

## **CURRICULUM VITAE**

### **A. GENERAL INFORMATION**

1. Name: AJAYI, Ebenezer Idowu O.
2. Date and Place of Birth: 13<sup>th</sup> April, 1983; ADO-EKITI
3. State of Origin: Ekiti
4. Local Government Area: Ido/Osi
5. Marital Status: Married
6. Names and Ages of Children: Samantha Ajayi, 3 years 7 months  
Hans Ajayi, 1 year 9 months
7. Name & Relationship of Next of kin/ Phone: Mrs Oluwatomisin I. Ajayi, Wife/ 0806 917 4500
8. Permanent Contact Address: No 3&5, Block 10, Ebelola House, Osogbo/Ilesa Exp/Way, Kajola, Atakumosa LGA, Osun State
9. E-mail Address: ebenezer.ajayi@uniosun.edu.ng
10. Cell Phone Number(s): +234(0)803 729 9521
11. College/Faculty/Unit: College of Science, Engineering and Technology;
12. Department: Faculty of Basic & Applied Sciences, Department of Biochemistry
13. Position on/ Date of First Appointment with the University: Assistant Lecturer/ 10<sup>th</sup> August, 2009
14. Present Position and Salary (Grade Level and Step): Lecturer I, CONUASS 4/4
15. Date of Present Position (Promotion): 1<sup>st</sup> October, 2016
16. Is your appointment Confirmed: Yes
17. If No, why Not?: N/A
18. Date of Confirmation of Appointment: 1<sup>st</sup> November 2016
19. Position Desired: Senior Lecturer

## **B. EDUCATIONAL BACKGROUND**

### **1. Educational Institutions Attended with Dates**

- i. University of Ibadan, Nigeria January 2009 – August 2015
- ii. University of Ibadan, Nigeria May 2006 – May 2008
- iii. University of Ado-Ekiti, Nigeria April 2000 – November 2004

### **2. Academic and Professional Qualifications with Dates/Issuing Authority**

- i. PhD Biochemistry 2015 University of Ibadan, Nigeria
- ii. MSc Biochemistry 2008 University of Ibadan, Nigeria
- iii. BSc (Hons) Biochemistry 2004 University of Ado-Ekiti, Nigeria

### **3. Other Relevant Qualifications**

- i. Instrumentation Training July 2010 – June 2011 National Institute of Pharmaceutical Education and Research (NIPER), Punjab, India
- ii. Global Health Course August 2011 Global Health eLearning Center  
Certificate of Course Completion in  
Global Health – **Antimicrobial Resistance (Part 1)**  
USAID / John Hopkins, Bloomberg  
Collaboration, USA.

### **4. Honours, Awards and Distinctions**

- i. Certified Patriot Honours Award, 2001 National Essay Competition (CPVL-CH / CP. 055) – **“Nigeria of My Dreams”** Campaign for Productive Visionary Leadership, Warri, Delta State, Nigeria **2002**
- ii. Ekiti State Indigenous PhD Award **2008**
- iii. African Federation of Clinical Chemists Young Scientists Award (Association of Clinical Chemists of Nigeria Conference Grant) **2016**  
International Federation of Clinical Chemists Young Scientists Award (WorldLab Travel Scholarship to Durban South Africa) **2017**

### **5. Research Fellowships with dates**

- i. TWAS-DBT Sandwich Postgraduate Fellowship **2009**
- ii. TETFund Academic Staff Training and Development Pre-Doc Research Training **2012**
- iii. TETFund Institutional Research Grant **2015**
- iv. CONICET Postdoctoral Fellowship (Argentinian Ministry of Science, Technology and Productive Innovations), 2 years **2017**

## **C. WORK EXPERIENCE OUTSIDE THE UNIVERSITY SYSTEM**

- 1. March 2005 – Feb. 2006 **Molecular Biosciences Ltd**, 124 M. C. C. Road, Calabar, Cross Rivers State, Nigeria

- Duties:** **Graduate Research Assistant:** Macro- and micro-propagation (i.e. on field and by tissue culture) of important plants such as *Artemisia annua* L., banana, cassava and pine-apple (N.Y.S.C. assignment)
2. March 2005 – Feb. 2006 **UNICEF / NYSC HIV / AIDS Collaboration (during the 1-year National Youth Service Corps Scheme)**  
Calabar, Cross Rivers State, Nigeria
- Duties:** **Peer Educator Trainer (PET):** Enlightenment and counselling on HIV /AIDS and social issues to young students and community members of Cross Rivers State; using audio and visual aids as well as arts and drama.
3. Nov. 2004 – Feb. 2005;  
March 2006-June 2006 **Christore Ventures**, 15 State Hospital Road, Arena Shopping Plaza, Similoluwa, Ado-Ekiti, Ekiti State, Nigeria
- Duties:** **Sales Representative:** Audit and sales of Christian and academic books, tapes, CDs, (auto) biographies and gift items
4. March 2003 – May 2003 **International Breweries Plc**, Omi-Asoro, Ilesa, Osun State, Nigeria
- Duties:** **Industrial Attachee:** Production of malt drink and lager beer, quality control of raw, semi-processed and the finished products, monitoring of microbiological standards
5. Feb. 2001 **Omega Academy**, Bawa Road, Ado-Ekiti, Ekiti State, Nigeria
- Duties:** **Tutor:** Teaching Chemistry to S.S.S. 2 students in preparation for General Certificate Examination (GCE), Nov. /Dec. 2001

**D. WORK EXPERIENCE IN OTHER UNIVERSITIES**

1. April 2018 – Till Date Laboratorio de Biofisica y Nanotecnologia  
Instituto de Investigacion Medica Mercedes y Martin Ferreyra, Universidad de Cordoba, CP5016, Argentina
- Duties:** **2017 CONICET Post-Doc Fellow**

- Team member:* Cutaneous Leishmaniasis, Transdermal Drug Delivery, Liposomal Formulation
2. November 2012 – July 2013 Evolutionary & Medical Genetics  
Centre for Cellular & Molecular Biology  
Hyderabad – 500 007, India
- Duties:** **2012 TETF AST&D Pre-Doc Research Trainee**  
*Team member:* Mitochondrial Cytopathies, Cancer & Visceral Leishmaniasis Genetic Association Studies
3. August 2012 – October 2012 **Department of Pharmacology & Toxicology**  
National Institute of Pharmaceutical Education and Research (NIPER), S. A. S. Nagar, Mohali  
Punjab – 160062, India.
- Duties:** **2012 TETF AST&D Pre-Doc Research Trainee**  
*Team member:* Signal Transduction & Cardiovascular Disorders
4. July 2010 – June 2011 **Department of Pharmaceutical Biotechnology/Biotechnology (PTBT),**  
National Institute of Pharmaceutical Education and Research (NIPER), S. A. S. Nagar, Mohali  
Punjab-160062, India.
- Duties:** **2009 DBT-TWAS Sandwich Ph.D Scholar:**  
*Team member:* Xanthine Oxidase research group; Biocatalysis research group.
5. May 2008 – Aug. 2012 **Biochemistry Department**  
University of Ibadan, Ibadan, Oyo State, Nigeria.
- Duties:** **Ph.D Scholar:** Co-supervision of research projects, demonstration of assays/practicals to B.Sc and M.Sc Biochemistry students.
6. June 2006 – May 2008 **Biochemistry Department, University of Ibadan, Ibadan, Oyo State, Nigeria.**
- Duties:** **M.Sc Student:** Demonstration of assays/practicals to B.Sc (Biochemistry), MBBS and BDS students.

7. Oct. 2002 **Biochemistry Laboratory**, Biochemistry Department, University of Lagos, Idi-Araba, Lagos State, Nigeria.
- Duties:** **Industrial Attachee:** Preparation of buffers, invigilation of tests, recording of continuous assessment scores and understudying at practical sessions.

**E. WORK EXPERIENCE IN OSUN STATE UNIVERSITY**

**Department of Chemical Sciences:**

Aug. 10, 2009 – Sept. 30, 2013 **Assistant Lecturer**

**Duties:** Teaching, Counseling and Research, Level Coordinator, Examinations Officer, Staff Adviser (in B.Sc Biochemistry Unit, Chemical Sciences Department)

Oct. 1, 2013 – Sept. 30, 2016 **Lecturer II**

**Duties:** Teaching, Counseling and Research, Level Coordinator, Examinations Officer, Staff Adviser (in B.Sc Biochemistry Unit, Chemical Sciences Department)

Oct. 1, 2016 – Till Date

**Lecturer I**

**Duties:** Teaching, Counseling and Research; Level Coordinator, Examinations Officer/ PG Coordinator, Head of Unit (Until Mar. 23, 2018 – both in B.Sc and M.Sc Biochemistry Department)

**F. CO-CURRICULAR PROFESSIONAL EXPERIENCE**

March 2011

**Department of Pharmaceutical Biotechnology/Biotechnology (PTBT),**

National Institute of Pharmaceutical Education and Research (NIPER), S. A. S. Nagar, Mohali Punjab-160062, India.

**Duties:** **Instructor:** Mitochondria Isolation and *in vitro* Modulation of Mitochondrial Membrane Permeability Transition Practical session (PTBT MSc Practical Modules 1 & 2)

May 2018 – Till Date

**Instituto de Investigacion Medica Mercedes y Martin Ferreyra**, Universidad de Cordoba, CP5016, Argentina

**Duties:** *Asistente del Coordinador del Seminario:* Organising and Inviting Speakers for Weekly Seminars in the Institute

**G. MEMBERSHIP OF PROFESSIONAL BODIES**

i.	Member	2001	American Society of Biochemistry and Molecular Biology ( <b>ASBMB</b> )
ii.	Member	2009	The Biochemical Society, London
iii.	Associate Member	2009	Association of Clinical Chemists of Nigeria ( <b>ACCN</b> )
iv.	Member	2009	Nigerian Society of Biochemistry and Molecular Biology ( <b>NSBMB</b> )
v.	Member	2010	Global Youth Coalition on HIV / AIDS ( <b>GYCA</b> ), and TakingITGlobal Initiative
vi.	Associate Member II	2011	Nigerian Institute for Biomedical Engineering ( <b>NIBE</b> ) – No: AS 117
vii.	Life Member	2012	Society for Mitochondrial Research and Medicine ( <b>SMRM</b> ), India – L/053/2012
viii.	Member	2015	International Society for Ethnopharmacology ( <b>ISE</b> ), UK
ix.	Life Member	2017	African Society of Drosophilists (ASD)
x.	Member	2017	International Society for Infectious Diseases (ISID)

**H. SERVICES**

i.	University	Oct. 1, 2016 – Mar. 16, 2018	Head of Unit, Biochemistry
		Oct. 1, 2016 – Mar. 23, 2018	PG Coordinator, Biochemistry
		Aug. 2016 till date	Associate Desk Editor, <i>Res. J. Health Sc.</i>
		Jan. 2015 till date	Desk Editor, <i>UNIOSUN J. Science</i>
		Nov. 2015 till date	Sub-Dean Students Affairs, College of SET
		Sept. 2009 – Sept. 31, 2016	Examination Officer, Biochemistry
		Sept. 2009-Dec. 2016	Member, CSET Lecture & Examination Time-Table Committee
		Oct 2014-Dec2016	Member, FBAS Sports Committee

		July 2015 – till date	Contact Administrator, Instrumental Access, Seeding Labs, USA (An International Equipment Donor Agency)
		August 2015 till date	Contact Administrator, TReND in Africa Switzerland/ Germany (An International Exchange/ Equipment Donor Agency)
		Dec 2016	Member, Teaching & Research Sub-Committee Rebuilding UNIOSUN for Strategic Growth, Development, Systemic Sustainability in Teaching and Research Portfolio: Implementing the Vision & Mission of the Vice-Chancellor
		Dec 2016	Member Local Organising Committee UNIOSUN Journal of Sciences Editorial Workshop (Presentation of Maiden Editions of TETFund-Sponsored Journals)
		June 2017	Member Local Organising Committee UNIOSUN Guest Lecture/ Postgraduate Workshop
ii.	Community	June 2005	Vaccinator, World Health Organisation (WHO) Immunization Scheme, Ado-Ekiti, Ekiti State
		August 2012 till date	Member, Osun State Taekwondo Association
		May 2014- Aug. 2017	Assistant Pastor, RCCG Pathfinder Parish (Youth Assembly), Oke-Baale, Osogbo
		Sept. 2017- Mar. 2018	Altar Minister, RCCG Miracle Parish Kajola
		February 2018	Board Member, Osun State Taekwondo Association/ LOC Member, 1 <sup>st</sup> South-West (4 <sup>th</sup> Leg, 2-day) Basic Coaching Workshop, Osogbo
iii.	National	2009 – 2016	Pioneer Set Alumni Financial Secretary 1993/1999 Renaissance Set, Christ's School Alumni
		2013/2014	Invigilator, Osun State Civil Service Promotion Examination
		2014/2015	Invigilator, Post-UTME Examination

		2016 – Till Date	Set Alumni Assistant General Secretary 1993/1999 Renaissance Set Christ’s School Alumni
		2017	Rapporteur, Technical Sessions 2D & 3E, International Conference (Humboldt Kolleg), FUTA, 2 – 6 April, 2017.
		2017	ASUU Leadership Training Workshop, UNIOSUN-2017: Towards a Principled and Ideological Unionism
iv.	International	2015	Invited Reviewer for <i>Drugs for Today</i>
		2016	Invited Reviewer for <i>Phytotherapy Research</i>
		2016	Invited Reviewer for <i>Research Journal of Health Sciences</i> , UNIOSUN
		2016-2017	Reviewer for <i>African Journal of Infectious Diseases</i>
		2017	Member and Reviewer, International Organisation Committee, International Conference of Interdisciplinary Sciences (ICIS-2017) by Phenome Research Foundation, Varanasi, India
		2017	Invited Reviewer for <i>Comparative Clinical Pathology</i>
		2018	Invited Reviewer for <i>Trends in Phytochemical Research</i>
		2018	Member, International Organisation Committee International Conference & Integrated Meeting (Medicine, Food, Pharma and Agro Technology: INCON-MFPA-2018) by DDU Kaushal Kendra (Banaras Hindu University, Varanasi), RGSC, Barkachha, Mirzapur, India
		2018	Invited Reviewer for <i>Fountain Journal of Natural and Applied Sciences</i>
		2019	Invited Reviewer for <i>Journal of Medicinal Plants Research</i>
		2019	Invited Reviewer for <i>Clinical Phytoscience</i>



2019

Invited Reviewer for *International Journal of Oceanography & Aquaculture*

2019

Invited Reviewer for *Journal of Food Science and Technology*

## I. COURSES TAUGHT DURING THE CURRENT ACADEMIC SESSION

### B.Sc. Harmattan Semester 2017/2018

BCH201 General Biochemistry I (3)

BCH309 Membrane Biochemistry (2)

BCH403 Tissue Biochemistry (2)

BCH409 Seminar in Biochemistry (2)

### M.Sc. First Semester 2016/2017

BCH705 Metabolic Regulation (2)

BCH715 Nutritional Biochemistry (2)

### M. Sc. Second Semester 2016/2017

BCH712 Industrial Biochemistry (2)

BCH799 Research Project (6)

## J. GRADUATE STUDIES SUPERVISION

**2015/2016 Session:** 3 M.Sc Seminar students; 2 M.Sc Project students

**2016/2017 Session:** 3 M.Sc Seminar students; 3 M.Sc Project students

## K. PUBLICATIONS

### i. Thesis/Dissertations

(1) Lectins. **Seminar (B. Sc)**

(2) Chemical composition, phytochemical screening and antimicrobial activities of Bruce (*Nauclea latifolia*) plant. **Project (B. Sc)**

(3) Malaria parasite invasion of the red blood cell. **Seminar (M. Sc)**

(4) Effect of artesunate on rat liver mitochondrial membrane permeability transition pore opening *in vivo*. **Project (M. Sc)**

(5) Modulation of mitochondrial membrane permeability transition in selected organs of type 2 diabetic rats by the leaf extract of *Manihot esculenta* (Crantz). **Project (Ph.D)**

### ii. Articles in Learned Journals

1. Anyasor, G. N., **Ajayi, E. I. O.**, Saliu, J. A., Ajagbonna, O. and by Olorunsogo, O. O. (2009). Artesunate opens mitochondrial membrane permeability transition pore. *Ann. Trop. Med. Public Health (ATMPH)* **2(2)**:37-41.

Africa Health Research Organization Publishers/WoltersKluwer-Medknow Publications ([www.atmph.org/text.asp?2009/2/2/37/64265](http://www.atmph.org/text.asp?2009/2/2/37/64265)).

2. Adeleke M. A., **Ajayi, E. I. O.**, Oyeniyi, T. T., Ajiboye, A. A., Ayoade, A. O., Ilori, T. S. (2013). Phytochemical and anti-plasmodial screening of three selected tropical plants

- used for the treatment of malaria in Osogbo, Southwestern Nigeria. *J. Agric. Sc & Tech. (JAGST)* **15(2)**:16 – 21. Jomo Kenyatta University of Agriculture and Technology, Kenya ([www.ajol.info/index.php/jagst/article/view/112827](http://www.ajol.info/index.php/jagst/article/view/112827)).
3. **Ajayi E. I. O.**, Ogungbuji E. T., Nojeem G. (2015). Analgesic potential of certain traditional African herbal extracts in high fat diet-manipulated hyperglycaemic rats. *Ife J. Sc. (IJS)* **17(2)**: 511 – 517. Obafemi Awolowo University, Ile-Ife; African Journal Online ([www.ajol.info/index.php/ijs/article/view/131736](http://www.ajol.info/index.php/ijs/article/view/131736)).
  4. **Ajayi E.I.O.**, Emmanuel U. Modo, Adetayo O. Adebamowo, Uttam Chand Banerjee, Olumide O. Tewe and Olufunso Olabode Olorunsogo (2016). Inhibitory Activity of Ethanol Extract of *Manihot esculenta* on Mitochondrial Membrane Permeability Transition Pore and Caspase 3 in Type 2 Diabetes Mellitus. *Int J. Biochem. Res. & Rev. (IJBCRR)* **9(4)**: 1-10 (Indexed in EBSCO, HINARI). DOI: 10.9734/IJBCRR/2016/23378
  5. **Ajayi E. I. O.**, Ojediran E. and Popoola G. (2016). Wound healing potential of *Nauclea latifolia* and *Manihot esculenta* leaf extract in Type 1diabetic rats. *Afr. J. Trad. Compl. Alter. Med. (AJTCAM)* **13(1):1-5**. African Ethnomedicine Network [doi.org/10.4314/ajtcam.v13i1.1](http://doi.org/10.4314/ajtcam.v13i1.1), <http://www.ajol.info/index.php/ajtcam/article/view/130667>).
  6. **Ajayi E.I.O.**, Adeola A.O. and Ajayi O.B. (2016). Preliminary phytochemical screening and antimicrobial activities of fruit, fruit skin, stem and root of Bruce plant. *UNIOSUN J. Sc.* **1(1)**: 74 – 81. <http://journals.uniosun.edu.ng/index.php/ujs/article/view/17/17>
  7. Akinde S.B., **Ajayi E.I.O.**, Awojide O.I., Azeez O.K., Osunsami K.O., Olabiran O.A. and Fowosire A.A. (2016). Activities of *Bombacopsis buonopozense* and *Nauclea latifolia* leaf extracts against bacteria isolated from cattle rumen waste and vegetable farm irrigation water. *UNIOSUN J. Sc.* **1(1)**: 46 – 55. <http://journals.uniosun.edu.ng/index.php/ujs/article/view/13/13>
  8. Adeleke M.A., Muhibi M.A., **Ajayi E.I.O.**, Idowu O.A., Famodimu M.T., Olaniyan S.O., Hassan A.N. (2016). Dengue virus specific Immunoglobulin G antibodies among patients with febrile conditions in Osogbo, Southwestern Nigeria. *Tropical Biomedicine* **33(1)**:1-7. Malaysian Society of Parasitology and Tropical Medicine, Malaysia ([www.msptm.org/files/Vol33-No01/001-007-Adeleke-MA.pdf](http://www.msptm.org/files/Vol33-No01/001-007-Adeleke-MA.pdf)).
  - \*9. **Ajayi E.I.O.**, Adeleke M. A., Adewumi T. Y. and Adeyemi A. A. (2017). Antiplasmodial activities of ethanol extracts of *Euphorbia hirta* whole plant and *Vernonia amygdalina* leaves in *Plasmodium berghei*-infected mice. *Journal of Taibah University for Science (JTUSCI)*. <http://dx.doi.org/doi:10.1016/j.jtusci.2017.01.008>

- \*10 **Ajayi E. I. O.**, Agarwal A., Banerjee U. C. and Olorunsogo O. O. (2017). Ethanol extract of *Manihot esculenta* leaf: A potential source of antioxidant, xanthine oxidase and lipase inhibitors. *Analele Stiintifice ale Universitatii "Alexandru Ioan Cuza" din Iasi Sec. II a. Genetica si Biologie Moleculara* 18(1):17-23 (Now renamed: Journal of Experimental and Molecular Biology). <http://www.gbm.bio.uaic.ro/index.php/gbm/article/view/1192/pdf>
- \*11 Molehin O. R., Oloyede O. I. and **Ajayi E. I. O.** (2017). GC–MS analysis of bioactive compounds in three extracts of *Clerodendrum volubile* P. Beauv leaves. *J. Med. Plants. Stud. Part C* 5(5): 191-195. <http://www.plantsjournal.com/archives/?year=2017&vol=5&issue=5&part=C&ArticleId=700>.
- \*12 **Ajayi E. I. O.**, Iyoha A. E., Abdulazeez F. O. (2018). Butanol extract of *Manihot esculenta* leaf modulated cigarette butt leachate-mediated liver mitochondrial membrane permeabilization and its functional capacity. *Research Journal of Health Sciences (RJHS)* 6(1): 26-34. <https://www.ajol.info/index.php/rejhs/article/viewFile/171306/160717>.
- \*13 Akinde S. B., Olaitan J. O., **Ajayi E. I. O.**, Adeniyi M. A., Ige O. O., Adebooye O. C. (2018). Fungal quality and molecular characterization of aflatoxin-producing *Aspergillus* species in irrigation water and fresh vegetables in Southwest Nigeria. *Jordan Journal of Agricultural Sciences* 14 (1): 51 – 70.
- \*14 Perez H. A., Allende G. F., **Ajayi E. I. O.**, Porta D. J. and Garcia N. H. (2018). Atherosclerosis plaque area reduction: working hypothesis to prevent cardiovascular event. *Comparative Clinical Pathology* 2018:1-8. <https://doi.org/10.1007/s00580-018-2868-1>
- \*15. Azeez L., Agbaje L., Wahab A., Rufai A., Salau A., **Ajayi E.**, Ajayi M., Adegbite M., Adebisi B. (2019). Phytomodulatory effects of silver nanoparticles on *Corchorus olitorius*: its antiphytopathogenic and hepatoprotective potentials. *Plant Physiology et Biochemistry* 136: 109-1172019. <https://doi.org/10.1016/j.plaphy.2018.12.006>
- \*16. Mishra A., Sundaravadivel P., Tripathi S. K., Jha R. K, Badrukhiya J., Basak N., Anerao I., Sharma A., **Ajayi E. I. O.**, Mishra A., Pandey S., Kumar U., Singh S., Nizamuddin S., Tupperwar N. C., Jha A. N., Thangaraj K. (2019). Variations in macrophage migration inhibitory factor gene are not associated with visceral leishmaniasis in India. *Journal of Infection and Public Health* 2019. <https://doi.org/10.1016/j.jiph.2018.12.011>

### iii. Review Articles

1. F. O. Atanu, U. G. Ebiloma and **E. I. Ajayi** (2011). A review of the pharmacological aspects of *Solanum nigrum* Linn. *Biotechnol. Mol. Biol. Rev. (BMBR)* **6 (1)**:1-7.
2. **Ajayi E. I. O.**, Ajayi O. I., Iyoha E. A. (2015). Current scene and scenario of visceral leishmaniasis in Nigeria. *International Journal of Technological Advancement and Research (IJTAR)* **4(4)**:83 – 86. Techno Consultancy Services (TCS) Journals, India (Eprint copy available – 162 pages).
- \*3. **Ajayi E. I. O.** (2018). How ‘diabetes egg-box’ can save some HIV-patients from additional disease? An invited short review of Sparrho Newsletter. Ed. Endre Szvetnik.  
<https://www.sparrho.com/pinboard/how-diabetes-egg-box-can-save-some-hiv-patients-from-additional-disease/232857/>

### iv. Refereed Conference Proceedings

1. Anyasor, G. N., **Ajayi, E. I. O.**, Saliu, J. A., Ajagbonna, O. and Olorunsogo, O. O. (2008). Artesunate opens mitochondrial membrane permeability transition pore. Book of Proceedings **1**: 57-59; 1st International Malaria Symposium on Clinical Pharmacology of Antimalarial Agents, Accra, Ghana; August 12 and 13, 2008; sponsored by Africa Health Research Organisation (AHRO), Ghana.
2. **Ajayi, E.I.O.**, Olufunso O. Olorunsogo, Uttam C. Banerjee (2011). Comparison of modulation of membrane permeability transition pore opening of heart mitochondria in normal and Type II diabetic rats using *Manihot esculenta* leaf extract. Book of Proceedings **3**: 168-69; The 3<sup>rd</sup> EMBO Meeting 2011, 10-13 September 2011; Austria Vienna Centre, Vienna, Austria.
3. Bhagya Bhavana, **Ajayi Ebenezer Idowu**, Gopalkrishna P., Satish N., Prasad V. V. T. S., Thangaraj K. (2013). Role of mitochondria in aging-associated cancers. Vol. **3**. 3<sup>rd</sup> Annual Conference of Society for Mitochondrial and Medicine: Mitochondria in Health and Diseases, December 19 and 20, 2013. National Institute of Mental Health and Neurosciences, Bangalore, Karnataka, India.
- \*4. **Ajayi E. I. O.**, Adeleke M.A., Muhibi M.A., Fadiya O.V. (2017). Hematological and kidney profile of patients co-infected with enteric and dengue fever in Osogbo, Southwest Nigeria. *Clin. Chem. Lab. Med.* **55**: Special Suppl, 1, S888. 22nd IFCC-EFLM European Congress of Clinical Chemistry and Laboratory Medicine, EuroMedLab Athens 2017, Megaron - The Athens Congress Center, Greece. 11-15 June, 2017. DOI 10.1515/cclm-2017-5026.

\*5 Ajayi E.I.O., Okiemen M., Uche C.C., Adewale A.D. (2017). Ethanolic extracts of *Nauclea latifolia*, *Manihot esculenta* leaf and leaf stalk normalized early symptoms of type 1 diabetes in alloxan-induced diabetic rats. Clin Chem Lab Med 55, Special Suppl, pS1240. Poster Abstracts, IFCC WorldLab 2017 – Durban, South Africa, 22-25 October 2017. DOI 10.1515/cclm-2017-7041.

v. **Unrefereed Conference Proceedings**

1. **Ajayi E.I.O.**, O. A. Adeola and O. B. Ajayi (2007). Preliminary phytochemical screening and antimicrobial activities of Bruce (*Nauclea latifolia*) plant. Book of Abstracts; 2nd Natural Product Research Colloquium & Guest Lecture, October 20-21, 2007; Department of Pharmacognosy, Faculty of Pharmacy, University of Ibadan Nigeria.
2. Adu B.W., Bello I. J., Olabode O. O. and **Ajayi, E. I. O.** (2009). Mitochondrial status as an index of the ageing process. Book of Abstracts; 5<sup>th</sup> Biennial Scientific Conference of Association of Clinical Chemists of Nigeria and Inauguration of African Federation of Clinical Chemistry; 25-28 October, 2009 at the University of Ibadan, Nigeria.
3. Anyasor G.N., **Ajayi E.I.O.**, Saliu J.A., Ajagbonna O. and Olorunsogo O.O (2009). Effect of artesunate on liver function enzymes, plasma electrolytes and renal functions. 29<sup>th</sup> Annual Scientific Conference of the Nigerian Society of Biochemistry and Molecular Biology; 6-9 December, 2009 at the Federal University of Technology, Akure, Nigeria.
4. Atanu F. O., **Ajayi E. I. O.** and Bello I. J. (2009). Bio-engineering the mitochondria for more durable hyper-accumulators. 29<sup>th</sup> Annual Scientific Conference of the Nigerian Society of Biochemistry and Molecular Biology; 6-9 December, 2009 at the Federal University of Technology, Akure, Nigeria.
5. **Ajayi, E.I.O.**, Agarwal A., Olorunsogo O. O. and Banerjee U. C. (2010). Antioxidant and Xanthine Oxidase Inhibitory activities of *Manihot esculenta* leaf extract. 2<sup>nd</sup> Biennial Int'l Conference on New Developments in Drug discovery from Natural Products and Traditional Medicines, DDNPTM/NIPER 2010 (20-24 November, 2010) NIPER, SAS Nagar, India.
6. **Ajayi E. I.O.**, Banerjee U. C., Olorunsogo O. O. (2011). Screening of ethanolic extracts of *Manihot esculenta* Crantz leaves for lipase inhibitory activity. International Conference on Recent Trends in Therapeutic Advancement of Free Radical Science & 10<sup>th</sup> Annual Meeting of the Society for Free Radical Research, India (SFRR, 9-11 January, 2011). Chennai, India.

7. **Ajayi, E.I.O.** (2011). Dung business is serious business: towards a cleaner environment. International Conference on Biotechnology for Better Tomorrow (**BTBT 2011**); February 6-9, 2011. Dr. Babasaheb Ambedkar Marathwada University, Aurangabad (M.S.), India.
8. **Ajayi E.I.O.**, Olorunsogo O. O. and Banerjee U. C. (2011). *In vitro* modulatory activities of ethanolic leaf extract of *Manihot esculenta*, Crantz on kidney mitochondrial membrane permeability transition pore of Type 2 diabetic Sprague- Dawley rats. World Congress on Biotechnology (21-23 March, 2011), Hyderabad, India.
9. **Ajayi, E.I.O.** (2012). Mitochondrial membrane permeability transition pore opening and wound healing in diabetes using natural products. 2<sup>nd</sup> WDF SIDCAIN NCDs Update Course, Lecture and Annual Scientific Conference; **UNIOSUN 2012**. Achieving Diabetes Prevention Through Education: Building Sustainable Capacity for Foot Care. February 1-3, 2012; University Main Auditorium, Osun State University Main Campus, Osogbo, Osun State.
10. **Ajayi E.I.O.**, Modo E. U., Adebamowo A. O., Banerjee U. C., Tewe O. O. and Olorunsogo O. O. (2012). Inhibitory activity of ethanol extract of *Manihot esculenta* on mitochondrial membrane permeability transition pore of high-energy diet-manipulated, low dose streptozotocin-induced Type 2 diabetes mellitus. 3<sup>rd</sup> UNIBADAN Biomedical Conference. 23-27 July, 2012; Conference Centre, University of Ibadan, Nigeria.
11. **Ajayi E.I.O.**, Rao V. A, Kumar V., Tikoo K. B. (2013). Mitochondrial membrane permeability transition pore opening in liver of insulin-resistant, uni-nephrectomised rats. International Conference on Diabetes and its Complications (ICDC-2013) as organised by CHARUSAT Healthcare and Research Foundation (CHRF) and Charotar University of Science and Technology (CHARUSAT), Vadodara, Gujarat. India. 18 – 20 January, 2013.
12. Ojediran E., Popoola G. and **Ajayi E.I.O.** (2013). Wound healing potential of *Nauclea latifolia* and *Manihot esculenta* leaf extract in insulin-resistant rats. 4<sup>th</sup> PhD Symposium, Berlin-Brandenburg School of Regenerative Therapy (BSRT): Regeneration Is Communication – Fireside Chats Between Cells & Matrices. 4- 6 December; Plus Hotel Berlin, Berlin, Germany.
13. Akinde S. B., Olaitan J. O., **Ajayi E. I. O.**, Ige O., Adeniyi M. (2015). Mycological quality, fungal molecular characterization and incidence of aflatoxin producing *Aspergillus* species in fresh vegetables, cultivation soil and irrigation water. 115<sup>th</sup> General Meeting of American Society for Microbiology May 30 – June 2, 2015. New Orleans Ernest N. Morial Convention Centre, Louisiana, USA.

14. **Ajayi E. I. O.**, Iyoha A. A. and Ajayi O. I. (2015). Current scene and scenario of visceral leishmaniasis in Nigeria. Vol. 1. International Conference on Advancement in Engineering, Research & Technology (ICETR) 06-07 June, 2015. MV Research and Development Centre, Bhopal, Madhya Pradesh, India.
15. **Ajayi E.I.O.**, Adeleke M. A., Adewumi T. Y., Adeyemi A. A. (2015). Antiplasmodial activities of ethanol extracts of *Euphorbia hirta* whole plant and *Vernonia amygdalina* leaves in *Plasmodium berghei*-infected mice. 1<sup>st</sup> International Conference on Natural Product Utilization, 2-5 October, 2015, Plovdiv, Bulgaria.
16. **Ajayi E. I. O.**, Iyoha A. E., Abdulazeez F. O. (2015). Role of butanol extract of *Manihot esculenta* leaf against perturbation of mitochondrial membrane permeability transition pore opening by cigarette butt leachate, *in vitro*. 10th FASBMB Congress/ 34th NSBMB Conference, FUTMINNA Nigeria 2015: "Biochemistry and Molecular Biology: Challenges and Prospects for Africa's Sustainable Development In the 21st Century." 2 – 6 November, 2015.
17. **Ajayi E. I. O.**, Isamah D. O. and Ajayi S. O. (2016). Preliminary physico-chemical properties of *Bombacopsis buonopozense* seed oil and its effects on liver mitochondrial membrane permeability transition pore opening and liver function of female albino rats, *in vivo*. UNIBADAN Conference of Biomedical Research (UCBR-5) holding from 12 – 15 July, 2016 at the Conference Centre, University of Ibadan.
18. Molehin O. R., **Ajayi E. I. O.**, Omotoyinbo O. E., Aladetuyi B. J. (2016). Regulation of Liver Catalase and Cytochrome C oxidase activities by Seed Peptides of Watermelon (*Citrullus lanatus*). 35<sup>th</sup> Annual Conference of the Nigerian Society of Biochemistry and Molecular Biology (NSBMB) – Covenant University, Sango-Otta, Ogun State. 1<sup>st</sup> – 4<sup>th</sup> November, 2016.
19. **Ajayi E. I. O.** and Adekale I. A. (2016). Modulation of mitochondrial apoptotic cell death in the brain of hyperglycemic rats by ethanol extract of *Bombacopsis glabra* leaves, *in vitro*. 35<sup>th</sup> Annual Conference of the Nigerian Society of Biochemistry and Molecular Biology (NSBMB) – Covenant University, Sango-Otta, Ogun State. 1<sup>st</sup> – 4<sup>th</sup> November, 2016.
20. **Ajayi E. I. O.** and Oroye R. A. (2016). Evaluation of the effects of *Carica papaya* seed peptides on murine liver mitochondrial cytochrome *c* oxidase, catalase and tissue regeneration. 35<sup>th</sup> Annual Conference of the Nigerian Society of Biochemistry and Molecular Biology (NSBMB) – Covenant University, Sango-Otta, Ogun State. 1<sup>st</sup> – 4<sup>th</sup> November, 2016.

- 21 **Ajayi E. I. O.**, Attah A. F., Faleke H. O., Alimi-Adeniran O., Sowale O. O. (2016). Effects of the crude peptides of *Thaumatococcus danielli* leaves and seeds on rat liver cytochrome c oxidase and catalase activities, hepatocyte regeneration, and bacteriocin-producing bacteria. "Towards Sustainable Clinical Chemistry Practice for The Nation" , 6th Biennial Conference of the Association of Clinical Chemists of Nigeria, Medical Research Centre, Lagos State University College of Medicine, Ikeja, Lagos, Nigeria. 12<sup>th</sup> -14<sup>th</sup> October, 2016.
- \*22 **Ajayi E. I. O.**, Faleke H. O., Alimi-Adeniran O. O., Oroye A. R., Awopo O. R., Sowale O. O. (2017). Hormetic modulation of wound healing, catalase and cytochrome oxidase activities by cationic peptides of some African plant seeds. 3<sup>rd</sup> Alexander von Humboldt Conference/Humboldt-Kolleg, Ladoke Akintola University of Technology Osogbo Campus, Osun State – Translating Research into Policy in Developing Countries. 24<sup>th</sup> –27<sup>th</sup> January, 2017.
- \*23. **Ajayi E. I. O.**, Sobulo O. B., Okoye O. A. (2017). Antiapoptotic protection of *Bombacopsis buonopogense* leaf extracts against perturbation of liver mitochondrial membrane permeability transition pore opening by cigarette butt leachate, *in vitro*. International Conference of Interdisciplinary Sciences (ICIS-2017) by Phenome Research Foundation, Varanasi, India. 16 – 17 July, 2017.
- \*24 **Ajayi E. I. O.** (2017). Challenges facing Biochemistry and Molecular Biology Education in Nigeria Universities. IUBMB-FEBS New Horizons in Biochemistry and Molecular Biology Education Conference, Weizmann Institute, Rehovot, Israel. 6 – 8 September, 2017.
- \*25. **Ajayi E. I. O.** (2017). Structural elucidation of the major compounds of the leaf of *Manihot esculenta* Crantz using spectroscopic techniques. Alexander von Humboldt-Foundation - Humboldt Kolleg, Oye-Ekiti 2017 Bursary: Convergence of qualitative and quantitative research approach. 11th – 15th September, 2017.
- \*26. **Ajayi E. I. O.**, Adetunji B. J., Adeleke M. A., Onilejin A. O., Idrees M. O., Babalola T. E. (2018). Emerging dichlorvos-based air freshener pertube kidney function in male albino rats. International Conference & Integrated Meeting (Medicine, Food, Pharma and Agro Technology: INCON-MFPA-2018) by DDU Kaushal Kendra (Banaras Hindu University, Varanasi), RGSC, Barkachha, Mirzapur, India. 19 – 20 February, 2018.



**vi. Book Chapters**

- \*1. Faleke H. O., Alimi-Adeniran O. O., Oroye A. R., Awope O. R., Sowale O. O., Molehin O. R., Attah A. F, **Ajayi E. I. O.** (2017). Hormetic modulation of wound healing, catalase and cytochrome oxidase activities by cationic peptides of some African plant seeds. In *Translating Research Findings into Policy in Developing Countries: Health, Infection and Treatment. Contributions from Humboldt Kolleg Osogbo-2017*, pp145-156. Lambert Academic Publishing. Ed Olusola Ojuronbe (ISSN: 978-620-2-05009-8).
- \*2. **Ajayi E. I. O.**, Modo E. U., Kiakubu O. T, Molehin O. R. (2019). Diabetes care using *Nauclea latifolia* Sm, *Manihot esculenta* Crantz and other natural products; Chapter 45, *Bioactive Food as Dietary Interventions For Diabetes*, 2nd Edition. Springer. Eds Ronald Watson and Victor Preedy (**In Press**).
- \*3. **Ajayi E. I. O.**, Adetunji B. J., Adeleke M. A., Onilejin A. O., Idrees M. O., Babalola T. E. (2019). Emerging dichlorvos-based air freshener pertube kidney function in male albino rats. Section D: Food Nutrition and Health Security, Chapter 31, *Recent Advances in Food Processing and Technology*. Springer. Eds Pragma Mishra, Raghvendra Raman Mishra, Ratna Shanker Mishra, Charles Oluwaseun Adetunji (**In Press**).

**L. CURRENT RESEARCH ACTIVITIES**

**i. Funded Research**

1. Sero-epidemiological surveillance of visceral leishmaniasis in Osun State, Southwestern, Nigeria (2015 TETFund Institutional Research Grant, UNIOSUN/TETFUND/15/0004).
2. Leishmanicidal activities of African vegetal extracts (2017 Argentinian Ministry of Science, Technology and Productive Innovation, CONICET Fellowship BECARIO-034162)

**ii. Non-funded/self-sponsored Research**

1. Molecular screening of antimicrobial extracts isolated from indigenous African seeds on wound-causing/-infecting Gram-negative microorganisms and tissue regeneration in diabetic foot ulcers; skin fibroblast and hepatocytes of diabetic rats.
2. Microbial enantiomeric biotransformation of nitrilside(s) from *Manihot esculenta* to more pharmaceutically useful derivatives in cancer therapy.

3. Evaluation of bioactive compounds from indigenous African seeds for porcine pancreatic lipase and human pancreatic amylase inhibitory effects, *in vitro*.
4. Targeting *Plasmodium berghei* apicoplast by antiplasmodial vegetal extracts.
5. Protective potentials of flavonoid fractions of *Nauclea latifolia* and *Bombacopsis bunopogensis* in ulcerative colitis.

**M. CONFERENCES/ WORKSHOPS ATTENDED (16 Most Recent)**

- 1 35<sup>th</sup> Annual Conference of the Nigerian Society of Biochemistry and Molecular Biology (NSBMB) – Covenant University, Sango-Otta, Ogun State. 1– 4 November, 2016.
- 2 Alexander von Humboldt Kolleg, LAUTECH 2017: “Translating Research into Policy in Developing Countries.” 24 –27 January, 2017.
- 3 Alexander von Humboldt Kolleg, FUTA 2017: “Functional Foods and Nutraceuticals: Translating the Knowledge of Food Bioactive Compounds to Effective Health Care Delivery in Developing World.” 2– 6 April, 2017.
- 4 22nd IFCC-EFLM European Congress of Clinical Chemistry and Laboratory Medicine, EuroMedLab Athens 2017, Megaron - The Athens Congress Center, Greece. 11-15 June, 2017.
- 5 IUBMB-FEBS New Horizons in Biochemistry and Molecular Biology Education Conference, Weizmann Institute, Rehovot, Israel. 6th–8th September, 2017.
- 6 Alexander von Humboldt Foundation - Humboldt Kolleg, Oye-Ekiti 2017. Convergence of qualitative and quantitative research approach. 11th – 15th September, 2017.
- 7 IFCC WorldLab 2017 – Durban, South Africa, 22-25 October 2017.
- 8 International Conference & Integrated Meeting (Medicine, Food, Pharma and Agro Technology: INCON-MFPA-2018) by DDU Kaushal Kendra (Banaras Hindu University, Varanasi), RGSC, Barkachha, Mirzapur, India, 19-20 February, 2018.
- 9 IIByT Seminario Extraordinario al Dr. Michael A. Robert: Mathematical models of Dengue and Zika emergence: Investigating the influence of seasonality in temperatures. Auditorium of CCT Building for Biological and Technological Research. 18 June 2018.
10. III Jornada Científica Homenaje al Dr Hugo Felipe Carrer. Aportes de un neurocientífico: Desde el laboratorio a la comunidad. 21 June 2018.
11. Simposio “Membrana Celular: su dinámica e interacciones con moléculas bioactivas y sistemas nanoestructurados” en la Facultad de Ciencias Médicas (Resolución No: RHCD 350-2018), Centro de Estudios e Investigación de la Enfermedad de Chagas y Leishmaniasis, de la Facultad de Ciencias Médicas de la Universidad Nacional de Córdoba. 13 August 2018.

12. Curso de Posgrado: Herramientas nanotecnológicas para biotecnología. 8 – 11 October, 2018, Universidad Nacional de Quilmes, Bernal, Buenos Aires, Argentina.
13. VI Jornada para el Fortalecimiento de la Enseñanza de la Enfermedad de Chagas en las Ciencias de la Salud. Organized by the Secretaría Académica y por el Centro de Estudios e Investigación de la Enfermedad de Chagas y Leishmaniasis, de la Facultad de Ciencias Médicas de la Universidad Nacional de Córdoba (Res. HCD 636/18) held in the Hospital Nacional de Clínicas, Cordoba. 19 October 2018.
14. XXXIII Reunión Annual de la Sociedad Argentina de Investigación en Neurociencias Pabellón Argentina de la Universidad Nacional de Córdoba (UNC), Ciudad de Córdoba. 23 – 26 October 2018; Curso pre-Congreso: “Neurobiology of Drug Addiction” 22 – 23 October; Workshop en tributo a Ricardo Mileli. Aula Instituto Ferreyra, Cordoba, Argentina. 23 October, 2018.
15. Jornada Educando al Cerebro Córdoba 2018. Universidad Nacional de Córdoba, Córdoba, Argentina. 27 October 2018.
16. Drug Discovery for Neglected Diseases International Congress 2018 – 4° Reunión Científica de la Red de Investigación de Productos Naturales contra Enfermedades Olvidadas (ResNet NPND); Facultad de Farmacia y Bioquímica de la Universidad de Buenos Aires, Junín, C. A. Buenos Aires, Argentina. 4 – 6 December, 2018.

**N. EXTRA-CURRICULAR ACTIVITIES**

Studying	Swimming	Gardening
Travelling	Acting	Taekwondo/Tai Chi
<b>ANY OTHER RELEVANT INFORMATION</b>		NIL

**O.**

**P.**

**SUMMARY OF CONTRIBUTION TO KNOWLEDGE**

My interest is to study the nature and modulation of biological membranes in the following disease conditions: diabetes and its complications (wound healing, nephropathy, cardiomyopathy, and retinopathy), neurodegenerative disorders, aging, cancer, and neglected / infectious tropical diseases. Presently, our lab seeks to search for drug-able compounds (alkaloids and polyphenols) which can be useful in the treatment or management of these conditions using the tools of tissue culture and the fruit fly.



**AJAYI, Ebenezer Idowu O., PhD**

**14<sup>th</sup> January, 2019.**