

Curriculum Vitae

OLUWATUNASE, Gideon Olamilekan

(BSc, MSc, PhD)

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HIGHER EDUCATION

PhD Anatomy, August 2025; Olabisi Onabanjo University, Ago-Iwoye, Ogun state, Nigeria

MSc Anatomy, May 2019; University of Ibadan, Ibadan, Oyo state, Nigeria

BSc (Hons) Anatomy, August 2015; University of Ilorin, Ilorin, Kwara state, Nigeria

RESEARCH EXPERIENCE

RESEARCH INTEREST AND ACTIVITIES

My main research activities are in the field of neurodevelopment, neuroendocrinology, reproductive and developmental biology with particular interest in male infertility and assisted reproductive technology (ART). My overarching goal is to understand how the brain controls male reproductive functions and sexual behavior. I am curious to identify, understand and explain neuronal circuitry involved in reproduction and how its disruptions can compromise male fertility. Also, I investigate how prenatal overexposure or co-exposure to environmental toxins interacts with the genetic composition of the body and its role in the pathogenesis of male infertility. In addition, given the emerging evidence of curative effects of tropical medicinal plants (including *Carpolobia alba* G. Don), I seek to test the protective and ameliorative potentials of phytomedicines on prenatal and postnatal reproductive toxicity. Understanding these will help in identifying potential therapeutic phytomedicines as new drug targets for the management of male infertility.

PROFESSIONAL QUALIFICATIONS

- Pan African Bioinformatics Network for H3Africa (H3ABioNet) introduction to Bioinformatic Training Course, July, 2024.
- Advanced Digital Empowerment Programme for Tertiary Institutions (ADEPTI) on Data Analysis using SPSS and Ms Power BI training University of Medical Sciences (UNIMED) Ondo state, 2023
- Animal Ethics Training Program organized by ACURET-UNIMED, UNIMED Ondo, 2022
- Course on Stereotactic Surgery in Laboratory Rats organized by TReND Africa and River State University 2022.

RESEARCH SKILLS AND TECHNIQUES

Rodents (rat and mice) model, behavioural analysis, histology, immunohistochemistry, rodent brain dissection, rodent stereotaxic injection, bright field microscopy, digital image analysis and biostatistics

RESEARCH EXPERIENCE

University of Medical Sciences Ondo city, Ondo state, Nigeria

Junior Researcher, Laboratory for Experimental and Translational Neurobiology (LETNeu)

July 2023 – Present

Lab leader: Dr. Omamuyovwi Ijomone

Duties

- Investigating the mechanisms underlying metal-induced neurotoxicity using routine histological and immunohistochemical techniques
- Evaluating the protective and ameliorative effects of African medicinal plants (e.g *Carpolobia alba*) on metal-induced reproductive toxicity and neurotoxicity using neurobehavioural, mating behavioural, histopathological, biochemical, molecular and immunohistochemical studies
- Carried out routine tissue processing for light microscopy
- Ethical handling of laboratory animal models such as rats, mice and *Caenorhabditis elegans*

Babcock University, Ilisan-Remo, Ogun state, Nigeria

Junior Researcher, Drosophila Lab, Department of Anatomy, January 2021-Present

Lab leader: Dr. John Olanrewaju

Duties

- Conducting Neurobehavioral assays and survival analysis of fruit fly in transgenic model of drosophila melanogaster.
- Analyzing Inflammatory and oxidative stress biomarkers in the treatment of wild type and transgenic models of Drosophila.
- Investigated protein expression in tissues using polymerase chain reaction (PCR) techniques.

ACADEMIC POSITIONS

University of Medical Sciences, Ondo

Ondo state, Nigeria

Lecturer II, Department of Anatomy

Faculty of Basic Medical Sciences

February, 2021 – Present

Duties

- Teach human anatomy, neuroscience and other biomedical courses to undergraduate students in Basic Medical Sciences.
- Developed new course module for undergraduate students.
- Provide leadership and mentorship for undergraduate students
- Design and supervise research for undergraduate students
- Administered continuous assessment and examination, computed students' grade for three academic sessions.
- Demonstrated Cadaver dissection during Anatomy practical sessions for medical and biomedical students
- Demonstrated ethical animal handling and experimentation to B.Sc Anatomy students

Subject taught

2020/2021 Academic session

- i. ANA 212- General Histology
- ii. ANA 412- Embalming and Mortuary Science
- iii. ANA 220- Gross Anatomy of Thorax, Abdomen, Pelvis and Perineum

2021/2022 Academic session

- i. ANA 212- General Histology
- ii. ANA 210- Gross Anatomy of Upper and Lower Extremities
- iii. ANA 220- Gross Anatomy of Thorax, Abdomen, Pelvis and Perineum
- iv. ANA 221- Systemic Histology

2022/2023 Academic session

- i. ANA 210- Gross Anatomy of Upper and Lower Extremities
- ii. ANA 220- Gross Anatomy of Thorax, Abdomen, Pelvis and Perineum
- iii. ANA 221- Systemic Histology
- iv. ANA 423- Animal Handling and Comparative Mammalian Anatomy

2023/2024 Academic Session

- i. ANA 210- Gross Anatomy of Upper and Lower Extremities
- ii. ANA 211- History of Anatomy
- iii. ANA 221- Systemic Histology
- iv. ANA 423- Animal Handling and Comparative Mammalian Anatomy

2024/2025 Academic Session

- i. ANA 212-General Histology
- ii. ANA 213- General Embryology
- iii. ANA 227- Anatomy II (for Nursing students)
- iv. ANA 325- Laboratory and Preservation Techniques
- v. General Histology for 200 level Medical and Dental students
- vi. Systemic Histology for 200 level Medical and Dental students

Honor and Award

- 3rd best poster presenter, Faculty of Basic Medical Sciences Research week, June, 2024

Grants/Fellowship

- International Society for Neurochemistry (ISN) Neuroscience School support, University of Medical Sciences, Ondo state, Nigeria, 11th- 16th, August, 2024.
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PUBLICATIONS

H-index – 6; i10-index -6; Number of Citations- >2000 (Google scholar)

1. Global, regional, and national age-sex-specific burden of diarrhoeal diseases, their risk factors, and aetiologies, 1990–2021, for 204 countries and territories: a systematic analysis for the Global Burden of Disease Study 2021. (2025). H.H Kyu, A Vongpradith, R.M.V Dominguez, J. Ma, S.B Albertson...**G.O. Oluwatunase**. The Lancet Infectious Diseases 25 (5), 519-536.
2. **Oluwatunase G.O.**, Otulana O.J., Odubela O.O., Fakunle B.P., Folarin R.O , Enemali F.U., Asafa, Adebisi K., Ogunmiluyi O.E., Jesuloluwa J., Agbomhekhe B., Badmus B., Samuel S.S. (2024). Sub-Acute Toxic Effects of Methanol Root Extract of *Carpolobia Alba G.Don* on Testes of Adult Wistar Rats. *J Exp Clin Anat* 21(2):180-187.
3. Adeniyi T.D., **Oluwatunase G.O.**, Moronkeji A., Adekomi A.D., G. Adunmo. (2024). Mercury-induced oxidative stress and neuropathologic changes in the prefrontal cortex of Wistar rats. *Nig J Neurosci* 15(4):97-104.
4. Dare, S.S.; Folarin, R.O.; Fakunle, P.B.; Odubela, O.O.; **Oluwatunase, G.O.**; Ekanem, P.E.; Shallie, P.D. (2024). Evaluating the anticonvulsant potential of kaurenoic acid isolated from *annona senegalensis* leaves in pentylenetetrazole-induced seizures: behavioral, cognitive, and cellular insights in Wistar rats. *J Exp Clin Anat.* 21(2): 235-242.
5. Oghenetega O.B, Oyovwi M.O, Obidimma C.E, Ijabodede T.V, Oghenetega E.G, Okwute P.G, Kpai T, **Oluwatunase G.O.**, Adeoye AD, Abraham TF, Ugwuishi EW.(2024). Quercetin Ameliorates Zinc Oxide Nanoparticles-induced Impaired Testicular Functions by Regulating Inflammation, Oxidative, and Hormonal Status. *Babcock Univ. Med. J.* 7(1):147-159.
6. Leko, B.J., **Oluwatunase G.O.**, Adejayan, T.O. (2024). Ethanolic Extract of *Xylopia aethiopica* attenuated Aluminium-induced ovarian toxicity in Adult Female Wistar Rats. *JBRA Assisted Reproduction.* (Online first). Doi:10.5935/1518-0557.20240024.
7. Feigin V.L., Abate M.D.,..., **Oluwatunase G.O.**, et al.(2024). Global, regional, and national burden of stroke and its risk factors, 1990–2021: a systematic analysis for the Global Burden of Disease Study 2021. *Lancet Neurol* 2024; 23: 973–1003.

8. Schumacher A.E., Kyu H.H., Aali A..., **Oluwatunase G.O.**, et al.(2024). Global age-sex-specific mortality, life expectancy, and population estimates in 204 countries and territories and 811 subnational locations, 1950-2021, and the impact of the COVID-19 pandemic: a comprehensive demographic analysis for the Global Burden of Disease Study 2021.Lancet.S0140-6736(24)00476-8.
9. Bhattacharjee N.V, Schumacher, A.E...., **Oluwatunase G.O.**, et al. (2024). Global fertility in 204 countries and territories, 1950–2021, with forecasts to 2100: a comprehensive demographic analysis for the Global Burden of Disease Study 2021. Lancet. S0140-6736(24)00550-6. <https://doi.org/10.1016>.
10. Mensah, G.A., Fuster, V., Murray, C.J.L., Roth, G.A...., **Oluwatunase, G.O.**, et al. (2023). Global Burden of Cardiovascular Diseases and Risks, 1990-2022. Journal of American College of Cardiology. 82(25): 2350-2473.
11. **Oluwatunase G.O.**, Enemali F.U., Okwute P.G., Asafa O.O., Ajimoh F.A. (2023). Comparative study of the effect of Ginkgo biloba extract and Vitamin C on lead induced hippocampal toxicity in adult male Wistar rats. *Anatomy Journal of Africa*. Vol 12 (1): 2327-2336.
12. Okwute P.G., **Oluwatunase G.O.**, Mofuolorunso A.M., Asafa O.O., Ogunbiyi O.E., Olalekan S. (2023). Evaluation of Abrus precatorius on Reproductive Function of Male Wistar Rat. *Anatomy Journal of Africa*. 12 (2): 2384-2392.
13. Ogundoyin O.O., **Oluwatunase G.O.**(2020). Histoarchitectural studies of gonads of rat pups following brief exposure to hyperthermia in-utero. *Anatomy Journal of Africa*.2020, 9(1): 1691-1700.

SUBMITTED MANUSCRIPT (UNDER REVIEW)

1. Comparative Evaluation of The Effects of Multiple Sources of Heat Stress on Testicular Histology and Function of Wistar Rats. *Asian Journal of Allied Health Sciences (AJAHS)*.

BOOK CHAPTER

1. **G.O. Oluwatunase**, Patrick Godwin Okwute, Olayinka Olawale Asafa, David Anuoluwapo Oyeniran, Onome Bright Ogenetega. (2025). Exploring the Prospect and Significance of Nematodes (*Caenorhabditis elegans*) as an Animal Model for Translational Neurobiology Research. In Tech open (Online first). DOI: <http://dx.doi.org/10.5772/intechopen.1008845>
2. Samuel Oluwadare Olalekan, Patrick Godwin Okwute, Ifabunmi Oduyemi Osonuga, Adekunle Muiz Mofolorunso, Bukunola Oluyemisi Adegbesan, Esther Nkechi Ezima, **G.O. Oluwatunase**. (2025). Gut Microbiota Modulation in Parkinson's Disease: Exploring Phytotherapy, Pharmacotherapy, and Precision Interventions. In Tech Open (online first). DOI: [10.5772/intechopen.1009908](https://doi.org/10.5772/intechopen.1009908)
3. Okwute P.G., Mofolorunso A.M., **Oluwatunase G.O.**, Asafa O.O., Olalekan S., Ogenetega O.B., Obukohwo A.M. (2024). The Complex Interplay: Unfolding the Mechanisms of Chronic Obstructive Pulmonary Disease in COPD – Pathology, Diagnosis, Treatment, and Future Directions Intech Open. DOI: [http://dx.doi.org/10.5772/intechopen.1003917](https://doi.org/10.5772/intechopen.1003917).

CONFERENCE PRESENTATIONS AND POSTERS

- Poster presentation on “Evaluation of Sub-acute and Sub-chronic administration of *Capolobia alba* (G. Don) on Histoarchitecture and Reproductive functions of Hypothalamic-Pituitary-Testicular Axis of Wistar Rat” at the 17th International Conference of the Society of Neuroscientists of Africa (SONA) held at Marrakech, Morocco on April 17 -20, 2025.
- Oral presentation on “Evaluation of Sub-acute and Sub-chronic administration of *Capolobia alba* (G. Don) on Histoarchitecture and Reproductive functions of Hypothalamic-Pituitary-Testicular Axis of Wistar Rat” at the UNIMED Faculty of Basic Medical Sciences 2025 International Conferences & Symposiums held at UNMED Laje Campus on 4th -6th June, 2025.

- Oral presentation on “Sub-acute administration of Methanolic extract of *Carpolobia alba* *G.Don* alters reproductive functions in adult male Wistar rat “ at the 20th Annual Scientific of the Anatomical Society of Nigeria (ASN) annual conference held at University of Ibadan, Oyo state, Nigeria, 7th -9th October, 2024.
- Poster presentation on “Comparative study of the effect of Ginkgo biloba extract and Vitamin C on lead induced hippocampal toxicity in adult male Wistar rats” at the 20th National Scientific Conference of the Neuroscience Society of Nigeria (NSN) held at Babcock University, Nigeira from 23rd - 25th August, 2023.
- Oral presentation on “Evaluation of Abrus precatorius on Reproductive Function of Male Wistar Rat “ at the 18th Annual Scientific of the Anatomical Society of Nigeria (ASN) annual conference held at Federal University Oye-Ekiti, Ekiti state, Nigeria, 1st -3rd February, 2023.

WORKSHOPS ATTENDED

- Benjamin Carson (Snr) College of Health and Medical Sciences (BCCHMS) Medical Education Workshop held 28th -29th May, 2025 at BCCHMS, Babcock University, Ilisan-Remo, Ogun state, Nigeria.
- Research Grant Training programme- Crafting Compelling Concept Notes and Grant Proposals held 5th -6th & 15th of March, 2024.
- Advanced Digital Empowerment Programme for Tertiary Institutions (ADEPTI) on Data Analysis using SPSS and Ms Power BI held at UNIMED Ondo on 17th -21st of April, 2023.
- Animal Ethics Training Program organized by ACURET-UNIMED Ondo on 5th -6th of December, 2022.
- Course on Stereotactic Surgery in Laboratory Rats organized by TRenD Africa and River State University held on 12th -15th October, 2022.

ACADEMIC SERVICE

Course Adviser	2021-present
Assistant departmental examination officer	2022-2023

Departmental Practical coordinator

2021-2022

LEADERSHIP & OUTREACH

President, Life Reformation Centre Youth Fellowship

June 2023-present

Chairman board of Trustees, Generation of Transcending Youths Foundation

2017-present

Class Governor/representative, Anatomy M.Sc class

2017-2019

PROFESSIONAL AFFILIATIONS

- Member, International Society for Neurochemistry (ISN)
- Member, America Association for Anatomy (AAA)
- Member, International Parkinson and Movement Disorder Society (MDS)
- Member, Neuroscience Society of Nigeria (NSN)
- Member, Anatomical Society of Nigeria (ASN)

REFERENCES

1. Name: Dr. Omamuyovwe Meshach Ijomone

University: University of Medical Sciences, Ondo state, Nigeria

Job title, Department: Associate Professor, Department of Anatomy

Relationship: Academic mentor

Mailing Address: Department of Anatomy, of Medical Sciences, Ondo state, Nigeria

Email address: omijomone@unimed.edu.ng

2. Name: Dr. Bankole Leko

University: University of Medical Sciences, Ondo state, Nigeria

Job title, Department: Head, Department of Anatomy

Relationship: Senior Colleague

Mailing Address: Department of Anatomy, of Medical Sciences, Ondo state, Nigeria

Email address: bleko@unimed.edu.ng

3. Name: Dr. Samuel Olojede

University: University of Walter Sisulu, South Africa

Job title, Department: Lecturer, Department of Human Biology

Relationship: Academic mentor

Mailing Address: Department of Human Biology, Walter Sisulu University

City: Mthatha, South Africa

Email address: solojede@wsu.ac.za