

i. Brief biography

Doctor Jacob K. Akintunde is a Reader of Molecular Toxicology and Medical Biochemistry at the Department of Biochemistry; College of Biosciences, Federal University of Agriculture, Abeokuta (FUNAAB), Nigeria. He obtained his MSc in Biochemistry (Molecular Drug Metabolism and Toxicology) from the University of Ibadan, Nigeria. He later received his Postgraduate Diploma in Food Agricultural and Biological Engineering from African Renaissance Institute of Science and Technology (ARIST), Abuja, Nigeria. Thereafter, he bagged his PhD degree in Applied Biochemistry from Federal University of Technology, Akure, Nigeria. Before moving to FUNAAB in 2017, Dr. Jacob was Lecturer II and Lecturer I at the Faculty of Basic Medical Sciences, Kwara State University, Nigeria and Faculty of Public Health, College of Medicine, University of Ibadan, Nigeria, respectively.

Doctor Jacob has broad background in areas of Molecular Drug Metabolism, Food Therapy and Toxicology which includes (a) elucidating biochemical/molecular mechanisms of Huntington/ Alzheimer's/Parkinson's disease and metabolic diseases particularly hypertension. (b) Understanding the role of oxidative stress in hippocampus, hypothalamus, basal ganglia, striatum and cerebral cortex disorders, (c) examining pathogenesis of environmental compounds in cardiovascular organs, (d) developing new chemotherapeutic agents and functional food therapies for prevention/inhibition of common metabolic diseases, and (e) therapeutic use of natural products to treat breast/prostate cancer, cardiopulmonary disorders and genetic diseases caused by anthropogenic/environmental and epigenetic toxicants.

Doctor Jacob's works had been supported by grants from Nigeria TETFUND schemes. He has mentored above 61 undergraduate students, 19 masters' students and 4 doctoral students. He has received several honours and awards including undergraduate Scholarship Awards, pioneer staff adviser to National Association of Biochemistry Students (NABS) KWASU chapter. Doctor Jacob was rated among top 500 Nigerian scientists (2020) by Scopus. Additionally, he is a member of Society of Toxicology (SOT), National Society of Functional foods and Nutraceuticals among others. Lastly, he has publications in national and International peer-reviewed Journals.

ii. Passport-sized Photograph



- iii. Personal Information:** AKINTUNDE Jacob Kehinde
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- vii Rank:** Reader
- viii. Designation:** Head of Department
- ix Research gate address :** Environmental Health Sciences, University of Ibadan
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xiii. Qualification

- Ph.D. Applied Biochemistry. 2014
- PGD. Food Agriculture and Biological Engineering. 2012
- M.Sc. Biochemistry (Molecular Drug Toxicology) 2008
- B.Sc. Environmental Management & Toxicology. 2003

xiv Membership of Professional Bodies

- Society of Toxicology (SOT)-USA
- International Society of Neurochemistry (ISN)-USA
- Nigeria Society of Biomedical Research.
- Nigerian Society for Experimental Biology (NISEB)
- Nigerian Society of Biochemistry and Molecular Biology (NSBMB).
- National Society of Functional foods and Nutraceuticals (Pharma foods)

xv Awards Received

- Rated among top 500 Nigerian scientists by Scopus (20th April, 2020)
- Pioneer Staff Adviser Awards by National Association of Biochemistry Students (NABS) Kwasu chapter (2014)
- Undergraduate Scholarship Awards by Federal Government (May, 2001)

xvi Research Conducted

- Efficacy of medicinal flavonoid from Bitter Gourd on cognitive disorders in a sub-chronic prostrate induced pathology using hypertensive animal model
- Corrective therapy of naringin against renal failure related to Lesch-Nyhan Disease in a rat model via NOS-cAMP-PKA and BDNF/TrkB pathways
- *Mantisa religiosa* egg-cake prevents ocular vasoconstriction syndrome triggered by inflammatory mediators via NOS/cGMP/PKG signalling pathway in rats exposed to mixture of flavouring enhancers
- Application of *Garcinia kola* oil constituents against GABA_Aergic system alteration in Huntington's disease using animal model
- Exposure to chemical hazards, long work duration and its associated symptoms of neurological disorders among workers of plastic industries in Anambra State
- Impact assessment of workplace exposure on prostate of workers in crude oil industries of Delta State, Nigeria
- Effect of occupational health risks on pulmonary health sweepers in Ikorodu Local Government Area, Lagos State

- Development of selenium nanoparticles from *Corchorus olitorius L.* leaves to treat hypertension and polycystic ovarian syndrome in rats
- Effect of lycopene on oculo-pulmonary nucleotides, immune T-cells and molecular responses in PM_{2.5} wood smoke induced chronic obstructive pulmonary disease in rats.
- Effect of thymoquinone on hypertensive maternal parents and developmental neuropathy of F1 male generation in rats exposed to mixture of Bisphenol-A analogues
- Biochemical and molecular responses of *Garcinia kola* oil on breast cancer and hypertension using *in-silico* and *in vivo* approaches

xvii **Conferences Attended**

- Pharma-Food Congress on the Role of Functional Foods and Nutraceuticals in the Era of COVID-19 held at Landmark University Omu-Aran, Nigeria, 4-7, October, 2022. **Paper Read:** Roasted cashew nut supplement inhibits MCP-1 and inflammatory mediators to correct hypertension related liver failure induced by mixed-fractionated petroleum products via NOS-cAMP-PKA signalling pathway in male rats
- Sustaining Biosciences for human and Agricultural Development. 2nd Biennial Conference held at Postgraduate hall of Federal University of Agriculture, Abeokuta, Nigeria, 12-15 November, 2019.
- Pharma-Food Congress on Phytomedicine and Functional Foods: Keys to sustainable Health Care Delivery in Sub-Sahara Africa held at T.I Francis Auditorium of Federal University of Technology Akure, Nigeria, 21-24, July, 2019. **Paper Read:** Naringin protects against Bisphenol-A induced ocular toxicity as implication of catarrh in hypertensive rat model
- Alexander von Humboldt Kolleg International Conference on Functional Foods and Nutraceuticals: Translating the knowledge of food bioactive compounds to Effective Health Care Delivery in Developing World held at Federal University of Technology, Akure, Nigeria, 2 – 6, April, 2017. **Paper Read:** Effect of dietary supplementation of black seed on testicular serum hormones and sperm functions in rats' exposed to leachate from battery recycling site.
- Alexander von Humboldt Kolleg International Conference on translating research findings into policy in developing countries held at the College of Health Sciences, LAUTECH Osogbo, Nigeria, 24 – 27, January, 2017. **Paper Read:** Differential protection of *Launea taraxacifolia* on cardiac oxidative damage, econucleotidase and carbohydrate catabolizing enzymes in rats exposed to metropolitan polluted river water
- Alexander von Humboldt Kolleg International Conference on Multidisciplinary Forum on Molecular Technology: Laying the Foundation for Revolutionized Research in Nigeria

held at Multimedia Centre of Excellence Auditorium, University of Lagos, Lagos, Nigeria. 10- 15th October, 2016. **Paper Red:** Therapeutic approaches of black seed oil and its underlying mechanisms against kidney dysfunction in haloperidol-induced male rats.

- 5th Biannual Unibadan Conference of Biotechnology for Health and Sustainable Development, held at UI hotel, Conference centre, University of Ibadan, Ibadan, Nigeria. 12- 15th July, 2016. **Paper read:** (i) Differential protection of black-seed oil on econucleotidase, cholinesterases and aminergic catabolizing enzyme in haloperidol-induced neuronal damage of male rats
- Alexander von Humboldt Kolleg international workshop on ethical issues in Research and Scholarship in Nigeria Universities held at UI hotel, Conference centre, University of Ibadan, Ibadan, Nigeria. 10- 14th February, 2016.
- 2nd Annual conference of Environmental Health Sciences held at CESDEV Hall, Awolowo Avenue, University of Ibadan, Ibadan, Nigeria. 1st -5 November, 2015. **Paper read:** Effect of *Launea taraxacifolia* methanolic extract on relevant markers of spermatogenesis in rats exposed to Surulere polluted river water of Kwara State, Nigeria.
- 33rd Annual conference of the Nigerian society of Biochemistry and molecular Biology (NSBMB), held at University Auditorium, University of Ilorin, Ilorin, Nigeria. 11th-14th November, 2014. **Paper read:** GC-MS Characterization of methanol extract stem bark of *kigelia africana* and its inhibitory property on some key markers linked with infertility in rat.
- 4th Biannual Unibadan Conference of Biotechnology for Health and Sustainable Development, held at Trenchard Hall, University of Ibadan, Ibadan, Nigeria. 1- 4th July, 2014. **Paper read:** Sub-acute exposure to Mercury induces key markers linked with neurotoxicity and low level ATP in Rat: Modulatory potentials of *Pteleiosis suberosa* (stem bark)

xviii Publications

- 1 **Akintunde, J.K:** Opeolu B.O and Aina O.O (2010). Exposure to potassium carbonate emulsion induced Nephro-toxicity in experimental animals. Institution *Journal of Biological Sciences*. (3):29-32.
- 2 Siemuri E.O; **Akintunde J.K** and Adeyinka E.A (2011). Acid-hydrolysed local cowpea (*Vigna unguiculata*) as culture media for laboratory Yeast (*Saccharomyces cerevisiae*): *International Journal of Research Microbiology*. 2(6): 187-191.
- 3 Adedayo M R; Ajiboye A.E; **Akintunde J.K;** Odaibo A.D (2011); Single Cell Protein as Nutritional Enhancers: *Journal of Advances in Applied Science Research* 2(5): 396-400

- 4 Ajiboye A.E; Kolawole O.M; Oladosu T.O; Adedayo M.R and **Akintunde J.K** (2011). Studies on the microorganisms associated with dried meat (Tinko) sold in Ilorin. *African Journal of Microbiology* 5(24):4150-4154.
- 5 Farombi, EO; **Akintunde, JK**; Nzute,N; Adedara, IA and Arojojoye O (2011) Municipal landfill leachate induces hepatotoxicity and oxidative stress in rats. *Journal of Toxicology and Industrial Health*. 28(6) 532–541. Published by Sage Publications Ltd. Available online at <https://doi.org/10.1177/074823371141694>
- 6 Irondi AE, Oboh G and **Akintunde JK** (2012) Comparative and synergistic antioxidant properties of *Carica papaya* and *Azadarichta indica* leaves. *International Journal of pharmaceutical sciences and research* 3(12): 4773-4779.
- 7 **Akintunde J. K**, Siemuri E. O, Bello I. J, Dairo K. P , Adedayo M. R, Ajiboye E. A (2012). Tears Production: Implication for Health Enhancement. *Scientific Reports* 1(10):476. Available online at doi:10.4172/scientificreports.476
- 8 **Akintunde JK**, Ajiboye JA, Siemuri EO, Oyelowo SB, Sunday OJ (2012) Sub-Chronic Treatment of Sildenafil Citrate (Viagra) on some Enzymatic and Non-Enzymatic Antioxidants in Testes and Brain of Male Rats. *Journal of Pharmacology and Drug Delivery Resources* 1:1 doi.org/10.4172.1000105.
- 9 Siemuri E.O; **Akintunde J.K**; Bello I.J and Dairo K.P (2012). Assessment of cytotoxic effects of methanol extracts of *Calliandra portoricensis* using Brine Shrimp (*Artemia salina*) Lethality Bioassay. *Global Journal of Bioscience and Biotechnology*. 1 (2): 257-260.
- 10 Dairo K.P **Akintunde J.K** (2012).Evaluation of plant Growth-promoting Rhizobacteria for the control of bacterial wilt disease of tomato. *Global Journal of Bioscience and Biotechnology*.1(2): 253-256.
- 11 **Akintunde J. K**; Siemuri E. O; Bello I. J; Dairo K. P; Adedayo M. R and Ajiboye E. A (2012). Tear production: Implication for Health Enhancement. *Scientific Reports*.1 (10): 01-08
- 12 Ajiboye J.A, **Akintunde J.K**, Oyagbemi A.A, Akinyinka E.O, Arojojoye O (2012).Influence of Isoniazid Treatment on Microsomal Lipid peroxidation and Antioxidant Defense Systems of Rats. *Journal of Drug Metabolism and Toxicology* 3:120. Published by omics. Available online at doi: 10.4172/2157-7609.1000120
- 13 Ajiboye J.A; Oyagbemi A.A; **Akintunde J.K**; Akinyinka E.O and Arojojoye O (2012). Microsomal Lipid Peroxidation, Antioxidant Enzyme Activities in Brain of Male Rats during Long-Term Exposure to Isoniazid. *Journal of Drug Metabolism and Toxicology* 3 (4):100127

- 14 **Akintunde JK**, Oboh G (2012) *In Vitro* Oxidative Damage Induced in Livers, Hearts and Kidneys of Rats Treated with Leachate from Battery Recycling Site: Evidence for Environmental Contamination and Tissue Damage. *Journal of Clinical and Experimental Pathology* 2:129
- 15 Irondi A.E; Anokam K.K; Chukwuma P.C; **Akintunde J.K** and Nurain I.O (2013) Variation in nutrients composition of *Tetrapleura tetraptera* fruit at two maturity stages. *International Journal of Biosciences* 3 (9): 102-110.
- 16 Hassan B.O; Siemuri O.E, and **Akintunde J.K** (2013) Assessment of cytotoxicity, antioxidant and free radical scavenging activities of the ethylacetate extract of *Calliandra portoricensis* root bark. *International Journal of Pharmaceutical Sciences and Research* 4(5): 1800-1807.
- 17 **Akintunde JK**, Ajiboye JA, Siemuri EO, Oyelowo SB, Sunday OJ; Abam E.O; Irondi A.E (2013) Effect of anti-erectile dysfunction drug on key tissues in healthy male rats. *American Journal of Drug Discovery and Development*. 3(2):32-46
- 18 **Akintunde JK**, Oboh G (2013) Municipal Auto-Battery Recycling-Site Leachate Activates Key Enzymes Linked to Non-Insulin Dependent Diabetes Mellitus (NIDDM) and Hypertension. *Journal of Diabetes and Metabolism* 4: 235
- 19 **Akintunde, J.K.**& Oboh, G. (2013): Exposure to leachate from municipal battery recycling site: implication as key inhibitor of steroidogenic enzymes and risk factor of prostate damage in rats. *Review of environmental health*. 28(2-3):107-15. Published by De Gruyter. Available online at <https://doi.org/10.1515/reveh-2013-0009>.
- 20 **Akintunde, J.K.**, Oboh, G.& Akindahunsi, A.A. (2013): Testicular membrane lipid damage by complex mixture of leachate from municipal battery recycling site as indication of idiopathic male infertility in rat. *Journal of interdisciplinary Toxicology*. 6(4): 192–197. Published by Versita. Available online at <https://doi.org/10.2478/intox-2013-0028>
- 21 Ajiboye J.A, **Akintunde J.K**, Oladejo O.S, Sabiu S.A (2015) Chemoprevention of Silymarin and Vitamin C on Isoniazid Induced Hepatotoxicity in Experimental Rat Model. *Journal of Toxin published*. 2 (1):01-03 (USA)
- 22 **Akintunde, J.K.**& Oboh, G. (2015): Sub-chronic exposure to leachate activates key markers linked with neurological disorder in Wistar male rat. *Environmental Science and Pollution Research*. 22:18541–18553. Published by Springer. Available online at <https://doi.org/10.1007/s11356-015-5327-4>
- 23 **Akintunde, J.K.** & Oboh, G. (2015): Depletion of cellular adenosine triphosphate and hepatocellular damage in rat after sub-chronic exposure to leachate from anthropogenic

- recycling site. *Human and Experimental Toxicology*. 34 (11): 1083-1095. Published by Sage Publications Ltd. Available online at <https://doi.org/10.1177/0960327115569809>.
- 24 **Akintunde, J.K.**, Oboh, G.& Akindahunsi, A.A. (2015): Inhibition of key markers linked with spermatogenesis and cellular ATP by sub-chronic exposure to leachate in a rat model. *Archive Environmental Contamination and Toxicology*. 68(1): 159–168. Published by springer. Available online at <https://doi.org/10.1007/s00244-014-0068-9>
- 25 Siemuri, E.O., **Akintunde, J.K.**& Salemcity, A.J. (2015): Effects of sub-acute methanol extract treatment of *Calliandra portoricensis* root bark on antioxidant defence capacity in an experimental rat model. *Journal of Basic Clinical Physiology and Pharmacology*. 26(4):375-382. Published by de gruyter. Available online at <https://doi.org/10.1515/jbcpp-2013-0151>
- 26 **Akintunde, J.K.**& Bolarin, O.E. (2015): Research on garlic capsule and Selenium-vitamin A, vitamin B, vitamin C applied in therapy of acute hepatocellular damage in a rat model. *Journal of Acute Disease*.4(4):298-404.Published by Elsevier. Available online at <https://doi.org/10.1016/j.joad.2015.06.008>
- 27 **Akintunde, J.K.**, Oboh, G.& Akindahunsi, A.A. (2015). Sub-chronic exposure to EOMABRS leachate induces germinal epithelial cell lesions, sperm abnormality and oxidative damage in rats. *Asian Pacific Journal of Reproduction*. 4 (4): 288–297. Published by Elsevier. Available online at <https://doi.org/10.1016/j.apjr.2015.07.006>
- 28 Nurain I.O; **Akintunde J. K**; Adebisi K.E; Azeez L.A; Bamisaye F. A; Ajani E. O; Bewaji C.O (2015). Intake of Powdered Tea Supplemented with Moringa oleifera Leaf Attenuates Some Haematological Parameters in Malnourished Children. *Journal of Biological and Chemical Research* 32 (2): 892-901.
- 29 Irondi A.E; Iweala E.J; Agboola O.S; **Akintunde J.K**; Ajiboye J.A (2015) Distribution of Metabolites and Antioxidant Activity in the Berry and Shoot of Solanum pseudocapsicum Grown in Nigeria. *International Journal of Biochemistry Research & Review* 8(1): 1-9.
- 30 **Akintunde, J.K.**, Bolarin, E.O.& Akintunde, D.G. (2016): Garlic capsule and selenium-vitamins ACE combination therapy modulate key antioxidant proteins and cellular adenosine triphosphate in lisinopril-induced lung damage in rats. *Drug Metabolism and Personalized Therapy*. 31(1): 47–54. Published by De gruyter. Available online at <https://doi.org/10.1515/dmpt-2015-0035>
- 31 **Akintunde JK**, Akintunde DG, Irondi EA, Babaita K, Labaika R, Sunday O (2016). Antioxidants from stem bark of *Kigelia africana* inhibit free radicals and membrane

- lipid damage in rat testes in vitro. **Oxidant antioxidant in Medical Science** published by Gesdav, 5(2): 63-69.
- 32 **Akintunde JK**, Ajiboye JA, Soyinka OO, Adeyemi AA (2016). Stem Bark Extract from *Alstonia boonei* attenuates Cholesterol, Triglyceride and Oxidative Damage via Low Immunohistochemical Expression in Small Intestinal Tract of Male Rats published by **Journal of Diabetes Metabolism** 7: 715.
- 33 Arojojoye OA, Nwaechefu OO, Ajiboye JA, **Akintunde JK** (2016). Induction of oxidative stress in *Clarias gariepinus* from Eleyele River in Nigeria. **Advances in Environmental Research** published by Aensi, 5(3): 179-187 (UK)
- 34 **Akintunde, J.K.**& Irechukwu, C.A. (2016): Differential protection of black-seed oil on econucleotidase, cholinesterases and aminergic catabolizing enzyme in haloperidol-induced neuronal damage of male rats. **Therapeutic Advances in Drug Safety**.7(4):132-146. Published by Sage publications Ltd. Available online at <https://doi.org/10.1177/2042098616656812>.
- 35 Olalubi, A.O., Owoyele, B.V., Ayinla, M.T. & **Akintunde, J.K.** (2016): Glucose absorption in the intestine of albino rats. **Journal Basic Clinical Physiology Pharmacology**. 27 (4):357-361. Published by De Gruyter. Available online at <https://doi.org/10.1515/jbcpp-2015-0052>
- 36 Ilesanmi, A.O., Ekwe, G.J., Ilesanmi, R.I., Ogundele, D.T., **Akintunde, J.K.**& Olalubi O.A. (2016): Prevalence of latent eosinophilia among occupational gardeners at Babcock University, Nigeria. **Asian Pacific Journal of Tropical Biomedicine**. 6(6):511-515. Published by Elsevier. Available online at <https://doi.org/10.1016/j.apjtb.2015.12.022>
- 37 **Akintunde, J.K.** (2017): Functional oil from black seed differentially inhibits aldose-reductase and ectonucleotidase activities by up-regulating cellular energy in haloperidol-induced hepatic toxicity in rat liver. **Journal of oleo science**. 66 (9): 1051-1060. Published by Japan Oil Chemists Society. Available online at <https://doi.org/10.5650/jos.ees17036>
- 38 Ajani, E.O., Sabiu, S., Zakari, M., Olanipekun, B.E., **Akintunde, J. K.** & Bamisaye, F.A. (2017): Antioxidant Capacity of Fractionated Extract and Structural Elucidation of Isolated Compounds from Leaf Extract of *Hydrocotyl bonariensis* Comm. Exlam, **Journal of Biologically Active Products from Nature**.7(3):166-177. Published by Taylor and Francis. Available online at <https://doi.org/10.1080/22311866.2017.1329667>
- 39 **Akintunde J.K.**, Labaika R.G (2017). Neuro-Preventive Effect and Elevation of Cellular Adenosine Triphosphate by PUFAs from *Pteleiosis suberosa* Stem Bark on Mercury Sub-Acute Exposed Rats. **Journal of acute medicine**, 7(1):1-9.

- 40 Ajiboye J.A, **Akintunde J.K.**, Okewuyi S.O, Okafor U.E (2017). PUFAs from Stem Bark of *Alstonia boonei* synergistically modulate diabetic, hepatic and androgenic damage by low expression of COX-2 and iNOS in rats. *Journal of molecular biomarker and diagnosis* 8: 334.
- 41 **Akintunde, J.K.**& Abubakar, O.K. (2017): Novel therapeutic approaches of natural oil from black seeds and its underlying mechanisms against kidney dysfunctions in haloperidol-induced male rats. *Journal of Drug metabolism and personalized therapy*.32 (2):97-107. Published by De Gruyter. Available online at <https://doi.org/10.1515/dmpt-2016-0044>
- 42 **Akintunde, J.K.**& Babaita, A.K. (2017): Effect of PUFAs from *Pteleopsis suberosa* stem bark on androgenic enzymes, cellular ATP and prostatic acid phosphatase in mercury chloride – Exposed rat. *Middle East Fertility Society Journal* 22:211-218. Published by Elsevier. Available online at <https://dx.doi.org/10.1016/j.mefs.2017.02.005>.
- 43 Irondi, A.E., **Akintunde J.K.**, Agboola S.O.& Boligon A.A. (2017): Blanching influences the phenolics composition, antioxidant activity and inhibitory effect of *Adansonia digitata* leaves extract on α -amylase, α -glucosidase and aldose reductase. *Journal of Food Science and Nutrition*. 5 (2): 233-242. Published by Wiley and Sons Ltd. Available online at <https://doi.org/10.1002/fsn3.386>
- 44 **Akintunde, J.K.**& Oboh, G. (2017). Nephritic cell damage and antioxidant status in rats exposed to leachate from battery recycling industry. *Journal of Interdisciplinary Toxicology*. 9(1): 1–11. Published by De Gruyter. Available online at <https://doi.org/10.1515/intox-2016-0001>
- 45 **Akintunde, J.K.**, Irondi, A.E., Ajani, E.O.& Olayemi, T.V. (2018): Neuroprotective effect of dietary black seed flour on key enzymes linked with neuronal signalling molecules in rats exposed to mixture of environmental metals. *Journal of Food Biochemistry* 42 (2):1-11. Published by Wiley Black-well. Available online at <https://doi.org/10.1111/jfbc.12573>
- 46 **Akintunde, J.K.**, Irondi, A.E, Ajani, E.O.& Olayemi, T.V. (2018): Dietary inclusion of black seed flour inhibits reproductive alterations via signal transduction by depleting ectoenzyme, adenosine deaminase and acetylcholinesterase activities in rats intoxicated with mixed environmental metals. *Journal of Biologically Active Products from Nature*, 8 (6):376-392. Published by Taylor and Francis. Available online at <https://doi.org/10.1080/22311866.2018.1523687>
- 47 Adedayo, M. R., **Akintunde, J.K.**, Sani, A.& Boligon, A.A. (2018): Effect of dietary supplement from mono-culture fermentation of *Moringa oleifera* seeds by *Rhizopus*

- stolonifer* on hematology and markers linked to hypercholesterolemia in rat model. *Food Science and Nutrition*. 6 (7):1826-1848. Published by John Wiley and Sons Ltd. Available at <https://doi.org/10.1002/fsn3.729>.
- 48 **Akintunde, J.K.**, Aina, M.O. & Boligon, A.A. (2018): Launaea taraxacifolia (Amin MS ex c. Jelfney) inhibits oxidative damage and econucleotidase followed by increased cellular ATP in testicular cells of rats exposed to metropolitan polluted river water. *Journal of Basic and Clinical Physiology and Pharmacology*, 29 (2):141-153. Published by De Gruyter. Available online at <https://doi.org/10.1515/jbcpp-2016-0187>.
- 49 **Akintunde J.K.**, Jimoh Y.O, Boligon A.A (2018). Essential Oil from Nigella Sativa Seed Differentially Ameliorates Steroid Genesis, Cellular ATP and Prostate Functions in Anti-Psychotic Drug-Induced Testicular Damage of Rats. *Journal of Clinical Toxicology*, 8 (1):01-09.
- 50 **Akintunde, J.K.**, Obisesan, O.O., Akinsete, S.J.& Adegoke, A.M. (2019): Diet from Mantis religiosa-egg case abolishes pulmonary dysfunctions triggered by sub-acute exposure to aerosolized-petroleum hydrocarbons in rat model. *Clinical Nutrition Experimental*. 26:44-58. Published by Elsevier. Available online at <https://doi.org/10.1016/j.yclnex.2019.04.001>.
- 51 **Akintunde, J.K.**& Woleola M.T. (2019): Impairment of neuro-renal cells on exposure to cosmopolitan polluted river water followed by differential protection of Launaea taraxacifolia in male rats. *Comparative Clinical Pathology*. 28:1245-1257. Published by Springer. Available online at <https://doi.org/10.1007/s00580-019-02898-y>.
- 52 **Akintunde, J.K.**, Ironi, A.E., Ajani, E.O.& Olayemi, T.V. (2019): Diet formulated with black seed flour activates regulatory androgenic enzymes and neuroendocrine hormones in leachate-exposed reproductive damage of rat testes. *Journal of Nutrition and Intermediary Metabolism*. 15: 70–77. Published by Elsevier. Available online at <https://doi.org/10.1016/j.jnim.2019.02.003>
- 53 **Akintunde, J.K.**, Farouk, A.A.& Mogbojuri, O. (2019): Metabolic treatment of syndrome linked with Parkinson's disease and hypothalamus pituitary gonadal hormones by turmeric curcumin in Bisphenol-A induced neuro-testicular dysfunction of wistar rat. *Biochemistry and Biophysics Reports*. 17: 97–107. Published by Elsevier. Available online at <https://doi.org/10.1016/j.bbrep.2018.12.004>
- 54 Kuyooro, S.E., **Akintunde, J.K.**, Okekearu, F.C.& Maduagwu, E.N. (2019): Toxicokinetics and biliary excretion of N-nitrosodiethylamine in rat supplemented with low and high dietary proteins. *Journal of dietary supplements*. 16(5):506-520.

- 55 **Akintunde, J. K.**, Ayeni, S.A., Adeoye, M.A.& Shittu, A.O. (2020): Rat liver and kidney post-mitochondrial dysfunction by addition of chronic mixed metal intoxication and hepatorenal wellness mediated by phenolic components from *Croton zambiscus* leaves. *Environmental Toxicology and Pharmacology* 74:103293. Published by Elsevier. Available online at <https://doi.org/10.1016/j.etap.2019.103293>
- 56 **Akintunde, J.K.**, Abioye, J.B.& Ebinama, O.N. (2020): Potential protective effects of naringin on oculo-pulmonary injury induced by wood smoke PM₁₀ exposure by modulation of oxidative damage and acetylcholine esterase activity in a rat model. *Current Therapeutic Research*. 92:100586 Published by Elsevier. Available online at <https://doi.org/10.1016/j.curtheres.2020.100586>
- 57 **Akintunde, J.K.**, Imhade, I.A.& Oboh G. (2020): Egg case concentrate of *Mantis religiosa* abrogates the accumulation of cadmium in muscular and bone tissues of African catfish via activation of nitric oxide and myeloperoxidase activity. *Journal of food Biochemistry*. 44 (6):1-11. Published by Wiley Black-well. Available online at <https://doi.org/10.1111/jfbc.13287>
- 58 **Akintunde, J.K.**, Akintola, T. E., Aliu, F.H., Fajoye, M. O. & Adimchi, S.O. (2020): Naringin regulates erectile dysfunction by abolition of apoptosis and inflammation through NOS/cGMP/PKG signalling pathway on exposure to Bisphenol-A in hypertensive rat model. *Reproductive Toxicology*. 95: 123–136. Published by Elsevier. Available online at <https://doi.org/10.1016/j.reprotox.2020.05.007>
- 59 **Akintunde, J.K.**, Akintola., T.E., Hamed, M.O., Amoo, C.O., Adegoke, A.M.& Ajisafe. L.O. (2020): Naringin protects against Bisphenol-A induced oculopathy as implication of cataract in hypertensive rat model. *Biomedicine and Pharmacotherapy*. 126: 110043. Published by Elsevier. Available online at <https://doi.org/10.1016/j.biopha.2020.110043>
- 60 Dosumu, O.A., Rotimi, S.O., **Akintunde, J.K.**, Adeleye, O.O., Sani, L.O., Omotosho O.O., Osinuga, K.T., Taiwo, O.A. & Ojo, O.A. (2020): Effect of vitamin K dietary supplementation in pulmonary dysfunction induced by 7,12-dimethylbez[a]anthracene in rat. *Journal of Biochemical and Molecular Toxicology* 34(12): e22584. Published by John Wiley and Sons Inc. Available online at <https://doi.org/10.1002/jbt.22584>
- 61 **Akintunde, J.K.**, Akintola, T.E., Adenuga, G.O., Odugbemi, Z.A., Adetoye, R.O.& Akintunde, O.G. (2020): Naringin attenuates Bisphenol-A mediated neurotoxicity in hypertensive rats by abrogation of cerebral nucleotide depletion, oxidative damage and

- neuroinflammation. *Neurotoxicology*. 81:18–33. Published by Elsevier. Available online at <https://doi.org/10.1016/j.neuro.2020.08.001>
- 62 **Akintunde, J.K.**, Oyedibu, G.O., Olanipekun, N.J. & Olaleye, O.A. (2021): Modulation of cardiopulmonary toxicity and oxidative stress by phenolic-rich fraction of *Croton zambiscus* leaves in rat exposed to chronic mixture of environmental toxicants. *Cardiovascular toxicology*. 20 (6):1-16. Published by Springer. Available online at <https://doi.org/10.1007/s12012-09618-x>.
- 63 **Akintunde, J.K.**, Farai, T.I., Arogundade, M.R., & Adeleke, J.T. (2021): Biogenic zinc-oxide nanoparticles of *Moringa oleifera* leaves abrogates rotenone induced neuroendocrine toxicity by regulation of oxidative stress and acetylcholinesterase activity. *Biochemistry and Biophysics Reports*.26:1-10. Published by Elsevier. Available online at <https://doi.org/10.1016/j.bbrep.2021.100999>
- 64 **Akintunde, J.K.**, Ibrahim, L.B., Omotosho, O.D., & Boligon A.A. (2021): Depletion of synaptosomal enzymes associated with neurotoxicity and ovarian dysfunction by phenolic antioxidants of *Croton zambiscus* leaves in rats exposed to chronic mixture of anthropogenic toxicant. *Metabolism Open*. 10:1-14. Published by Elsevier. Available online at <https://doi.org/10.1016/j.metop.2021.100097>
- 65 **Akintunde J.K.**, Ajiboye J. A, Siemuri E.O & Olabisi O. O. (2021): Fansidar drug induces cytotoxicity in some vital tissues in a rat model: combination defensive effect of selenium and zinc capsules. *Therapeutic Advances in Drug Safety*. Published by Sage Publications Ltd. Available online <https://doi.org/10.1177/20420986211027101>
- 66 **Akintunde J.K.**, Omoniyi O.R, Folorunsho O.E, Moses C.A (2021). Meta-inhibition of ocular and gastrointestinal dysfunctions by phenolic-rich fraction of *Croton zambiscus* leaves in a rat model exposed to chronic mixed metals. *Cutaneous and Ocular Toxicology*. Published by Taylor and Francis. Available online <https://doi.org/10.1080/15569527.2021.1976792>
- 67 Okareh O.T, Adetoba M.M, **Akintunde J.K.**, Alarape S.A (2021). Effects of different Cooking Processes on Bioavailability of Mercury and Arsenic in Exposed African Catfish (*Clarias gariepinus*, Burchell, 1822) *Bionature* 41 (1): 39-49. Published by Global Press Hub. Available online at <https://orcid.org/0000-0003-1685-2139>
- 68 **Akintunde J.K** & Abiola A. E. (2022): Active elements from *Launea taraxacifolia* upgrades cardiovascular integrity by attenuation of ectonucleotidase and carbohydrate-hydrolysing enzymes in rat exposed to metropolitan polluted-

- river water. **Phytomedicine plus** 2: 100245. Published by Elsevier. Available online at <https://doi.org/10.1016/j.phyplu.2022.100245>
- 69 **Akintunde J.K**, Abinu O.S, Taiwo K.F, Sodiq R.A, Folayan A.D, Ate A.D (2022). Disorders of Hippocampus Facilitated by Hypertension in Purine Metabolism Deficiency is Repressed by Naringin, a Bi-flavonoid in a Rat Model via NOS/cAMP/PKA and DARPP-32, BDNF/TrkB Pathways. **Neurotoxicity research** 40 (4):1-19. Published by Springer. Available online at <https://doi.org/10.1007/s12640-022-00578-4>
- 70 Adeleye O.O, Dosumu O.A, **Akintunde J.K**, Ugwor E.I, Abatan M.O, James A.S, Oyeniran A.O, Ajetunmobi A.A, Ilori O.T, Eromosele C.O (2022). Behavioural Patterns and Growth Performance of Male Wistar Rats Exposed to Cigarette Smoke: Effects of Curcumin and Hesperidin. **Folia Veterinaria** 66 (3): 19-27. Published by Sciendo. Available online at <https://doi.org/10.2478/fv-2022-002>
- 71 **Akintunde J.K**, Akomolafe V.O, Taiwo O.A, Ahmad I, Patel H, Osifeso A, Adefuye O.O, Ojo O.A (2022). Antihypertensive activity of Roasted cashew nut in mixed petroleum fractions-induced hypertension: An in vivo and in silico approaches. **Heliyon**. 8 (12):e12339. Published by Elsevier. Available online at <http://doi.org/10.1016/j.heliyon.2022e12339>.
- 72 **Akintunde J.K**, Lateef S.A, Amadi C.J, Okoh O.S. (2023). Ethylene glycol and plantain peel ripened with calcium carbide inhibit reproductive mediators in male rats. **Endocrine and Metabolic Disorder**. 11:100130. Published by Elsevier. Available online at <http://dx.doi.org/10.1016/j.endmts.2023.100130>
- 73 **Akintunde J.K**, Olayinka M.C, Ugbaja V.C, Akinfenwa C.A, Akintola A.J, Akamo A.J, Bello I.J. (2023). Downregulation of inflammatory erectile dysfunction by *Mantisa religiosa* egg-cake through NO-cGMP-PKG dependent NF-kB signaling cascade activated by mixture of salt intake. **Toxicology Reports** 10:633-646. Published by Elsevier. Available online at <https://doi.org/10.1016/j.toxrep.2023.05.007>
- 74 Adedayo, M.R., **Akintunde, J.K**, Sani, A. & Boligon, A.A. (2023): Effect of nutriment from monoculture fermentation of *Adasonia digitata* seeds by *Penicillium chrysogenum* on haematology and functional endpoints of intra and extrahepatic tissues in rats. **Medicine in microecology** .17:100085. Published by Elsevier. Available at <https://doi.org/10.1002/j.medmic.2023.100085>

Folayan A.D., **Akintunde, J.K.**, Akamo A.J., & Oyelakin, (2023). The Intervention of oil constituents from *Garcinia cola* against epidermal growth factor receptor in breast cancer using In-silico analysis. *Informatics in medicine unlocked* 40:12185. Published by Elsevier. Available at <https://doi.org/10.1002/j.imedun.2023.12185>

Chapters in Books

- 1 **Akintunde, J.K.**, Akomolafe, S.F., (2017): Functional foods and management of infertility. *Functional foods: unlocking the medicine in foods* (ed.) 4:45-52. Oboh G.: Published by Graceland Prints.
- 2 Akinsete, S.J., **Akintunde, J.K.**, Oduwole, O.O., (2021): Soil contamination in an urban low-income community in Ibadan, Nigeria: climate-driven changes. *Handbook of climate change management* pp 1-22
- 3 **Akintunde J.K.**, Adegoke A.M., (2023): Ectoparasites: Host Resistance and Tolerance. *Textbook on Parasitic Infections, Immune Responses and Therapeutics* (Galley proof stage)