

Profile of Professor Gordon Akanzuwine Awandare

Gordon Akanzuwine Awandare is a Professor of Biochemistry, Cell and Molecular Biology and the Pro Vice-Chancellor responsible for Academic and Students Affairs (Pro VC ASA) at University of Ghana. He is also the Founding Director of the West African Centre for Cell Biology of Infectious Pathogens (WACCBIP), University of Ghana, and a visiting Professor at the Faculty of Health and Life Sciences, Oxford Brookes University, Oxford, UK.

Education

Gordon Awandare completed his O'level in 1991 at Notre Dame Seminary Secondary School, Navrongo and A'level in 1993 at Presbyterian Boys Secondary School, Legon. He then obtained his Bsc Biochemistry in 1998 and MPhil Biochemistry in 2002 at the University of Ghana, Legon. Subsequently he obtained a PhD in Infectious Diseases and Microbiology from the University of Pittsburgh, Pennsylvania, USA in 2007.

Career

While studying for his Master's degree from 1999 – 2002, Gordon Awandare worked as a Research Assistant at the Immunology Unit of the Noguchi Memorial Institute for Medical Research, University of Ghana and at the Unité d'Immunologie Moléculaire des Parasites, Institut Pasteur, Paris. After obtaining his Master's degree, he was appointed Lecturer at the Department of Biochemistry, University of Ghana in 2002, where he worked for one year before leaving to the United States of America for his PhD studies in 2003. After obtaining his PhD in 2007, Gordon Awandare worked as a Scientist at the Division of Malaria Vaccine Development of the Walter Reed Army Institute of Research, Silver Spring, Maryland until 2010 when he returned to the University of Ghana to establish his research group. He was promoted to Senior Lecturer in 2011, Associate Professor in 2015 and Professor in 2018. He was Head of Department of Biochemistry, Cell and Molecular Biology from 2013 to 2017. In 2014, he led the establishment of WACCBIP after winning one of the World Bank's African Centres of excellence grants and became the Founding Director of the centre. He was appointed Pro Vice-Chancellor for Academic and Student Affairs, University of Ghana in December 2021 and assumed office in January 2022.

Teaching, Research and Mentorship

Gordon Awandare has expertise in Cell and Molecular Biology, Immunology and Genetics. His research works encompass both infectious diseases and non-communicable diseases, with a focus on understanding pathogen biology and disease mechanisms to generate knowledge for development of diagnostics, vaccines and drugs. The majority of his research output is on malaria, including investigating mechanisms

of red cell invasion, innate and adaptive immune responses, and the role of human genetic variation in influencing disease pathogenesis. He played a leading role in the discovery of complement receptor 1 as a major receptor used by malaria parasites to invade red blood cells. His other works on malaria have covered parasite population genetics, genomic surveillance for drug resistance, and the impact of transmission intensity on immunity to malaria. Gordon Awandare has also done significant research on the genetics of hearing impairment, where his team identified the genetic mutations that predispose individuals to developing the condition in Ghana. During the COVID-19 pandemic, Gordon Awandare's team played a leading role in Ghana's response by providing research data on seroprevalence and genomic diversity of circulating SARS-CoV-2 viruses. He has more than 150 peer-reviewed journal publications in a wide range of journals, including some of the leading infectious diseases and immunology journals. He has supervised 14 postdoctoral fellows, 20 PhD students and 23 Master's students, and mentored many young scientists in Ghana and across Africa.

Grants and capacity-building

Gordon Awandare has an outstanding record of winning grants and building research partnerships across the world. He has successfully managed several large multinational and multidisciplinary training and research projects, involving many high-level academics and multi-million-dollar budgets. Since 2011, he has directly attracted over 40m USD in grant funds to the University of Ghana, including winning highly competitive grants including two World Bank African Centres of Excellence grants valued at 14.5m USD and two Wellcome Trust DELTAS awards amounting to 11.5m USD. He has also won grants from the National Institute for Health and Care Research (NIHR), UK; National Institutes of Health (NIH), USA; Royal Society, UK; UK's Foreign Commonwealth and Development Office (FCDO); UK Research and Innovation (UKRI); Rockefeller Foundation; and African Research Universities Alliance (ARUA). These grants have provided advanced scientific equipment, infrastructure, and fellowships to more than 350 African scientists for Masters, Doctoral and Postdoctoral training at the University of Ghana.

Leadership and membership of boards and committees

Within the University of Ghana, Gordon Awandare is currently the Board Chairman for the University of Ghana Enterprises Limited (UGEL). He Chairs the Implementation Committee for the Vice-Chancellor's Classroom Modernization Project, as well as nine (9) statutory Boards and Committees. He has been a member of the Academic Board and served on the Business and Executive Committee for many years. He has also been Chairman, Centre Management Committee for WACCBIP, and member of Management committees/boards for many units, including, Office of Research Innovation and Development (ORID),

Noguchi Memorial Institute for Medical Research, School of Pharmacy, Legon Centre for International Affairs and Diplomacy, School of Biological Sciences, and School of Nuclear and Allied Sciences, Ghana Atomic Energy Commission. Prof Awandare has also Chaired or served on numerous Adhoc committees at the University of Ghana, including the Search Committee for Vice Chancellor in 2020/2021.

At the National level, Gordon Awandare is currently the Foundation Chairman of the Governing Council of the CK Tadam University of Technology and Applied Sciences in Navrongo, where he is also Chairman of the University's Finance Committee. He has previously served on the Governing Council of the University of Development Studies, Tamale, where he was also the Chairman of the University's Audit Report Implementing Committee. Gordon Awandare is a member of the Advisory Board of Yemaachi Biotec, a biotechnology company in Accra which was founded by one of his mentees. He was recently appointed as a member of the Foundation Governing Board of the National Vaccine Institute of Ghana.

Gordon Awandare serves on numerous prestigious international boards and committees, including, Chairman, West African Network of Infectious Disease ACEs (WANIDA), a World Bank/French Government funded collaborative network for training and research; Member, Expert Advisory Board, Wellcome Trust Centre for Infectious Diseases Research in Africa (CIDRI), University of Cape Town, South Africa; Deputy Director and Member of Steering Committee, Crick African Network, Francis Crick Institute, UK; Member; Steering Committee, National Institute of Health Research Global Research Unit on Tackling Infections to Benefit Africa (TIBA), University of Edinburgh, UK; Member, International Scientific Advisory Board of the Malawi Liverpool Wellcome Trust Programme, Malawi; Technical Consultant, Science Engagement to support Evidence Informed Policy Responses to COVID-19 in Africa, Africa Academy of Sciences, Nairobi, Kenya; Member, Lancet COVID-19 Commission, Africa task Force; Member, Editorial Board, Parasitology; Member, MalariaGEN Governance Committee, Wellcome Sanger Institute, UK; Member of Council, Society for Experimental Biology and Medicine; Member, Advisory Board, AAS Open Research, African Academy of Sciences; Member, Wellcome Sanger Institute Advanced Courses and Scientific Conferences Steering Group, UK.

Awards and Honors

Prof. Awandare was a recipient of the Royal Society Pfizer award for 2015 for achievements in molecular and cellular studies of malaria, and science capacity building in Africa. At the University of Ghana, he received the Distinguished Award for Meritorious Service in 2014, Citation of Honor in recognition of contributions to science development in the College of Basic and Applied Sciences in particular, and

University of Ghana in general in 2020 and Meritorious Award in Recognition of Outstanding Service, College of Basic and Applied Sciences in 2021.

He is a Fellow of the Ghana Academy of Arts and Sciences and the Royal Society of Biology of the UK. In 2019, he was appointed the first Global Editor for Africa for Experimental Biology and Medicine, the journal of the Society for Experimental Biology and Medicine. He has been profiled in some prestigious global media, including *The Scientist* Magazine in recognition of his impact on science capacity building in Africa and Kenya Airways' Msafiri Magazine as one of Africa's Brilliant Minds.

Family

Gordon Awandare hails from Kandiga, in the Upper East region. He was born in Bolgatanga in November 1974 to Mr. Joseph Atoriyah and Mrs. Immaculate Atoriyah, who were both Teachers. He is the first of four children of his parents, and his siblings are Eunice Awandare, Jerome Awandare and Flavia Awandare. Gordon is married to Mrs. Massah Awandare and they have three children, Marie, Gabrielle and Jeremy. Gordon is from a big extended family and has many close aunts, uncles, nieces and nephews.