

## Emmanuel O. Akala, R.Ph., Ph.D.

Emmanuel O. Akala, R. Ph., Ph.D. is a Professor of Pharmaceutics, Chair, Howard University Institutional Animal Care and Use Committee (IACUC) and Director, Laboratory for Nanomedicine, Drug Delivery, and Pharmaceutical & Biopharmaceutical Drug Products Design. His training is cosmopolitan and his curriculum vitae (CV) provides details of his professional training as a pharmacist and an immunization pharmacist (registered in Utah, Maryland, Washington DC and in Nigeria), a pharmacy professor, and a research scientist with bias for conventional and novel drug delivery systems. Professor Akala received B. Pharm. (Hons) degree and M.Sc. (Pharmaceutics) degree at The University of Ife (Now Obafemi Awolowo University), Ile-Ife, Nigeria and Ph.D. degree in Pharmaceutics at The University of Manchester, England (as a Commonwealth Scholar). He was a DAAD Fellow at the Institute of Biopharmaceutics and Pharmaceutical Technology, University of Munster, Germany, and an NIH Postdoctoral Fellow in Pharmaceutics and Bioengineering at The University of Utah, USA.

He has worked as a pharmacist in Nigeria and USA, and as a Lecturer and Senior Lecturer in Pharmaceutics in Nigeria, as a Teaching Assistant in England, as a Laboratory Instructor and Research Associate in USA and Germany and as an Assistant Professor, Associate Professor and Professor of Pharmaceutics in USA. Professor Akala has established a very active research group with capability for the design and development of conventional and novel drug products/drug delivery systems. His research focus, at the moment, is on nanotechnology platform for the treatment of cancer and HIV/AIDS with the applications of quality by design (QbD), statistical experimental design, computer optimization, and process analytical technology in his research efforts. At Howard University, he has obtained more than ten million dollars in research grants. His current research grant funding is as follows: (1) NIH/NCI (Akala (PI): Novel Nanotechnology Platform for Breast Cancer Treatment (\$1,132,500:00: 2015 -2018). (2) NIH/NIAID (Akala (PI):The District of Columbia Center for AIDS Research: Targeting Drug (ARV) Loaded Multifunctional Nanoparticles to M Cells Overlaying GALT (HIV-1 Reservoir) (\$600,000:00: 2011 -2016). (3). U.S. - Russian University Research Competition (CRDF Global - Peace and Prosperity Through Science Collaboration PI: (\$110,000) (June 1, 2015 - May 31, 2017). Professor Akala holds three patents. He has numerous research publications in peer reviewed journals and several conference proceedings and abstracts.

In the HU College of Pharmacy, Professor Akala was the Chairman of the Practice and Physical Facilities Sub-Committee (twice) during the reaccreditation programs. He initiated the survey of our external preceptors to substantiate the contents of our accreditation dossier. He was the Chairman of the Admission, Recruitment and Retention Committee. He initiated changing of our maths admission questions every year; we continue the tradition till today. He has served and/or chaired varied and diverse committees in his Department, HU College of Pharmacy, Howard University, and nationally & internationally. Over the years, Professor Akala has taught several Pharm. D. courses and has developed and taught several Ph.D. courses and mentored several Doctor of Pharmacy students. He has directed the research work of eight M.S. students, four Ph.D. students, eight postdoctoral fellows, several Pharm. D., B.S., and high school students and four pharmacy students from different Universities in Brazil (Brazil Scientific Mobility Program). His research endeavors have been characterized by wide interactions and associations (interdisciplinary approach to research) at Howard University, within USA and in Germany, UK and Demark. Professor Akala received the 2013 Distinguished Howard University College of Pharmacy Alumni Award, the 2013 Top Reviewer Award in the Journal of Pharmaceutical Sciences, the 2013 Top

Reviewer Award in the Journal of Nanomedicine, the 2014 AACR Minority-Serving Institution Faculty Scholar in Cancer Research Award, and the 2016 Washington DC Pharmacy Association NASPA Excellence in Innovation Award. Professor Akala has been serving as a member of the Advisory Group of the Center for Pharmaceutical Advancement and Training of the United States Pharmacopeia since 2013. He was appointed, in 2015, a member of the USP (the General Chapters-Dosage Forms USP's Expert Committee). USP Expert Committees are responsible for developing and revising USP standards that comprise its compendia: the USP and the NF, USP Compounding Compendium, Herbal Medicines Compendium, Dietary Supplements Compendium, and Food Chemicals Codex.