


IAP Webinar:

Building Trust in Science Through Science Education

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Join the InterAcademy Partnership and the Smithsonian Science Education Center for a discussion on the intersection of science education, STEM literacy, and public trust in science—and how education can help build and restore confidence in scientific knowledge

 Tuesday, 11 March 2025

 12:00 – 13:30 UTC
8:00 – 9:30 AM US EST

 Online via Zoom



Scan to Register

Background

Science plays a crucial role in shaping societies, informing policy decisions, and driving innovation. Equally, science education shapes how individuals engage with and respond to scientific knowledge and innovation. However, public confidence in scientific knowledge varies across different contexts, influenced by factors such as access to education, science communication, cultural perspectives, and the availability of credible information. As the global landscape of science and technology evolves, strengthening scientific literacy—through effective science education and public engagement—is essential for fostering trust in scientific processes, institutions, and discoveries.

The InterAcademy Partnership (IAP) is committed to advancing science education and strengthening trust in science through knowledge-sharing, policy engagement, and innovative educational strategies. Through the [IAP Science Education Programme \(SEP\)](#), which is led by a [Global Council](#) of experts, IAP seeks to inform science education on a global scale, especially in primary and secondary schools, with a pedagogy based on [Inquiry-Based Science Education \(IBSE\)](#).

In collaboration with the [Smithsonian Science Education Center](#), IAP is organizing this webinar to bring together scientists, educators, policymakers, and science institutions to examine the intersection of science education, STEM literacy, and public trust in science, and how education can be leveraged to build and restore confidence in scientific knowledge. Presentations will showcase ongoing efforts by various stakeholders—including academies, donors, educators, and the media—to enhance STEM learning and strengthen scientific literacy. The event will be recorded and summarized on the IAP website ([see past webinars](#)).

Registration: All participants, including speakers, should register using this link. <https://nasem.zoom.us/meeting/register/L0H-3ni7QGqS0dAJk6sWQw>

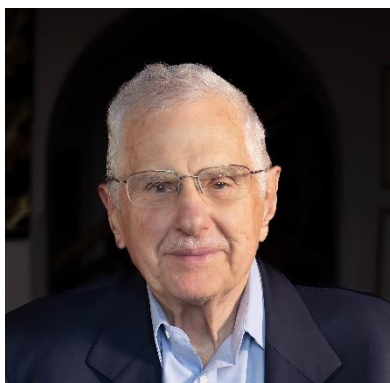
Format and Structure:

- **Date:** Tuesday, 11 March 2025.
- **Time:** 12:00 - 13:30 PM UTC/GMT; 8:00 - 9:30 AM EST.
- **Platform:** Virtual on Zoom.

Agenda and Speakers

1. **Introduction and Welcome Remarks (5 minutes)**
 - **Moderator:** Dr. Carol O'Donnell, Director, Smithsonian Science Education Center
 - **Welcome Remarks:** Dr. Peter McGrath, Coordinator, IAP Secretariat Office, Trieste, Italy
2. **Keynote Presentation (12 minutes)**
 - **Speaker:** Dr. Bruce Alberts, American biochemist, former President, U.S. National Academy of Sciences
 - **Presentation Title:** *The Role of Science Education in Strengthening Public Trust in Science*
3. **Panel Presentations: Science Education, STEM Literacy, and Trust in Science (35 minutes total)**
 - **Dr. Miguel L. Allende**, Director, Center for Genome Regulation, Professor of Biology, University of Chile
 - *Innovative Approaches to Science Education: Portable Labs, Zebrafish, and Genomics in the Classroom*
 - **Dr. Sharifah Maimunah Syed Zin**, former Permanent Delegate of Malaysia to UNESCO
 - *Enhancing Science Education through Interdisciplinary Approaches – The Case of the One Belt One Road Fusion of Civilizations Education Curriculum*
 - **Prof. Teketel Yohannes Anshebo**, Executive Director, Ethiopian Academy of Sciences
 - *Science Center and STEM at the Ethiopian Academy of Sciences*
4. **Moderated Discussion (15 minutes)**
 - **Moderator:** Dr. Carol O'Donnell, Director, Smithsonian Science Education Center
 - Discussion Topics:
 - How can science education enhance public trust in science?
 - The role of media, misinformation, and science communication in shaping public perceptions
 - Strategies for engaging policymakers, educators, and institutions in fostering STEM literacy
 - Best practices from global initiatives in science education
5. **Question and Answer Session (25 minutes)**
 - Audience members submit questions via chat or unmute to speak
6. **Closing Remarks (3 minutes)**
 - **Dr. Ourania Kosti**, Executive Director, InterAcademy Partnership & Director, Board on International Scientific Organizations, The National Academies of Sciences, Engineering, and Medicine
 - **Moses Ogutu**, Associate Program Officer, InterAcademy Partnership & The National Academies of Sciences, Engineering, and Medicine

Speakers



Dr. Bruce Alberts, a prominent biochemist with a strong commitment to the improvement of science education, was awarded the National Medal of Science by President Barack Obama in 2014. He served as Editor-in-Chief of *Science* (2008-2013) and as one of President Obama's first three Science Envoys, assigned to Indonesia (2009-2011). Alberts returned to the Department of Biochemistry and Biophysics at the University of California, San Francisco in 2005, assuming the Chancellor's Leadership Chair for Science and Education after serving for 12 years as the president of the National Academy of Sciences (NAS). During his tenure at the NAS, Alberts was instrumental in developing the landmark National Science Education Standards (1996), emphasizing science as inquiry. He is also noted as one of the original

authors of *The Molecular Biology of the Cell*, a preeminent textbook in the field now in its seventh edition. For the period 2000 to 2009, Alberts served as the cochair of the InterAcademy Council, an organization in Amsterdam governed by the presidents of 15 national academies of sciences; established to provide scientific advice to the world, it is now known as the InterAcademy Partnership for Policy (relocated to Trieste). Committed in his international work to the promotion of the "creativity, openness and tolerance that are inherent to science," Alberts believes that "scientists all around the world must band together to help create more rational, scientifically based societies that find dogmatism intolerable." [Read more](#)



Dr. Carol O'Donnell is the Douglas M. Lapp and Anne B. Keiser Director of the **Smithsonian Science Education Center**, which is dedicated to transforming K–12 Education through Science in collaboration with communities across the globe. O'Donnell is responsible for all operational activities and planning for the unit, including building awareness for preschool through 12th-grade science-education reform, conducting programs that support the professional growth of P–12 teachers and school leaders and overseeing all research and curricular-resource development, philanthropic development and administration. O'Donnell serves as the U.S. representative on the Global Council of the InterAcademy Partnership Science Education Programme, an appointment by the National Academies of Sciences, Engineering, and Medicine, and she serves on the UN Broadband Commission Working Group on School Connectivity: Hybrid Learning.

[Read more](#)



Miguel L Allende, Director, Center for Genome Regulation. Professor of Biology, University of Chile. Dr. Miguel L Allende received his Bachelor's in Biology from the Catholic University of Chile in 1987 and a PhD from the University of Pennsylvania in 1994. In 1998, Dr. Allende returned to his home country of Chile, where he established the first zebrafish lab in Latin America and started an independent academic position at the Faculty of Science, University of Chile. Since then, he has worked on several topics including neural development, pattern formation, neuronal and axonal regeneration, innate immunity, metal toxicology, host-pathogen models and genomics. He leads the Millennium Institute Center for Genome Regulation, CGR. At the CGR,

he started new research lines in the area of animal genomics, working on different fish species that display unique life histories and adaptations to extreme habitats. Since 2017, Dr. Allende leads the Chilean 1000 Genomes Initiative, which aims to sequence and analyze the genomes of Chilean endemic species and of the Chilean human population. Dr Allende was incorporated into the Chilean Academy of Sciences in 2015. In addition to his research, Dr. Allende is interested in promoting science education by using the zebrafish as an educational tool. He participates in the country's Portable Labs Program that trains teachers to use sophisticated laboratory equipment for subsequent use by school students. [Read more.](#)



Dr. Sharifah Maimunah Syed Zin, (B.A. Hons, Dip. Ed, University of Malaya, M. A (Education), University of Sussex, UK, Ph.D University of East Anglia, UK) is former Permanent Delegate of Malaysia to UNESCO, Paris and former director of the Curriculum Development Division, Ministry of Education, Malaysia. She has more than 33 years' experience in education. She was consultant to the Ministry of Education Brunei Darussalam on a study on science education policy of the country. Her last position was Director of the International Science, Technology and Innovation Centre for South-South Cooperation under the auspices of UNESCO (ISTIC). Although retired she continues to be involved in improving science education in schools. She is Chairman of the Governing School Board of Sri Bestari Private School and of IDEAS

International Secondary School and member of the School Board of the International School @ Parkcity, Kuala Lumpur. [Read more.](#)



Prof. Teketel Yohannes Anshebo, is Executive Executive Director Ethiopian Academy of Sciences (EAS). Prof. Teketel received his PhD in Physical Chemistry in 1997 from Addis Ababa University. Since 1984, he has served at the Department of Chemistry at Addis Ababa University. His main research area includes studies of conducting polymer electrochemistry, spectroelectrochemistry, photovoltaics, and photoelectrochemistry. He has published over 85 scientific articles. In this endeavor, he has been collaborating with prominent scientists at the University of Linkoping, Sweden, the University of Linz, Austria, the University of Osaka, Japan, the University of Antwerp, Belgium, the Abdus Salam International Center for Theoretical Physics, Trieste, Italy, Institute of Chemistry, Chinese Academy of Science,

Beijing, China, ISMN-CNR, Bologna, Italy, and co-authored with leading scientists in his research areas. The leadership quality of Prof. Teketel is demonstrated by his service as the Chairman of the Department of Chemistry (BDTC, AAU); Director, Chair, and Coordinator of the Materials Science Program at the College of Natural Sciences (AAU); Associate Dean for Graduate Programs the College of Natural Sciences (AAU); Director for Research at AAU; Acting Vice President for Research and Technology Transfer (AAU), and Vice President for Academic Affairs at Addis Ababa Science and Technology University (AASTU). Currently, he is serving as an Executive Director of the Ethiopian Academy of Sciences. [Read more.](#)



Dr. Peter McGrath obtained his BSc in Agricultural Zoology from the University of Glasgow, UK, and his PhD from the University of Leeds, UK. His 10-year research career focused on insect transmission and epidemiology of plant viruses and included postdoc positions at the Scottish Crop Research Institute as well as Purdue University and the University of Arizona in the USA. Returning to the UK in 1997, he established his own business as a freelance journalist focusing on agricultural, environmental and scientific issues. He joined The World Academy of Sciences (TWAS) in Trieste, Italy, in 2003 as writer/editor in the Public Information Office. From 2006, Peter began overseeing the implementation of TWAS's core capacity-building programmes, including South-South fellowships and other exchange schemes,

research grants and various prizes, as well as the activities of the Organization for Women in Science for the Developing World (OWSD). In 2011 he was appointed as Coordinator of the TWAS science policy / science diplomacy unit, which has since grown in activities and influence. In 2013, he was appointed as Coordinator of the InterAcademy Partnership (IAP), playing a key role in engaging IAP's 150 member academies in regional and global projects such as the Science Education Programme (SEP), the Climate Change and Health project, the Young Physician Leaders (YPL) programme, Science in Exile, and activities focused on the UN Sustainable Development Goals. [Read more.](#)

About the Organisers

The **InterAcademy Partnership (IAP)** is a global network of 150 academies of science, engineering, and medicine. With its four regional networks—in Africa (NASAC), the Americas (the InterAmerican Network of Academies of Sciences, IANAS), Asia/Oceania (the Association of Academies and Societies of Sciences in Asia, AASSA) and Europe (the European Academies Science Advisory Council, EASAC), IAP provides a platform for mobilising regional and national expertise on wide ranging issues of global importance, and for facilitating cooperation with other key stakeholders and potential partners. IAP’s secretariat offices are hosted by The World Academy of Sciences in Trieste, Italy, and the National Academy of Sciences in Washington, DC, USA. More information is available at www.interacademies.org. Questions should be sent to secretariat@iapartnership.org.

The **Smithsonian Science Education Center** connects classrooms around the world with the science, history, research, and culture of the Smithsonian. Through hands-on STEM curriculum, resources, and professional development programs, we inspire curiosity, empower K-12 educators, and ensure every learner has access to high-quality science education. More information is available at <https://ssec.si.edu/>.