



INTER-AMERICAN NETWORK OF ACADEMIES OF SCIENCES (IANAS)
GENERAL ASSEMBLY
CÓRDOBA, ARGENTINA, SEPTEMBER 19-21, 2022

The Inter-American Network of Academies of Sciences (IANAS) held its 7th General Assembly (GA) on September 19-21, 2022 in Córdoba, Argentina. The GA was held at the National Academy of Sciences of Argentina. The General Assembly brought together IANAS member Academies and representatives from nineteen invited academies, to appraise the network's actions in the 2019-2022 triennium, to revise the Statutes and approve the Rules of Procedures, and to elect the leadership of the network for the next three years.

The following IANAS member Academies attended the General Assembly: Academy of Medical, Physical and Natural Sciences of Guatemala (José Rodrigo Sacahui Reyes, representative); Academy of Physical, Mathematical and Natural Sciences of Venezuela (Ismardo Bonalde, President); Academy of Sciences of Ecuador (Ángel Guevara Espinoza, President); Brazilian Academy of Sciences (Helena B. Nader, IANAS Co-chair and President of the ABC); Caribbean Academy of Sciences (Neela Badrie, representative); Chilean Academy of Sciences (Juan Asenjo, representative); Colombian Academy of Exact, Physical and Natural Sciences (Helena Groot, President); Cuban Academy of Sciences (Luis Velazquez, President); Latin American Academy of Sciences (Claudio Bifano, President); (US) National Academies of Sciences, Engineering and Medicine, USA (John Boright, NAS Executive Director; Karen Strier, Academy Member); National Academy of Exact,

Physical and Natural Sciences of Argentina (Victor Ramos, President); National Academy of Sciences of Argentina (Beatriz Caputto, IANAS Executive Director and President of the ANC); National Academy of Sciences of Bolivia (Mónica Moraes, President); National Academy of Sciences of Costa Rica (Walter Fernandez Rojas, President); National Academy of Sciences of Honduras (Mario Lanza Santamaría, President); National Academy of Sciences of Peru (Alberto Gago, President); National Academy of Sciences of Uruguay (Roberto Markarian, representative); Nicaraguan Academy of Sciences (Maria Luisa Acosta, President); Panamanian Association for the Advancement of Science (José Fábrega, President); The Royal Society of Canada (Jeremy McNeil, IANAS Co-chair and President of the RSC).

Apart from the official President/representatives of each IANAS Academy, some other members of the academies were present: Gabriel Bernardello (Vicepresident, National Academy of Sciences of Argentina), Carlos Argaraña (Secretary Academician, National Academy of Sciences of Argentina), Rita Hoyos (Member, National Academy of Sciences of Argentina), Marcos Cortesao (Executive Director, Brazilian Academy of Sciences), Jorge Huete (Foreign Secretary, Nicaraguan Academy of Sciences) and Ana Denicola (Women for Science focal point, National Academy of Sciences of Uruguay).

Co-chairs and representatives of the four IANAS programs were also present: Beatriz Caputto (Representative of the Science Education program); Anthony Clayton (Co-chair of the Energy Program) who attended virtually; Frances Henry (Co-chair of the Women for Science program) attended virtually; Katherine Vammen (Co-chair of the Water Program). As well as invited Speakers for the different panels and symposiums: Ingrid Arotoma Rojas (Climate Change and Health in the Americas Symposium), Mariella Azzato (ACAL Conecta), Claudia Bauzer Medeiros (Open Science – what, why, when, how?, Plenary lecture), Horacio Corti (Energies for the Transition Symposium), Robin Fears (Climate Change and Health in the Americas Symposium, virtual speaker), Martin Forde (Climate Change and Health in the Americas Symposium), Enrique Forero (ISC Regional Focal Point for the Latin American and Caribbean region), Esteban Franceschini (Energies for the Transition Symposium), Sherilee Harper (Climate Change and Health in the Americas Symposium, virtual speaker), Miguel Laborde (Energies for the Transition Symposium), Phil Landrigan (Climate Change and Health in the Americas Symposium, virtual speaker), David Moher (Climate Change and Health in the Americas Symposium), Daniel Placht (NASEM Science Officer), Fernanda Raggio (Energies for the Transition Symposium), Matilde Rusticucci (Climate Change and Health in the Americas Symposium) and Carolina Santacruz-Perez (ISC Science Officer of the LATAM and Caribbean Region).

The meeting opened with welcoming remarks by Dr. Beatriz Caputto, followed by Pablo de Chiara (Minister of Science and Technology of the province of Córdoba, Argentina) who highlighted the importance of STEM education and how the province of Córdoba is working towards involving students in these areas of expertise.

Helena Nader (IANAS Co-chair) thanked Beatriz Caputto for hosting the General Assembly, as well as Jeremy McNeil

for organizing it and his work as Co-chair. She also reported the main IANAS Activities since the last General Assembly. Subsequently, Cherry Murray (IAP Co-chair) connected virtually to welcome everyone to the General Assembly and STEM Education Workshop. She expressed her gratitude and how impressed she is with IANAS activities. The session continued with each IANAS program delivering a brief presentation of their achievements since the previous gathering, as well as next steps and goals for the next period.

After the IANAS Programs overviews, everyone introduced themselves.

There was a mid morning health break and once it was finished, everyone reunited to have a discussion about the current IANAS programs. Jeremy McNeil started the debate addressing the issue of focal points and their Academies not reaching policy makers. He proposed that instead of focal point meetings every year (which is one of IANAS main expenses), academies should organize meetings at a national level on a subject of major importance for that country, where politicians and policy makers are invited. In addition to that, it was proposed that academies should not be responsible for having focal points for each program, but only for those that they are interested in. The question that was brought up was *how can IANAS help the academies?*. Helena Nader built on Jeremy's proposition by saying that in order to reach policy makers, the academies need to circulate the information, work with the government, politicians and even other countries if possible. In her opinion, academies should ask themselves what they are doing concerning the 2030 agenda as well as their country's needs. **There was a general consensus regarding this redesign of IANAS way of working, as well as how to help academies reach policy makers and also the public.**

The member Academies then discussed the new IANAS Statutes and Rules

of Procedures, which were drafted by a small working group and presented by Marcos Cortesao. There were several modifications proposed. The first one concerning the General Assembly, on item II.9, where it was proposed it should be added that IANAS could also try to provide assistance where appropriate. The following change was regarding the Executive Committee, on point *b*), where it states that “at each EC meeting the Co-Chairs will invite by rotation two member Academies not elected to the EC to attend as non-voting observers” it was observed that this should not be an obligation, but rather an option. Another modification of the EC was regarding the following text “If their respective academies are unable to do so, only the travel expenses of the five elected representatives will be assured by IANAS”. It was proposed and accepted that this be changed to “If their respective academies are unable to do so, the travel expenses of the Academies on the EC may, subject to financial availability, be covered by IANAS”.

Subsequently, the Rules of Procedures were revised. The first observation was in regards to Article 5, where it was proposed that apart from global concerns and problems of global nature, it should also consider regional concerns or problems of regional nature. On Article 6, item 6.1, concerning IANAS publications, it was suggested that it is modified to the following text *For each IANAS publication, the Executive Committee will appoint from among its members an IANAS Publication Committee to review the draft publication that will carry the IANAS Logo or will be identified as an IANAS publication.* Under the same article, it was also observed that on item 6.2 it should not be a request from the EC, but rather the IANAS Publication Committee should always recommend whether a publication is appropriate to be identified as an IANAS publication and to carry the IANAS Logo. Both the Statutes and the Rules of Procedures were unanimously approved.

The election of the new leadership of the network was the next item in the agenda.

Helena B. Nader, from the Brazilian Academy of Sciences, and Karen B. Strier, from the US National Academy of Sciences were unanimously elected IANAS co-chairs for the period 2022-2025. There were no offers from IANAS Member Academies to host the 2025 General Assembly. The following Academies were elected to the Executive Board of IANAS: National Academy of Sciences of Bolivia; Royal Society of Canada; Chilean Academy of Sciences; Colombian Academy of Exact, Physical and Natural Sciences and the National Academy of Sciences of Peru. The five elected Academies, together with the National Academy of Sciences of Argentina (host of the 2022 GA) and the Academy that will decide to host the future 2025 GA, constitute the new Executive Committee.

The election of the Academy of Sciences of Haiti as an IANAS Member Academy was planned to be decided and voted on in the General Assembly. Nevertheless, during the meeting the members' academies were informed that apparently there seemed to be some issues if that Academy did indeed represent academics from Haiti. The Academy of Sciences of Haiti had asked to be a member of ISC and it seemed that they had some doubts about the representation and were then clarifying the topic. Due to this fact the member academies decided to postpone the voting in order to gather more information.

Plenary lectures, symposiums and conferences were organized, starting with a plenary lecture on the importance of Open Science, *Open Science – what, why, when, how?*, by Professor Claudia Bauzer Medeiros, from the Institute of Computing, University of Campinas.

This was followed by the Energies for the Transition symposium, chaired by Dr. Victor Ramos, President of the National Academy of Exact, Physical and Natural Sciences of Argentina. This symposium consisted of four lectures from university professors, researchers and specialists of the field. The first lecture *YPF Exploration in the*

present energy context was given by Dr. Fernanda Raggio, Executive Exploration Manager at YPF, in which she explained how the Argentinian petrol company is currently making its explorations, researching the use of renewable energy and trying to move towards a more sustainable future for the company. The second lecture, *Overview of hydrogen roadmaps in Latin America* by Dr Miguel Laborde, Superior Researcher at Conicet¹, consisting in the analysis of the use of Hydrogen as a fuel. Following this topic, Dr. Horacio Corti, a Conicet researcher as well, talked about the *role of hydrogen and lithium for the energy transition in Argentina and beyond*. The last lecture of this symposium *Development of electrolyzers for hydrogen production. Local experiences and industry linkage* was given by Dr. Esteban Franceschini, Professor at the National University of Córdoba and independent researcher at Conicet.

Monday's session was originally planned to end with an Executive Committee meeting, but due to lack of time it was decided to be postponed for the next day.

On Tuesday another symposium was held, this time coordinated by Helena Nader, on Climate Change and Health in the Americas (CCHA). It included eight lectures on different aspects of this topic, both virtual and in person, from various university professors and experts. Also, the official CCHA report prepared by Sherilee Harper and Jeremy McNeil was presented and distributed during the symposium, as well as some pamphlets summarizing the report which were available in English, Spanish, Portuguese and French.

The first lecture, *An overview of the IAP global project: linking science and policy to protect and promote health (virtual)*, Dr.

Robin Fears, EASAC Biosciences Programme Director, explained how the European Academies' Science Advisory Council produced their report "The imperative of climate action to protect human health in Europe" and how that led to IAP sponsoring other regional networks, including IANAS, to prepare similar documents. The report evaluates different options for reducing climate change impact on human health, through climate-resilient pathways that also encourage equity, social justice and guarantees human rights. The second lecture, *Climate change in the Americas* by Prof. Matilde Rusticucci, University of Buenos Aires and Conicet researcher, consisted of an analysis of our future, focusing on the Americas, pointing out that it is necessary to make a change considering the rapid and aggressive increase in temperatures. This was followed by a virtual lecture: *A roadmap for the report: Taking action against climate change will benefit health and advance health equity in the Americas*, by Prof. Sherilee Harper, University of Alberta, Canada, who presented an overview of the new IANAS report, this document considers how to combat the negative effects of climate change on health and how to reduce the ways in which the health system itself contributes to this problem. Subsequently, the lecture *Energy, health and climate change* was presented virtually by Prof. Anthony Clayton, Institute for Sustainable Development, University of the West Indies in Jamaica, who focused on the future of cities in our climate context and what we can do in terms of urbanization to alleviate the consequences of global warming.

After this last lecture there was a lunch break, before continuing with the last segment of the Climate Change and Health symposium. Prof. Phil Landrigan, Boston College, MA, USA and Centre Scientifique do Monaco, Monaco, connected virtually for his lecture *Health, Air Pollution and Climate Change in the Americas* where he defined each concept, described the link between air pollution and climate change and how it affects our lives, especially healthwise but also

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National Scientific and Technical Research Council (Argentina).

socially and economically. This was followed by a presentation in person by Prof. Martin Forde, St. George's University, Grenada *Impact of Climate Change on Water and Health Resources in the Caribbean* where he thoroughly explained the impact that poor health care and water disasters caused by deficient distribution of resources and climate change, has affected and continues to affect this region of the Americas.

After a healthbreak, Jeremy McNeil, IANAS Co-Chair and Professor at the Western University of Ontario, Canada, gave his lecture on *How the impact of climate change on insects will affect food security and vector borne diseases*. Lastly, Prof. Ingrid Arotoma-Rojas, University of Leeds, UK, went through one of her case studies where she investigated the Shawi and the Ashankinka people from the Peruvian Amazon, to explain how climate change impacts indigenous food systems, which implies a nutritional transition and affects their physical and mental health, as well as their social and cultural ways of living.

The second day session concluded with a meeting between the incoming and outcoming Executive Committee members. The following Presidents/Representatives were present: Juan Asenjo (Chilean Academy of Sciences), John Boright (U.S National Academy of Sciences), Beatriz Caputto (National Academy of Sciences of Argentina), Marcos Cortesao (Brazilian Academy of Sciences), Enrique Forero (Colombian Academy of Exact, Physical and Natural Sciences), Alberto Gago (National Academy of Sciences of Peru), Helena Groot (Colombian Academy of Exact, Physical and Natural Sciences), Jeremy McNeil (Royal Society of Canada), Mónica Moraes (National Academy of Sciences of Bolivia), Helena Nader (Brazilian Academy of Sciences), Karen Strier (U.S National Academy of Sciences). After everyone introduced themselves, they discussed the different programs and their focal points, stating that annual focal points meetings, in person, were a big expense and that IANAS should take a different approach.

It was also talked about that the incoming EC should revise the program's Co-chairs situation, since they have not been rotating positions as they should have. This does not mean that Academies cannot continue working with focal points and the IANAS programs, but that a new way of working should be considered. It was agreed that a follow up virtual meeting will be held after the GA in order to complete remaining business including to reach a decision about the status of the Academy of Sciences of Haiti as a new member academy and to review the new budget.

On Wednesday morning, the session started with a plenary lecture on Predatory Journals by Prof. David Moher from the University of Ottawa, Canada. This was followed by two presentations from ISC representatives, Enrique Forero (Chair, Regional focal point for Latin America and the Caribbean) in regards to Science as a Global Public Good, and Carolina Santacruz-Perez (Science Officer RFC - LAC) who talked about ISC Regional focal point of Latin America and the Caribbean region's projects, activities and collaboration opportunities. Afterwards, Dr. Daniel Placht, NASEM's Science Officer, presented a new program of the academy to connect the researchers community in the Americas, strengthening the link between English speaking countries and Latin America. Another project was presented by Mariella Azzato from ACAL, called ACALConecta, which consists of a social platform that integrates scientists from Latin America and the Caribbean region.

The General Assembly came to a closure in the afternoon of Wednesday, September 21st, with a joint session that brought together Presidents/representatives of Member Academies and some of the specialists who worked on the IANAS Science Education statement, to kick-off the IANAS STEM Education program initially with a workshop on the topic that was held immediately after the assembly.