

# CURRICULUM VITAE

- I. (a) Names: Oludare Michael Ogunyemi  
(b) Address *OB205A, Nutritional & Industrial Biochemistry  
Research Unit, Department of Biochemistry,  
College of Medicine, University of Ibadan*
- II. Internet page addresses
- Google Scholar: <https://scholar.google.com/citations?hl=en&user=FnIHbpsAAAAJ#>
  - Research gate: <https://www.researchgate.net/profile/Oludare-Ogunyemi>
  - ORCID: <https://orcid.org/my-orcid?orcid=0000-0002-9956-3860>
  - Scopus: <https://www.scopus.com/authid/detail.uri?authorId=57216774391>
  - Publon: <https://publons.com/researcher/4343582/oludare-ogunyemi/>
  - Elsevier review: <https://reviewerhub.elsevier.com/reviewer-profile>
- III. Academic Qualifications (with dates and granting bodies)
- (a) Bachelor of Science (Hons) (Biochemistry, University of Ado Ekiti, Nigeria) 2009  
(b) Masters of Science (Biochemistry, University of Ibadan, Nigeria) 2012  
(c) Doctor of Philosophy (Biochemistry, University of Ibadan, Nigeria) 2023
- IV. Scholarship, Fellowship and Prizes (with dates)
- (a) Ekiti State Postgraduate Scholarship Bursary Award 2012  
(b) African-German Network of Excellence in Science Grant 2016
- V. Honours, Distinctions and Membership of Learned Societies
- (a) Nigerian Society of Biochemistry and Molecular Biology  
(b) Biochemical Society. United Kingdom  
(c) Nigerian Institute of Management
- VI. Details of Teaching/Work Experience
- (a) Details of Teaching Experience**
- (i) Supervision of practical classes (Southwestern University) 2014-2018  
(ii) Supervision of practical classes (Salem University) 2018-2022  
(iii) Supervision of weekly practical classes (UI) 2023 to date  
(iv) Biochemistry lectures (B.Sc.) (Southwestern University) 2014-2018  
(v) Biochemistry lectures (B.Sc.) (Salem University) 2018-2022  
(vi) Biochemistry Lectures (MBBS/BDS) (UI) 2023 to date
- (b) Details of Administrative Experience**
- (i) Member, B.Sc. Programme Committee (Southwestern University) 2016-2018  
(ii) Member, B.Sc. Programme Committee (Salem University) 2018-2022  
(iii) Member, Committee on NUC Accreditation (Salem University) 2021-2022  
(iv) Member, Committee on NUC Accreditation (UI) 2023 to date  
(v) Member, MBBS/BDS Programme Committee (UI) 2023 to date  
(vi) Member, Committee on NUC Accreditation (UI) 2023 to date
- (c) Supervision: 20 B.Sc. Dissertations

## VII. Peer-reviewed Publications:

1. Olaiya C.O, Choudhary M.I, **Ogunyemi O.M**, Nwauzoma A.B. (2013). Nutraceuticals from Bitter Leaf (*Vernonia amygdalina* Del.) Protects against Cadmium Chloride- induced Hypertension in Albino Rats. *Nature and Science*. 11(6):136-145 (Published by Marsland Press, USA).
2. Olaiya C.O, **Ogunyemi O.M**, Karigidi K.O (2015). Biotechnological Strategies for Enhancing the Nutritive and Nutraceutical Values of Tomato (*Solanum lycopersicon*). *The Annals of the University Dunarea de Jos of Galati Fascicle VI – Food Technology*. 39(2), 9-19. (Published by Galati University Press, Romania; DOAJ-indexed)
3. Gyebi G. A., Ocheje J. A., **Ogunyemi, O.M.** (2019) Molecular docking studies of bioactive compounds from clove (*Syzygium aromaticum*) on metabolic regulators in cancer. *Salem University Journal of Life Sciences* 1(1) 1-18. **In Print**.
4. Usman A. A., **Ogunyemi O. M.**, Effiong M. O., and Usman G. O (2020). Effect of dehusking on the chemical and nutritional composition of jack bean seed. *Salem University Journal of Life Sciences: Vol. 2, No.1*, pp 80-93. Nigeria. **In Print**.
5. **Ogunyemi O.M.**, Gyebi G.A., Shaibu O.R., Ozonwa O. J. & Olaiya C.O. (2020) Enhancement Of Antioxidant Potential Of Yoghurt With Natural Additives: Preliminary Sensory And *In Vitro* Antioxidant Analyses. *Salem University Journal of Life Sciences* 2(1) 1-17. **In Print**.
6. **Ogunyemi, O. M.**, Gyebi, G. A., Elfiky, A. A., Afolabi, S. O., Ogunro, O. B., Adegunloye, A. P., & Ibrahim, I. M. (2020). Alkaloids and flavonoids from African phytochemicals as potential inhibitors of SARS-Cov-2 RNA-dependent RNA polymerase: an in silico perspective. *Antiviral Chemistry and Chemotherapy*, 28, 2040206620984076. (Published by SAGE; Scopus-indexed)
7. Oso B.J and **Ogunyemi O.M** (2020). Assessment of in vitro biological properties of aqueous extracts of *Murraya koenigii* (L.) Spreng, *Thymus vulgaris* L., and *Ocimum gratissimum* L. leaves. *Croatian Journal of Food Science and Technology*. DOI: 10.17508/CJFST.2020.12.2.10 Published by: Josip Juraj Strossmayer University of Osijek, Faculty of Food Technology Osijek, Osijek, Croatia; DOAJ-indexed
8. Gyebi, G. A., Adegunloye, A. P., Ibrahim M. I., **Ogunyemi, O. M.**, Ogunro, O. B., & Afolabi, S. O. (2020). Prevention of SARS-CoV-2 Cell Entry: Insight from *In silico* Interaction of Drug-like Alkaloids with Spike Glycoprotein, human ACE2 and TMPRSS2. *Journal of Biomolecular Structure and Dynamics*, 1-21 [10.1080/07391102.2020.1835726](https://doi.org/10.1080/07391102.2020.1835726). *Published by Taylor and Francis Ltd; Thomson Reuters SCI –indexed; IF: 5.235*)
9. Gyebi, G. A., Ogunro, O. B., Adegunloye, A. P., **Ogunyemi, O. M.**, & Afolabi, S. O. (2020). Potential inhibitors of coronavirus 3-chymotrypsin-like protease (3CLpro): An in silico screening of alkaloids and terpenoids from African medicinal plants. *Journal of Biomolecular Structure and Dynamics*, 39(9) 3396-3408 [10.1080/07391102.2020.1764868](https://doi.org/10.1080/07391102.2020.1764868) . *Published by Taylor and Francis Ltd; Thomson Reuters SCI –indexed; IF: 5.235*)
10. **Ogunyemi O. M.**, Gyebi A.G., Adebayo J.O., Oguntola J.A., Olaiya C.O. (2020) Marsectohexol and other pregnane phytochemicals derived from *Gongronema latifolium* as  $\alpha$ -amylase and  $\alpha$ -glucosidase inhibitors: *in vitro* and molecular docking studies *SN Applied Science*. 2(12), 1-11. [10.1007/s42452-020-03951-0](https://doi.org/10.1007/s42452-020-03951-0). (Published by Springer Nature Switzerland; Scopus-indexed)
11. Gyebi, G. A., **Ogunyemi, O. M.**, Ibrahim M. I., Ogunro, O. B., Adegunloye, A. P., & Afolabi, S. O. (2020). SARS-CoV-2 host cell entry: an *in silico* investigation of potential inhibitory roles of terpenoids. *Journal of Genetic Engineering and Biotechnology*. 19:113.

10.1186/s43141-021-00209-z. (Published by Academy of Scientific Research and Technology; Scopus-indexed; IF: 3.818)

12. Gyebi, G. A., **Ogunyemi, O. M.**, Ibrahim, I. M., Afolabi, S. O., & Adebayo, J. O. (2021). Dual targeting of cytokine storm and viral replication in COVID-19 by plant-derived steroidal pregnanes: An in silico perspective. *Computers in Biology and Medicine*, 134, 104406 [10.1016/j.combiomed.2021.104406](https://doi.org/10.1016/j.combiomed.2021.104406). Published by Elsevier, Ireland; Thomson Reuters SCI –indexed; IF:7.469)
13. Gyebi, G. A., Elfiky, A. A., **Ogunyemi, O. M.**, Ibrahim, I. M., Adegunloye, A. P., Adebayo, J. O., Olaiya, C.O., Ocheje, J. & Fabusiwa, M. M. (2021). Structure-based virtual screening suggests inhibitors of 3-Chymotrypsin-Like Protease of SARS-CoV-2 from *Vernonia amygdalina* and *Occinum gratissimum*. *Computers in Biology and Medicine* 136: 104671. <https://doi.org/10.1016/j.combiomed.2021.104671>(Published by Elsevier, Ireland; Thomson Reuters SCI –indexed; IF:7.469)
14. **Ogunyemi, M.O.**, Gyebi G. A., Shaibu R.O. (2021) Antioxidant, nutritional and physicochemical quality of yoghurt produced from milk-based fermentation mix enhanced with food spices. *Croatian Journal of Food Science and Technology* 10.17508/CJFST.2021.13.2.10. (Published by: Josip Juraj Strossmayer University of Osijek, Faculty of Food Technology Osijek, Osijek, Croatia; DOAJ-indexed)
15. Tom-Otu, M. O., Omowaye, O. S., Makolo, D., Ayodele , P. F., **Ogunyemi, O. M.**, Fabusiwa, M., & Fabusiwa, M. (2022). *In Silico* and *In Vitro* Antimicrobial Testing of Aqueous Extract of *Vernonia amygdalina* against *Escherichia coli* Isolated from Wistar Rats Infected with *Trypanosoma congolense*. *Open Journal of Bioscience Research* (ISSN: 2734-2069), 3(2), 1-16. <https://doi.org/10.52417/ojbr.v3i2.391>
16. **Ogunyemi, O. M.**, Gyebi, G. A., Ibrahim, I. M., Olaiya, C. O., Ocheje, J. O., Fabusiwa, M. M., & Adebayo, J. O. (2021). Dietary stigmastane-type saponins as promising dual-target directed inhibitors of SARS-CoV-2 proteases: a structure-based screening. *RSC Advances*, 11(53), 33380-33398. DOI: [10.1039/d1ra05976a](https://doi.org/10.1039/d1ra05976a) (Published by the Royal Society of Chemistry; Thomson Reuters SCI –indexed; IF: 3.361).
17. Olawale, F., Iwaloye, O., Olofinisan, K., **Ogunyemi, O. M.**, Gyebi, G. A., & Ibrahim, I. M. (2022). Homology modelling, vHTS, pharmacophore, molecular docking and molecular dynamics studies for the identification of natural compound-derived inhibitor of MRP3 in acute leukaemia treatment. *Chemical Papers*. doi: 10.1007/s11696-022-02128-w (Published by Springer Nature Switzerland; Thomson Reuters SCI –indexed IF: 2.097)
18. Gyebi, G. A., **Ogunyemi, O. M.**, Adefolalu, A. A., Rodríguez-Martínez, A., López-Pastor, J. F., Banegas-Luna, A. J., Pérez-Sánchez, H., Adegunloye, A. P., Ogunro, O. B., & Afolabi, S. O. (2022). African derived phytochemicals may interfere with SARS-CoV-2 RNA capping machinery via inhibition of 2'-O-ribose methyltransferase: An in silico perspective. *Journal of Molecular Structure*, 1262, 133019. DOI: [10.1016/j.molstruc.2022.133019](https://doi.org/10.1016/j.molstruc.2022.133019) (Published by Elsevier, Ireland; Thomson Reuters SCI –indexed IF: 3.196)
19. Femi Olawale, **Oludare Ogunyemi**, Ibukun Mary Folorunso (2022). Repurposing clinically approved drugs as Wee1 checkpoint kinase inhibitors: an in silico investigation integrating molecular docking, ensemble QSAR modelling and molecular dynamics simulation. *Molecular Simulation*. DOI: 10.1080/08927022.2022.2101673. (Published by Taylor and Francis Ltd; Thomson Reuters SCI –indexed; IF: 2.346)
20. Gyebi, G. A., **Ogunyemi, O. M.**, Ibrahim M. I., Afolabi, S. O., Ojo, R. J., Uju E. I., Adebayo J. O. (2022) Inhibitory potentials of phytochemicals from *Ocimum gratissimum* against anti-apoptotic BCL-2 proteins associated with cancer: An integrated computational

- study. *Egyptian Journal of Basic and Applied Sciences* 9 (1): 588-608. (Published by Taylor and Francis Ltd)
21. Gaber El-Saber Batiha, **Oludare M. Ogunyemi**, Hazem M. Shaheen, Funso Raphael Kutu, Charles O. Olaiya, Sabatier Jean-Marc and Michel De Waard (2022). Rhus coriaria L. (Sumac), a versatile and resourceful food spice with cornucopia of polyphenols. *Molecules* 27(16), 5179; <https://doi.org/10.3390/molecules27165179>. (Published by MDPI; Thomson Reuters SCI-indexed; IF: 4.927)
  22. **Ogunyemi, O.M.**, Gyebi, G., Saheed, A., Paul, J., Nwaneri-Chidozie, V., Olorundare, O., Adebayo, J., Koketsu, M., Aljarba, N., Alkahtani, S., Batiha, G., and Olaiya, C. (2022), Inhibition mechanism of alpha-amylase, a diabetes target, by a steroidal pregnane and pregnane glycosides derived from *Gongronema latifolium* Benth. *Front. Mol. Biosci.* 9:866719. doi: 10.3389/fmolb.2022.86671. (Published by Frontiers Media SA; Thomson Reuters SCI-indexed; IF: 6.113)
  23. **Ogunyemi, O. M.**, Gyebi, G. A., Ibrahim, I. M., Esan, A. M., Olaiya, C. O., Soliman, M. M., and Batiha, G. E. (2023). Identification of promising multi-targeting inhibitors of obesity from *Vernonia amygdalina* through computational analysis. *Molecular Diversity*. 27, 1-25. doi: 10.1007/s11030-022-10397-6. (Published by Springer Nature Switzerland; Thomson Reuters SCI-indexed IF: 2.943)
  24. Gyebi, G. A., **Ogunyemi, O. M.**, Adefolalu, A. A., López-Pastor, J. F., Banegas-Luna, A. J., Rodríguez-Martínez, A., Pérez-Sánchez, H., Adegunloye, A. P., Ogunro, O. B., & Afolabi, S. O. (2023). Antimalarial phytochemicals as potential inhibitors of SARS-CoV-2 guanine N7-methyltransferase (nsp 14): an integrated computational approach. *Journal of Biomolecular Structure and Dynamics*, 41:11, 5022-5044. doi: 10.1016/j.molstruc.2022.133019. (Published by Taylor and Francis Ltd; Thomson Reuters SCI-indexed; IF: 5.235)
  25. Femi Olawale, Kolawole Olofinisan, **Oludare M. Ogunyemi**, Kayode O. Karigidi, Gideon A. Gyebi, Ibrahim M. Ibrahim, Opeyemi Iwaloye (2023). Deciphering the therapeutic role of *Kigelia africana* fruit in erectile dysfunction through metabolite profiling and molecular modelling, *Informatics in Medicine Unlocked*, 37,101190, <https://doi.org/10.1016/j.imu.2023.101190>
  26. Anifowose LO, Paimo OK, Adegboyega FN, **Ogunyemi OM**, Akano RO, Hammad SF, Ghazy MA (2023). Molecular docking appraisal of *Dysphania ambrosioides* phytochemicals as potential inhibitor of a key triple-negative breast cancer driver gene (2023). *In Silico Pharmacol.* 11. doi: 10.1007/s40203-023-00152-6.
  27. Gyebi, G.A., **Ogunyemi, O.M.**, Ibrahim, I.M. et al. Identification of potential inhibitors of cholinergic and  $\beta$ -secretase enzymes from phytochemicals derived from *Gongronema latifolium* Benth leaf: an integrated computational analysis. *Mol Divers* (2023). <https://doi.org/10.1007/s11030-023-10658-y> (Published by Springer Nature Switzerland; Thomson Reuters SCI-indexed IF: 2.943)
  28. Gideon A Gyebi, Joseph C Ejoh, Oludare M Ogunyemi, Auza Moses Ibrahim, Ibrahim M Ibrahim, Saheed O Afolabi, Gabriel O Anyanwu, Rotimi J Ojo, Olalekan B Ogunro, Badriyah S Alotaibi, Gaber El-Saber Batiha (2023). Probing the multitargeting potential of n-hexane fraction of *Gongronema latifolium* leaves in neurodegeneration via in vitro, GC-MS and in silico studies. *Future Journal of Pharmaceutical Sciences* 9:84. <https://doi.org/10.1186/s43094-023-00536-7>
  29. Joy A Adetunji, Oludare M Ogunyemi, Gideon A Gyebi, Anuoluwapo E Adewumi, Charles O Olaiya (2023). Atomistic simulations suggest dietary flavonoids from *Beta vulgaris* (beet) as promising inhibitors of human angiotensin-converting enzyme and 2-alpha-adrenergic receptors in hypertension. *Bioinformatics Advances* <https://doi.org/10.1093/bioadv/vbad133>



30. Ogunyemi O.M, Gyebi G.A and Olaiya C.O (2023) Triterpenes from African Antidiabetic Herbs as Inhibitors of DPP-4 and PTP1B Targets: Molecular Modeling Investigation. *Pharmaceuticals* (under review)

### VIII. Major conferences and Workshops Attended with Papers Read

- a. 32nd Annual Scientific Conference of the Nigerian Society of Biochemistry and Molecular Biology (NSBMB). November 14-17, 2012. University of Calabar, Nigeria.  
**Abstract presented:** Ogunyemi O.M, Olaiya C.O, Choudhary M.I. Evaluation of the Effects of  $\beta$ -sitosterol (BSS),  $\beta$ -sitosterol glucoside (BSSG) and BSS: BSSG mixture on some indices of hypertension in albino rats. Book of abstract PDT 72; Page 93.
- b. 3rd Unibadan Conference of Biomedical Research. (UCBR). July 24-27, 2012. University of Ibadan. Nigeria.  
**Abstract presented:** Ogunyemi O.M, Olaiya C.O, Choudhary M.I. Modulatory effects of  $\beta$ -sitosterol on some indices of hypertension in Wistar Albino Rats. Book of abstract. OPB22; Pp. 62.
- c. 4th Unibadan Conference of Biomedical Research (UCBR). July 1-4, 2014. University of Ibadan. Nigeria.  
**Abstract presented:** Ogunyemi O.M, Olaiya C.O, Karigidi K. (2014). Biotechnological Strategies for Enhancing the Nutritive and Nutraceutical Values of Tomato (*Solanum lycopersicon*). Book of Abstract. OPD 24; Pp. 86
- d. 10th FASBMB/ 34th NSBMB Conference. November 2nd -6th 2015, Minna, Nigeria.  
**Abstract presented:** Olaiya C.O, Ogunyemi O.M, Adewale T.B, Kareem A.M. Enzyme Activity, Antioxidant Potential and Mineral Content of Bioregulator- treated Millet under Salinity Stress.
- e. International Workshop (Humboldt Kolleg) Ibadan (2016). Ethical issues in research and scholarship and how to successfully apply for Alexander von Humboldt and DAAD fellowships and scholarships. February 10-14, 2016, Conference Center, University of Ibadan.
- f. 5th Unibadan Conference of Biomedical Research (UCBR). August 13- 15, 2016. University of Ibadan, Nigeria.  
**Abstract presented:** Oludare Michael Ogunyemi, Charles Ojo Olaiya and Funke A. Toyese. Antioxidant, Nutritional and Physicochemical Properties of Tomato Juice fortified with *Zingiber officinale* (Ginger).
- g. Workshop on Good Laboratory Practices (GLP) (2017). Microbial Biotechnology, Food Security & Safety Niche Area Research Group, Northwest University, Mafikeng, South Africa. SA-Agentina Bilateral Funding, at Mmabatho Palms, South Africa.
- h. African Physical Society Zoom Conference on Biophysics in Africa. March 22-26, 2021. University of Pretoria, South Africa.
- i. ICGEB symposium on COVID19 (2021): update on the current pandemic in multiple key regions of the world, ICGEB activities, feedback from Member States and future cooperation. An on-line event. October 26-26, 2021. Trieste, Italy
- j. 7th Unibadan Conference of Biomedical Research (UCBR). September 13-18, 2021. University of Ibadan, Nigeria.  
**Abstract presented:** Oludare M. Ogunyemi, Gideon A. Gyebi, Abdo A. Elfiky, Ibrahim M. Ibrahim, Adegbenro P. Adegunloye, Joseph O. Adebayo, Joshua Ocheje, Mercy M. Fabusiwa, Charles O. Olaiya. Identification of potential inhibitors of 3-Chymotrypsin-Like Protease of SARS-CoV-2 from *Vernonia amygdalina* and *Occinum gratissimum*: structure - based virtual screening.
- k. Joint virtual conference of the African Light Source (AfLS3 – 2021), Pan-African Conference on Crystallography online (ePCCr - 2021), African Physical Society (AfPS – 2021). November 15 – 19, 2021

- l. Hybrid Workshop on Computer Simulation and Theory of Macromolecules. An on-line event. April 08-09, 2022. Hunfield, Germany.
- m. 8th UNIBADAN Conference of Biomedical Research (UCBR-8). 13-15 September, 2023. College of Medicine, university of Ibadan, Ibadan, Nigeria.  
**Abstract presented:** Ogunyemi O.M, Gyebi G.A, Ibrahim I. M, Ogunyemi MM, Olaiya C.O.O. Molecular mechanics and quantum mechanics model calculations revealed interactions of DPP-4 with terpene structures derived from African antidiabetic herbs
- n. XXIX International Symposium on Bioinformatics and Computer-Aided Drug Discovery, which was held online from 18 to 20 September 2023.
- o. Biophysics in Africa International Conference. 25 -28 September, 2023  
**Abstract presented:** Ogunyemi O.M, Macaulay O.S, Gyebi G.A, Ogunyemi M.M, Agunloye M.O and Olaiya C.O. Probing binding affinity of human acetylcholinesterase for steroidal pregnanes as promising inhibitors through molecular modelling investigation

## **IX Academic Linkages**

1. Department of Chemistry and Biomolecular Science/Material Science, Faculty of Engineering and Division of Anaerobi Research, Life Science Research Center Gifu University, 1-1 Yanagido, Gifu 501, Japan
2. Bibliotheca Alexandrina HPC facility, Alexandria, Department of Biophysics, Faculty of Sciences, Cairo University, Giza, Egypt
3. Structural Bioinformatics and High-Performance Computing Research Group (BIO-HPC), Universidad Católica de Murcia (UCAM), Spain
4. Department of Pharmacology and Therapeutics, Faculty of Veterinary Medicine, Damanhour University, Damanhour 22511, AlBeheira, Egypt
5. School of Agricultural Sciences, University of Mpumalanga, Mbombela 1200, South Africa
6. Institut de Neurophysiopathologie (INP), CNRS UMR 7051, Faculté des Sciences Médicales et Paramédicales, Aix-Marseille Université, 27 Bd Jean Moulin, 13005 Marseille, France

## **X Voluntary/Community Services**

1. Manuscript reviewer for Journal of Biomolecular Structure and Dynamics
2. Manuscript reviewer for Computers in Biology and Medicine
3. Manuscript reviewer for Computational and Structural Biotechnology Journal
4. Manuscript reviewer for Archiv der Pharmazie
5. Counselling and mentoring services for young adults as an Associate Coordinator at Deeper Life Campus Fellowship