

Connections to Sustain Science in Latin America Webinar

June 30, 4:00 – 5:30 PM EDT

The Connections to Sustain Science in Latin America program

Daniel Placht, Associate Program Officer, NASEM

This project seeks to address the declining support for science and support early-career researchers and graduate students in the LAC region through a multi-pronged and collaborative approach. Working with partners in Latin America including the Inter-American Network of Academies of Sciences and Latin America Academy of Sciences, the project team will develop an online, open source repository for scientific knowledge in the region, as well as host capacity building workshops and webinars. Additionally, the project will seek to build transdisciplinary research networks through a series of symposia based on the Frontiers of Engineering and Frontiers of Science programs.

Bio:

Daniel Placht is an associate program officer in the Policy and Global Affairs division of the U.S. National Academies of Sciences, Engineering, and Medicine (NASEM)). He currently directs the Connections to Sustain Science in Latin America program, and works on the Arab-American Frontiers and PEER programs which focus on international development and capacity building through improved access to science and technology. Before joining NASEM, Daniel worked at the International Law Institute in Washington, DC as well as multiple international development NGOs in Cairo, Egypt. He holds an undergraduate degree in international affairs from Bard College in New York and is currently obtaining a master's in environmental engineering from Virginia Tech.

Hurdles facing science in the Americas

Dr. Jeremy McNeil, Co-Chair, Inter-American Network of Academies of Sciences

While there is no shortage of important subjects to address, or ideas as to how conduct the appropriate research, there are many challenges facing scientists in the Americas. These are not just limited to insufficient funds to actually execute the research but range from lack of appropriate equipment/expertise to the national political situation. I will touch on a few examples, and consider how the current program will help address some of these hurdles.

Bio:

Jeremy N. McNeil received his B. Sc. University of Western Ontario, Canada (1969) and his PhD at North Carolina State University, USA (1972). From 1972-2012 he was a professor at Laval University, Quebec and in 2013 was a Humboldt Fellow at Hamburg University.

Jeremy is now Distinguished University Professor and the H. Battle Professor of Chemical Ecology at the University of Western Ontario. He has an interdisciplinary and international research programme in chemical ecology working in a number of different areas: insect migration, insect-host plant interactions and herbivore-natural enemy interaction. Jeremy has published >200 scientific papers and trained > 50 graduate students.

He has received a number of national and international awards for his research, including the Gold Medal from the Entomological Society of Canada, the Fry Medal of the Canadian Society of Zoologists, the Silver Medal of the International Society of Chemical Ecology and the Delwart Prize in Chemical Ecology (Belgium). He is a Fellow of the Royal Society of Canada, served as the RSC Foreign Secretary from 2010-2017 and is currently President. He is also a Foreign Fellow of the Guatemalan and Brazilian Academies of Science.

For over 30 years he has been engaged, both at home and abroad, in activities relating to the public awareness of science. In 2014 he was appointed to the Order of Canada for his research and for his dedication to increasing public appreciation of science. In 2016 he received the NSERC Award (Individual) for Science Promotion.

Challenges faced by ECRs in LAC and how programs from academies of science and young scientists organizations could have a positive impact

Dr. Sandra Lopez, Global Young Academy member and Senior Health Researcher, Gorgas Memorial Institute for Health Studies

A summary of challenges, issues, and problems faced by ECRs in LATAM, as well as their opportunities and the possible actions that could be taken by the countries as well as by academies of science, and associations and organizations lead by the ECRs themselves, like the GYA, will be presented for discussion.

Bio:

Dr. Sandra López Verges received her Bachelor in Biochemistry (2001), her Master degree in Microbiology specialty Virology (2003) and her Ph.D. in Microbiology specialty Basic Virology (2007) at the Université Paris 7 Denis Diderot, Ecole Normale Supérieure d'Ulm and Pasteur Institute in France. As her research focuses to understand viral infections and the virus-human host interactions, she complemented her expertise in Virology with post-doctoral training in Immunology at the University of California San Francisco, U.S.A. Since 2012, she is now back to Panama as a Senior Health Researcher at the Gorgas Memorial Institute of Health Studies (ICGES). Back in her country, she is developing a new line of research on innate immunity of arboviral diseases, mentoring students at the Ph.D., master, bachelor, and even high school level. She is now chief of the Department of Research in Virology and Biotechnology at ICGES and participated in the national molecular laboratory response during the COVID19 pandemic. She also gives classes at the master's and doctorate level in private and public universities, appointed an invited professor at the Universidad de Panama, the main public university in Panama, since 2018.

Her research and work has resulted in one patent and many publications in high impact journals and prestigious awards as UNESCO-L'OREAL International Fellowship for Young Women in Science in 2014, TWAS-APANAC award in 2014, being named a member of the Global Young Academy (GYA) for five years in 2018 and elected as a member of the Executive Committee of the GYA in 2019 and 2020, obtaining several young investigator awards in recognized international conferences in virology and immunology, and is appointed as a Member of the National Research System (SNI) as Distinguished researcher by the National Secretary of Science, Innovation, and Technology (SENACYT) in Panama.

Dr. López is committed to Women in Science as she has helped organize an annual Panama National UNESCO-L'OREAL award with SENACYT, L'OREAL and UNESCO in 2017 to encourage young women to pursue scientific careers in their country. She continues to work for better gender equity in science with the GYA and more locally, with the movement CienciaEnPanama, APANAC, Ciudad del Saber and SENACYT, including in science training programs for middle and high school professors. Sandra was also a mentor in the women empowerment program of the Ekpa'palek foundation for Latin American students and professionals from 2018 to 2020.

Sandra has also wide interest in Science Diplomacy and Science advice, showing her interest in working to address global challenges and to increase the impact of science in the social, environmental, and health issues. Being one of the fellows of the Science Diplomacy and Leadership workshop organized by AAAS in 2017, she was a facilitator during the Science Diplomacy workshop at CILAC2018, and is participating with SENACYT, the Ministry of Foreign Affairs, and other colleagues on the development of a Science Diplomacy strategy for Panama. As part of this strategy, she participated in a Science Diplomacy class for Diplomats fellows from Panama's Ministry of Foreign affairs and in the proposal of a Science Diplomacy and Science Advice law.

Promoting science outreach in Brazil - Serrapilheira Institute, a small private experiment

Dr. Hugo Aguilaniu, Director, Serrapilheira

The Serrapilheira Institute is the first private non-profit institution geared towards fostering science in Brazil. It was founded to place more value on scientific knowledge and to increase science visibility. The idea is to stimulate a culture of science by acting in two areas: science itself and science outreach. In Science outreach, we first mapped initiatives all throughout Brazil and noticed that a significant amount of projects are outside the academy and are not contemplated by traditional funding agencies. We now support over 50 projects, ranging from classical science journalism, to community based projects, podcasts, YouTube and others.

Bio:

Hugo Aguilaniu is a geneticist by training. After obtaining his PhD from the University of Gothenburg, Sweden, he became a post-doctoral fellow at the Salk Institute for Biological Studies, USA. His scientific contributions mainly concern the study of the genetic bases of aging. He then joined the Conseil National de la Recherche Scientifique (National Council for Scientific Research, CNRS) of France, where he became a research director. Following this appointment, he led a research team at the École Normale Supérieure de Lyon from 2006 to 2016, where his research was awarded by the CNRS and the ERC (European Research Council). In 2017, he became director of the Serrapilheira Institute in Rio de Janeiro. He is also a member of the High Council of the Rio de Janeiro Research Agency (FAPERJ).