

## CURRICULUM VITAE

- I.**
- a. **Name:** Abayomi Mayowa Ajayi
  - b. **Date of Birth:** 24<sup>th</sup> April, 1980
  - c. **Department:** Pharmacology & Therapeutics
  - d. **Faculty:** Basic Medical Sciences
  - e. **Present Employer:** University of Ibadan
- II.**
- a. **First Academic Appointment:** Lecturer II (2 September, 2013)
  - b. **Present Post (with date):** Senior Lecturer (1 October, 2020)
  - c. **Date of Last promotion (upgrade):** 1 October, 2020
  - d. **Date last considered:** NA
- III. University Education (with dates):**
- a. Ahmadu Bello University, Zaria. 2000 – 2003
  - b. University of Ibadan, Ibadan. 2005 – 2007
  - c. University of Ibadan, Ibadan. 2011 – 2017
- IV. Academic qualifications (with dates and granting bodies)**
- a. B.Sc. Biochemistry July, 2003 Ahmadu Bello University
  - b. M.Sc. Pharmacology April, 2007 University of Ibadan
  - c. PhD Pharmacology May, 2017 University of Ibadan
- V. Professional qualifications and diplomas (with dates)**
- a. NA
- VI. Scholarships, Fellowships and Prizes (with dates): NA**
- VII. Honours, Distinctions and Membership of Learned Societies**
- a. Distinctions
    - i. African Drug and Diagnostic Innovation (ANDI) Awards, Best in Oral Presentation (Natural Product and Traditional Medicines), Addis Ababa, Ethiopia Oct 2011
  - b. Memberships

- i. Pharmacology for Africa (Pharfa)
- ii. Multilateral Initiative on Malaria Society
- iii. Neuroscience Society of Nigeria
- iv. Africa Society for Drosophila Research
- v. International Society of Neurochemistry

### **VIII. Details of Teaching / Work Experience**

#### **A. Kampala International University                      September, 2007 – August, 2013**

- i. Teaching pharmacology courses to diploma and undergraduate medical, nursing, pharmacy and pharmacology students at Kampala International University-Western Campus, Ishaka-Bushenyi Uganda (2007 – 2013).
- ii. Examination Coordinator - Department of Pharmacology KIU-WC (Dec 2007 – June 2009).
  - Coordinate examination activities in the department with the Head of Department
  - Liaising with the Faculty Examination Officer and the Associate Deans office as regards student's examination records.
- iii. Examination Officer - Faculty of Biomedical Sciences KIU-WC (July 2009 – Dec 2010).
  - Being responsible to the Dean for the Smooth running and administration of all examinations.
  - Liaising with departmental exams officers and examination boards in respect of examination requirements, entries, results and communication.
  - Ensuring that students are conversant with the university examination policy and are aware of the examination boards' requirements regarding their conduct while sitting examination.
- iv. Associate Dean - Faculty of Biomedical Sciences, KIU-WC (Jan 2011 – August 2013).
  - Provide oversight of academic program planning, development and implementation
  - Collaborate with the directorate of academic affairs in the maintenance and management of examination record systems and computerized tracking of all students in the faculty.

#### **B. University of Ibadan, Nigeria.                      September 2013 – till date**

- i. **Undergraduate lectures:** Courses and topics taught to B.Sc (Physiology, Physiotherapy, Nursing and Medical Laboratory Science), B.Pharm (Pharmacy), and MBBS/BDS (Medical and Dental) degree students includes;
  - ✓ PHA 301 (Introductory Pharmacology), PHA 302 (Autonomic Nervous System 1), PHA 304 (Gastrointestinal Pharmacology), PHA 501 (Autocoids and related drugs, inflammation and asthma), PHA 502 (Toxicology)
  - ✓ Block posting lectures: Histamine, serotonin, ergot alkaloids and eicosanoids, diuretics and vasodilators, opioid and non-opioid analgesics.

- ✓ Integrated Core lectures to MBBS/BDS students: Anti-inflammatory and opioid analgesics
- ✓ Practical class demonstrations to B.Sc, B.Pharm and MBBS/BDS students
- ✓ Supervision of undergraduate B.Pharm final year projects
- ii. Postgraduate Pharmacology lectures**
  - ✓ PHA 701 (Investigative Techniques)
  - ✓ PHA 702 (Properties of Biological Membrane)
  - ✓ PHA 707 (Pharmacology of Inflammation)
  - ✓ PHA 708 (Advanced Studies in Principles of Chemotherapy).
  - ✓ Supervision of M.Sc Pharmacology students
- iii. Postgraduate Coordinator, Department of Pharmacology and Therapeutics, August 2021 –August 2023
- iv. Member, University of Ibadan Animal Care and Use Research Ethics Committee (UI-ACUREC), 2021-2022
- v. Community Service**
  - a. Lecture presentation at the 9th Graduating Set symposium, Department of Pharmacology, Olabisi Onabanjo University, Sagamu, Ogun State. Lecture title: “The Quest: Life beyond these walls” Research and Postgraduate Options after 1st Degree In Pharmacology. 21st August, 2019
  - b. National Association of Pharmacology Students (NIPSA) conference Guest Lecturer: Good laboratory practices. Department of Pharmacology, Olabisi Onabanjo University, Sagamu, Ogun State. 14th August, 2018.
  - c. INEC Ward Collation Officer at Surulere LGA, Oyo-State for the 2019 Presidential and National Assembly Election.

## **IX. Research**

### **(a) Research Related Skills**

- Cell Culture techniques. Working with RAW 264.7 macrophages and CHO-k1 cell lines for cytotoxicity and anti-inflammatory testing of extracts and natural compounds
- Biochemical assays: ELISA assays, various biochemical assays in tissue and microdilution assays
- Rodents handling and behavioural assays. Oral and intraperitoneal drug administration skills to laboratory rodents as well organising behavioural experiments
- Ability to organize large amounts of research information in a clear manner. Analysis of research data using statistical packages (MS-Excel, Graphpad Prism, SPSS) and presentation of emerging conclusions and concepts using MS-Powerpoint. Questionnaire design, problem-solving skills, ability to communicate effectively to audiences. Ability to work with timelines under minimum supervision.

### **(b) Research Interest: Health Promoting Potentials of Indigenous Fruits**

My long term research interest involve using new tools to understand how indigenous fruits, spices and herbs promote health and well-being for all at all ages.

I investigate how extracts or bioactive compounds prevent and ameliorate behavioural derangement and underlying oxido-inflammatory processes as a result of repeated exposure to stress, chemical toxicants, high fat diet and malaria infection. I have been involve in the pharmacological and toxicological investigation of indigenous herbs, spices, fruits and their bioactive compounds with the goal of promoting their development into herbal medicinal products or nutraceuticals.

Presently, I'm also investigating the interplay between alcohol herbal mixture (paraga) use, diets and stress and its consequences on cardiometabolic, reproductive and neurocognitive functioning, in order to elucidate the dangers of harmful alcohol use. My research tools involve using *in vitro* cell line, *Drosophila melanogaster* and laboratory rodents for pharmacological investigations.

### (c) Completed

- i. Co – Investigator: Paul E Alele (PI), Kasule GT, **Ajayi AM**, Lawrence I. Neurotoxic, Hematologic and Metabolic Outcomes of Sub chronic Khat (*Catha edulis*) and Ethanol in a rat model.
- ii. Primary Faculty Mentor for Medical Education Partnership Initiative (MEPI) Undergraduate Mentored Research Support (2013): Naluwuge Annet, Buyinza Peter, Ivan Luswata. Comparative Physicochemical, Phytochemical and Acute Toxicity Studies on Two *Ocimum Species* of Western Ugandan.
- iii. Thesis: Evaluation of the anti-inflammatory activities of extracts and flavonoid-rich fraction from *Ocimum gratissimum* Linn. (Lamiaceae) Leaf.

### (d) In progress

- i. Investigator: Health promoting properties of indigenous fruits, spices and herbs
- ii. Investigator: Interplay between alcohol herbal mixture (paraga) abuse and neurocognitive disorders

### (e) Project, dissertation and thesis

#### Undergraduate Projects Supervised

- i. Naluwuge Annet: Comparative physicochemical, phytochemical and acute toxicity studies of *Ocimum gratissimum* and *Ocimum suave* species in Western Uganda. **(B.Pharm project, 2013, KIU-WC, Uganda).**
- ii. Ivan Luswata: Comparative studies on polyphenolics composition and antioxidant activities in leaves of *Ocimum gratissimum* and *Ocimum suave*. **(B.Pharm project, 2013, KIU-WC, Uganda)**
- iii. Chidiebere Ezeh: Investigating the antinociceptive effect of the ethylacetate fraction of *Ocimum gratissimum* in mice. **(B.Pharm project, 2016, UI, Nigeria).**

- iv. Ezeagu Maduka Bedewright: Anti-inflammatory property of hexane extract of the nut of *Plukenetia conophora* (Euphorbiaceae) in rats. **(B.Pharm project, 2018, UI, Nigeria).**
- v. Ola Bose Christie: Antinociceptive effect of hexane extract of *Plukenetia conophora* (Euphorbiaceae, African walnut) in mice. **(B.Pharm project, 2018, UI, Nigeria).**
- vi. Ogunkolade Gracious Emmanuel: Evaluation of the effect of *Chrysophyllum albidum* fruit extract on behavioral and biochemical changes in mice exposed to repeated social defeat stress and lipopolysaccharides. **(B.Pharm project, 2019, UI, Nigeria).**
- vii. John Kayode Abidemi: Evaluation of the hypolipidemic effect of *Ananas comosus* fruit peel extract in High Fat Diet-fed rats. **(B.Pharm project, 2019, UI, Nigeria).**
- viii. Oyedele Ayomide Tolulope: Impact of *Chrysophyllum albidum* fruit-supplemented diet on growth, memory and biochemical changes in post-weaning Swiss mice. **(B.Pharm project, 2019, UI, Nigeria).**
- ix. Olutogun Eniola: Evaluation of the hepatotoxic response following chronic consumption of alcohol herbal beverage, ethyl oleate and ethanol in normal diet and high-fat diet fed rats. **(B.Pharm project, 2020, UI, Nigeria).**
- x. Cole Samuel Adedeji: Evaluation of insulin resistance and oxidative stress following chronic consumption of alcohol herbal beverage, ethyl oleate and ethanol in normal diet and high-fat diet fed rats. **(B.Pharm project, 2020, UI, Nigeria).**
- xi. Owojori Temidayo: Evaluation of atherogenic indices following the chronic consumption of alcohol herbal beverage, ethyl oleate and ethanol in normal diet and high-fat diet fed rats. **(B.Pharm project, 2020, UI, Nigeria).**
- xii. Ojetola Ifeoluwa Abigail: Evaluation of the effect of Naringin on monoarthritis induced affective disorders in High-Fat Diet fed mice. **(B.Pharm project, 2021, UI, Nigeria).**
- xiii. Alabi Joshua Ayo: Comparative Evaluation of the *in vitro* antioxidant and antidepressant-like activities of extracts and fractions from freshly homogenised and oven-dried fruits of *Chrysophyllum albidum*. **(B.Pharm project, 2021, UI, Nigeria).**

#### **M.Sc Dissertation supervised**

- i. Chidebe Emmanuel Onyinyechukwu: Evaluation of the memory enhancing and neuroprotective effects of *Chrysophyllum albidum* fruit supplementation in mice. **(M.Sc Pharmacology, 2019, UI, Nigeria).**
- ii. Melete John Chinweoke: Effect of alcoholic herbal mixture 'paraga' and ethanol on aggression and neurocognition in mice. **(M.Sc Pharmacology, 2019, UI, Nigeria).**
- iii. Adebajo Iyanuoluwa Mary: Evaluation of the effect of Co-administration of a commercial juice on antimalarial efficacy of artemether-lumefantrine

- in *Plasmodium beighei* infected mice. (M.Sc Pharmacology, 2020, UI, Nigeria)
- iv. Joseph Olusola Olugbenga: Evaluation of the anxiogenic and oxido-inflammatory response in high-fat diet fed rats co-administered with alcohol herbal beverage 'paraga' and ethanol (M.Sc Pharmacology, 2020, UI, Nigeria).
  - v. Onyemenam Chiwete Valentine: Ameliorative potentials of *Spondias mombin* Linn fruit on anxiodepressive behaviour and biochemical perturbation in Swiss mice subjected to social defeat stress. (M.Sc Pharmacology, 2021, UI, Nigeria)
  - vi. Aghariagbonse Monday Osarodion: Ameliorative potentials of *Spondias mombin* Linn fruit juice on metabolic and hepato-neuroanl changes in high-fat diet fed Wistar Rats. (M.Sc Pharmacology, 2021, UI, Nigeria)

## X. Publication

1. Olajide, O.A., **Ajayi, A.M.** and Wright, C.W. (2009). Anti-inflammatory properties of cryptolepine. *Phytotherapy Research* Vol. 23. No. 10: 1421-1425.
2. **Ajayi, A.M.**, Tanayen, J.K., Balogun, S.O., Ibrahim, A., Ezeonwumelu, J.O.C, Kiplagat, D., Oyewale, A.A., Oloro, J.O., Goji, A.D.T. and Adzu, B. (2011). Anti-inflammatory and Analgesic Properties of Ethanolic Stem Bark Extract of *Ficus trichopoda* in Rats. *Pharmacognosy Journal* Vol. 2. No. 18: 43-47.
3. Ezeonwumelu, J. O. C., Julius, A. K., Muhoho, C. N., **Ajayi, A. M.**, Oyewale, A. A., Tanayen, J. K., Balogu, S. O., Ibrahim, A., Adzu, B., Adiukwu, P. C., Oloro, J., Kiplagat, D. M., Goji, T., Okoruwa, G. A., Onchweri, A. N., & Reddy, P. M. K. (2011). Biochemical and histological studies of aqueous extract of *Bidens pilosa* leaves from Ugandan Rift Valley in rats, *British Journal of Pharmacology and Toxicology*, Vol. 2 No 6: 302-309.
4. Alele, P.E., **Ajayi, A.M.** and Imanirampa, L. (2013). Chronic khat (*Catha edulis*) and alcohol maginally alter complete blood counts, clinical chemistry, and testosterone in male rats. *Journal of Experimental Pharmacology* Vol. 5: 33-44.
5. **Ajayi, A.M.**, Tanayen, J.K., Ezeonwumelu, J.O.C., Dare, S., Okwanachi, A., Adzu, B. and Ademowo, O.G. (2014). Anti-inflammatory, Anti-nociceptive and Total polyphenolic Content of Hydroethanolic Extract of *Ocimum gratissimum* L. Leaves. *African Journal of Medicine and Medical Sciences*. Vol. 43. Suppl. 1: 215-224.
6. Eduviere, A.T., Umukoro, S., Aderibigbe, A.O., **Ajayi, A.M.** and Adewole, F.A. (2015). Methyl jasmonate enhances memory performance through inhibition of oxidative stress and acetylcholinesterase activity in mice. *Life Sciences*. Vol. 132: 20 -26.
7. Umukoro, S., Oluwole, O.G., Eduviere, A.T., Adrian, O.I. and **Ajayi, A.M.** (2015). Jobelyn<sup>®</sup> exhibited anti-inflammatory, antioxidant, and membrane –stabilizing activities in experimental models. *Journal of Basic and Clinical Physiology and Pharmacology* Vol. 26. No.5: 501-508.
8. Ben-Azu, B., Aderibigbe, A.O., **Ajayi, A.M.** and Iwalewa, E.O. (2016). Neuroprotective effects of the ethanol stem bark extracts of *Terminalia ivorensis* in Ketamine-induced schizophrenia-like behaviours and oxidative damage in mice. *Pharmaceutical Biology* Vol. 54. No. 12: 2871-2879.

9. Alele, P.E., Matovu, D., Imanirampa, L. and **Ajayi, A.M.** (2016). Projection neurons in the cortex and hippocampus: differential effects of chronic khat and ethanol exposure in adult male rats. *Journal of Experimental Pharmacology* Vol. 8: 43-52.
10. **Ajayi, A.M.**, Tanayen, J.K., Magomere, A. and Ezeonwumelu, J.O.C. (2017). Antinociceptive and anti-inflammatory effects of aqueous extract of *Chenopodium opulifolium* schrad leaves. *Journal of Intercultural Ethnopharmacology* Vol. 6. No. 1: 14-21.
11. **Ajayi, A.M.**, Naluwuge, A., Buyinza, P. and Luswata, I. (2017). Comparative physicochemical, phytochemical and acute toxicity studies of two *Ocimum* species in Western Uganda. *Journal of Medicinal Plants Research* Vol. 11. No. 1: 1-10.
12. **Ajayi, A.M.**, Ologe, M.O., Ben-Azu, B., Okhale, S.E., Adzu, B., & Ademowo, O.G. (2017). *Ocimum gratissimum* Linn. Leaf extract inhibits free radical generation and suppressed inflammation in carrageenan-induced inflammation models in rats. *Journal of Basic and Clinical Physiology and Pharmacology*, Vol. 28 No. 6: 531-541.
13. **Ajayi, A.M.**, Martins, D.T.O., Balogun, S.O., Oliveira, R.G., Ascencio, S.D., Soares, I.M., Barbosa, R.B., and Ademowo, O.G. (2017). *Ocimum gratissimum* L. leaf flavonoid-rich fraction suppress LPS-induced inflammatory response in RAW 264.7 macrophages and peritonitis in mice. *Journal of Ethnopharmacology* Vol. 204: 169-178.
14. Alabi, A., **Ajayi, A. M.**, Olooto, W. E., Emegoakor, C., Oladunjoye, O., & Obikoya, Y. (2017). Antinociceptive and anti-inflammatory properties of a polyherbal extract of *Plumbago zeylinica* and *Capsicum frutescens* in rodents. *African Journal of Biomedical Research*, Vol. 20 No. 3: 277-285.
15. Umukoro, S., Alabi, A. O., Eduviere, A. T., **Ajayi, A. M.**, & Oluwole, O. G. (2017). Anti-inflammatory and membrane stabilizing properties of methyl jasmonate in rats. *Chinese Journal of Natural Medicines*, Vol. 15 No. 3: 202-209.
16. Anyaegbu, O. C., **Ajayi, A. M.**, & Adedapo, A. D. (2017). Hypolipidemic and antioxidant effects of the Methanolic stem bark extract of *Anacardium occidentale* Linn. In triton-X 100 induced hyperlipidemic rats. *Oriental Pharmacy and Experimental Medicine*, Vol. 17 No. 3: 211-221.
17. **Ajayi, A. M.**, Umukoro, S., Ben-Azu, B., Adzu, B., & Ademowo, O. G. (2017). Toxicity and Protective Effect of Phenolic-Enriched Ethylacetate Fraction of



- Ocimum gratissimum* (Linn.) Leaf against Acute Inflammation and Oxidative Stress in Rats. *Drug Development Research*, Vol. 78 No. 3-4: 135-145.
18. Oyeleke, S.A., **Ajayi, A.M.**, Umukoro, S., Aderibigbe, A.O., Ademowo, O.G. 2018. Anti-inflammatory activity of *Theobroma cacao* L. stem bark ethanol extract and its fractions in experimental models. *Journal of Ethnopharmacology*, Vol. 222: 239-248.
  19. Onda, E. E., Sonibare, M. A., **Ajayi, A. M.**, & Umukoro, S. (2018). Anti-inflammatory and Antioxidant Effects of *Tetrapleura tetraptera* (Schumach & Thonn.) Taub. Fruit Extract in Carrageenan/Kaolin-induced Acute Monoarthritis in Rats. *Nigerian Journal of Pharmaceutical Research*, Vol. 13 No. 2: 157-166.
  20. Omorogbe, O., **Ajayi, A. M.**, Ben-Azu, B., Oghwere, E. E., Adebisin, A., Aderibigbe, A. O., Okubena, O., & Umukoro, S. (2018). Jobelyn® attenuates inflammatory responses and neurobehavioural deficits associated with complete Freund-adjuvant-induced arthritis in mice. *Biomedicine & Pharmacotherapy*, Vol. 98: 585-593.
  21. Ben-Azu, B., Aderibigbe, A.O., **Ajayi, A.M.**, Eneni, A.O., Umukoro, S., Iwalewa, E.O. (2018). Involvement of GABAergic, BDNF and Nox-2 mechanisms in the prevention and reversal of ketamine-induced schizophrenia-like behavior by morin in mice. *Brain Research Bulletin* Vol. 139:292-306.
  22. **Ajayi, A.M.**, Ben-Azu, B., Ologe, O.M., de Oliveira, R.G., Ademowo, O.G., (2018). Cytotoxic, membrane stabilizing and anti-arthritic effects of methanol extract of *Ocimum gratissimum* Linn. Leaf. *African Journal of Medicine and Medical Sciences*, Vol 47 No. 4: 307-319.
  23. Umukoro, S., Oghwere, E.E., Ben-Azu, B., Owwoeye, O., **Ajayi, A.M.**, Omorogbe, O., Okubena, O., (2018). Jobelyn® ameliorates neurological deficits in rats with ischemic stroke through inhibition of release of pro-inflammatory cytokines and NF-κB signalling pathway. *Pathophysiology* Vol. 26: 77-88.
  24. Asehinde, S., **Ajayi, A.M.**, Bakre, A., Omorogbe, O., Adebisin, A., & Umukoro, S. (2018). Effects of Jobelyn® on Isoniazid-Induced Seizures, Biomarkers of Oxidative Stress and Glutamate Decarboxylase Activity in Mice. *Basic and Clinical Neuroscience*, Vol. 9 No. 6: 389.
  25. Umukoro, S., Kalejaye, H. A., Ben-Azu, B., & **Ajayi, A. M.** (2018). Naringenin attenuates behavioural derangements induced by social defeat stress in mice via

- inhibition of acetylcholinesterase activity, oxidative stress and release of pro-inflammatory cytokines. *Biomedicine & Pharmacotherapy*, Vol. 105: 714-723.
26. Ben-Azu, B., Omogbiya, I. A., Aderibigbe, A. O., Umukoro, S., **Ajayi, A. M.**, & Iwalewa, E. O. (2018). Doxycycline prevents and reverses schizophrenic-like behaviors induced by ketamine in mice via modulation of oxidative, nitrenergic and cholinergic pathways. *Brain Research Bulletin*, Vol. 139, 114-124.
  27. **Ajayi, A.M.**, Ben-Azu, B., Onasanwo, S.A., Adeoluwa, O., Eduviere, A., Ademowo, O.G. (2019) Flavonoid-Rich Fraction of *Ocimum gratissimum* attenuates lipopolysaccharide-induced sickness behaviour, inflammatory and oxidative stress in mice. *Drug Research* Vol. 69: 151-158.
  28. Ben-Azu, B., Nwoke, E. E., Aderibigbe, A. O., Omogbiya, I. A., **Ajayi, A. M.**, Olonode, E. T., ... & Iwalewa, E. O. (2019). Possible neuroprotective mechanisms of action involved in the neurobehavioral property of naringin in mice. *Biomedicine & Pharmacotherapy*, Vol. 109: 536-546.
  29. Ben-Azu, B., Aderibigbe, A.O., **Ajayi, A.M.**, Eneni, A.E.O., Omogbiya, I.A., Owoeye, O., Umukoro, S., Iwalewa, E.O. (2019). Morin decreases cortical pyramidal neuron degeneration via inhibition of neuroinflammation in mouse model of schizophrenia. *International Immunopharmacology* Vol. 70:338-353.
  30. Ojo, E. S., Ishola, I. O., Ben-Azu, B., Afolayan, O. O., James, A. B., **Ajayi, A. M.**, & Adeyemi, O. O. (2019). Ameliorative influence of *Cnestis ferruginea* vahl ex DC (Connaraceae) root extract on kainic acid-induced temporal lobe epilepsy in mice: Role of oxidative stress and neuroinflammation. *Journal of Ethnopharmacology*, Vol. 243: 112117.
  31. **Ajayi, A.M.**, Diya, O.O., Adedapo, A.D.A. (2019). Hypolipidemic Effect of *Chrysophyllum albidum* peel extract and its underlying antioxidant mechanisms in normal and tritox-X-100-induced hyperlipidemic rats. *Journal of Dietary Supplements*, Vol. 17 No. 4: 365-383.
  32. **Ajayi, A.M.**, Ayodele, E.O., Ben-Azu, B., Aderibigbe, A.O., Umukoro, S. (2019). Evaluation of neurotoxicity and hepatotoxicity effects of acute and sub-acute oral administration of unripe ackee (*Blighia sapida*) fruit extract. *Toxicology Reports* 6: 656-665.
  33. Alabi, A. O., **Ajayi, A. M.**, Ben-Azu, B., Bakre, A. G., & Umukoro, S. (2019). Methyl jasmonate abrogates rotenone-induced parkinsonian-like symptoms through inhibition of oxidative stress, release of pro-inflammatory cytokines, and

- down-regulation of immunopositive cells of NF- $\kappa$ B and  $\alpha$ -synuclein expressions in mice. *Neurotoxicology*, Vol. 74, 172-183.
34. Alabi, A. O., **Ajayi, A. M.**, Ben-Azu, B., Omorogbe, O., & Umukoro, S. (2019). Methyl jasmonate ameliorates rotenone-induced motor deficits in rats through its neuroprotective activity and increased expression of tyrosine hydroxylase immunopositive cells. *Metabolic brain disease*, Vol. 34: 1723-1736.
  35. Alabi, A. O., **Ajayi, A. M.**, Omorogbe, O., & Umukoro, S. (2019). Anti-nociceptive and anti-inflammatory effects of an aqueous extract of blended leaves of *Ocimum gratissimum* and *Psidium guajava*. *Clinical Phytoscience*, Vol. 5 No. 1: 1-9.
  36. Umukoro, S., Oghwere, E. E., Ben-Azu, B., Owoeye, O., **Ajayi, A. M.**, Omorogbe, O., & Okubena, O. (2019). Jobelyn® ameliorates neurological deficits in rats with ischemic stroke through inhibition of release of pro-inflammatory cytokines and NF- $\kappa$ B signaling pathway. *Pathophysiology*, Vol. 26 No. 1: 77-88.
  37. **Ajayi, A. M.**, Badaki, V. B., Ariyo, O. O., Ben-Azu, B., Asejeje, F. O., & Adedapo, A. D. (2020). *Chrysophyllum albidum* fruit peel attenuates nociceptive pain and inflammatory response in rodents by inhibition of pro-inflammatory cytokines and COX-2 expression through suppression of NF- $\kappa$ B activation. *Nutrition Research*. Vol. 77: 73-84.
  38. **Ajayi, A. M.**, Arasi, R. O., Ben-Azu, B., Godson, J. C., Umukoro, S., Aderibigbe, A.O. (2020). Nigerian Psychoactive alcoholic herbal mixture impacts behavioural performance and caused brain biochemical and histopathological alterations in mice. *African Journal of Biomedical Research*, Vol. 23 No. 2: 255-265.
  39. **Ajayi, A. M.**, Alabi, A. O., Adebessin, A., Ben-Azu, B., & Umukoro, S. (2021). Aqueous extract of dry powder blend of seeds and leaves of *Picralima nitida* (Stapf) T. & H. Durand reduce pain and inflammation in animal models. *Journal of Basic and Clinical Physiology and Pharmacology*, Vol. 32 No. 2: 97-107.
  40. **Ajayi, A. M.**, Chidebe, E. O., Ben-Azu, B., & Umukoro, S. (2020). *Chrysophyllum albidum* (African star apple) fruit-supplemented diet enhances cognitive functions and attenuates lipopolysaccharide-induced memory impairment, oxidative stress, and release of proinflammatory cytokines. *Nutrire*, Vol. 45 No. 2: 1-13.
  41. Emokpae, O., Ben-Azu, B., **Ajayi, A. M.**, & Umukoro, S. (2020). D-Ribose-L-cysteine attenuates lipopolysaccharide-induced memory deficits through inhibition of oxidative stress, release of proinflammatory cytokines, and nuclear factor-kappa

B expression in mice. *Naunyn-Schmiedeberg's archives of Pharmacology*, Vol. 393 No. 5: 909-925.

42. **Ajayi, A. M.**, Alabi, A. O., Oyibo, A. O., & Joseph, O. O. (2020). Antioedematogenic and anti-inflammatory actions of *Phragmanthera incana* (Schum) Balle leaf in carrageenan-induced inflammation models in rats. *Advances in Traditional Medicine*, 1-11.
43. Adedapo, A. D., **Ajayi, A. M.**, Ekwunife, N. L., Falayi, O. O., Oyagbemi, A., Omobowale, T. O., & Adedapo, A. A. (2020). Antihypertensive effect of *Phragmanthera incana* (Schum) Balle on NG-nitro-L-Arginine methyl ester (L-NAME) induced hypertensive rats. *Journal of Ethnopharmacology*, Vol. 257: 112888.
44. Ariyo, O. O., **Ajayi, A. M.**, Ben-Azu, B., & Aderibigbe, A. O. (2020). Antinociceptive and anti-inflammatory activities of ethanol extract and fractions of *Morus mesozygia* Stapf (Moraceae) leaves and its underlying mechanisms in rodents. *Journal of Ethnopharmacology*, 259, 112934.
45. Asejeje, F. O., Abiola, M. A., Ben-Azu, B., Adeosun, A. M., Ighodaro, O. M., & **Ajayi, A. M.** (2020). Apple cider vinegar attenuates lipopolysaccharide-induced neurobehavioral deficits in mice. *Nutrire*, Vol. 45 No. 2: 1-9.
46. Ben-Azu, B., Emokpae, O., **Ajayi, A. M.**, Jarikre, T. A., Orhode, V., Aderibigbe, A. O., Umukoro, S., & Iwalewa, E. O. (2020). Repeated psychosocial stress causes glutamic acid decarboxylase isoform-67, oxidative-Nox-2 changes and neuroinflammation in mice: prevention by treatment with a neuroactive flavonoid, morin. *Brain Research*, Vol. 1744: 146917.
47. Okoh, L., **Ajayi, A. M.**, Ben-Azu, B., Akinluyi, E. T., Emokpae, O., & Umukoro, S. (2020). d-Ribose–l-cysteine exhibits adaptogenic-like activity through inhibition of oxido-inflammatory responses and increased neuronal caspase-3 activity in mice exposed to unpredictable chronic mild stress. *Molecular Biology Reports*, Vol. 47 No.10: 7709-7722.
48. Oladapo, O. M., Ben-Azu, B., **Ajayi, A. M.**, Emokpae, O., Eneni, A. E. O., Omogbiya, I. A., & Iwalewa, E. O. (2021). Naringin confers protection against psychosocial defeat stress-induced neurobehavioral deficits in mice: Involvement of glutamic acid decarboxylase isoform-67, oxido-nitregic stress, and neuroinflammatory mechanisms. *Journal of Molecular Neuroscience*, Vol. 71 No. 3: 431-445.

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**XI. Major Conferences/Workshop Attended with papers read (in the last five years).**

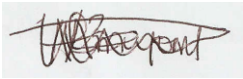
- i. 14<sup>th</sup> Society of Neuroscientists of Africa (SONA)/17<sup>th</sup> Nigerian Society of Neuroscientists (NSN) Conference, March 24<sup>th</sup> -28<sup>th</sup>, **2019**, Lagos, Nigeria. **Ajayi, A.M.**, Godson, J.M., Ogunkolade, G., Badaki, V.B., Ben-Azu, B., Umukoro, S. *Chrysophyllum albidum* Fruit Extract (CAPE) mitigates against Lipopolysaccharides Exacerbation of Repeated Social Defeat-induced Neurobehavioral and Neurochemical Changes in Mice. **A Poster presentation**
- ii. 8<sup>th</sup> IBRO-UM5 African Advanced School on Cognition and its disorders at the Faculty of Sciences, Mohammed V University, Rabat, Morocco from September 2<sup>nd</sup>-14<sup>th</sup>, **2019**. **Ajayi, A.M.**, Godson, J.M., Ogunkolade, G., Badaki, V.B., Ben-Azu, B., Umukoro, S. *Chrysophyllum albidum* Fruit Extract (CAPE) mitigates against Lipopolysaccharides Exacerbation of Repeated Social Defeat-induced Neurobehavioral and Neurochemical Changes in Mice. **A Poster presentation**
- iii. 19<sup>th</sup> Nigerian Society of Neuroscientists (NSN) Conference, July 31<sup>st</sup> – 2<sup>nd</sup> August, **2022**, Ibadan, Nigeria. **Ajayi, A.M.**, Ojetola I.A, Adeleke P.A., Ben-Azu, B., Umukoro, S. Naringin ameliorates inflammation mediated-anxiodepressive behaviour in Complete Freund Adjuvant-induced arthritis in high-fat diet fed mice. **A Poster presentation**

**Google scholar citation: 1718**

**Google scholar h-index: 24**

**Google scholar page:** <https://scholar.google.com/citations?user=L3ocvowAAAAJ&hl=en>

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1<sup>st</sup> September, 2023

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