats exposed to Bonny light crude oil, leading to improved motor coordination and cognitive performance [Paper 21]. I have also demonstrated that diosmin alleviates doxorubicin-induced chemobrain in rats via inhibition of oxido-inflammation, apoptosis, and modulation of autophagy, suggesting its potential for mitigating the neurotoxic side effects of chemotherapy and improving cognitive function in cancer patients [Paper 24]. These findings provide a deeper understanding of the molecular pathways involved in neurotoxic damage and the potential for targeted therapeutic interventions, ultimately leading to improved neuronal function and reduced neurological deficits.

C. **Additional Therapeutic Interventions**

i. I have demonstrated that taurine and N-acetylcysteine can reverse reproductive and neuroendocrine dysfunctions in levetiracetam-treated epileptic male rats, highlighting the potential of these compounds as adjunctive therapies for mitigating the adverse effects of antiepileptic drugs [Paper 12]. This intervention improved both seizure control and reproductive function in the treated animals.

ii. My studies on Kolaviron, Lutein, α-Tocopherol, Co-Administration of Vitamin E and Homtamin Ginseng, and Quercetin flavonoid with vitamin C provide insights into disease processes related to diabetes, potassium bromate induced renal dysfunction, cyclosporine-induced and sodium fluoride induced testicular impairment, and potassium-bromate induced hepatic malfunction, identifying promising targets related to oxidative stress, inflammation, apoptosis, and hormonal regulation. These interventions resulted in improved organ function and reduced disease severity.

D. **Literature Reviews and Book Chapters**

In addition to primary research, I have contributed to the field through comprehensive reviews and book chapters. I have co-authored two chapters on testosterone within the context of male reproductive health (Paper 11, Paper 17). Moreover, a scoping review has been conducted to assess the effects of protein kinase inhibitors on spermatogenic functions and blood-testis barrier remodelling [Paper 16]. These contributions demonstrate my commitment to synthesizing existing knowledge and identifying future research directions.

In summary, my research has generated significant contributions to the fields of reproductive toxicology, neurotoxicology, and the therapeutic applications of natural products. By elucidating the mechanisms of toxicity, emphasizing the functional consequences, and identifying promising therapeutic interventions, my work provides a foundation for developing strategies to protect and improve reproductive and neurological health. My dedication to rigorous scientific inquiry and innovative approaches positions me to continue making significant contributions to these critical areas of research.

Signature: …… Date: 07-07-2025