

CURRICULUM VITAE

- I.** (a) Name: Adeola Oluwakemi Olowofolahan
(b) Department: Biochemistry
(c) Faculty: Basic Medical Sciences
- II.** (a) First Academic Appointment: Assistant Lecturer (14 June, 2012)
(b) Present Post : Lecturer 1 (01 October, 2018)
(c) Date of Last Promotion: 01 October, 2018
- III.** University Education (with dates)
(a) Obafemi Awolowo University, Ile-Ife 1992–1998
(b) University of Ibadan, Ibadan 2008–2010
(c) University of Ibadan, Ibadan 2012-2019
- IV.** Academic Qualifications (with dates and granting bodies)
(a) Bachelor of Science (Hons) (Biochemistry, OAU, Ile-Ife) 1998
(b) Master of Science (Biochemistry, University of Ibadan) 2010
(c) Doctor of Philosophy (Biochemistry, University of Ibadan) 2019
- V.** Professional Qualifications and Diploma
Doctor of Philosophy (PhD) in Biochemistry 2019
- VI.** Scholarships, Fellowships and Prizes (with dates)
(a) University of Ibadan Postgraduate Publication Award 2017
(b) University of Ibadan TETFUND Award 2017
- VII.** Honours, Distinctions and Membership of Learned Societies
(a) Nigeria Society for Experimental Biology (NISEB)
(b) Nigerian Society of Biochemistry and Molecular Biology
(c) Biochemical Society, UK
(d) World Mitochondria Society

VIII. Details of Teaching /Work Experience

(a) Details of Teaching

- (i) Organization, demonstration and supervision of weekly practical classes for: MBBS/BDS and Biochemistry students
- (ii) Biochemistry lectures for B.Sc. Biochemistry and MBBS/BDS students
- (iii) Biochemistry lectures for students from Physiotherapy, B. Pharmacy Microbiology, BMLS, Nursing and Human Nutrition Departments

(b) Administrative duties

- (i) Member, B.Sc. Programme Committee 2012-2020
- (ii) Member, Postgraduate Programme Committee 2020-till date
- (iii) Member, Departmental Committee on NUC Accreditation 2012-till date
- (iv) Member, Dept. Committee on Curriculum Development 2012-till date
- (v) Adviser, 200 Level B.Sc. (Biochemistry) Program 2016-till date
- (vi) Member, Committee on Review of College Prospectus 2020-till date
- (vii) Member, Local Organizing Committee on UCBR-7 2021

IX Research

(a) Completed

- (i) Effect of different fractions of methanol extract of *Drymaria cordata* on mitochondrial-mediated apoptosis
- (ii) Ameliorative potential of methanol extract and chloroform fraction of *Drymaria cordata* on monosodium glutamate-induced uterine hyperplasia in female rats

(b) Ongoing Research

- (i) Effect of methanol extract of *Drymaria cordata* on estradiol benzoate-induced endometrial hyperplasia in female rats
- (ii) Effect of methanol extract of *Drymaria cordata* on 7,12-dimethylbenzene[a]anthracene-Induced-uterine and mammary gland hyperplasia
- (iii) Structural Elucidation of the bioactive agent(s) purified from *Drymaria cordata* and its antioxidant and anti-proliferative effects on uterine fibroid cancer cell lines via induction of mitochondrial-mediated apoptosis and estrogen receptor signaling pathway

Uterine leiomyoma (uterine fibroids) are benign tumors that emanate from the myometrium. The cause of fibroid is still unknown. Surgery is currently the primary treatment for uterine fibroid with uterine artery embolization and focused ultrasound ablation as other emerging less-invasive options. All these options are associated with some forms of morbidity and mortality. In view of these, there is need for a safe, effective oral treatment method that would appeal to many women with symptomatic uterine leiomyoma. The ongoing study is therefore investigating the possible phytotherapeutic potential of *Drymaria cordata* on uterine leiomyoma looking at some molecular biomarkers such as uterine aromatase, estrogen receptors, some mitochondrial enzymes, mitDNA, TFAM, NRF-1 and PGC-1 protein (PGC-1 α) in normal and 7,12-dimethylbenzene[a]anthracene-treated female rats. Our preliminary study on the plant showed its ameliorative potential on monosodium glutamate-induced uterine hyperplasia. The present study is looking at the molecular basis of action at the hormonal and mitochondrial levels. The study also intends to investigate the effect of the plant on mammary gland.

(c) Project, Dissertation and Thesis

- (i) A.O. Olowofolahan, 1999, Factors that cause Platelet Aggregation, B.Sc.
- (ii) A.O. Olowofolahan, 2010, Modulatory Effect of Kolaviron, a Biflavonoid Complex Purified from Seeds of *Garcinia Kola* on Rat Liver Mitochondrial Membrane Permeability Transition Pore, M.Sc.
- (iii) A.O. Olowofolahan, 2019, Fractions of *Drymaria cordata* linn. Modulate mitochondrial-mediated apoptosis in normal rat liver and monosodium glutamate- induced uterine hyperplasia, Ph.D.

IX. Publications

a. **Books already published:** Nil

b. **Chapters in book already published**

Olowofolahan, O.A., Adeoye, Y.D and Olorunsogo, O.O. (2019). Induction of Mitochondrial-Mediated Apoptosis by Solvent Fractions of Methanol Extract of *Heliotropium indicum* in Rat Liver Cells. In Recent Advances in Biological Research Vol 4. DOI: 10.9734/bpi/rabr/v4. ISBN: 9789389246063.

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

d. **Patent and Copyrights:** Nil

e. **Articles that have already appeared in Learned Journal:**

1. **Olowofolahan, A.O.**, Adeoye, A.O., Offor, G.N., Adebisi, L.A. and Olorunsogo O.O. (2015). Induction of Mitochondrial Membrane Permeability Transition Pore and Cytochrome c Release by Different Fractions of *Drymaria cordata*. *Archives of Basic and Applied Medicine*. Vol 3: 135-144. (Nigeria) (Contribution 50%)
2. Adewoye, E. O., Olateju, M.O. and **Olowofolahan A.O.** (2016). *Chrysophyllum Albidum* Reversed Mitochondrial Dysfunction and Dyslipidemia in Diabetic Wistar Rats. *Archives of Basic and Applied Medicine*. Vol 4: 95-100. (Nigeria) (Contribution 20%)
3. **Olowofolahan, A.O.**, Adeoye, Y.D. and Olorunsogo, O.O. (2017). Induction of Mitochondrial-Mediated Apoptosis by Solvent Fractions of Methanol Extract of *Heliotropium indicum* in Rat Liver Cells. *Annual Research and Review in Biology*. Vol 17 (2): 1-15. (United States of America) (Contribution 70%)
4. **Olowofolahan, A.O.**, Aina, O.O., Hassan, E.T. and Olorunsogo, O.O. (2017). Ameliorative Potentials of Methanol Extract and Chloroform Fraction of *Drymaria cordata* on MSG-induced Uterine Hyperplasia in Female Wistar Rats. *European Journal of Medicinal Plants*. Vol 20 (4): 1-9. (India) (Contribution 60%)
5. **Olowofolahan, A.O.** and Olorunsogo, O.O. (2018). Induction of Apoptosis in Rat Liver Cells Via Caspase activation by Chloroform Fraction of Methanol Extract of *Drymaria cordata*. *European Journal of Biomedical and Pharmaceutical Sciences*. Vol. 5 (4): 73-83. (India) (Contribution 80%)

6. **Olowofolahan, A.O.**, Adeosun , O.A., Afolabi, O.T. and Olorunsogo, O.O. (2018). Effect of Methanol Extract of *Mangifera indica* on Mitochondrial Membrane Permeability Transition Pore in Normal Rat Liver and Monosodium Glutamate-induced Liver and Uterine Damage. *Journal of Complemetary and Alternative Medical Research*. Vol 5(2):1-14. (India) (Contribution 40%)
7. **Olowofolahan, A.O.**, Nwaokolo, E.N. and Olorunsogo, O.O. (2019). Effect of Methanol Leaf Extract of *Blighia Sapida* on Mitochondrial Membrane Permeability Transition Pore Opening and Blood Glucose Levels in Normal and Streptozotocin-Induced Diabetic Rats. *Biomedical Journal of Scientific & Technical Research* Vol. 19(1): 14047-14057. (India) (Contribution 70%)
8. Oyebode, O.T, Teniola, O.E, **Olowofolahan, A.O.** and Olorunsogo, O.O. (2019). Alpha Stone Decoction, a Polyherbal Formulation, Induces Liver Mitochondrial-mediated Apoptosis in a Monosodium Glutamate Model of Hyperplasia. *Arch. Bas. App. Med.*Vol. 7: 109 – 115. (Nigeria) (Contribution 20%)
9. **Olowofolahan, A.O.**, Bolarin, O.L. and Olorunsogo, O.O. (2020). In vitro and in vivo effect of 3-Para-fluorobenzoyl-propionic acid on rat liver mitochondrial permeability transition pore opening and lipid peroxidation. *Annals of Science and Technology*. Vol 5 (1): 39-44. (Nigeria) (Contribution 70%)
10. **Olowofolahan, A.O.**, Akanji, B.A. and Olorunsogo, O.O. (2020). 3-(Para-fluorobenzoyl)-propionic acid; a metabolite of haloperidol reversed oestradiol valerate-induced uterine hyperplasia via modulation of estrogen receptor signaling pathway in female Wistar rats. *Journal of Basic and Clinical Physiology and Pharmacology*. Vol. 31(4). DOI: 10.1515/jbcpp-2019-0119. (Germany) (Contribution 70%)
11. **Olowofolahan, A.O.**, Ezekiel C.D. and Olorunsogo, O.O. (2020). Induction of Mitochondrial Membrane Permeability Transition Pore Opening and DNA fragmentation by Solvent Fractions of *Mangifera indica*. *Archives of Basic and Applied Medicine*. Vol. 7: 123–129. (Nigeria) (Contribution 70%)
12. **Olowofolahan, A.O.**, Oyebode, O.T. and Olorunsogo, O.O. (2020). GCMS analysis of partially purified chloroform sub fractions of methanol extract of *Drymaria cordata* (Linn) and their effects on mitochondrial membrane permeability transition pore. *Arch. Bas. App. Med*. Vol. 8: 3–11. (Nigeria) (Contribution 60%)
13. **Olowofolahan, A.O.**, Olanlokun, J.O. and Olorunsogo, O.O.(2020). GCMS analysis and Phytoprotective effect of chloroform fraction of methanol leaf extract of *Drymaria*

cordata against MSG-induced lesions in specific tissues. African Journal of Medicine and Medical Sciences. Vol. 49: 409-419. (Nigeria) (Contribution 60%)

14. **Olowofolahan, A.O.**, Adeosun, O.A., Olorunsogo, O.O. (2020). Monosodium Glutamate Induces Cytotoxicity in Rat Liver via Mitochondrial Permeability Transition Pore Opening. Cell Biochemistry and Biophysics. Vol. 78:429–437.
15. **Olowofolahan, A.O.**, Oyebode, O.T. and Olorunsogo, O.O. (2021). Methyl palmitate reversed estradiol benzoate-induced endometrial hyperplasia in female rats. Toxicology Mechanisms and Methods. Vol. 31(1): 43–52. (United Kingdom) (Contribution 60%)
16. **Olowofolahan, A.O.** and Olorunsogo, O.O. (2021). Effect of *Gloriosa superba* linn (EEGS) on mPT and monosodium glutamate-induced proliferative disorder using rat model. Journal of Ethnopharmacology Vol. 267: 113498. (Netherland) (Contribution 80%)
17. **Olowofolahan, A.O.** and Olorunsogo, O.O. (2021). Fractions of *Ageratum conyzoides* L. (Compositae) induce mitochondrial-mediated apoptosis in rats: Possible option in monosodium glutamate-induced hepatic and uterine pathological disorder. Journal of Ethnopharmacology. Vol. 277: 114192. (Netherland) (Contribution 80%)
18. **Olowofolahan, A.O.**, Adewoye, F.O. and Olorunsogo, O.O. (2021). Modulatory effect of methanol extract of *Annona muricata* stem bark on mitochondrial membrane permeability transition pore in normal rat liver and monosodium glutamate-induced uterine hyperplasia. Journal of Complementary and Integrative Medicine. Vol. 18(2):355-361. (Germany) (Contribution 70%)
19. **Olowofolahan, A.O.**, Paulinus, O.B., Dare, H.M. and Olorunsogo, O.O. (2021). Metformin induces apoptosis via uterus mitochondrial permeability transition pore opening and protects against estradiol benzoate-induced uterine defect and associated pathophysiological disorder in female Wistar rats. Bulletin of the National Research Centre. Vol. 45:102. (United Kingdom) (Contribution 60%)
20. **Olowofolahan, A.O.**, Tobih S.E and Olorunsogo, O.O. (2021). Amelioration of oestradiol valerate-induced endometrial hyperplasia in female rats by methanol fraction of *Mangifera indica* Linn via modulation of estrogen receptor signaling pathway. Indian Journal of Physiology and Pharmacology. Vol. 65:2 (India) (Contribution 70%)

21. Olanlokun, J.O., **Olowofolahan, A.O.**, Bodede, O., Adegbuyi, A.T., Prinsloo, G., Steenkamp, P. and Olorunsogo, O.O. (2021). Anti-inflammatory potentials of the n-hexane fraction of *Alstonia boonei* stem bark in lipopolysaccharide-induced inflammation in Wistar rats. *Journal of Inflammation Research*. Vol. 2021(14): 3905–3920 (United Kingdom) (Contribution 30%)
22. Oyebode, O.T., **Olowofolahan A.O.** and Olorunsogo, O. O. (2021). Toxic Effects of Unripe *Carica papaya* (Linn) Fruit Extract on Healthy Rat Liver Mitochondria Traditional and Integrative Medicine. Vol. 6 (2):126-137 (Iran) (Contribution 30%)
23. **Olowofolahan, A.O.**, Dare, H.M., Adeoye, Y.D., Olorunsogo, O.O. (2022). *Annona muricata* Linn stem bark protects against uterine proliferative disorder induced by estradiol benzoate in female rat. *European Journal of Medicinal Plants*. Vol. 33(9): 48-61. (Contribution 60%)

f. Articles that have already been accepted for publication:

1. **Olowofolahan A.O.**, Olasupo, M.E., Adeoye , Y.D. and and Olorunsogo, O.O.
Fractions of *Ageratum conyzoides* induce cytotoxicity in rat liver cells via mitochondrial permeability transition pore opening: Potential anti-cancer agents. *African Journal of Biomedical Research* (impress).

g. Technical Reports and Monographs : Nil

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

(a) 3rd International Conference on Cell and Experimental Biology (CEB-2022), Boston, MA, USA. (April 18-20, 2022).

Paper presented: Olowofolahan, A.O., Adeosun, O.A., Olorunsogo, O.O. (2020).
Monosodium Glutamate Induces Cytotoxicity in Rat Liver via Mitochondrial Permeability Transition Pore Opening.

(b) Seventh Unibadan Conference of Biomedical Research, University of Ibadan, Ibadan, Nigeria. September 15- 17, 2021.

Papers presented

(i) **Olowofolahan, A.O.**, Paulinus, O.B., Dare, H.M. and Olorunsogo, O.O. (2021).
Metformin induces apoptosis via uterus mitochondrial permeability transition pore opening and protects against estradiol benzoate-induced uterine defect and associated pathophysiological disorder in female Wistar rats.

(ii) **Olowofolahan, A.O.**, Tobih S.E and Olorunsogo, O.O. (2021). Amelioration of oestradiol valerate-induced endometrial hyperplasia in female rats by methanol fraction of *Mangifera indica* Linn via modulation of estrogen receptor signaling pathway.

(c) Webinar seminar on "Publish Open Access Books" organized by Taylor & Francis Group. July 27, 2021.

(d) American Society for Biochemistry and Molecular Biology; Protonic Bioenergetics and Action Potential Webinar Series, May 11, 18 and 25, 2021.

(e) 38th Scientific Conference and Annual General Meeting of the Nigerian Society of Biochemistry and Molecular Biology, Sokoto, Nigeria (6-10 June, 2021).

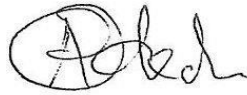
Paper Presented: Adeoye, Y.D., Oladipo, T.A., **Olowofolahan, O.O.** and Olorunsogo, O.O. (2021). Effect of *Ageratum conyzoides* in rats with ethanol-induced liver damage.

(f) Sixth Unibadan Conference of Biomedical Research on Biotechnology, University of Ibadan, Ibadan Nigeria (July 10-13, 2018).

Paper presented: Olowofolahan, A.O., E. O. Nwaokolo, E.O. and Olorunsogo, O.O. Inhibitory effect of methanol extract of *Blighia sapida* on mitochondrial membrane permeability transition pore opening in normal and streptozotocin-induced diabetic rats

(g) Fifth Unibadan Conference of Biomedical Research on Biotechnology, University of Ibadan, Ibadan Nigeria (July 12-15, 2016)

Paper presented: Olowofolahan, A.O., Aina, O.O., Adebisi, L.A. and Olorunsogo, O.O. Ameliorative potentials of methanol extract of *Drymaria cordata* on fibroid induction in female wistar rats.



.....
A.O. OLOWOFOLAHAN