



# THE AFRICAN ACADEMY OF SCIENCES FELLOWSHIPS

FELLOWS ELECTED IN 2020 & 2021







## THE AFRICAN ACADEMY OF SCIENCES FELLOWSHIPS

### FELLOWS ELECTED IN 2020 & 2021

#### A Publication of

The African Academy of Sciences (The AAS)  
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## FELLOWS OF THE AAS

One of the core mandates of the African Academy of Sciences (AAS) is to recognize excellence and it does this by electing scholars who have excelled in their fields of expertise as its members. The AAS Fellowship comprises individuals who have reached the highest level of excellence in their field of expertise and have made contributions to the advancement of the field on the African continent.

Fellows of the AAS are elected based on their achievements that includes their publication record, innovations, leadership roles and contribution to society. The AAS is delighted to announce the Fellows elected in 2020 and 2021.





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# INDUCTEES (FELLOWS)

## Fellows

Fellows are elected by The AAS Fellows based on achievements that include their publication record, innovations, leadership roles and contribution to policy and to the development of science on the continent.

## Profiles of Inductees: 2020 to 2021







## Honorary Fellows

Honorary Fellows are eminent members of society who have helped The AAS to achieve its goals.



## HONORARY FELLOWS



### Alain Krief

University of Namur and University of Karachi

Prof Krief possess both Tunisian and French nationalities. He received his PhD from the University of Paris in 1970 and realized his post-doctorate at Harvard University (1970-1971). He Joined the University of Namur where he created the department of Organic Chemistry (1972). He is also Adjunct Professor, HEJ Research Institute, University of Karachi, Pakistan and Senior Associate to the UNESCO UNISA Africa chair in Nanoscience's & Nanotechnology (University of South Africa, Cape Town).



### Jean Albergel

The French Research Institute for Sustainable Development

Dr Albergel joined IRD (the French Research Institute for Sustainable Development) in 1979 and spent most of his working life in Africa; especially in semi-arid countries where he addressed four related scientific topics: (1) infiltration processes, runoff, erosion and fluxes transfers at the scale of cultivated catchments, (2) impacts of climate variability on water resources, (3) water and land management and ecosystem services under threat from climate change, (4) nexus water, energy, food security.



### Dr. A. K. Tyagi

Director, Chemistry Group, BARC, Mumbai

Senior Professor (Chemistry) at Homi Bhabha National Institute (HBNI), Mumbai

Dr. A. K. Tyagi joined Chemistry Division, BARC in 1986 through BARC Training School. Presently he is Director, Chemistry Group, BARC, Mumbai and also a Senior Professor (Chemistry) at Homi Bhabha National Institute (HBNI), Mumbai. His research interests are in the field of nanomaterials, functional materials, nuclear materials, metastable materials and Hybrid materials.





## AGRICULTURAL AND NUTRITIONAL SCIENCES



### Henry Fadamiro

Texas A&M University

Discipline: Agricultural & Nutritional Sciences

Professor Henry Fadamiro is a Professor of Entomology at Texas A&M University, College Station, Texas. He is the Chief Scientific Officer & Associate Director for Texas A&M AgriLife Research. He also serves as Associate Dean for College of Agriculture and Life Sciences. Prior to joining Texas A&M University, Professor Fadamiro was on the faculty at Auburn University for 18 years and served in various leadership roles including as Associate Dean for Research for College of Agriculture and Associate Director of Alabama Agricultural Experiment, Assistant Dean & Director of Global Programs, and Integrated Pest Management Coordinator for Alabama. Prof. Fadamiro received the Rhodes Scholarship to earn his Ph.D. in Entomology and Pest Management from the University of Oxford in England in 1995. Prior to that, he earned his Bachelor's and Master's degrees from the Federal University of Technology in Akure, Nigeria.



### Kongming Wu

Chinese Academy of Agriculture (CAAS)

Discipline: Agricultural & Nutritional Sciences

Dr. Wu graduated with his bachelor degree from Henan Agricultural University in 1984. In 1987, he received his Master degree from Zhejiang Agricultural University. From 1987 to 1992, he worked as a researcher in Henan Academy of Agricultural Sciences. In 1994, he obtained his PhD from Chinese Academy of Agricultural Sciences (CAAS), and then he worked for the Institute of Plant Protection of CAAS as an associate professor / professor (1994-2002) and later as director general / professor (2003-2011). During 2012-2021, he took the position of the vice President of CAAS and was appointed President of CAAS in late 2021.



## AGRICULTURAL AND NUTRITIONAL SCIENCES



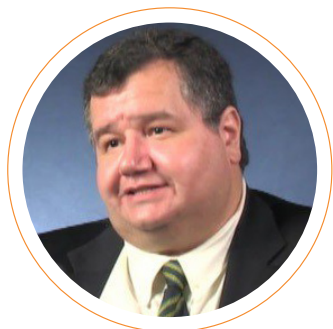
### Rajeev Varshney

International Crops Research Institution for Semi-Arid Tropics (ICRISAT)

Discipline: Agricultural & Nutritional Sciences

Prof. Varshney, an agricultural scientist specializing in genomics, crop breeding, seeds system and capacity building, is currently serving ICRISAT as a Research Program Director- Accelerated Crop Improvement and Murdoch University (Australia) as International Chair in Agriculture & Food Security.

Prof. Varshney is a globally recognized leader for his work on genome sequencing, genomics-assisted breeding, seed system and capacity building in developing countries in sub-Saharan Africa and Asia.



### Rodomiro Ortiz

Swedish University of Agricultural Sciences (SLU)

Discipline: Agricultural & Nutritional Sciences

Rodomiro Ortiz (Lima, Perú; 1958) is Faculty Professor and Chair of Genetics and Plant Breeding at the Swedish University of Agricultural Sciences (SLU), and SLU Breeding Network Chairman. He holds a PhD in Plant Breeding & Genetics from the University of Wisconsin-Madison, and worked as young researcher at UNALM (Perú) and Rutgers University, was scientist and director of various CGIAR Consortium Centers, and held a Nordic professorship on plant genetic resources at the then Royal Veterinary and Agricultural University.

Professor Ortiz has written > 800 reports, of which about 50% are journal articles or edited book chapters with h-index of 70 and cited by 19070 [as per Google Scholar on 2021.12.20]. The CGIAR awarded to IITA the prestigious 1994 King Baudouin Award for the multidisciplinary research of the team working in plantain and banana improvement, in which he was program leader. In 2012, Plant Breeding Reviews dedicated him its volume 36.





## AGRICULTURAL AND NUTRITIONAL SCIENCES



### Jianbo Shen

Chines Center for Disease Control and Prevention

Discipline: Agricultural & Nutritional Sciences

Professor Jianbo Shen, an expert in plant nutrition and rhizosphere science, has been engaged in studies on plant-soil interactions and interventions that are aimed at enhancing resource-use efficiency and food security, particularly focusing on root/rhizosphere management for improving nutrient-use efficiency and crop productivity and enhancing environmental resilience. He has coupled the techniques of plant and soil sciences to augment understanding of biological and chemical processes in the rhizosphere, and he has developed effective approaches of rhizosphere management for improving the nutrient-use efficiency and crop yield while reducing environmental impact in cropping systems. Professor Shen has made contributions to the scientific innovation and technology transfer of rhizosphere nutrition and management. He found that root/rhizosphere efficiency can be maximized by creating an appropriate root-zone nutrient supply, stimulating root proliferation and rhizosphere acidification, and strengthening rhizosphere interactions.



### Newton Lupwayi

Agriculture and Agri-food Canada

Discipline: Agricultural & Nutritional Sciences

Dr Lupwayi, a soil microbiologist, started his career as an academic at the University of Malawi. He then worked as a Research Associate at the International Livestock Research Institute in Ethiopia before moving to Canada, where he is a Research Scientist with Agriculture and Agri-Food Canada. He has published 144 papers in peer-reviewed scientific journals. His work has been consumed heavily by peers, as indicated by his H-index of 32 (Scopus) or 42 (Google Scholar). He has served on the Editorial Boards of the Canadian Journal of Soil Science, where he rose to become Editor-in-Chief, Agronomy Journal, and Agriculture Ecosystems & Environment. Besides reviewing manuscripts for many international journals, he has reviewed research proposals for national research councils of Canada, France and the Netherlands. He is a Fellow of the Canadian Society of Soil Science.



## AGRICULTURAL AND NUTRITIONAL SCIENCES



### Albert Modi

University of KwaZulu-Natal

Discipline: Agricultural & Nutritional Sciences

Albert Thembinkosi Modi is the Deputy Vice Chancellor of the College of Agriculture, Engineering and Science at the University of KwaZulu-Natal (UKZN), South Africa. His academic experience goes back to 1996, when he was first appointed as a Crop Science lecturer, following many years of working as an agronomist for Pioneer Hi-Bred International, a subsidiary of publicly traded Corteva Agriscience (the agriculture business of DowDuPont). After completion of a PhD in Seed Science at Ohio State University (USA) he continued to grow his impact as a researcher and teacher of Crop Science at the university of KwaZulu-Natal, where he developed and introduced curriculum in Seed Science and Technology as well as Sustainable Agriculture. This led to his ability to establish a research group focusing on water-energy-food nexus, including establishment and launch of the Moses Kotane Institute for Science and Technology in KwaZulu-Natal in 2008.



### Fusuo Zhang

Chinese Center for Disease Control and Prevention

Discipline: Agricultural & Nutritional Sciences

Professor Fusuo Zhang, an internationally renowned expert in plant nutrition, has committed his career spanning more than 40 years to education and scientific research aiming to solve agricultural production problems for smallholder farmers. He is a major contributor to establishment of the disciplines of Plant Nutrition as well as Agricultural Resources and Environment in China; he significantly expanded the quality and range of research work in plant nutrition, greatly promoted the development of these disciplines in China for talent training, science & technology innovation, and social development, as well as contributed immensely to the development of global plant nutrition research.





## BIOSCIENCES



### Jill Farrant

University of Cape town

Discipline: Biosciences

Professor Jill Farrant holds a South African Research Chair in “Systems Biology Studies on Plant Desiccation Tolerance for Food Security” in the Department of Molecular and Cell Biology, University of Cape Town, South Africa. She is an acknowledged world leader in the field of plant desiccation tolerance (holding a rarely given A rated status by the South African National Research Foundation), working predominantly (but not exclusively) on the desiccation tolerant “resurrection plants”. Her research is multidisciplinary, utilising techniques involved molecular biology, biochemistry, cell biology and physiology to understand protection mechanisms, and regulation thereof, associated with desiccation tolerance, and those associated with biotechnology to test informed genetic alteration(s) for the production of extremely drought tolerant crops. She has further utilized the metabolomic make up of resurrection plants for applications in the cosmetic industry, being Scientific Advisor for the Giorgio Armani Skincare range Crema Nera Extrema.



### Louis Albert Tchuem Tchuente

University of Yaounde I

Discipline: Biosciences

Louis-Albert Tchuem Tchuente is Professor of Parasitology at the University of Yaoundé I, with broad interest in the epidemiology, ecology, and control of parasites. He is the Founding Director of the research Centre for Schistosomiasis and Parasitology, Coordinator of the National Programme for the Control of Schistosomiasis and Intestinal Helminthiasis, Inspector for Medical and Paramedical Services at the Ministry of Public Health, NTD Ambassador, Global Schistosomiasis Alliance (GSA) Ambassador, and Chair of the GSA Monitoring and Evaluation Working Group. He has over 35 years of extensive experience in various aspects of research and control of schistosomiasis, STH and other NTDs, including project/programme development, management, implementation, leadership, resource mobilization, partnership development and capacity building. Through his scientific discoveries, he contributed to a better knowledge of the reproductive biology of schistosomes and its implications on the epidemiology of schistosomiasis, and he provided new insights on the precision mapping of schistosomiasis and the transition from control to elimination.



## BIOSCIENCES



### Le Kang

Institute of Zoology, Chinese Academy of Sciences

Discipline: Biosciences

Dr. Le Kang is a CAS Distinguished Professor in Institute of Zoology, Chinese Academy of Sciences (CAS). Dr. Kang obtained his Ph. D. in ecology from Chinese Academy of Sciences in 1990. He pioneers the researches on ecological genomics and adaptation of insects. He reveals the molecular mechanisms for phenotypic plasticity and adaptation of locusts at both genetic and epigenetic levels using interdisciplinary methods. He has made remarkable contributions in locust biology and his achievement has reshaped the scientific outlooks on locust biology, and provided crucial cues to develop novel control strategies against the swarming insects.



### Hassan Azzazy

The American University in Cairo

Discipline: Biosciences

Dr. Hassan Azzazy is a tenured Distinguished University Professor and Chairman of the department of Chemistry at the American University in Cairo. He is the director of the international medical laboratory scientists training program. Before joining AUC, Dr. Azzazy was a postdoctoral fellow and assistant professor at University of Maryland School of Medicine, Baltimore, MD. Dr. Azzazy received his B.Sc. and a post-graduate diploma in Biochemistry both from Alexandria University and a PhD in Biochemistry and Molecular Biology from University of North Texas Health Science Center, Fort Worth, TX (1994).



### Abdoulaye Diabeté

Institut de Recherche en Sciences de la Santé (IRSS)

Discipline: Biosciences

Diabate Abdoulaye is a vector ecologist. He owned a PhD degree from the University of Montpellier, France and spent 4 years as a postdoc fellow at NIH in the US. His research activities proceed along with two different but complementary directions. First, it involves insecticide resistance and its management and second, it is focused on population biology, ecological studies on phenotypic variation within and between populations of mosquitoes and analyses of its genetic and environmental sources.





## BIOSCIENCES



### Yalemtehay Mekonnen

Addis Ababa University

Discipline: Biosciences

Yalemtehay Mekonnen is a Professor of Cell and Human Physiology. She is an academic staff in the Department of Biology at the College of Natural and Computational Sciences of the Addis Ababa University, Ethiopia. She has extensively published in different peer reviewed scientific journals on topics of respiratory physiology, medicinal plants and other related topics. She has advised many MSc and PhD students. In leadership positions she was involved and has initiated a number of national and international research networks and collaborations. She has also mentored young professionals specially women over the last three decades.



## CHEMICAL SCIENCES



### Amany Mohamed

Cairo University

Discipline: Chemical Sciences

Prof. Amany Mohamed Fekry is a professor of physical chemistry, department of chemistry, Faculty of Science, Cairo University in 2017. I have more than 100 publications in different international journals, a review, 3 book chapters and 1 book. I have attended 12 national and international conferences. My H-index is 33 with 2538 citations. I have supervised more than 20 MSc, Ph. D. students. I have reviewed more than 100 articles in different international journals. Stanford University identifies me in the top 2 % of Scientists worldwide in 2020 and 2021.



## CULTURAL SCIENCES, HUMANITIES AND SOCIAL SCIENCES



### Menale Kassie

International Centre of Insect Physiology and Ecology

Discipline: Cultural Sciences, Humanities & Social Sciences

Menale Kassie is a Principal Scientist and Head of the Social Sciences and Impact Assessment Unit at the International Centre of Insect Physiology and Ecology. Before joining icipe, Menale worked for the International Maize and Wheat Improvement Centre (CIMMYT), the International Crop Research Institute for the Semi-Arid Tropics (ICRISAT), the University of Gothenburg, Sweden, and for a government organization in Ethiopia. Dr. Menale Kassie holds a Ph.D. in Development and Resource Economics from the School of Economics and Business, Norwegian University of Life Sciences, Norway. He has 16 years of research experience with sound knowledge in impact assessment, project development and management experience, and leadership.



## ENGINEERING TECHNOLOGY AND APPLIED SCIENCES



### Esther Akinlabi

Pan African University for Life and Earth Sciences Institute, Ibadan, Nigeria

Discipline: Engineering Technology & Applied Sciences

Professor Esther Titilayo Akinlabi is a Professor of Mechanical Engineering and currently serving as the Director of the Pan African University Life and Earth Sciences Institute (PAULESI), Ibadan, Nigeria. Prior to joining PAULESI, she started at UJ as a Lecturer in November 2010, grew through the academic ranks and was promoted to the position of Full Professor in May 2016 owing to her exceptional research publication output, supervision of students, and the attraction of external grants to the university. She had the privilege to serve as the Head of Department of the Department of Mechanical Engineering Science and as the Vice Dean for Teaching and Learning at the University of Johannesburg, South Africa. Her research interest is in the field of modern and advanced manufacturing processes – Friction stir welding and additive manufacturing.



## ENGINEERING TECHNOLOGY AND APPLIED SCIENCES



### Nabil Eltayeb

The British University in Egypt

Discipline: Engineering Technology & Applied Sciences

Professor Nabil El-Tayeb gained his PhD from Leeds University, Leeds, UK-1986, attended MSc at Aston University in Birmingham, (1982), and received his first degree "BSc" distinction with honor from Helwan University-Cairo-1977.

Currently, he is a full professor at The British University in Egypt since 2010, Head of Engineering Quality assurance unit (2018-till now).



### Ahmed Elwakil

Nile University

Discipline: Engineering Technology & Applied Sciences

Ahmed Elwakil was born in Cairo, Egypt. He received his B.Sc. and M.Sc. degrees in Electronics and Communications from Cairo University and his Ph.D. from the National University of Ireland, University College Dublin in May 2000. He was with the Egyptian Nuclear Research Centre till 2007 and then joined the Department of Electrical, Sharjah University, Emirates, where he is currently a Full Professor. He was a Visiting Professor/Researcher at Istanbul Technical University (Istanbul, Turkey), University of Calgary (Alberta, Canada), Queens University (Belfast, UK), Ohio State University (Columbus, Ohio), King Abdullah University of Science and Technology (KAUST, Saudi Arabia) and Imperial College London (2017). He is an Adjunct Prof. at the Nano-electronics Integrated Systems Center at Nile University, Egypt. and is also an Adjunct Prof. at the Dept. of Electrical Engineering, Schulich School of Engineering, University of Calgary, Canada.





## GEOLOGICAL, ENVIRONMENTAL, EARTH AND SPACE SCIENCES



### Fengting Li

College of Environmental Science and Engineering, Tongji University

Discipline: Geological, Environmental, Earth & Space Sciences

Li Fengting is a Professor of Tongji University and the Director for the Key Laboratory of Cities' Mitigation and Adaptation to Climate Change in Shanghai, China Meteorological Administration (CMACC).

His research mainly focuses on climate change, water resources management, and carbon neutralization technology including , design and development of new functional nano materials, carbon utilization and low carbon water treatment , as well as mechanism of South-South and Triangular Cooperation.



## MATHEMATICAL SCIENCES



### Nasser Sweilam

Cairo University

Discipline: Mathematical Sciences

Professor of numerical analysis at the Department of Mathematics, Faculty of Science, Cairo University. He earned his M.Sc. in Mathematis, Faculty of Science, Cairo University . He was a channel system Ph.D. student between Cairo University, Egypt, and TU-Munich, Germany. He received his Ph.D. in "Optimal Control of Variational Inequalities, the Dam Problem". He was the Head of the Department of Mathematics, Faculty of Science, Cairo University ( May 2012-May 2018). Prof. Sweilam published more than 150 publications and supervised more than 33 thesis' for Ph.D., M.Sc



## MATHEMATICAL SCIENCES



### Kh Mekheimer

Al-Azhar University

Discipline: Mathematical Sciences

Prof. Mekheimer received a B.Sc. in Mathematics from Ain Shams University Cairo (1984), M.Sc. in Thermo-Elasticity from Al-Azhar University (1990), completed his doctorate in Bio-fluid Mechanics at Al-Azhar University in (1994). Currently, he is a professor of Applied Mathematics and Vice Dean of Research and Post-graduate Studies at the Faculty of Science (Men), Al-Azhar University, Egypt. He is leading an active group in his field of interest "Bio-Fluids".



### Tasawar Hayat

Quaid-i-Azam University Islamabad

Discipline: Mathematical Sciences

Tasawar Hayat is working as a Professor of Mathematics at Quaid-i-Azam University (QAU), Islamabad, Pakistan. He received the M.Sc and (M.Phil, PhD) degrees in Mathematics (Applied Mathematics) in 1992 and (1994, 1999) respectively from the QAU. His fields of interest include fluid mechanics, mathematical modeling, simulation, biomechanics, wave mechanics, nonlinear differential and integral systems, fractional calculus, complex network systems, nanomaterials etc. He has already supervised more than one hundred (PhD and M. Phil) students.



## MEDICAL AND HEALTH SCIENCES



### Salako Luc Djogbenou

University of Abomey

Discipline: Medical & Health Sciences

Professor Luc Salako Djogbénou obtained a PhD in Medical Entomology and Parasitology from the University of Montpellier, France. He was a Post-doctoral fellow at the Liverpool School of Tropical Medicine (LSTM). He has been LSTM fellow staff since 2013. He is currently Professor, Director of the Regional Institute of Public Health of the University of Abomey-Calavi, Deputy Head of the Tropical Infectious Diseases Research Centre newly created by him. He was Director of the Laboratory of Vector-borne Infectious Diseases.



### IkeOluwapo Ajayi

College of Medicine, University of Ibadan

Discipline: Medical & Health Sciences

Prof. Ifeoluwapo Ajayi received MB;BS from University of Ibadan and M.Cl.Sc in Clinical Science, Family medicine from the University of Western Ontario, London, Canada in year 1983 and 1994 respectively, and she also received MPH from University of Ibadan in year 2000 and Ph.D. degree (Epidemiology) from the University of Ibadan, Nigeria, in Year 2006.

Her research interests are in Communicable diseases (Malaria); Non-communicable diseases (hypertension, obesity, cervical and breast cancer).



### Walter Jaoko

Director of KAVI-Institute of Clinical Research, University of Nairobi

Discipline: Medical & Health Sciences

Walter Jaoko is a physician, a professor of medical microbiology and tropical medicine and the Director of KAVI-Institute of Clinical Research, at the University of Nairobi. He is also an Extraordinary Professor of Medicine at Stellenbosch University's Centre for Bioethics and Law in the Department of Medicine, and Adjunct Professor, School of Public Health, University of Alabama at Birmingham.





## MEDICAL AND HEALTH SCIENCES



### Mayowa O. Owolabi

University of Ibadan

Discipline: Medical & Health Sciences

Mayowa Ojo OWOLABI MBBS, MSc, DrM, MD, is a Professor of Neurology, and the Dean, Faculty of Clinical Sciences, University of Ibadan, Nigeria. He is among the top 10 Nigerian scientists among the global top 2% scientists (2021). He has over 320 publications in peer reviewed journals including the Lancet, Nature, New England Journal of Medicine, and Science, with over 61,000 citations with a Google Scholar h-index of 66. He has won over \$20 million in grant awards. He developed the seed of life model, stroke levity scale, and the stroke recovery cycle. He leads the largest study of stroke in Africa which is unravelling the genetic and environmental determinants of stroke and its risk factors in Africa.



### Sodiomon Bienvenu Sirima

Groupe de Recherche Action en Sante (GRAS) Ouagadougou

Discipline: Medical & Health Sciences

Holder of Doctorate in Medicine (MD) and Bachelor in Socio-anthropology at the University of Ouagadougou, Burkina Faso, and Ph.D in epidemiology from the Rome University "La Sapienza", Italy, Dr Sodiomon Bienvenu. Sirima is expert on clinical trials and one of the Africans pioneers in conducting ICH-GCP compliant Malaria vaccine trials. He has evolved from the position of rural district medical officer up to Executive Director of a leading national malaria research Center. Since January 2020, he is Chief Executive Officer of "Groupe de Recherche Action en Santé" (GRAS), a leading non-governmental health research Institute founded since 2008, accredited by the Burkina Faso Ministry of Science and Technology.



### Joseph Kamgno

University of Yaounde

Discipline: Medical & Health Sciences

Prof Joseph KAMGNO is a Medical Doctor from the University of Yaounde I, with a Diploma of Epidemiology from Pasteur Institute in Paris, a Master of Public Health and a PhD in Epidemiology from the University of Paris VI.

He is the Founding Director of the Center for Research on Filariasis and other Tropical Diseases (CRFIIMT). He is also teaching epidemiology at the Faculty of Medicine and Biomedical Sciences at the University of Yaounde I where he is Head of Department of Public Health.



## MEDICAL AND HEALTH SCIENCES



### André Pascal Kengne

South African Medical Research Council

Discipline: Medical & Health Sciences

Prof Andre Pascal Kengne is a scientist and medical doctor with a speciality in internal medicine. He received his basic and specialist training from the School of Medicine of Yaounde I university in Cameroon. He then completed a PhD in Medicine with major concentration on cardiovascular epidemiology and prevention, from the School of Medicine and George Institute for Global Health at the University of Sydney, in Australia in 2009. He joined the South African Medical Research Council (SAMRC) in 2011 as the first Director of its Collaborative Research Programme on CVD and Metabolic Diseases, and was promoted in 2013 to lead the newly established and consolidated NCD Research Unit of the organization. He holds conjoint appointments as Professor at the Department of the Department of Medicine of the University of Cape Town, and Extraordinary Professor at the Department of Global Health of the Stellenbosch University, South Africa.



### Ann Moormann

University of Massachusetts Medical School

Discipline: Medical & Health Sciences

Ann Moormann earned her PhD in Epidemiologic Sciences and MPH in Hospital & Molecular Epidemiology at the University of Michigan, Ann Arbor. She then trained at the Center for Global Health and Diseases at Case Western Reserve University in Cleveland, Ohio. She has been a Visiting Scientist at the Center for Global Health Research, Kenya Medical Research Institute in Kisumu since 1999. She is currently a Professor of Medicine in the Division of Infectious Diseases and Immunology, Department of Medicine at the University of Massachusetts Chan Medical School in Worcester. Her research focuses on investigating the development and maintenance of protective immunity to infectious diseases, primarily *Plasmodium falciparum* malaria and Epstein Barr Virus (EBV); and understanding the pathogenesis of endemic Burkitt lymphoma (BL), a common pediatric cancer in sub-Saharan Africa that has been associated with these two infections.



## MEDICAL AND HEALTH SCIENCES



### Dora Mbanaya

University of Yaounde I

Discipline: Medical & Health Sciences

Dora Ngum Shu Mbanaya is Professor of Haematology at the Faculty of Medicine and Biomedical Sciences (FMBS), University of Yaoundé I (UYI), and the General Manager of the National Blood Transfusion Service in Cameroon. She is holder of an MD in General Medicine (Cameroon); PhD in Medicine/ Haematology (Newcastle upon Tyne, England) and a “Diplôme Universitaire” in Transfusion Medicine (Université d’Abidjan, Côte d’Ivoire). She is Fellow of the Royal College of Pathologists, UK and the current President of the Africa Society for Blood Transfusion.



### Jean Claude Mbanaya

University Of Yaounde

Discipline: Medical & Health Sciences

Jean Claude Mbanaya is Professor of Medicine and Endocrinology at the Faculty of Medicine and Biomedical Sciences, Director Biotechnology Center and Postgraduate Dean Doctoral School of Life, Health and Environmental Sciences, University of Yaoundé I and Consultant Physician at the National Obesity Centre at the Yaoundé Central Hospital. He has a wide span of expertise, but his current focus is on clinical application of basic research and equity of access to care and education and the integration of diabetes and NCD in the primary health care activities of developing countries.



### Osama Badary

The British University in Egypt

Discipline: Medical & Health Sciences

Osama Badary is currently the Vice Dean, Faculty of Pharmacy, British University in Egypt (BUE). Chairman of NODCAR, 2013-2019. Head of Clinical Pharmacy Department at Ain Shams University 2006-2013. Publications of over 100 original articles, book chapters and more than 100 Master and Ph.D. supervisions. Chairman of the Egyptian Clinical Pharmacy Fellowship Board. Vice President of the Arab Academy for Development of Pharmaceutical Skills.





## MEDICAL AND HEALTH SCIENCES



### Souleymane Mboup

Institut de Recherche en Santé, de Surveillance Epidémiologique et de Formations (IRESSEF)

Discipline: Medical & Health Sciences

Prof. Souleymane Mboup is a virologist with world-renowned expertise in HIV/AIDS and other infectious tropical diseases. He lives in Dakar and leads IRESSEF as the founder and CEO. His first degree is in Pharmacy, followed by training in microbiology in Tours and Harvard. His research has played an important role in the fight against HIV/AIDS. He is credited as one of the discoverers of the HIV-2 virus, the closest known human virus related to the prototypic AIDS virus. Although his contributions on HIV are widely known, he has developed a growing interest in arboviruses, malaria, multi resistant TB, hepatitis, Ebola, and other tropical infectious diseases. These are major and soaring public health problems exceedingly difficult to control. Today, these represent the WHO and The Global Fund's top public health priorities for prevention and control.



### Emelda Okiro

KEMRI-Wellcome Trust Programme

Discipline: Medical & Health Sciences

Emelda leads the Population Health Unit within the KEMRI-Wellcome Trust Research Programme in Kenya. Emelda has 20 years of Population and Public Health research experience. She has evolved the science of impact evaluation, epidemiology, population health, statistics, data analytics and operations research focusing on research capacity mentorship in the Africa region. Her work has focused on leveraging epidemiological data to improve the understanding of disease mechanisms and strengthen programme implementation of new tools and innovations to achieve a greater impact on health in Africa. Emelda has applied her epidemiological science to many important public health topics that plague the African continent: malaria, HIV, RSV, health access, under-five mortality, emerging infectious pathogens and anaemia. She is focused on embedding herself in the policy process in-country and is passionate about improving routine data in sub-Saharan Africa.



## PHYSICAL SCIENCES



### Francesco Petruccione

University of KwaZulu-Natal

Discipline: Physical Sciences

Francesco Petruccione studied Physics at the University of Freiburg i. Br. and received his PhD in 1988 and the "Habilitation" degree (Dr. rer. nat. habil.) in 1994. In 2004 he was appointed Professor of Theoretical Physics at the University of KwaZulu-Natal (UKZN), in Durban (South Africa). In 2007 he was granted the South African Research Chair for Quantum Information Processing and Communication. At present, he is the interim Director of the National Institute for Theoretical and Computational Sciences, Pro Vice-Chancellor Big Data and Informatics of UKZN, and Professor Extraordinary at the Department of Physics of the Stellenbosch University.



### Fairouz Malek

Centre National de la Recherche Scientifique (CNRS) and IN2P3

Discipline: Physical Sciences

Dr Fairouz Malek is a senior scientist and physicist with experience in nuclear research, particle physics and cosmology. She is currently working at CERN (European Organization for Particle Physics) on the Large Hadron Collider (LHC) and contributed to this century's major discovery in particle physics, the Higgs boson. Prior to that, she participated in a heavy ion collision experiment at CERN's Super Proton Synchrotron, an experiment that contributed to the discovery in 2000 of the quark-gluon plasma state, QGP. She also participated in a NASA space experiment, AMS, to search for antimatter in space. She was born and raised in Algeria where she completed her university studies in physics. After the Master at the Houari-Boumedienne University of Algiers, she had the opportunity to pursue doctoral studies in nuclear physics at the University of Grenoble in France. After her doctorate, she obtained a full research position at the CNRS (National Centre for Scientific Research) in France.



## PHYSICAL SCIENCES



### Farida Fassi

Mohammed V University in Rabat

Discipline: Physical Sciences

Dr. Farida Fassi is a Professor of Mohammed V University in Rabat at the Faculty of Science. In 1996, after completing her BSc in physics from Abdelmalek Essaïd University in Morocco, she went to Spain to continue Higher Education. In 1999, she obtained her MSc from the University of Valencia in Spain. After MSc, she earned her Ph.D. In 2003, she awarded the European Ph.D. in particle physics in recognition of her contribution in the ATLAS experiment at CERN. She then granted with a post-doc from CSIC to continue working on the ATLAS experiment.



### Anton du Plessis

Stellenbosch University

Discipline: Physical Sciences

Prof. Anton Du Plessis is applications scientist at Object Research Systems, Montreal, Canada (remotely). He is based in South Africa and as academic he also holds an Associate Professor position at Stellenbosch University, South Africa, with additional affiliations with Nelson Mandela University and Central University of Technology, South Africa. He is an experienced scholar in the fields of additive manufacturing and X-ray tomography, with specific interests in quality control and process optimization, lattice structures, new applications involving image analysis of tomographic images for all kinds of materials, and biomimicry especially for engineering design. He is deputy editor of the journal Additive Manufacturing Letters and acts on the editorial board and as editor on numerous other journals including Additive Manufacturing, Advanced Engineering Materials, Scientific Reports, Scientific African, 3D Printing and Additive Manufacturing, amongst others. ill.





## PHYSICAL SCIENCES



### Mohamed Henini

University of Nottingham

Discipline: Physical Sciences

Mohamed Henini obtained his first degree at the University of Oran, Algeria. He went to Nottingham University, UK, and was awarded the PhD degree in 1984.

Henini has been studying various aspects of low dimensional semiconductor structures and devices grown by Molecular Beam Epitaxy (MBE) for over 25 years. During this time a significant contribution to the understanding of the physics underlying the operation of such structures and devices has been made. The research work has been recognized nationally and internationally. He has an established reputation and as a result collaborate/collaborated with many scientists both in the UK and overseas as evidenced by his publications.



### Abdel Nasser Tawfik

Egyptian Center for Theoretical Physics, Nile University

Discipline: Physical Sciences

Professor Tawfik is the founding director of the Egyptian Center for Theoretical Physics (ECTP), the founding director of the World Laboratory for Cosmology and Particle Physics (WLCAPP), and the research director at "ICSC-World Laboratory" in Erice, Italy. Professor Tawfik is serving in several committees and panels for education, scientific research, and development. In 1999, He has earned Dr.rer.Nat (Ph.D.) at Philipps Universität zu Marburg, and in 2012 "Doctor of Science (D.Sc.)" in "physics and mathematics" at Uzbekistan National University. Tawfik has accomplished successive academic posts at Marburg, Stuttgart, Trier, Bielefeld (Germany), Hiroshima (Japan), MTI and Nile universities (Egypt).



## PHYSICAL SCIENCES



### Nageh Allam

American University in Cairo

Discipline: Physical Sciences

Nageh Allam received his PhD in materials science and engineering from Pennsylvania State University and pursued his postdoctoral studies at both Georgia Institute of Technology and Massachusetts Institute of Technology (MIT). After his postdoctoral tenure at GaTech and MIT, He joined the faculty at The American University in Cairo (AUC), where he is currently a tenured Professor of materials science and engineering and the Director of the Nanotechnology graduate program. He is the founder of the AUC Energy Materials Laboratory (EML) and the co-founder of the Solar Energy program. Allam's research is multidisciplinary in nature as it is at the interface between nanoscience, physics, and chemistry.



### Deji Akinwande

University of Texas

Discipline: Physical Sciences

Deji Akinwande is an Endowed Professor at the University of Texas at Austin. His research focuses on 2D materials, pioneering device innovations from lab towards applications. He received the PhD degree from Stanford University in 2009. Prof. Akinwande serves as an Editor ACS Nano and Nature NPJ 2D Materials & Applications, and on the editorial board for Science. He is the co-Chair of the Gordon Research Conference on 2D electronics and was a past Chair of the 2018/2019 Device Research Conference (DRC), and the Nano-device sub-committee for the 2018 IEEE IEDM Conference. He is a Fellow of the IEEE, the American Physical Society (APS), and the African Academy of Sciences.



### Kimani Toussaint

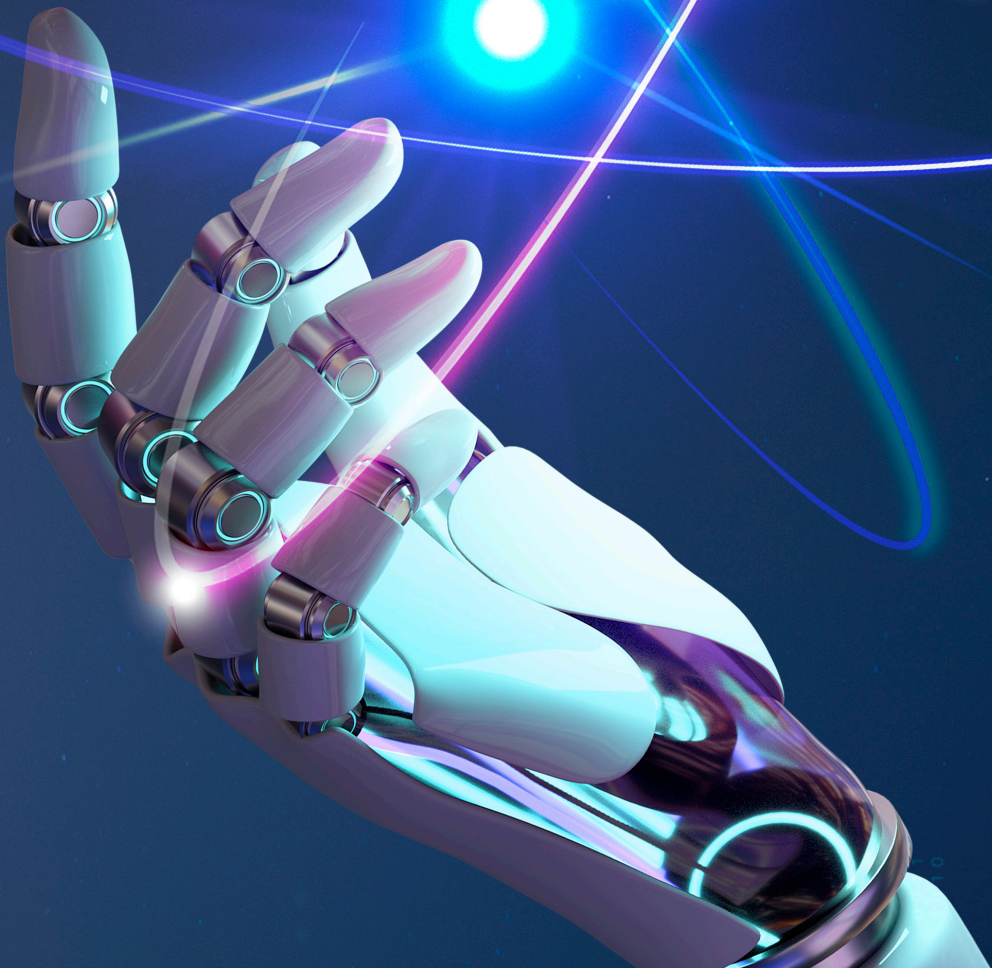
Brown University

Discipline: Physical Sciences

Kimani C. Toussaint, Jr., Ph.D. is a Professor and Senior Associate Dean in the School of Engineering at Brown University. Dr. Toussaint directs the laboratory for Photonics Research of Bio/nano Environments (PROBE Lab), an interdisciplinary research group which focuses on both developing nonlinear optical imaging techniques for quantitative assessment of biological tissues, and novel methods for harnessing plasmonic nanostructures for light-driven control of matter. Dr. Toussaint is a member of the Board of Reviewing Editors for Science, and a Guest Editor for PNAS.



# 2021 Fellows







## AGRICULTURAL AND NUTRITIONAL SCIENCES

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### **Olubukola Babalola**

North-West University

Discipline: Agricultural & Nutritional Sciences

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Professor Olubukola Oluranti Babalola (Pr.Sci.Nat, MASSAF, FASLP, FTWAS, FAS, FAAS), the Vice President of the Organization for Women in Science for the Developing World (OWSD), is an NRF-rated scientist with over 20 years of research experience focusing on rhizosphere metagenomics, coupled with an MBA in General Management. She is the Research Director of the Food Security & Safety Focus Area at North-West University (NWU), South Africa, without reservation leading, as the Head and Principal Investigator a Microbial Biotechnology Research laboratory. Olubukola is a member of the editorial board for Microbiology Spectrum, Applied and Environmental Microbiology (American Society for Microbiology, USA), BMC Microbiology (Elsevier), and Biochemistry and Biophysics Reports (Elsevier).

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### **Dr Tadele Tefere**

International Centre of Insect Physiology and Ecology

Discipline: Agricultural & Nutritional Sciences

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Dr Tadele Tefera is currently Country Head of ICIPE (International Centre of Insect Physiology and Ecology), Ethiopia. He is an entomologist, obtained his PhD from Stellenbosch University, MSc and BSc from Haramaya University. He was Humboldt fellow at University of Göttingen, Germany. He mentored over 30 MSc and PhD students, authored over 100 publications and has a patent right in biopesticide. Dr Tefera was Associate Professor and Director of Research at Haramaya University.



## AGRICULTURAL AND NUTRITIONAL SCIENCES



### Tianyu Wang

Institute of Crop Science, Chinese Academy of Agricultural Sciences (CAAS)

Discipline: Agricultural & Nutritional Sciences

Dr. Wang is a Distinguished Professor, Senior Chief Scientist, at the Institute of Crop Science, Chinese Academy of Agricultural Sciences (CAAS). Dr. Wang's scientific fields focus is on crop germplasm, genetics and breeding. His career has been devoted to solving problems in millet and corn production by excavating and utilizing excellent germplasm resources.



### Charles Ogugua Aworh

University of Ibadan

Discipline: Agricultural & Nutritional Sciences

Ogugua Charles Aworh is retired George Coumantaros Distinguished Professor, Department of Food Technology, University of Ibadan (UI); President, International Academy of Food Science and Technology (IAFoST), the global focus of food science excellence; and Chairman, Technical Advisory Group of Nigeria's Tertiary Education Trust Fund (TETFund). He obtained B.Sc. (Hons) from UI (1973); MSc (1976) and Ph.D. (1978) in Food Science and Technology from Cornell University, USA. He is a recipient of the Lifetime Achievement Award of the Nigerian Institute of Food Science and Technology (NIFST), former Chairman of NIFST Body of Fellows (2008-2013), pioneer Chairman of the Multidisciplinary Central Research Laboratory, UI, (2008-2014), and served three-terms as Head of Department of Food Technology, UI.



## BIOSCIENCES



### Etinosa Igbinosa

University of Benin

Discipline: Biosciences

Etinosa Igbinosa is a Professor of Molecular Microbiology, Head of the Applied Microbial Processes & Environmental Health Research Group, and Director of General Studies at the University of Benin, Nigeria. He holds a PhD in Microbiology from the University of Fort Hare, South Africa. He was a Postdoctoral Fellow at UNESCO-IHE Institute for Water Education Delft, Netherlands and Universidade Federal de Viçosa, Brazil, and a visiting scientist at the University of Ottawa, Ottawa, Canada.



### Melodie McGeoch

La Trobe University

Discipline: Biosciences

Melodie A. McGeoch was born in Gauteng, South Africa. She obtained her B.Sc degree in Botany and Entomology, and B.Sc (Hons) in Entomology, from the University of KwaZulu-Natal. In 1995 she was awarded a PhD in Entomology from the University of Pretoria. She has held academic positions at the Universities of Pretoria, Stellenbosch and Monash. She is currently Professor in Ecology at La Trobe University (Australia). She currently serves as 1st Vice Chair of the Science Committee of the Global Biodiversity Information Facility (GBIF) and sits on the Board of the National Computational Infrastructure (ANU).



### Ganiyu Oboh

The Federal University of Technology

Discipline: Biosciences

Prof. Ganiyu Oboh hails from Ibie-Nafe, Edo-State, Nigeria. He holds PhD in Applied Biochemistry (2002) from the Federal University of Technology, Akure, Nigeria, and has enjoyed postdoctoral trainings from laboratories in Brazil, Germany and China. He joined the service of the Department of Biochemistry, Federal University of Technology, Akure, Nigeria in 1997 as a Graduate Assistant, from where he rose to the position of a Professor in 2012. He has served in different administrative capacities including Head of Biochemistry Department, Sub-Dean, School of Postgraduate Studies and Director, Centre for Research and Development of the university.





## BIOSCIENCES



### Mohammed Hichem Kara

University of Annaba in Algeria

Discipline: Biosciences

Mohamed Hichem KARA is a teacher and researcher at the University of Annaba in Algeria. Holder of a PhD in biological oceanography from the University of Science and Technology Houari Boumediène of Algiers in 1998, his scientific activities are oriented towards marine and continental hydrobiology with a particular interest for biodiversity, fishing, aquaculture and their interactions with human activities (pollution, invasive species and global warming). In 2003, he founded the Marine Bioresources laboratory. In 2007 and 2010, he respectively initiated a Master's degree and a Doctorate in coastal environment and aquatic bioresources. His team has participated in 15 international research programs (Tassili, PHC Maghreb, AUF, CNRS-PICS, EU-FP7, US-AID, Envi-Med, Amidex, Key initiative Muse, COST). He is the author of a hundred of scientific articles (Scopus h index = 16), 5 books and 2 book chapters.



### Ahmed Moustafa

American University in Cairo

Discipline: Biosciences

Dr. Ahmed Moustafa graduated with a B.Sc. in computer science from Alexandria University. Then he earned his Ph.D. in computational genetics from the University of Iowa. Dr. Moustafa conducted his postdoctoral fellowship at the J. Craig Venter Institute (JCVI). Afterward, he joined the American University in Cairo (AUC) as a bioinformatics faculty member in the Department of Biology. Then, Dr. Moustafa served as the director of the Biotechnology Graduate Program. Currently, he is serving as the chair of the Biology Department at AUC. In addition, Dr. Moustafa is affiliated with JCVI as an adjunct scientist. He is also the head of the bioinformatics department at the Egypt Center for Research and Regenerative Medicine (ECRRM).



## BIOSCIENCES



### Huanming Yang

BGI-Shenzhen/ University of Chinese Academy of Science

Discipline: Biosciences

Dr. Yang received his Ph.D. from University of Copenhagen, Denmark (1985-1988), and post-doctoral training in France (1988-1990) and the USA (1990-1994). He, as Chairman and co-founder of BGI-China which is regarded as one of the most important contributors to the genome research in the world, making a significant contribution to the International Human Genome Project (HGP, 1999-2003), the International HapMap Project (HapMap, 2002-2006), the International 1000 Genomes Project (GIK, 2008-2012), the International Cancer Genome Project (ICGP, 2008-present), the international collaboration on Yeast Genome Redesign and Synthesis (Sc2.0, 2011-2017), as well as sequencing and analyzing genomes of many other animals, plants, and microorganisms, with >600 publications in the internationally prestigious peer-reviewed journals, including >120 in Cell, Science, Nature and its series, with an H-index = 115 (Nov. 08, 2022).



### Dr. Simon Kariuki

Kenya Medical Research Institute/Centre for Global Health Research

Discipline: Biosciences

Dr. Kariuki is a Senior Principal Research Scientist at the Kenya Medical Research Institute/Centre for Global Health Research (KEMRI/CGHR) and the Malaria Branch Chief of the KEMRI, CDC and Liverpool School of Tropical Medicine (LSTM) Collaborative Programme in Kisumu, Kenya. He has more than 30 years of hands-on experience in human health research focusing on the epidemiology and mechanisms of acquired immunity to infectious diseases, health systems research, clinical trials, entomology, disease surveillance, monitoring and evaluation and capacity strengthening.



## CHEMICAL SCIENCES



### Ponnadurai Ramasami

University of Mauritius

Discipline: Chemical Sciences

Prof Ponnadurai Ramasami, CSci, CChem, FRSC, FAAS, FICCE, MMast, received his PhD in Physical Chemistry and became full Professor in 2013. He is a Visiting Professor with the University of Johannesburg and he is Professor Extraordinarius with the University of South Africa. He was awarded the best Mauritian Scientist in 2016. He also holds a UNESCO Chair in Computational Chemistry. He leads the Computational Chemistry Group, Department of Chemistry, Faculty of Science at the University of Mauritius.



### Eno E. Ebenso

University of South Africa

Discipline: Chemical Sciences

Prof Ebenso obtained his PhD in Physical Chemistry from the University of Calabar, Nigeria and has been lecturing in the university system since 1990. He started his university teaching career at the University of Calabar, Nigeria. He was the Acting Vice Rector (Research and Planning) and the Executive Dean of the Faculty of Natural and Agricultural Sciences at the entire North-West University in South Africa – Dec 31st 2019. He then took up appointment as Research Professor at the University of South Africa (1st Feb 2021 till date).



## CHEMICAL SCIENCES



### Thalappil Pradeep

Indian Institute of Technology Madras

Discipline: Chemical Sciences

Thalappil Pradeep is an Institute Professor, the Deepak Parekh Institute Chair Professor and a Professor of Chemistry at the Indian Institute of Technology Madras, Chennai, India. He studied at the University of Calicut, Indian Institute of Science, UC Berkeley, and Purdue. His research interests are in molecular and nanoscale materials. He is an author of over 525 papers in journals and is an inventor of over 100 patents or patent applications. In addition to the work on advanced materials, he is involved in the development of affordable technologies for drinking water purification. His pesticide removal technology has reached about 10 million people. Along with his associates, he has incubated seven companies and three of them have production units. His arsenic removal technology, approved for national implementation, is delivering arsenic free water to about 1.2 million people every day.



### Chérif F. Matta

Mount Saint Vincent University

Discipline: Chemical Sciences

Chérif F. Matta is Professor and Chair of the Department of Chemistry and Physics at Mount Saint Vincent University (Canada). He holds honorary or visiting professorships at Université Laval, Dalhousie University, and Saint Mary's University (all in Canada) and at Zewail City for Science and Technology (Egypt). Professor Matta's research group is internationally recognized in theoretical and computational chemistry and in mitochondrial biophysics.





## CULTURAL SCIENCES, HUMANITIES AND SOCIAL SCIENCES



### Nicholas Odhiambo

University of South Africa

Discipline: Cultural Sciences, Humanities and Social Sciences

Prof Nicholas M. Odhiambo holds a PhD (Economics) degree from the University of Stellenbosch. His research profile is broad, rich and multifaceted. His research has made a significant contribution to the scholarly body of knowledge. In the past 22 years, he has published a number of papers in various international journals. Of these publications, more than 330 articles have been published in more than 140 reputable/peer-reviewed/refereed journals. Prof Odhiambo is currently ranked among the top economics authors in the world by IDEAS/RePEc, the largest bibliographic database dedicated to Economics.



## GEOLOGICAL, ENVIRONMENTAL, EARTH AND SPACE SCIENCES



### Shuanggen Jin

Henan Polytechnic University

Discipline: Geological, Environmental, Earth and Space Sciences

Shuanggen Jin is currently Vice-President and Professor at Henan Polytechnic University and Professor at Shanghai Astronomical Observatory, CAS, China. He was formerly Visiting Fellow at University of New South Wales, Australia, Post-Doc and Senior Scientist at Korea Astronomy and Space Science Institute, Research Fellow at University of Texas at Austin, USA, Professor at Bulent Ecevit University, Turkey, and Dean and Professor at Nanjing University of Information Science and Technology, China.



## GEOLOGICAL, ENVIRONMENTAL, EARTH AND SPACE SCIENCES



### Harold John Annegarn

NorthWest University

Discipline: Geological, Environmental, Earth and Space Sciences

Extraordinary Professor, School of Geo and Spatial Sciences, North West University, Potchefstroom, South Africa; Honorary Associate Professor, China Agricultural University, Beijing; Fellow of the Academy of Science of South Africa

Harold Annegarn is a polymath who has contributed to fundamental and applied sciences across a wide range of scientific disciplines. From his doctoral thesis in nuclear physics, he branched out to become a specialist in atmospheric chemistry, the health effects of air pollution and energy efficiency. Annegarn has published in diverse fields - atmospheric science, climatology, remote sensing, geology, mining, science diplomacy, botany and even an oft-cited paper on the avian biology of vultures. He has risen to international prominence in several fields, having hosted international projects and organised major conferences in nuclear physics, atmospheric sciences, energy and remote sensing.



## MEDICAL AND HEALTH SCIENCES



### Abiodun Falodun

University of Benin

Discipline: Medical and Health Sciences

Abiodun Falodun, PhD is a renowned Professor of Medicinal and Natural Product Chemistry in the University of Benin and one of the foremost experts in anticancer natural product drug discovery with over 120 scientific papers.

He isolated the first chemical principle from an indigenous medicinal plant used for the management of threatened abortion, which earned him the May and Baker Professional Innovative Award (2007).



## MEDICAL AND HEALTH SCIENCES



### Habiba Bouhamed Chaabouni

University of Tunis El Manar

Discipline: Medical and Health Sciences

Professor Habiba Bouhamed Chaabouni is emerita of medicine at the University of Tunis El Manar. She is fellow of "French National Academy of Medicine" and fellow of "Tunisian Academy of Science and Arts", former director of science department, and laureate of the prestigious "L'Oréal-UNESCO award" for Women in Science.

Physician and scientific researcher, Dr. Bouhamed is a pioneer in human genetics who faced the challenge of developing genetics in medical and health areas and succeeded to establish very early the national medical genetics board. Graduated in medicine and science, she put together her knowledge and skills for the benefice of students, patients and community.



### Martins Emeje

National Institute for Pharmaceutical Research & Development

Discipline: Medical and Health Sciences

Martins Emeje obtained BPharm with distinction from Ahmadu Bello University, MPharm and Ph.D. from University of Nigeria, where he received the best PhD award and was enlisted as UNN's "Face of Research." He established the first nanomedicine center in Nigeria. He was the pioneer head of the intellectual property and technology transfer as well as the technology innovation and support center. Prof. Emeje's several international fellowships include the prestigious Raman fellowship. He has over 150 primary scientific publications, patents, trademarks, and public opinions in print and electronic media. He has a postgraduate certificate in Project Management from Walden University, Minnesota, as well as a professional teaching certificate and a World Bank certification in Public Procurement.



## MEDICAL AND HEALTH SCIENCES



### Julius Najah Fobil

University of Ghana

Discipline: Medical and Health Sciences

Julius Fobil is a Professor of environmental health with an outstanding academic career; having contributed significantly to the field of environmental epidemiology in Ghana and beyond. He is the Provost of the University of Ghana's College of Health Sciences; having previously served as Dean its School of Public Health, He also an Associate Scientist at the Bernhard Nocht Institute for Tropical Medicine in Hamburg. His research focuses on environmental exposure assessment, urban environmental health in low-income economies and more recently, he has been involved in research capacity building in environmental and occupational health in West and Central Africa region.



### Pontiano Kaleebu

Uganda Virus Research Institute and MRC/UVRI & LSHTM Uganda Research Unit

Discipline: Medical and Health Sciences

Prof. Pontiano Kaleebu is Director of the Uganda Virus Research Institute (UVRI) and Director of the MRC/UVRI and London School of Hygiene and Tropical Medicine (LSHTM), Uganda Research Unit. He is a professor of immunovirology at the LSHTM.

He holds a medical degree from Makerere University, a diploma in immunology and a PhD from University of London.



### Andrew Duncan Steele

Bill & Melinda Gates Foundation

Discipline: Medical and Health Sciences

Duncan Steele is the Deputy Director and Strategic Lead for enteric vaccines in the Enteric and Diarrheal Diseases team of the Bill & Melinda Gates Foundation. He is responsible for an integrated portfolio of vaccine research and development and for implementation strategies for the control of diarrhea and enteric fever in vulnerable populations in endemic countries. He coordinates teams across Vaccine Development and Vaccine Delivery for improved and new vaccines against rotavirus, cholera, typhoid fever, Shigella spp. and Hepatitis E virus.





## PHYSICAL SCIENCES



### Bruce Mellado

University of the Witwatersrand and iThemba LABS

Discipline: Physical Sciences

Bruce Mellado, is a Professor at the University of the Witwatersrand, a Senior Researcher of iThemba LABS and serves as the Director of the Institute for Collider Particle Physics. Currently, he is the Chairperson of the Institutional Board of the Tile Calorimeter at the ATLAS experiment at the European laboratory CERN. He was the National Contact Physicist of South Africa at the ATLAS experiment and the co-Chair of the Nuclear Particle and Radiation Division of South African Institute of Physics. He is the recipient of several awards and fellowships, including the TW Kambule-NSTF Award for Research in 2021 and the Vice-Chancellor Award for Research in 2022. Prof. Mellado is an Internationally acclaimed, B1 rated researcher of the National Research Foundation.



### Tayalati Yahya

University Mohammed V in Rabat

Discipline: Physical Sciences

Tayalati started his career as an experimental high-energy physicist with a Ph.D. from the University Mohammed First in Morocco. He pursued the field in the ANTARES collaboration. He has been involved in the early preparation and deployment of the ANTARES neutrino telescope and was for many years the convener of the exotic physics group. ANTARES has allowed to reach very competitive limits on the flux of Magnetic Monopoles and Nuclearites particles in the Universe.

## ABOUT THE AAS

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