

# BIOSKETCH

## **DR. O.J. AFONNE**

PhD (Pharmacology/Toxicology), ERT  
Environmental/Reproductive Toxicologist  
Researcher & Senior Lecturer  
Nnamdi Azikiwe University, Nnewi Campus  
Member Worldview Mission (<http://www.worldviewmission.org>)

## **PERSONAL DATA**

**NAME** : **AFONNE, ONYENMECHI JOHNSON**

**CONTACT ADDRESS** : Department of Pharmacology  
Faculty of Medicine, College of Health Sciences  
Nnamdi Azikiwe University, Nnewi Campus  
P.M.B. 5001, Nnewi, Anambra State, Nigeria.  
E-mail: oj\_afonne@yahoo.co.uk  
Phone: 08037973397

## **RESEARCH INTEREST** – Reproductive/Environmental Toxicology

Current research activities include:

- (i) Analysis of water and soil samples
- (ii) Ecotoxicology of various rivers in Nigeria
- (iii) Pesticide residues levels in common foods in Nigeria
- (iv) Polycyclic aromatic hydrocarbon (PAH) levels in common foods in Nigeria
- (v) Heavy metals contamination of common foods in Nigeria
- (vi) Reproductive toxicology of environmental contaminants

## **PROFESSIONAL/FELLOWSHIP AWARDS**

- 1.** Bo Holmstedt Memorial Foundation Travel Award to attend the XII International Congress of Toxicology, July 19-23, 2010, in Barcelona, Spain by International Union of Toxicology (IUTOX).
- 2.** Bursary Award to attend the 2010 Congress at Heriot-Watt University, Edinburgh, March 28-31, 2010, by British Toxicology Society (BTS).
- 3.** Postdoctoral Fellowship Award at Indian Institute of Toxicology Research (IITR), Lucknow, India, 2009-2010, by Third World Academy of Science (TWAS).

## **PROFESSIONAL TRAININGS IN PHARMACOLOGY/TOXICOLOGY**

1. Hands-on training on basic and advanced molecular biology procedures like: RNA extraction, cDNA synthesis, PCR, Gel electrophoresis (agarose, 2-D), Fluorescent microscope etc. – Postdoctoral Research Fellowship at Indian Institute of Toxicology Research (IITR), Lucknow, India (2009-2010).
2. Handling and dissection of flies and isolation of the reproductive organs for biological experiments – Postdoctoral Research Fellowship at IITR, Lucknow, India (2009-2010).
3. Training workshop on Risk Assessment and Quality Assurance held at Limbe, Cameroon, October 21 – 28, 2006, by African Society of Toxicological Sciences (ASTS).
4. Professional Development Seminar on Basic Training: OECD Principles of Good Laboratory Practice held at Limbe, Cameroon, October 24, 2006, by ASTS.
5. Training on Use of Computers in Toxicology Hazard Assessment held at Limbe, Cameroon, October 27, 2006, by ASTS.
6. Training on Advanced Digital Application Programme – Tertiary (ADAPT), by Digital Bridge Institute, Abuja at Abia State University, Uturu, Nigeria, April 14-18, 2008.

## **ACADEMIC LEADERSHIP QUALITIES**

1. European Registered Toxicologist (ERT) (2010-Present).
2. Postgraduate supervisor (2009-Present).
3. Postgraduate examiner (2009-Present).
4. Postgraduate Coordinator, Department of Pharmacology, Faculty of Medicine, Nnamdi Azikiwe University, Nnewi Campus (2010-Present).
5. Postgraduate Coordinator, Faculty of Medicine, Nnamdi Azikiwe University, Nnewi Campus (2011-Present).
6. Third World Academy of Science (TWAS) Postdoctoral Fellow, Indian Institute of Toxicology Research (IITR), Lucknow, India (2009–2010).
7. Editor-in Chief, The Africa Education Initiative (NEF) Newsletter (2009-Present).
8. Reviewer, Various local and international journals.

## **MEMBERSHIP OF INTERNATIONAL/LOCAL BODIES**

1. Member, European Toxicology Society (EUROTOX).
2. Member, British Toxicology Society (BTS), UK.
3. Member, Society of Environmental Toxicology & Chemistry (SETAC) (Europe/African Branch).
4. Member, International Commission on Occupational Health (ICOH), Rome, Italy.
5. Member, African Society of Toxicological Sciences (ASTS).
6. Member, West African Society for Pharmacology (WASP).

7. Member, Western Africa Network of Natural Products Research Scientists
8. Member, Society of Quality Assurance of Nigeria (SQAN).

### LIST OF PUBLICATIONS

1. Orisakwe OE, **Afonne OJ**, Ufearo CS, Dioka CE. (1996). Preliminary investigation of *Synclisia scabrida* as a folkore medicine in Nigeria. *J. Biomed. Sci. Assoc.* 7 (3): 7-12 (JAPAN).
2. Orisakwe OE, **Afonne OJ**, Dioka CE, Ufearo CS, Ofoefule SI. (1996). Investigation into the oestrogen-like activity of *Synclisia scabrida*. *Fitoterapia* Vol. LXVII, No 5: 469-471. (ITALY).
3. Orisakwe OE, **Afonne OJ**, Dioka CE. (1996). Some pharmacological properties of *Synclisia scabrida* II. *Indian J. Med. Res.* 103:282-284. (INDIA).
4. Orisakwe OE, **Afonne OJ**, Dioka CE. (1997). A papaverine like activity of *Synclisia scabrida* in folklore medicine in Nigeria. *J. Biomed. Sci. Assoc.* 8 (3):1-5. (JAPAN).
5. Orisakwe OE, Asomugha R, **Afonne OJ**, Chilaka KC, Dioka C. (1999). Effect of industrial effluents on water and soil qualities in Nnewi, Nigeria. *J. Health Sci.* 45 (4): 177-183. (JAPAN).
6. **Afonne OJ**, Orisakwe OE. (1999). Cytokines in environmental toxicology. *Trop. J. Med. Res.* 3: 1-8 (NIGERIA).
7. Orisakwe OE, Chilaka KC, **Afonne OJ**, Obi E, Ilondu NDA. (2000). Evaluation of the developmental toxicity of amlodipine besylate in mice. *J. Health Sci.* 42 (1): 42-45. (JAPAN).
8. **Afonne OJ**, Orisakwe OE, Ndubuka GI, Akumka DD, Ilondu N. (2000). Zinc protection of mercury-induced hepatic toxicity in mice. *Biol Pharm Bull* 23 (3): 305-308. (JAPAN).
9. Ilondu N, Orisakwe OE, Ofoefule SI, **Afonne OJ**, Obi E, Chilaka KC, Orish C. (2000). Pharmacokinetics of diethylcarbamazine: prediction by concentration in saliva. *Biol Pharm Bull* 23 (4): 443-445. (JAPAN).
10. Orisakwe OE, Ilondu NDA, **Afonne OJ**, Ofoefule SI, Orish CN. (2000). Acceleration of body clearance of diethylcarbamazine by oral activated charcoal. *Pharmacol Res* 42 (2): 167-170. (ITALY).
11. Orisakwe OE, Obi E, Dioka CE, Amilo GI, **Afonne OJ**, Ufearo CS. (2000). Na and K levels and label review studies of Nigerian spices. *Indian J. Nutr. Diet.* 37:146 –150. (INDIA).

12. Orisakwe OE, Akumka DD, **Afonne OJ**, Gamaniel KS, Amos S. (2000). Investigation into the pharmacological basis for some of the folkloric uses of bonny light crude oil in Nigeria. *Indian J Pharmacol* 32: 231-234 (INDIA).
13. **Afonne OJ**, Orisakwe OE., Obi E, Orish CN, Akumka DD. (2000). Some pharmacological properties of *Synclisia scabrida* III. *Indian J Pharmacol* 32: 239-241 (INDIA).
14. Obi E, Emeh JK, Orisakwe OE, **Afonne OJ**, Ilondu NA, Agbasi PU. (2000). Investigation of the biochemical evidence for the antiulcerogenic activities of *Synclisia scabrida*. *Indian J Pharmacol* 32: 381-383 (INDIA).
15. Orisakwe OE, **Afonne OJ**, Nwobodo E, Asomugha L, Dioka CE. (2001). Low-dose mercury induces testicular damage protected by zinc in mice. *Eur J Obst & Gynae Rep Biol* 95(1): 92-96 (NETHERLAND).
16. Orisakwe OE, Ilondu NDA, **Afonne OJ**, Ofefule SI, Orish CN, Agbasi PU. (2001). Effect of activated charcoal on diethylcarbazine absorption in humans. *Am J Ther.* 8(1): 7-9 (U.S.A.).
17. Orisakwe OE, Agbasi PU, **Afonne OJ**, Ofoefule SI, Obi E, Orish CN. (2001). Rifampicin pharmacokinetics with and without ciprofloxacin. *Am J Ther* 8(3): 151-153 (U.S.A.).
18. Ofoefule SI, Obodo CE, Orisakwe OE, Ilondu NA, **Afonne OJ**, Maduka SO, Anusiem CA, Agbasi PU. (2001). Some plasma pharmacokinetic parameters of isoniazid (INH) in the presence of a fluoroquinolone antibacterial agent. *Am J Ther* 8(4): 243-246 (USA).
19. Orisakwe OE, Asomugha R, Obi E, **Afonne OJ**, Dioka CE, Akumka D, Ilondu NA. (2001). Ecotoxicological study of the Niger Delta area of River Niger. *Bull Environ Contam Toxicol* 66(4): 548-552 (USA).
20. Chude MA, Orisakwe OE, **Afonne OJ**, Gamaniel KS, Vongtau OH, Obi E. (2001). Hypoglycaemic effect of the aqueous extract of *Boerhavia diffusa* leaves. *Indian J Pharm* 33: 215-216 (INDIA).
21. Orisakwe OE, **Afonne OJ**, Agbasi PU, Ilondu NA, Ofoefule SI, Obi E. (2001). Adsorptive capacity of activated charcoal for rifampicin with and without sodium chloride and sodium citrate. *Biol Pharm Bull* 24(6): 724 - 726 (JAPAN).
22. Agbasi PU, Orisakwe OE, Obi E, Ofoefule SI, Ilondu NA, **Afonne OJ**. (2001). Effect of sulphate cathartics on adsorption of rifampicin to activated charcoal. *Indian J Pharmaceut Sci* 63(4): 328-330 (INDIA).

23. Orisakwe OE, Oluboyo A, Ofoefule S, Obi E, Ilondu N, **Afonne OJ**, Agbasi P, Chiroma DH. (2001). Adsorption studies of artesunate: Evaluation of saline cathartics as additive in management of artesunate poisoning. *J Health Sci.* 47(5): 1-4 (JAPAN).
24. Orisakwe OE, **Afonne OJ**, Ilondu N, Obi E, Ufearo CS, Agbasi PU, Maduka SO, Orish CN, Orish VN. (2002). Influence of prokinetics on the gastrointestinal transit and residence times of activated charcoal. *J Pak Med Assoc.* 52(8): 354-356 (PAKISTAN).
25. **Afonne OJ**, Orisakwe OE, Obi E, Dioka CE, Ndubuka GI. (2002). Nephrotoxic actions of low-dose mercury in mice: Protection by zinc. *Arch Environ Health.* 57(2): 98-102 (USA).
26. Ofoefule SI, Obodo CE, Orisakwe OE, **Afonne OJ**, Ilondu NA, Agbasi PU, Anusiem CA, Maduka SO, Ilo CE. (2002). Salivary and urinary excretion and plasma-saliva concentration ratio of isoniazid (INH) in the presence of co-administration ciprofloxacin (CP). *Am J Ther.* 9(1): 15-18 (USA).
27. **Afonne OJ**, Orisakwe OE, Ekanem IA, Akumka DD. (2002). Zinc protects chromium-induced testicular injury in mice. *Indian J Pharm* 34: 26-31 (INDIA).
28. Orisakwe OE, **Afonne OJ**, Dioka CE, Agbasi PU, Azikiwe CC, Obi E. (2002). Testicular toxicity of rinbacin in rats. *Biol Pharm Bull.* 25(2): 206-208 (JAPAN).
29. **Afonne OJ**, Orisakwe OE, Ofoefule SI, Tsalha S, Obi E., Ilondu NA, Okorie O. (2002). Saline cathartics and adsorptive capacity of activated charcoal for doxycycline. *Acta Poloniae Pharmaceutica-Drug Research* 59(3): 177-179 (POLAND).
30. **Afonne OJ**, Orisakwe OE, Dioka CE, Obi E, Ezejiofor T, Asomugha L, Ukoha U, (2002). Effects of rinbacin on rat kidney. *Biol Pharm Bull* 28(8): 1022-1025 (JAPAN).
31. Dioka C, Orisakwe OE, **Afonne OJ**, Agbasi PU, Akumka DD, Okonkwo CJ, Ilondu N. (2002). Investigation into the haematologic and hepatic effects of rinbacin in rats. *J Health Sci* 48(5): 393-398 (JAPAN).
32. Orisakwe OE, **Afonne OJ**, Ezejiofor NA, Tsalha S. (2003). *In vitro* effects of sulfate cathartics on the adsorption of doxycycline to activated charcoal. *Eur Bull Drug Res* 11(4): 96-97 (ITALY).
33. Orisakwe OE, **Afonne OJ**, Chude MA, Obi E, Ilondu NA, Dioka CE. (2003). Subchronic toxicity studies of the aqueous extract of *Boerhavia diffusa* leaves. *J Health Sci* 49(6): 444-447 (JAPAN).

34. Orisakwe OE, Abasi PU, Ofoefule SI, Ilondu NA, **Afonne OJ**, Anusiem CA, Ilo E, Maduka SO. (2004). Effect of pefloxacin on the urinary excretion of rifampicin. *Am J Ther.* 11(1): 13-16 (USA).
35. Orisakwe OE, **Afonne OJ**, Agbasi PU, Ofoefule SI, Orish CN, Ilondu NA. (2004). Urinary excretion of rifampicin in the presence of ciprofloxacin. *Am J Ther* 11(3) 171-174 (USA).
36. Orisakwe OE, Husaini DC, **Afonne OJ**. (2004). Testicular effects of sub-chronic administration of *Hibiscus sabdariffa* calyx aqueous extract in rats. *Reprod Toxicol* 18(2): 295-298 (USA).
37. Orisakwe OE, Akumka DD, Njan, **Afonne OJ**. (2004). Testicular toxicity of Nigerian bonny light crude oil in male albino rats. *Reprod Toxicol* 18(3): 439-442 (USA).
38. Orisakwe OE, Njan AA, **Afonne OJ**, Akumka DD, Orish VN, Udemezue OO. (2004). Investigation into the nephrotoxicity of Nigerian bonny light crude oil in albino rats. *Int J Env Res & Pub Health* 1(2): 106-110 (USA).
39. Orisakwe OE, Asomugha R, **Afonne OJ**, Obi E, Dioka CE. (2004). Impact of effluents from car battery manufacturing plant on water, soil and food qualities in Nnewi, Nigeria. *Arch Environ Health* 59(1): 31-36 (USA.).
40. Ugwoke CC, Nwobodo ED, Unekwe P, Chukwuma ST, Odike MAC, **Afonne OJ**. (2004). Fuel vapour disrupts the histoarchitecture of reproductive organs in albino rats (Wistar). *J Sci Indust Stud* 2(2): 72-74. (NIGERIA).
41. Orisakwe OE, Akumka DD, Njan AA, **Afonne OJ**, Okechi OO. (2005). Hepatotoxic and haematologic effects of Nigerian bonny light crude oil in male albino rats. *Toxicol Environ Chem.* 87(2): 215-221 (GERMANY).
42. Asomugha R, Orisakwe OE, **Afonne OJ**, Obi E, Nduka CJ, Dioka CE (2005). Impact of effluents from cable manufacturing plant on food, water and soil qualities in Nnewi, Nigeria. *Pakistani J Biol Sci.* 8(5): 744-747 (PAKISTAN).
43. Orisakwe OE, Igwilo IO, **Afonne OJ**, Maduabuchi UJ-M, Obi E, Nduka JC,. (2006). Heavy metal hazards of sachet water in Nigeria. *Arch Environ Occup Health* 61(5): 209-213 (USA).
44. Igwilo IO, **Afonne OJ**, Maduabuchi UJ-M, Orisakwe OE. (2006). Toxicological study of the Anam River in Otuocha, Anambra State, Nigeria. *Arch Environ Occup Health* 61(5): 205-208 (USA).
45. **Afonne O**, Orisakwe O. (2007). Effects of Chevron Escravos crude oil and Emulsol LW oil dispersant on the reproductive functions of male guinea

pigs. *Toxicol Lett* 172(Suppl): S111.  
<http://dx.doi.org/10.1016/j.toxlet.2007.05.299>. (UK).

46. Orisakwe OE, Nwachukwu EP, Osadolor HB, **Afonne OJ**, Okocha CE. (2007). Liver and kidney function tests amongst paint factory workers in Nkpor, Nigeria. *Toxicol Indust Health* 23: 161-165 (USA).
47. Husaini DC, Gbodi TA, Orisakwe OE, Ogbadoyi EO, Jigam AA, Makun HA, Garba MS, **Afonne OJ**, Pam HC. (2007). Seasonal nitrate content of stream water, soil and some Foodstuffs samples in Abuja municipal area of Nigeria. *J Health Sci* 53(4) 359-364 (JAPAN).
48. Oluboyo AO, **Afonne OJ**, Oluboyo BO, Okeke AC, Chukwuanukwu RC, Chukwuanukwu TO. (2009). Pattern of lipid profiles in HIV seropositive subjects on antiretroviral therapy. *J Adv Med Pharmaceut Sci* 3(1): 40-42 (NIGERAI).
49. Oluboyo AO, Onyenekwe CC, **Afonne OJ**, Oluboyo BO, Orji DA, Nwankwo M. (2010). Some biochemical parameters in pre and post menopausal women in Nnewi, Nigeria. *Afr J Med Sci* 3(1): 11-16 (NIGERIA).
50. **Afonne O**, Orisakwe O, Onyiaorah I. (2010). Reproductive effects of two crude oils in male guinea pig. *Toxicol Lett* 196(Suppl): S185-S186.  
<http://dx.doi.org/10.1016/j.toxlet.2010.03.632>. (UK).
51. Obi E, **Afonne OJ**, Orisakwe OE. (2011). Testicular toxicity of B-Success herbal supplement in male albino rats. *Int Res Pharm Pharmacol* 1(8): 221-227. (Africa)
52. Ezejiofor TIN, Duru CI, Asagbra AE, Ezejiofor AN, Orisakwe OE, **Afonne OJ**, Obi E (2012). Waste to wealth: Production of oxytetracycline using *Streptomyces* species from household kitchen wastes of agricultural produce. *Afr J Biotech* 11(43): 10115-10124. (Africa)
53. Ughachukwu PO, **Afonne OJ**. (2012). Review of health effects of non-ionizing radiations. *Trop J Med Res* 16(1): 13-19. (NIGERIA)

### CONFERENCE PAPERS

1. Husaini DC, Pam H, Ukoha U, **Afonne OJ**, Orisakwe OE, Gamaniel KS. (2000) Hepatotoxicity study of *Hibiscus sabdariffa* in rats. 27<sup>th</sup> Annual Regional Conference of the West African Society for Pharmacology (WASP). Port Harcourt, Nigeria. October 23-28, 2000.

2. Orisakwe OE, Asomugha R, **Afonne OJ**, Obi E, Husaini DC. (2001). Impact of effluents from lead battery and cable manufacturing plants on soil, water and food qualities. Environmental Health Conference, Ghana. January 3-6, 2001.
3. Asomugha R, Orisakwe OE, **Afonne OJ**, Obi E. (2001). Environmental effects of effluents from petroleum processing industry. Environmental Health Conference, Ghana. January 3-6, 2001.
4. **Afonne OJ**, Pam HC, Orisakwe OE. (2002). Health effects of exposure to some heavy metals in mechanic workshops. 29<sup>th</sup> Annual Regional Conference of the West African Society for Pharmacology (WASP). Abuja, Nigeria. October 21-23, 2002.
5. Dioka CE, Adeniyi FAA, Orisakwe OE, **Afonne OJ**, Meludu SC. (2003). Liver and kidney function tests in occupationally lead-exposed artisans in mechanic village in Nnewi, Nigeria. 3<sup>rd</sup> International Conference of African Society for Toxicological Sciences (ASTS), Abuja, Nigeria. April 22-26, 2003.
6. Dioka CE, Adeniyi FAA, Orisakwe OE, Meludu SC, **Afonne OJ** (2003). Hepatotoxicity of lead in guinea pigs is protected by zinc. 3<sup>rd</sup> International Conference of African Society for Toxicological Sciences (ASTS), Abuja, Nigeria. April 22-26, 2003.
7. Dioka CE, Orisakwe OE, Adeniyi FAA, Meludu SC, **Afonne OJ** (2003). Histological and biochemical assessment of nephrotoxicity induced by lead chloride pretreated with zinc. 3<sup>rd</sup> International Conference of African Society for Toxicological Sciences (ASTS), Abuja, Nigeria. April 22-26, 2003.
8. Obi E, **Afonne OJ**, Orisakwe OE. (2007). Investigation into the possible testicular toxicity and the heavy metal content of some Nigerian herbal supplements. 2007 Africa Education Initiative International Scientific Conference, Awka, Nigeria. June 11-14, 2007.
9. **Afonne OJ**. (2009). Guidelines for preparing a research proposal. 2009 Africa Education Initiative International Scientific Conference, Vom, Nigeria. June 22-25, 2009.
10. **Afonne OJ**, Orisakwe OE, Onyiaorah IV. (2010). Spermatotoxic effects of Forcados blend crude oil and chemical dispersant in guinea pigs. 2010 British Toxicology Society Annual Congress, Heriot-Watt University, Edinburgh. March 28-31, 2010.



11. Molokwu GU, **Afonne OJ**. (2011). Attitude of Nigerian orthodox medical practitioners in Anambra State towards traditional medicine. 36<sup>th</sup> West African Society for Pharmacology/Societe Ouest Africaine de Pharmacologie (WASP/SOAP) Conference, Kwame Nkrumah University of Science and Technology, Kumasi, Ghana. July 12-16, 2011.
12. Molokwu GU, **Afonne OJ**, Orisakwe OE. (2011). Investigating the role of lead, cadmium and nickel in neuropsychiatric patients in Anambra State, South Eastern Nigeria. 36<sup>th</sup> West African Society for Pharmacology/Societe Ouest Africaine de Pharmacologie (WASP/SOAP) Conference, Kwame Nkrumah University of Science and Technology, Kumasi, Ghana. July 12-16, 2011.

## **COURSES TAUGHT IN POSTGRADUATE PROGRAMME**

### **PgD COURSES**

1. General Pharmacology/Pharmacokinetics	(PHA 600)	4 Credits
2. Chemotherapy	(PHA 607)	4 Credits
3. Toxicology	(PHA 608)	3 Credits
3. Seminar	(PHA 609)	3 Credits

### **MSc COURSES**

1. Toxicology	(PHA 705)	3 Credits
2. Seminar	(PHA 709)	3 Credits

### **PhD COURSES**

Advanced Toxicology	(PHA 802)	3 Credits
---------------------	-----------	-----------

## **PROJECTS SUPERVISED**

1. Environmental health hazards and neuropsychiatric disorders in Anambra State, Nigeria.
2. Polycyclic aromatic hydrocarbons in common food products consumed in Onitsha, South-Eastern Nigeria.
3. Pesticide residues in foods eaten in Ekpoma, South-Southern Nigeria. Toxicological effects of antimony in albino Wistar rats.
4. Chemical analysis of water and soil samples in Ihiala, Nigeria

## **REFEREES**

1. Prof. Orish E. Orisakwe  
Professor of Toxicology  
Department of Experimental Pharmacology & Clinical Pharmacy  
University of Port-Harcourt, Port-Harcourt, Rivers State, Nigeria  
E-mail: eorish@yahoo.com
2. Prof. Joseph E. Ahaneku  
Professor of Chemical Pathology  
Nnamdi Azikiwe University, Awka, Anambra State, Nigeria
3. Dr. D. Kar Chowdhuri  
Head, Embryotoxicology Division  
Indian Institute of Toxicology Research  
P.O.Box No. 80, Mahatma Gandhi Marg  
Lucknow-226001, Uttar Pradesh, India