



# Webinar: Removing Barriers that hinder Global Scientific Exchange and Collaboration



International scientific exchange is crucial in both the advancement of science and in addressing global challenges such as climate change, public health and pandemics, sustainable development, and digital security. Yet, researchers, academicians, and practitioners across the world encounter regulatory, financial, cultural, and infrastructural barriers that significantly impede global scientific collaboration. For instance, regulatory issues such as complicated visa application processes can limit the mobility of scientists, affecting their ability to attend conferences, conduct fieldwork, or engage in long-term international collaborations. In addition, varying intellectual property laws among countries can complicate the sharing of crucial knowledge and innovation.

This webinar provides a platform for identifying cross-cutting challenges, sharing experiences, and exploring viable solutions to enhance global scientific exchange and networking.

## **Registration and Participation**

- **When:** Tuesday, 19 March 2024.
- Time: 12:00 noon 13:30 Hours UTC/GMT (8:00 9:30 AM EST). (Time converter).
- Platform: Virtual on Zoom.
- Registration: All participants, including speakers, should register using this link.

## Agenda

### All times UTC

12:00 – 12:05 Hour Welcome and Introduction

**Prof. Stephanie Burton,** Vice- President, *Academy of Science of South Africa*.

12:05 – 12:10 Hour Topic and Speaker Introduction

**Moderator: Dr Sekazi Mtingwa,** Administrative Judge, U.S. Nuclear Regulatory Commission; Board Member, Board on International Scientific Organizations, *U.S National Academies of Sciences, Engineering and Medicine.* 

12:10 – 13:00 Hour Panel Presentations: Removing Barriers that hinder Global Scientific Exchange and Collaboration.

Up to 10 minutes each for personal insights, national contexts, experiences and interventions.

• Presentation1: Addressing mobility barriers (e.g., visas) for international scientists.

**Dr Sekazi Mtingwa,** Board Member, Board on International Scientific Organizations, *U.S National Academies of Sciences, Engineering and Medicine.* 

 Presentation 2: Promoting equity through improved data and biospecimen sharing practices: The African Data and Biospecimen Exchange.

**Prof. Nicki Tiffin**, Deputy Director, South African National Bioinformatics Institute; fellow of the *African Academy of Science*.

• Presentation 3: Intellectual property rights and international scientific collaborations.

**Dr. Orakanoke Phanraksa**, Senior Intellectual Property Consultant Technology Licensing Office, National Science and Technology Development Agency, Thailand; past Co-Chair, *Global Young Academy*.

 Presentation 4: Removing barriers faced by women in scientists in international collaborations.

**Dr. Rana Dajani,** President of the *Society for Advancement of Science and Technology in the Arab World* (SASTA); Professor of molecular biology at the Hashemite University in Jordan.

13:00 – 13:25 Hour Moderated Q&A Session

Moderator: Dr. Sekazi Mtingwa.

13:25 - 13:30 Hour Closing remarks and Next Steps

Dr. Ourania (Rania) Kosti

**Executive Director,** InterAcademy Partnership & Director, Board on International Scientific Organizations of the *U.S. National Academies of Science, Engineering and Medicine.* 

**Moses Ogutu,** Associate Program Officer, IAP and Policy and Global Affairs Division, the U.S. National Academies of Science, Engineering and Medicine.

## **Speakers**



Stephanie Burton, Vice-President, Academy of Science of South Africa. She is Professor in Biochemistry, in the Faculty of Natural and Agricultural Sciences, and a professor at Future Africa at the University of Pretoria (UP). She is the former Vice-Principal for Research and Postgraduate Education at UP, having served in that role from 2011 to 2020. Professor Burton is the President and a Fellow of the Royal Society of South Africa (RSSA), Vice-President of the Academy of Science of South Africa (ASSAf), a Research Fellow for Universities South Africa (USAf), a member of the Governing Council of Future Earth (an international network focusing on sustainability sciences) and a member of the Board of the InterAcademy Partnership (IAP).



Sekazi Mtingwa is an Administrative Judge with the U.S. Nuclear Regulatory Commission and Principal Partner of TriSEED Consultants, LLC, in the United States. He is also a Board Member, Board on International Scientific Organizations, US National **Academies of Sciences, Engineering and Medicine.** He played an important role in the design and construction of accelerator systems at Fermilab used to discover the top quark. With James Bjorken, he developed the theory of intrabeam scattering, which has played a critical role in the development of intense particle accelerators, including synchrotron light sources. He co-founded approximately 25 domestic and international organizations and programs, including the African Physical Society, African Light Source Foundation, African Laser Centre, Mwalimu Julius K. Nyerere University of Agriculture and Technology in Tanzania, and LAAAMP, which enhances synchrotron light source and crystallographic sciences in developing countries. He recently

served as Chair of the IUPAP C13 Commission on Physics for Development. He is recipient of the American Association for the Advancement of Science's 2023 Philip Hauge Abelson Prize for his many contributions to scientific research and policy, the inaugural International Science Council's 2021 Policy-for-Science Award, the American Physical Society's 2017 Robert R. Wilson Prize for Outstanding Achievement in the Physics of Particle Accelerators, the 2017 U.S. Presidential Award for Excellence in Science, Mathematics, and Engineering Mentoring, and the American Nuclear Society's 2015 Distinguished Service Award for his pivotal role in rejuvenating university nuclear science and engineering programs in the United States. Most recently, Mtingwa has been promoting the establishment of synchrotron light source facilities in Africa, the Greater Caribbean, and Central Asia.



Orakanoke Phanraksa is a policy specialist in the field of intellectual property laws at Technology Licensing Office, at the National Science and Technology Development Agency (NSTDA), Thailand. Currently, she has been partially seconded to serve Thailand Science Research and Innovation (TSRI) to lead the international affairs division. She has been playing a key role to form a policy framework to promote and strengthen technology licensing offices and IP professionals in the academic and research institutions in Thailand. In 2019, she was the first to be awarded the Global IP Champion Award from the Global Innovation Policy Center, US Chamber of Commerce. This award

was given to five individuals in the field of intellectual property who are leading efforts to bring about positive change in their communities and around the world. In 2023, she was selected as one of the five regional IP Policy experts by the WIPO to develop the IP Policy Model for Universities and Research institutions in ASEAN. Apart from her professional experience in the IP regime, she was one of the past Co-Chairs of the **Global Young Academy** (2015/2016), a non-profit organization with 200 top young scientists from all disciplines from around the world. She was the co-founder and Co-Chair of the ASEAN Young Scientists Network where she enjoys sharing her IP experiences to the community of young scientists in ASEAN. In 2022, she was selected and appointed as the International Science Council Fellow. She experienced in policy development by serving the Minister of Higher Education, Science, Research, and Innovation (MHESI) Thailand from 2020-2022.



Nicki Tiffin is Deputy Director, South African National Bioinformatics Institute (SANBI). She joined SANBI in November 2021, bringing her expertise in working with health data and the bioinformatics of human disease. She has a Ph D in molecular genomics (University of London, 2000) and a Masters in Public Health-Epidemiology (University of Cape Town, 2017). Her work includes the integration and analysis of routine health data, epidemiological, clinical and genomic data, as well as the ethics and governance of working with health data in research. She is a fellow of the African Academy of Sciences and in 2021 was awarded a Calestous Juma Science Leadership Fellowship by the

Bill & Melinda Gates Foundation.



Rana Dajani is currently a Robert Bosch Fellow in Germany, a professor of molecular biology at the Hashemite University in Jordan. Her area of expertise is epigenetics and biomarkers of trauma among refugees. Through her leadership, she has introduced national and regional stem cell laws and presided over numerous scientific boards and United Nations councils, most recently as the President of the Society for the Advancement of Science and Technology in the Arab World. Visiting professor at Harvard, Yale, MIT and Cambridge. A tireless supporter of building indigenous research capabilities in the developing world and creating a mentoring program to support women scholars in STEM that was recognized by the National Academy of Sciences. Rana is a social entrepreneur and global thought leader. She is the founder of We Love Reading, a grassroots initiative to create

changemakers in underserved communities by fostering a lifelong love of reading. A recipient of the UNESCO International Literacy Prize, We Love Reading has established more than 8,000 locally run libraries in over 60 countries. Rana has also been recognized as a Fulbright, Eisenhower, Ashoka and Yale Morse Fellow. On the list of the 100 most influential Arab Women and receiving the Jacobs social entrepreneur award, Nansen UNHCR refugee award, and the Schwab Social Entrepreneur Award. Her 2018 book *Five Scarves: Doing the Impossible — If We Can Reverse Cell Fate, Why Can't We Redefine Success?* challenged global policy makers to address ongoing inequities in education and employment, while also putting forward a new paradigm for measuring success in an evolving world.

## Select IAP and Non-IAP Reports and Statements on International Scientific Collaborations

- 1. Global Health Inequalities: Research for a fairer future (IAP Report 2022).
- 2. Health in the Climate Emergency: A global perspective (IAP Report 2022).
- 3. Improving Scientific Input to Global Policymaking with a Focus on the UN Sustainable Development Goals (IAP Report 2019).
- 4. <u>It's getting harder for scientists to collaborate across borders that's bad when the</u> world faces global problems like pandemics and climate change.
- 5. <u>Global science for global challenges: the landscape of international scientific</u> collaboration.
- 6. African researchers lead campaign for equity in global collaborations.

## Organizer and contact information

**Organizer:** The webinar is organized by the <u>InterAcademy Partnership (IAP)</u> as part of its ongoing webinar series. The IAP is a network of 150 national, regional, and global member academies that work together to support the vital role of science in seeking evidence-based solutions to the world's most challenging problems. IAP's secretariat offices are hosted by the U.S. National Academies of Science in Washington, DC, and the World Academy of Sciences, in Trieste, Italy. For more information about IAP see <a href="www.interacademies.org">www.interacademies.org</a> and follow IAP on <a href="twitter">Twitter</a>, LinkedIn and YouTube.

The webinar is being **co-hosted** with the <u>Board on International Scientific Organizations</u> (BISO) of the U.S. National Academies of Sciences, Engineering, and Medicine (NASEM). BISO is a component of <u>the Academies</u>' division of <u>Policy and Global Affairs</u>. The mission of BISO is to strengthen science for the benefit of society through U.S. leadership, collaboration, and representation in international scientific organizations and initiatives. BISO also provides information about these international scientific organizations and initiatives to the leadership of the Academies, the <u>National Science Foundation</u>, the <u>Department of State</u>, and other organizations. For more information visit <a href="https://www.nationalacademies.org/biso/about">https://www.nationalacademies.org/biso/about</a>

#### The IAP Webinar Series

The IAP Webinar Series is designed to allow IAP member academies and networks to engage on topics of common interest, learn from each other, build capacity, and establish partnerships. The first webinar on <a href="Peromoting Ethics and Integrity in Scientific Research and Practice">Promoting Ethics and Integrity in Scientific Research and Practice</a> took place in October 2023.

For inquiries, please email the IAP Secretariat at <u>secretariat@iapartnership.org</u> or the Webinar Coordinator, Moses Ogutu, at <u>MOgutu@nas.edu</u>.