

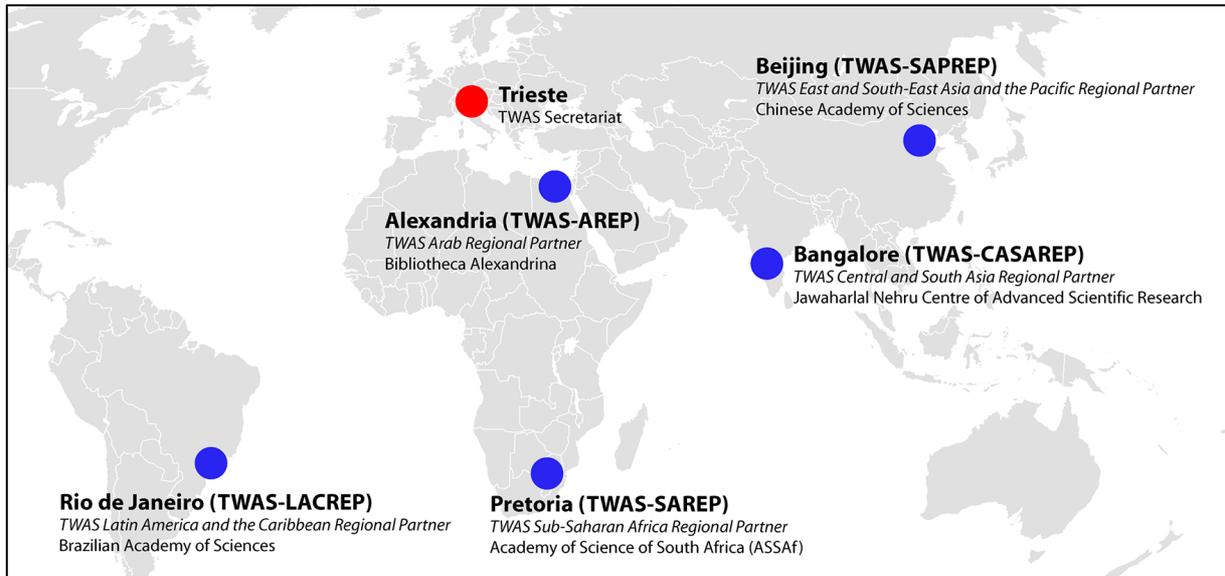
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**Young Affiliates**

**2019–2023**

# TWAS Young Affiliates 2019–2023

Every year since 2007, TWAS five Regional Partners—responsible for Latin America and the Caribbean, East and South-East Asia and the Pacific, the Arab region, Central and South Asia, and Sub-Saharan Africa—elect up to five outstanding young scientists from their region as TWAS Young Affiliates for a period of five years. These young scientists must be living and working in a developing country, and have an excellent track record of at least 10 international publications.



## Arab Region

TWAS Regional Partner for the Arab Region (TWAS-AREP) at the *Bibliotheca Alexandrina* in Alexandria, Egypt

### **Hamdan Zaki Hamdan Abualbasher**

*Department of Biochemistry and Molecular Biology*

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Hamdan Z.H. Abualbasher is an Associate Professor of biochemistry and molecular biology in the Faculty of Medicine, Al-Neelain University, Khartoum, Sudan.

He earned his Master of Science in medical biochemistry from Khartoum University, Faculty of Medicine (2010) and his PhD in biochemistry from Al-Neelain University, Faculty of Medicine (2015). Since 2016 he has been working in the group of tropical diseases-tuberculosis, at the Neelain Institute for Medical Research, and is also a Co-Editor in Chief of the *Al-Neelain Medical Journal*. For the outstanding quality of his research he has received the Al-Neelain Youth Award for Excellence in Scientific Research (2017). He has authored more than 20 scientific papers in peer-reviewed journals, two book chapters, and has supervised several master students.

### **Lamya Adnan Atif Al-Haj**

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*Sultan Qaboos University*

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Lamya Al-Haj is an Assistant Professor at Sultan Qaboos University, with a PhD in molecular biology from University College London (2014), and an Master of Science in environmental science and technology from the University of New South Wales (Australia), in 2006, where she received the Boban Marcovic Prize in Environmental Science. Her research is focused on the production of biofuels and HVP's from microorganisms using genetic engineering tools and production of biodiesel from waste date seeds. She is the recipient of national and international awards: the Sultan Qaboos University's award for outstanding scientific contribution, and the Al Mara award for Innovation and Technology, 2019. At the international level she is the recipient of the Gulf Intelligence-Occidental award 2016, L'Oréal UNESCO award for women in science-Middle East fellowship award (2018) and most recently the Young Global Leader 2020 award from the World Economic Forum. Al-Haj aspires to promote STEM education, R&D and youth development initiatives in the Arab world creating positive change. In past years she has delivered numerous scientific, inspirational and motivations talks targeted to the Arab youth and women.

## **Hiba El Hajj**

*Department of Experimental Pathology, Immunology and Microbiology*

*Faculty of Medicine*

*American University of Beirut*

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Hiba El Hajj is an Associate Professor with tenure at the Department of Experimental Pathology, Immunology and Microbiology, Faculty of Medicine, American University of Beirut (AUB). Her main research interests include molecular oncology and molecular parasitology. In oncology, her research focuses on targeted therapies on oncoprotein degradation in human hematological malignancies using two models: the Nucleophosmin-1 mutated AML, and the human T cell lymphotropic virus type I-induced adult T cell leukemia. In parasitology, she is exploring innovative prevention and treatment strategies using immunomodulatory drugs against toxoplasmosis and cutaneous leishmaniasis. She co-authored so far 46 articles in peer-reviewed journals. Her awards include: *Prix d'Excellence Scientifique Franco-Libanais* de la Société des Membres de la Légion d'Honneur; 2016 Rising Talents L'Oréal UNESCO for Women In Science Award; and the 2015 L'Oréal UNESCO For Women In Science Levant And Egypt Fellowship. She attracted both intramural AUB funding mostly, as well as extramural funding including CNRS-L, CNRS-Montpellier, AUB-CNRS, Cèdre funds as well as the "L'Oréal-UNESCO for Women in Science" Awards.

## **Saja A. A. J. E. Fakhraldeen**

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Saja A. Fakhraldeen earned her MS (2011) and PhD (2015) in cancer biology from the University of Wisconsin-Madison (USA) and her BS (2009) in biological engineering from MIT. Since May 2017, she has been working as a Research Scientist at the Kuwait Institute for Scientific Research (KISR), where she investigates bioactive properties of compounds isolated from Kuwait's marine environment. She is currently working on generating the first metagenomic profile of marine microorganisms in Kuwait Bay, and on establishing the first mammalian cell culture and imaging facilities at KISR.

Other interests that she is pursuing at KISR include wastewater epidemiology. In this field, she has coordinated routine shipment of urban sewage samples to Denmark as part of Kuwait's participation in the Global Sewage Surveillance Program. She has also collaboratively developed a protocol for viral analysis of urban sewage samples.

As of 2019, Fakhraldeen is a member of the American Society for Biochemistry and Molecular Biology (ASBMB) and a member of Sigma Xi, The Scientific Research Honor Society. She was also rewarded with the 2018 L'Oréal-UNESCO For Women in Science regional fellowship.

## **Hassan Ahmed Shokry**

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Hassan Shokry Hassan Ahmed is an Associate Professor in the Environmental Engineering Department, Egypt-Japan University of Science and Technology, Alexandria, Egypt. His interests cover nanotechnology, sensors applications, design of environmental controlling systems.

He started his career working first as an Assistant Researcher, Assistant Professor then as an Associate Professor (2004–2019) in the Electronic Materials Researches Department, City of Scientific Research and Technological Applications, Alexandria, Egypt.

Ahmed is the recipient of numerous awards: the ALECSO award for young researchers in the Arab World (field nanotechnology), in 2015; the State Encouragement Award in the field of Basic Sciences (field physical science), in 2017. He is serving as a member in the National Committee for New Materials Technology (2018–2021), and is a referee in many scientific journals.

## Central and South Asia

TWAS Regional Partner for Central and South Asia (TWAS-CASAREP) at the Jawaharlal Nehru Centre for Advanced Scientific Research in Bangalore, India

### **Noreen Sher Akbar**

*College of Electrical and Mechanical Engineering  
National University of Sciences and Technology  
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Noreen Sher Akbar is a researcher in the field of mathematics and basic and engineering science, with 10 years experience, more than 280 research papers in ISI international journals and more than 6000 citations. She earned her PhD in mathematics, in 2012, with merit, and has active research collaborations with professors at leading universities in USA, Turkey, Tunisia and Germany.

Her research areas include Newtonian and non-Newtonian fluids, and her work has wide applications in engineering sciences.

Because of her outstanding curriculum, Akbar has been listed among the top 20 most productive researchers, and selected as a Young Associate of Pakistan Academy of Sciences (PAS), in 2013. The Ministerial Standing Committee on Scientific and Technological Cooperation (COMSTECH) of the Organization of Islamic Cooperation declared Akbar the top Pakistani Nano Scientist for year 2016. Akbar has received 19 national and international awards, including the Gold Medal of Best Mathematics Researcher by Quaid-i-Azam University Islamabad (2019), and the Raziuddin Gold Medal of Mathematics for year 2017 by Pakistan Academy of Sciences.

### **Tasrina Rabia Choudhury**

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Tasrina Rabia Choudhury is a Bangladeshi chemist with a PhD (2015) and a Master of Science (2005) in applied chemistry and chemical engineering, both from the University of Dhaka, Bangladesh. From the same university she also earned a Bachelor of Science with honors (2003) in applied chemistry and chemical technology. She is currently working as a Principal Scientific Officer and Technical Manager in analytical chemistry laboratory (accredited on ISO/IEC 17025:2005), Chemistry Division, Atomic Energy Centre, Dhaka, and is involved in the development, validation and accreditation of methods for the analysis of major, minor, trace essential and toxic elements in different environmental, food and biological samples and the impact of these elements on human health and diseases. Other interests involve non-communicable diseases and analysis of trace/heavy metals in samples for regular monitoring purposes using ICP-MS, ICP-OES, Flame-AAS, Graphite Furnace-AAS, Hydride Generation-AAS,

and UV-Visible techniques. She is also a member of OWSD, INGSA-ASIA, Bangladesh Chemical Society and NITUB. Among her awards: BAS Gold Medal Award in Physical Sciences group (2018) from Bangladesh Academy of Sciences.

### **Rajani Mandyam Bhoolokam**

*National Institute of Advanced Studies (NIAS)*

*Indian Institute of Science*

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Mandyam Bhoolokam Rajani is an Associate Professor in the School of Humanities, National Institute of Advanced Studies (NIAS), Bangalore, India. Her research interests focus on landscape archaeology and geo-spatial analysis for cultural heritage: by using space/air based remote sensing (RS) images she analyses Earth's surface and subsurface features, obtaining information that improves the understanding of the cultural heritage of an area. She complements remote sensing studies with GPS survey, and Geographic Information System (GIS) technologies.

Rajani earned her PhD from the University of Mysore, in 2011, working in the field of space-based archaeological investigations. Her findings and discoveries helped restore and manage many archeological sites, providing information about environmental and cultural conditions of the past, and about the impact of climate change. She received the Young Geospatial Scientist Award in 2011, and the P.R. Pisharoty Memorial Award in 2019 from the Indian Society of Remote Sensing (ISRS). She was elected to the Indian National Young Academy of Science (INIAS), in 2018, and has been a TEDx speaker: [shorturl.at/oAX25](https://shorturl.at/oAX25).

### **Hamid Reza Pourghasemi**

*Department of Natural Resources and Environmental Engineering*

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Hamid Reza Pourghasemi earned his PhD in watershed management engineering and sciences, from Tarbiat Modares University (TMU), in 2014. He also holds an Master of Science in watershed management engineering from TMU (2008), and a Bachelor of Science in range and watershed engineering from Gorgan University (2004). His current scientific interests include landslides modelling, natural hazards, multi-hazard mapping, machine learning, and spatial modelling in Geographic Information Systems (GIS) and Remote Sensing (RS). He is also skilled in application of data mining/machine learning techniques in natural and man-made hazards (flood, gully erosion, forest fire, and land subsidence); application of GIS and RS in natural resources and environment; application of spatial multi criteria evaluation (SMCE) and analytical hierarchy process (AHP), and geo-statistics in hydrology. For his scientific results he has been selected as the best educational professor at Shiraz University, College of Agriculture (2017); distinguished researcher (2017); distinguished youngest researcher (2018); and

distinguished researcher (2019) all at Shiraz University. Also, he was selected as Highly Cited Researcher in 2019 by Web Of Science.

**Priyanga Ranasinghe**

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*Faculty of Medicine*

*University of Colombo*

*Colombo, Sri Lanka*

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Priyanga Ranasinghe is a Senior Lecturer at the Department of Pharmacology, Faculty of Medicine, University of Colombo (UC), Sri Lanka, and a Visiting Lecturer at the Department of Chemistry, Faculty of Science (UC). He earned his MD in Clinical Medicine (2018) at the UC Postgraduate Institute of Medicine, and completed his PhD in the same year at UC, with a thesis on Evaluation of Zinc and Ceylon cinnamon supplementations for prevention and treatment of Diabetes Mellitus. His scientific interests include clinical pharmacology and clinical trials, nutrition, diabetes, endocrinology, obesity and weight management. At UC, he has conducted studies in ergonomics, health literacy, health economics and medical education, some of which are pioneer research projects in Sri Lanka. He has an impressive number of publications (80+) in peer-reviewed journals, as well as over 90 research communications at national and international conferences. He is the recipient of many awards, including consecutive presidential research awards and the Committee of Vice Chancellors and Directors (CVCD) lifetime Research Excellence Award for Most Outstanding Young Researcher in Health Sciences (2014).

# East and Southeast Asia and the Pacific

TWAS Regional Partner for East and South-East Asia and the Pacific (TWAS-SAPREP) at the Chinese Academy of Sciences in Beijing, China

## **Wei Li**

*Institute of Zoology (IZ)*  
*Chinese Academy of Sciences (CAS)*  
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Li Wei is a Professor and Principal Investigator at the Institute of Zoology (IZ), Chinese Academy of Sciences (CAS). He received his Bachelor of Science degree from Wu Han University (2006), and his PhD degree from IZ, CAS (2012). He joined IZ, CAS, in 2013, as a Professor of Star Programme, and established his own research group; there he was promoted to Professor in 2016 after a stringent assessment, in which he scored excellent. In 2017, Li was promoted to the Vice-Director of the State Key Laboratory of Stem Cell and Reproductive Biology. His research focus is on stem cells and genetic engineering research: he aims to understand the genetic basis of certain reproduction- and regeneration-related functions/phenotypes, and to reconstitute such phenotype/function in a given cell or organism for research and therapeutic purposes. Current interests include developing cutting-edge genome engineering technologies and mammalian synthetic biology; dissection of genetic and epigenetic basis of reproduction- and regeneration-related phenotypes; clinical application of gene therapy. He is the recipient, among others, of the International Award of the Japanese Association for Laboratory Animal Science.

## **Phyu Phyu Lwin**

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*Ministry of Natural Resources and Environmental Conservation (MONREC)*  
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Phyu Phyu Lwin is an environmental scientist from Myanmar, who earned her PhD in agricultural science from Kyoto University, Japan, in 2018. She holds a Master of Science in forest sciences and forest ecology from Georg-August University, Göttingen, Germany (2013) and a Bachelor of Science in forestry from University of Forestry (now University of Forestry and Environment Sciences), in Yezin, Myanmar (2006). She currently serves as a Staff Officer with the Forest Research Institute, Forest Department, Ministry of Natural Resources and Environmental Conservation (MONREC).

Her initial interest focused on nature and conservation of natural forests, but then she realized that forests and people are intimately connected, and moved towards social science, intertwining them with nature and ecosystems. She is involved in providing information for policy reform in the forestry sector; she develops strategies to secure local livelihoods, and 'knowledge, attitude and practice' methods. Being aware of the importance of indigenous

knowledge for forests well-being, she is exploring the traditional knowledge of local people who live in nearby forests, to merge this precious heritage with scientific data.

### **Jigme Tenzin**

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*Ministry of Agriculture and Forests*

*Thimphu, Buthan*

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Jigme Tenzin has been working with the Department of Forests and Park Services since 2009, starting programmes that can be considered a pioneer contribution to science in Bhutan. He holds a PhD (2016) in forest management from the University of Natural Resources & Life Sciences, Vienna, Austria. He also has a Master of Science in Forest Management from the Indira Gandhi National Forest Academy, Dehradun, India (2008) and a Bachelor of Science in botany, zoology and chemistry from the Sherubtse College, Kanglung, Bhutan (2005). He has received awards and honours such as the Australian Leadership Awards Fellowship (2011) and the Netherland Fellowship Program Awards (NUFFIC), in 2013. In 2014 he was promoted to Senior Forestry Officer and in 2018 to Deputy Chief Forestry Officer with the Watershed Management Division (DoFPS). He has also trained local leaders on the concept of watershed management. Bhutan has a rich biodiversity of forests, which makes it difficult to develop management models for every tree species. Tenzin has grouped local species easing their ecological management, providing a framework that allows the assessment of the forest structure, between 'natural' and 'semi-disturbed' areas.

### **Munkhtsetseg Tsednee**

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Munkhtsetseg Tsednee is a Scientific Researcher at Botanic Garden and Research Institute, Mongolian Academy of Sciences (MAS), in Ulaanbaatar, Mongolia. She earned a PhD in biotechnology from the Academia Sinica, Taipei, Taiwan (2013); and a Master of Science (2005) and a Bachelor of Science (2003) in chemistry, both from the National University of Mongolia, Ulaanbaatar. She worked at Academia Sinica (Taipei), the University of California, Los Angeles, and the University of Tokyo, as a Postdoctoral Researcher (2013–19), before returning back to MAS. She is a plant expert, interested in understanding the molecular basis of abiotic stress-adapted plants. Her research focuses on plant response to nutrient stresses and plant metal hyperaccumulation under soil heavy metal pollution. She has expertise in developing mass spectrometry based approaches for metabolomics and metal speciation. She received awards from Academia Sinica, Taiwan Society of Plant Biologists, Japan Society for the Promotion of Sciences; and served as a member of professional associations including Association for Women in Science (2015–present), Japan Society of Plant Physiologists (2017–2019), Taiwan Society of Plant Biologists (2012–2015).

# Latin America and the Caribbean

TWAS Regional Partner for Latin America and the Caribbean (TWAS-LACREP) at the Brazilian Academy of Sciences in Rio de Janeiro, Brazil

## **María-José Endara Burbano**

*Centro para la investigación de la Biodiversidad y Cambio Climático (BIOCAMB)*

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María-José Endara Burbano is an Associate Professor at the Centro para la Investigación de la Biodiversidad y Cambio Climático, Universidad Tecnológica Indoamérica (UTI), Ecuador. She earned her PhD in biology (2015) from the University of Utah, USA.

She is an evolutionary biologist whose accomplishments have helped redefine textbook concepts in the field of plant-insect interactions and evolution. Endara's research proved that interactions between plants and its herbivores are not reciprocal, but asymmetric. Her studies brought to a new identification method for tropical plants based on metabolomics, or 'chemocoding'. She published her studies in peer-reviewed journals including the *Journal of Ecology*, *New Phytologist*, *PNAS*, *Science*. Endara is a member of the Asociación Latinoamericana de Botánica; the Ecological Society of America; the Association of Tropical Biology and Conservation; and the International Society of Chemical Ecology. Among her most recent awards: the Achievement Award, from UTI (2018); the F1000 recommendation of first-author paper (2017); and the Runner-up 2015 OTS (Organization for Tropical Studies) Outstanding Student Paper Award (2015).

## **Gabriela Maria Fuentes Braeuner**

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Gabriela María Fuentes Braeuner has been the Director of the Centre for Environmental Studies and Biodiversity, Universidad del Valle de Guatemala (CEAB-UVG) since 2018. She is a PhD student in the Agriculture and Environment Programme, Universidad de Santiago de Compostela, Spain. She earned a postgraduate diploma in Water Resources Management at University of Canterbury, New Zealand (2013) and a master in business administration from ESI/York University (2011), Guatemala-USA. She started her scientific career as a Forestry Professional at the National Forest Institute (2010–2012), then she carried out research at CEAB-UVG (2014–2018) and served as a consultant for Rainforest Alliance (2018), and for the Sustainable Economic Observatory-UVG (2018–2019). She is a member of the National Climate Change Council, the Guatemalan System of Climate Change Science, Biodiversity and Climate Change and the Water Committee at UVG. In the last 6 years she focused mainly on mitigation

of climate change and projects to avoid deforestation. As a government adviser on climate change, she has participated in three COPs of the UNFCCC, in 2015 in Paris, in 2016 in Marrakesh, and in 2019 in Madrid.

### **Allan Xavier Pernudy Ubau**

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Allan Xavier Pernudy Ubau is a Professor of Hematology. Until 2018 he was teaching at the National Autonomous University of Nicaragua (UNAN), and was the Director of the laboratory for molecular biology at the Polytechnic Institute of Health, UNAN-Managua. He started his career at UNAN where he earned his Bachelor of Science degree in clinical bio-analysis (2002). Then he obtained an Master of Science in hematology, from the University of Costa Rica (2008). He expanded his academic education in Germany, studying leukemogenesis, and earned his PhD from the University Medical Center Hamburg-Eppendorf (UKE), in 2013. Both his master and PhD studies were financed by scholarships (German Academic Exchange Service - DAAD). Back home, he established the first molecular biology laboratory on leukaemia and anemia diagnosis at UNAN-Managua. He started a successful collaboration with an international pharmaceutical company resulting in free-treatment access for patients in Nicaragua. He is a member of the Caribbean Network of Researchers on Sickle Cell Disease and Thalassemia, and the recipient of awards and honours including a three-month Visitor Training Program, with the American Society of Hematology (2015).

### **Alexandre Reily Rocha**

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Alexandre Reily Rocha is an Assistant Professor at the Instituto de Física Teórica (IFT), Universidade Estadual Paulista (UNESP), São Paulo, Brazil. In 2007 he obtained a PhD in physics from the Trinity College Dublin, TCD, Dublin, Ireland. At TCD he developed one of the most important computational codes for simulating electronic transport in nanoscopic systems. In 2012 he moved to UNESP, which hosts a branch of the International Center for Theoretical Physics (ICTP), the South American Institute for Fundamental Research (ICTP-SAIFR). Since 2014 he has been an affiliate member of ICTP-SAIFR and also a Simons Associate of ICTP-Trieste. In 2016, Reily Rocha spent one year at the Department of Chemical Engineering, Massachusetts Institute of Technology, MIT, Cambridge, as a Visiting Scholar. He is a member of the Brazilian Physical Society, and of the American Physical Society. In addition, he was elected as an affiliate member of the Brazilian Academy of Sciences (ABC), a Simons Associate of the International Center for Theoretical Physics (ICTP), Trieste, Italy, and an affiliate member of the Academy of Science for the State of São Paulo.

**Jacqueline Yamileth Rivera Ayala**

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Jacqueline Yamileth Rivera Ayala has been an Impact Based Forecast Specialist with the Ministry of Environment and Natural Resources - MARN, El Salvador since 2016. She holds a Master of Science in urban and regional development from the University of Seoul, South Korea (2015), and a post grade in volcanology (University of Hilo, Hawaii, 2017). Her work consists in assessing the likelihood of impacts due to natural hazards, for early warning systems in areas at high risk. As a member of the Threat Monitoring Centre of El Salvador, she supervises landslide and seismic events, tsunami generation and volcanic eruptions. Regarding these natural events, Rivera Ayala generates information and communicates potential at risk zones, through a direct communication line with the Civil Protection and settlements. Other tasks include generation of impact based forecast (IBF), landslide susceptibility newsletters, identification of areas at high risk for natural hazards, and training to municipal Civil Protection. In her work she uses geographic information systems and landslide modelling software (ArcGIS, QGis, GvSIG, LAHAR\_Z, R program). She is a member of the Latin American Volcanology Association.

## **Sub-Saharan Africa**

TWAS Regional Partner for Sub-Saharan Africa (TWAS-SAREP) at the African Academy of Sciences in Nairobi, Kenya

### **Tatenda Dalu**

*Aquatic Systems Research Group  
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A native of Zimbabwe, Tatenda Dalu is a Lecturer in the School of Biology and Environmental Sciences, University of Mpumalanga, South Africa. His field of specialization is in aquatic ecology, with particular emphasis on diatoms: a sector that offers useful applications, with great potential for future development regarding water quality and benefits for humans. In 2008 Dalu earned his Bachelor of Science in biological sciences (with honours), in the Department of Biological Sciences at the University of Zimbabwe, Harare. In 2015 he obtained his PhD in marine biology at Rhodes University, South Africa. His research has added new insight to our understanding of how substrate type, flood occurrence and allochthonous inputs contribute to diatom community dynamics in temperate freshwater and estuarine systems. Dalu is a member of three South African scientific academies and of two international societies. He has been appointed as an Honorary Research Associate at the South African Institute for Aquatic Biodiversity (SAIAB), and has received a 2016 bronze medal award from the Southern African Society for Aquatic Scientists (SASAqS), for his outstanding contributions to his field.

### **Lisa Claire du Toit**

*Wits Advanced Drug Delivery Platform (WADDP) Research Unit  
Department of Pharmacy and Pharmacology  
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Lisa Claire du Toit is an Associate Professor of pharmaceutical chemistry and Senior Researcher at the Wits Advanced Drug Delivery Platform (WADDP) research unit, Department of Pharmacy and Pharmacology, University of the Witwatersrand (UW), Johannesburg, South Africa. du Toit started her research career in 2005, at the Department of Pharmacy and Pharmacology, UW. She completed cum laude her master's degree, and earned her PhD at WADDP, focusing on drug delivery system design. Her major areas of interest and expertise include ocular drug delivery, nanosystems for drug delivery, and tissue engineering technologies with a stimulus-responsive focus. She is interested in the design and prototyping of marketable advanced drug delivery and tissue engineering systems to enhance drug bioavailability and tissue repair. du Toit has over 200 publications in reputable ISI accredited journals, and is the principal investigator on two patents. She has been awarded a Wits Innovators Forum First-Time Inventor

Award for having disclosed a first patent, and has established international collaborations in developed and developing countries, such as Japan, USA, India, Tanzania, Egypt, Mauritius.

### **Newsheen Goonoo**

*Biomaterials, Drug Delivery & Nanotechnology Unit  
Centre for Biomedical and Biomaterials Research (CBBR)  
University of Mauritius  
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Newsheen Goonoo, a native of Mauritius, earned her PhD from the Centre for Biomedical and Biomaterials Research (CBBR), University of Mauritius, in 2015. In 2015, Goonoo was selected from a pool of over 2000 applicants to attend the prestigious 65th Lindau Nobel Laureate Meeting in Germany. In 2017 she completed her post doctoral fellowship at the University of Siegen, Germany, and then joined CBBR as Postdoctoral Fellow. In 2018, through a Return for Research Grant from the Alexander von Humboldt Foundation and the University of Siegen she visited the Physical Chemistry laboratory in Siegen again, for a two months research stay. Goonoo works in the field of engineering of nanoscaffolds for regenerative medicine, but her research is located at the interface between soft matter nanoscience and applied biomedical research. She has excellent track record in the area of (bio)polymers, electrospinning of (bio)polymer blends and their biomedical applications. Goonoo has received international recognition via prestigious awards, most notably the 2013 Carl-Klason Prize (at POLYCHAR 21 in Gwangju, South Korea). She is an affiliate member of the African Academy of Sciences (AAS).

### **Mamadou Kaba**

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Mamadou Kaba is a Senior Research Officer and Director of the African Microbiome and Epidemiology Research Group, University of Cape Town (UCT), South Africa. He has completed his MD training at the University of Conakry (Guinea) in 2006, then moved to France where he earned his Master of Science (2007) and PhD (2011) in infectious diseases at Aix-Marseille University, publishing 10 articles on epidemiology of hepatitis E virus infection in South-Eastern France. His scientific papers were influential in understanding the epidemiology of methicillin-resistant *Staphylococcus aureus*, responsible for hospital and community-acquired infections worldwide. To challenge the “brain drain movement”, Kaba returned to South Africa to work as a Carnegie Postdoctoral Research Fellow in the Department of Pathology at UCT (2011–2014). His main interests include the study of the human microbiome in health and disease, as well as public health microbiology. Kaba has been selected for various honours and awards, including the Next Einstein Forum Fellow (2017) and the CIHR Canadian HIV Trials Network

International Fellow (2017). Since 2011, he has been a member of the International Society for Infectious Disease.

**Josephine Wanjiku Ngunjiri**

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Josephine Ngunjiri from Kenya holds a Master of Science in applied parasitology (2011) from the University of Nairobi, Kenya, and a PhD in tropical and infectious diseases from the same university (2015). She is currently a lecturer in biological sciences at the University of Embu, Kenya. Her field of expertise is in applied parasitology, infectious diseases and Global Burden of Disease (GBD), with their socio-economic impact especially on children and women; other interests cover resource poor communities, the impact of two parasitic diseases: schistosomiasis and tungiasis. Ngunjiri is also a teacher in biological units, in charge of supervising students, research and training. She investigates the GBD, promoting measures to improve health and access to education. Because of the Coronavirus pandemic, she is now collaborating with the Institute for Health Metrics and Evaluation, monitoring the effect of social distancing measures enacted by Kenya's government. She is the recipient of the fifth call National Commission for Science, Technology and Innovation research grant and Deans Committee Research Grant, University of Nairobi (2014).