



### SUSTAINABLE RESEARCH: SUMMARY NOTES & REFLECTIONS ON THE THEMATIC AND THE DISCUSSION PAPER

Global Research Council - Americas Regional Meeting November 7th, 8th and 9th, 2023 – Buenos Aires, Argentina

The National Scientific and Technical Research Council (CONICET) of Argentina and the National Agency of Research and Development (ANID) of Chile jointly hosted the 2023 Americas Regional Meeting (ARM) of the Global Research Council (GRC) from November 7th to 9th, 2023 in Buenos Aires, Argentina.

The Funding Agencies and Research Councils gathered in the Americas Region recognize the strategic value of this multilateral instrument to improve scientific and technological research and to joint efforts to address the present regional and global challenges effectively.

#### CONTEXT

<u>Global Research Council</u> (GRC) is a virtual organization, composed by heads of STI funding agencias of the world that promotes exchange of data and best practices for a solid and high quality cooperation between the agencies. Heads of Research Councils (HORCs) meet every year during annual meetings which are preceded by regional meetings. The next annual meeting of GRC will be from 27 and 31 May 2024 in Interlaken, Switzerland and will be organized by <u>Swiss</u> <u>National Science Foundation (SNSF)</u> and <u>the Fund for Science, Technology and Innovation</u> (FONSTI) of Cote D'ivoire. The annual meeting 2024 will be around the topic of Sustainable Research that will be analyzed in the following three axis through discussion paper developed by the organizers of the 2024 GRC Annual Meeting:

- 1. Research for sustainable development;
- 2. Making research itself sustainable; and,



#### 3. Making sure sustainability science matters

In addition to strengthening links between agencies-participants of the meeting, the main objective of the 2023 GRC America's Regional Meeting is to generate discussion around the topic of Sustainable Research and develop its understanding on regional level and generate regional response/ opinion to the paper in order for its consideration in 2024 GRC Annual Meeting. This document offers 2023 GRC America's Regional Meetings minutes and some conclusions.

#### MInutes of the meetings

Dr. Ana Franchi, President of CONICET (Argentina), and Alejandra Pizarro, National Director of ANID (Chile) hosted the opening session. They thanked the authorities of the National Agency for Research and Innovation (ANII) from Uruguay and the National Science and Engineering Research Council (NSERC) of Canada, and the representatives of the International Development Research Centre (IDRC) of Canada, the National Commission on Science and Technology (NCST) of Jamaica, the National Science Foundation (NSF) of the United States, the São Paulo Research Foundation (FAPESP) and the Santa Catarina Research Foundation (FAPESC) of Brazil, the National Science Foundation (SNSF) for their attendance. Also, representatives of the Latin American Council of Social Sciences (CLACSO), the Inter-American Institute for Global Change Research (IAI) and the Belmont Forum participated as observers in the Meeting.

During the opening session, Dr. Franchi stated that the GRC renews its central role in promoting multilateral dialogue between Research Councils and their relation with other key stakeholders for the pursuit of a more inclusive science in this complex context. She highlighted the need to strengthen scientific capacities and to join efforts to promote international collaborations and concrete action plans to address problems such as inequality, poverty, food security and the responsible use of our natural resources on our populations. Finally, she commented on the Scientific Workshops organized in the framework of the GRC, focused on Artificial Intelligence and Open Science in September and October, 2023.

Subsequently, Alejandra Pizarro raised the importance of the integration among funding agencies that GRC offers –both on a global and regional scale–, which is key to address global challenges and promote the connection between science and technology and social needs. In



this way, Mrs. Pizarro stated that the Americas Regional Meeting comes across as an opportunity to sort out the global challenge of sustainability and how the science and technology sector can contribute to the solutions proposed from the Americas region. Ultimately, she concluded that the agenda of the event would work as an instance of mutual knowledge, which contributes to the generation of scientific knowledge in a collaborative and articulated way –an aspect that the agencies can highlight and encourage to achieve deeper and more concrete discussions.

Afterwards, Professor Alejandro Adem, President of NSERC (Canada) and Chair of the GRC Governing Board saluted the participants and thanked them for their presence as well. He stated the key importance of the Global Research Council as a multilateral platform that fosters international cooperation and mutual understanding among funding agencies and research councils.

A round of presentations of the GRC member agencies representatives underlined importance of GRC in general and America's Regional meeting in particular.

The Opening Ceremony continued with the presentation of the "*GRC Overview: towards 2024 Annual Meeting, objectives and desired outputs from Regional Meetings*" by Prof. Euclides De Mesquita Neto, GRC Executive Secretary, in which he explained GRC's structure, vision and roadmap. GRC Main Events –such as the Annual and Regional Meetings– and its interactions with the Research Ecosystem (International Science Council, United Nations, etc.) were presented by him as well. Particularly, Prof. Euclides detailed the aim of this encounter: to share a core discussion on Sustainable Research (divided in three pillars/sessions), the GRC Foresight Report and the Working Groups (RRA, EDI and MLE) presentation, as well as the three side events on Evaluation Systems, Science Diplomacy and Ocean Sustainability.

#### Foresight Report Session

Day 1 included presentation of Shaun Baron, International Policy Advisor at the NSERC (Canada) and ESG representative, who shared the Foresight Report about the 2017-2022 activities within the GRC. This report intended to analyze the initiatives that took part during this period and the impression of each Agency about the Regional Engagement. Although the report might not represent clear opinion on GRC's activities due to the low rate of response and complex







structure of the questionnaire (and difficulties in responding due to absence of institutional memory within certain agencies with regards to GRC), it concluded that there has been a large improvement in engagement in the Americas Regional Meeting, something that has led to the development of new collaborations between its participants in collaborative activities. America's region is a good example of this as during past years, several agencies from the region have been working together in activities, like thematic virtual seminars and joint calls. On the other hand, there is a perceived lack of connectivity between the Regional and the Annual Meetings and other activities of the GRC. Furthermore, the Report claims that the GRC is not very effective in taking forward topics after the 'Statement of Principles' have been endorsed and reviewing them on a regular basis. America's region is not different in that context from the overall conclusion. It is proposed that it would be beneficial to understand the barriers to engagement and what support countries might need to encourage them to join or become more actively involved in the future. It was suggested to expand efforts of existing active members to invite new (or old and not active) actors to the regional meetings and demonstrate the benefits of the GRC. The Report concluded that the GRC could improve its external communications to raise awareness of the GRC and its impact and include different types of discussion topics in the future, for example those with a thematic focus (i.e. Artificial Intelligence).



#### PLENARY SESSIONS

The plenary sessions of the 2023 ARM focused on the *Discussion paper* proposed for the 12th Annual Meeting of the Global Research Council in Interlaken, Switzerland that will be hosted by the Swiss National Science Foundation (SNSF) and the Fonds ivoirien pour la Science, la Technologie et l'Innovation (FONSTI).

The discussion topic was about "Sustainable Research" in three main axes:

- *Research for sustainable development* strengthening the contribution of research to sustainable development
- *Making research itself sustainable* making research itself an expression of economic, ecological and social responsibility
- *Making sure sustainability science matters* supporting scientific knowledge's benefits to policy makers and people

## *First Axis: Research for sustainable development* - strengthening the contribution of research to sustainable development.

The module started with a brief presentation in charge of Laura Tejada, Scientific Officer of the Swiss National Science Foundation (SNSF, Switzerland), with the main topics in order to foster discussion regarding how to strengthen contribution of research to sustainable development, how to address specific challenges such as inclusive framing, skills building, access to information and knowledge, and how to optimize processes and implementation from the Agencies perspective.

This first axis was moderated by Dr. Concepta Margaret Mcmanus Pimentel, International Relations Manager from FAPESP (Brazil) and counted with four panelists.

To start, Dr. Flavio Caiafa, President of the National Agency for Research and Innovation (ANII, Uruguay) contributed to the discussion by sharing ANII's initiatives on climate change and sustainability. Specifically, he described the new instruments introduced by ANII in 2023 to prioritize adaptation and mitigation of climate change and presented ANII's increasing collaborations in technology transfer along with technology-based companies on sustainability.

Dr. Olive-Jean Burrowes, Executive Director of the National Commission of Science and Technology (NCST, Jamaica) presented a brief report regarding the advancements within the



NCST, an organization that coordinates a national strategy in science and technology. Dr. Burrowes shared the NCST's will to develop the National ST&I system, promote a culture of innovation, and to design a development agenda considering capacity building, enabling policy environment as well as promoting sustainable research.

Dr. Mario Pecheny, Director of Social Sciences and Humanities of CONICET (Argentina) shared his impressions about research for sustainable development and stated that strengthening the National ST&I systems is in itself research sustainability goal. Also, he remarked that the Americas Region has political, economical and social challenges for scientific research that have to be overcome with stronger policies and funding capacity.

Dr. Humberto Gonzalez and Dr. Hugo Silva from the Research Center on High Latitude Marine Ecosystems Dynamics (IDEAL, Chile) shared the scientific contents of the IDEAL project in oceanography and marine biology, and talked about the challenges that came up when setting up national and international networks that demand the coordination with a wide range of stakeholders, including decision makers in the public sector. They stated that research on sustainability is a key element to overcome global challenges and cannot be done without international cooperation.

Following panel presentations and discussion, all participants could share their initiatives related to research on sustainability and demonstrated richness and advances of the region in the topic. The discussion also showed that there are several established cooperation networks within the region as research on sustainability relates to global challenges that cannot be resolved by individual actors/countries.

## Second Axis: Making research itself sustainable – making research itself an expression of economic, ecological and social responsibility

The module started with a brief presentation by Laura Tejada, Scientific Officer of the Swiss National Science Foundation (SNSF, Switzerland) with the main topics in order to foster discussion regarding how to make research more economically, ecologically and socially responsible, how to adapt the 2030 SDGs to concrete actions, how to create best practices in science-regarding international cooperation-, and how to make structures more likely to promote a more sustainable research from the Agencies perspective.







This second axis was moderated by Prof. Alejandro Adem, President of the NSERC (Canada) and Chair of the GRC Governing Board and counted with three panelists..

Dr. Flavio Caiafa, President of ANII (Uruguay), structured his presentation in three areas involved in research sustainability: economy, ecology and social impact. Dr. Caiafa talked about ANII's open access policy and its participation in PRISMA with a "Gender module" and a "Beneficiaries module" for all the initiatives funded by the Agency. He also shared his impressions of the economic aspect of research and pointed out two trends that need to be consolidated: 1) governments' commitment to support and fund public research; and 2) change in the funding matrix by involving private actors in science and technology initiatives and technology transfer.

Dr. Claudia Capurro, Vice-president of Scientific Affairs of CONICET (Argentina) stated that the sustainable research discussion has to be tackled not only from an environmental perspective but from two specific approaches: encouraging sustainable research practices –including open access, publishing costs, international cooperation and milder scientific processes–; and adopting sustainable research assessment systems. Dr. Capurro claimed that science needs to be more interdisciplinary, more inclusive in terms of language and more appealing for young students.

Mr. Reynaldo Lee Varela Head of International Relations of the National Secretariat of Science, Technology and Innovation, (SENACYT, Panama) detailed some actions and initiatives to make research more sustainable such as reducing the sample size, to increase experimental design and the use of technology. Also, Mr. Lee talked about the challenge for the digitalization of data collection, repositories, the need to improve laboratory practices and to create assessment criteria to measure the environmental impact of scientific research.

Following open discussion demonstrated that all agencies and observers are clear about the necessity to provide sustainability of research. However, often, political instability generates barriers in ensuring funding for research and equipment and also slows approval processes of new regulations and laws related to sustainability of science and its practices. It is important to generate support within the region to, at least, share knowledge, experience and expertise in order to ensure that countries with little or no support for STI can have access to latest science



updates and management practices and STI policies and have knowledge about available international mechanisms for funding.

# Third Axis: *Making sure sustainability science matters* – supporting scientific knowledge's benefits to policy makers and people

This third axis was moderated by Ana Vásquez, International Cooperation Manager from ANII (Uruguay) and counted with two panelists.

The module started with a brief presentation by Laura Tejada, Scientific Officer of the Swiss National Science Foundation (SNSF, Switzerland) with the main topics in order to foster discussion on how to connect science to society in order to assure accessibility and simplification, how to build clarity and transparency and the use of ethical guidelines and how researchers, policy makers and stakeholders may raise awareness of their roles by connecting science and society from the Agencies perspective.

Dr. Luz Lardone, Member of the Board of Directors of CONICET (Argentina) stated that the topic itself is challenging because it gathers several aspects such as the use of language –considering dialogue as a vehicle and as an instrument–, knowledge as an aim itself in institutional agendas, the disconnection between knowledge management and public policy design and how knowledge in internalized by society. Dr. Lardone highlighted the importance of establishing multilevel governance to strengthen development agendas, make the use of resources more efficient and to reinforce the mindset that science is a part of society. She also talked about scientific fares and stressed out the importance of using the concept of "science as part of society" instead of "science for society". It is important not to separate science from society, but analyze it as part of it and as something that comes from society as each researcher is a societal member.

Prof. Flavio Caiafa, President of ANII (Uruguay) addressed the topic by describing ANII's policies and activities oriented to science promotion: the innovation award/event launched in 2022; the Eureka initiative that invites researchers to talk about their work in public lectures and the CEIBAL Center for training in programming for young children. Dr. Caiafa remarked that Uruguay



has a Public Innovation Law that promotes open innovation calls that allow to identify problems that require innovation from entrepreneurs, companies and public institutions.

Following open discussion provided participants with several examples of initiatives in different countries that promote societal impact of research. It was suggested that the region can generate a document with incorporation of such examples that can be used for a broader audience and within the 2024 GRC Annual Meeting paper.

#### America's Region Perspective on 2024 GRC Annual Meeting Discussion Paper

The meeting was a great opportunity to address the global challenge of sustainability and how the STI sector can contribute to the solutions from America's region. The three axes discussed in the different sessions brought different perspectives to the analysis of the issue of research sustainability.

It was emphasized that research on sustainability is important to address global challenges and the better way to do so is through international, bilateral and mostly multilateral, cooperation. The meeting's participants demonstrated their commitment to sustainable research and willingness to continue to tackle challenges faced jointly. Although the region represents different contexts and capacities in different countries, it is important to strengthen cooperation between STI related actors and level up the region's research on sustainability to position the region as a reference for excellent research.

Sustainability of research is also considered one of the key elements for sustainable research as it ensures that research is sustainable not only in terms of use of materials, but also in terms of availability of funding and incorporation of EDI perspective. Open Science is also crucial for making research data and outcomes available for all, especially young researchers. Funding agencies should look for a way to deal with publishers to promote Open Science and Open Data. Open Science and Open Data are also important when talking about impact on society. The results of science should be available for all. Science is part of the society and should be considered as such by being part of it and not promoting science for society. Agencies should ensure to integrate it into their policy and change focus from installing science in a society to expanding its frames inside the society. Many agencies in the region already have several



initiatives that strengthen the impact of science on society by incorporating innovation concept into their missions, organizing fares and implementing new instruments that incorporate all relevant stakeholders on national and sub-national levels.

The discussion on the 2024 GRC Annual Meeting theme was a valuable instance of sharing mutual knowledge and experiences and contributing to the generation of scientific practices in the region in a collaborative and articulated way. Sustainable research agenda seeks to connect all society's stakeholders, STI actors being one of them, through knowledge transfer, contributions to public policies and knowledge dissemination.







#### **WORKING GROUPS**

#### Multilateral Engagement (MLE)

Dr. Prudence Makhuta from the National Research Foundation (NRF, South Africa) and Co-Chair of the MLE WG, highlighted the relevant scope role of the GRC in multilateral engagement and presented the results of the report carried out by the WG among 20 participating Organizations to map the funding instruments and opportunities within the members of the GRC. Dr. Makhuta commented on several aspects regarding entailment - there is a clear predominance of European participation in cooperation with Asia Pacific region- and budget availability-and its lack of flexibility-. Also, she shared that there is a consensus within the group regarding research areas of common interest like energy transition, sustainable development goals and climate change. Finally, Dr. Makhuta shared the main challenges for MLE: open collaboration opportunities for new partners-including new countries and new stakeholders-, support interdisciplinary research and consolidate the administrative capacity of the Agencies by incorporating funding and highly-qualified officials.

The presentation was followed by a panel moderated by Dr. Karen Lips, Program Director of the National Science Foundation (NSF) of the United States and counted with four presentations on cooperation initiatives within the region..

Dr. Michael Steele, representative of the National Science Foundation (NSF) of the United States, participated in this session virtually. After his presentation on Research Security, he invited the participating Agencies to join the Community of Practice, which is a regular meeting to get a shared understanding and shared tools for science policy.

Dr. Sharapiya Kakimova, Internationalization Expert at ANID (Chile), presented the outputs of the 2023 GRC Scientific Workshops in Artificial Intelligence and Open Science in September and October, 2023 and Ana Vasquez from ANII (Uruguay) presented the terms and conditions of the 2023 Multilateral Call in Energy Transition focused on Mobility launched by ANII (Uruguay), CONICET (Argentina), FAPESP (Brazil) and the IDRC (Canada).

Mr. Reynaldo Lee Varela, the Head of International Relations of SENACYT (Panama) presented the *Science Diplomacy Declaration of Panama*, launched in October 2023 in Panama City.



Overall the session demonstrated that members of GRC America Region have several initiatives that promote regional cooperation and knowledge and expertise sharing within the region that can be good examples for other regions of GRC.

#### Equity, Diversity and Inclusion (EDI)

The session began with the presentation by Dr. Ana Almeida from FAPESP (Brazil), Co-Chair of the Equity, Diversity and Inclusion (EDI) Working Group of GRC. The group was created in 2017 to advance the coordination of actions to comply with the Statement of Principles and Actions on "Promoting the Equality and Status of Women in Research" endorsed by GRC in 2016. In 2021, the EDI WG published a report on gender policies in GRC member Agencies, and, in 2022, organized the first virtual seminar to share experiences and expertise between agencies.

The WG was changed to "Equity, Diversity and Inclusion Working Group" in 2023 to adjust its expanded mission established by the GRC that includes –but is not limited to– gender policies, integrating variables such as sex-gender diversity, ethnicity, access to education and technologies, the territory and other conditions that generate and sustain inequality gaps in the scientific system.

Dr. Ana Almeida presented the current main topics of the EDI WG, focused on sustainability: cooperation and sustainable development in a context of international resource inequality; tools and practices to build an international scientific community with social sensitivity; and the sustainability of public policies as a bridge between scientific production and its real impact on the most disadvantaged groups in society.

This segment was moderated by Prof. Alejandro Adem, President of the NSERC (Canada) and Chair of the GRC Governing Board and counted with three panelists, Mrs.Alejandra Pizarro, National Director of ANID (Chile), Dr. Ana Franchi, President of CONICET (Argentina) and Dr. Olive-Jean Burrowes, Executive Director of NCST(Jamaica), who commented on their challenges in terms of gender and equality policies in the design and implementation of scientific policies and their experience as women in leadership roles.



In overall, agencies from the region agreed that EDI perspective is important for the regional perspective and to pursue the topic of sustainable research, especially in its axis of sustainability of research.



#### **Responsible Research Assessment (RRA)**

Mohammed A. Alshamsi from the King Abdulaziz City for Science and Technology (KACST, Saudi Arabia) and Co-Chair of the RRA WG, presented the vision of the RRA WG: assessment criteria shapes research culture and also should encourage high-quality research by considering its impact on innovation. Furthermore, research assessment criteria and processes shall be carefully considered and established in order to foster a healthier research and innovation system and the GRC members may adopt a new assessment approach in order to encourage excellency in the scientific practice.

Shawn McGuirk, Deputy Director of NSERC (Canada) explained the eleven dimensions of RRA, which are divided in three categories, including: Guiding principles, Governance and Strategy and Process and methodology.

Afterwards, Dr. Alshamsi presented the RRA WG nineteen members and its track in the past years: at first, the WG members established a concrete vision and new dimensions of research assessment. Then, they shared several activities carried out by the WG as webinars to analyze study cases, a survey to present in the 2024 Annual Meeting and the ongoing project to develop a self assessment instrument for the GRC understanding of the progress made within the RRA WG.

Dr. Cynthia Jeppesen, Planning and Assessment Manager of CONICET (Argentina) and RRA WG member, commented on two presentations and moderated followed discussion.

In general, the participants of the meeting agreed that 11 dimensions developed by the group reflect all aspects related to RRA and can help to better tackle RRA within research councils. It was also mentioned that RRA WG and EDI WG have some level of cooperation as their subjects are intertwined and advances of each WG should be considered in both.







#### SIDE EVENTS

#### Transformations in academic communication and the impact on evaluation systems

The Side Event was hosted by the Latin American Council on Social Sciences (CLACSO). Dr. Laura Rovelli, Professor at the UNLP-IdIHCS-CONICET and FOLEC-CLACSO Coordinator welcomed the audience and started the discussion about transforming research assessment for next generation by cooperating for a comprehensive, articulated and incremental reform of evaluation systems, aligned with RRA and open science principles and values. Also, Dr. Rovelli, along with Euclides de Mesquita Neto, GRC Executive Secretary, highlighted the importance of creating synergies between FOLEC, COARA and other initiatives aligned with open science, such as forums of experiences and learning, transformative laboratories and supranational bodies for coordination and monitoring of actions.

Prof. Emanuel Kulczycki, Director, Research Group on Academic Communication (SCRG-AMU) and Associate Professor, Adam Mickiewicz University (Poland) gave a lecture about how the use of metrics in academia contributes to publication pressure and drives scientists to publish their results in a way that allows them to maintain their jobs and positions, instead of prioritizing the scientific objectives of research.

This session was commented by Prof. Ismael Rafòls, Senior Researcher at CWTS and UNESCO Chair on Diversity and Inclusion in Global Science, who shared the UNESCO perspective on the many faces of open science: dialogue with other knowledge, open engagement, open scientific knowledge and infrastructure. Shawn McGuirk, Deputy Director of Natural Sciences and Engineering Research Council (NSERC, Canada) and Cynthia Jeppesen, Assessment and Planning Manager of CONICET (Argentina) participated as representatives of the Responsible Research Assessment Working Group of the GRC and talked about the main challenges the WG is currently addressing.



Mario Pecheny, Director of Social Sciences and Humanities, CONICET (Argentina) gave the closing remarks and stated that science communication and evaluation systems are a very important topic of discussion in three dimensions: technical, ethical and normative. This Side Event was moderated by Laura Rovelli.



#### Science Diplomacy Center Launch

The Side Event was hosted by the Inter-American Institute for Global Change Research (IAI). The event was opened by remarks of the GRC hosts, Alejandra Pizarro, National Director, ANID (Chile) and Eugenia Tola, Director of International Relations, CONICET (Argentina). Both hosts underlined the importance of opening the Science Diplomacy Centre in the region to foster existing international cooperation and provide a framework for further collaborations.

Dr. Euclides de Mesquita Neto, GRC Executive Secretary, shared the GRC Declaration in Science Diplomacy as a kick off topic for the Side Event. Afterwards, Marcella Ohira, Deputy Executive Director of IAI presented the IAI Science Diplomacy Center and Policy (STeP) Fellows Program and talked about how Science Diplomacy is a central axis of what the IAI is and how in recent years IAI has been very active in implementing innovative programs. Also, Ohira claimed that the Science Diplomacy Center has two main challenges: to develop capacities for decision-makers and officials, and to create a platform to share policy papers and emerging issues.

Dr. Amâncio Jorge Silva de Oliveira from the University of São Paulo (USP, Brazil), Dr. Franklin Carrero-Martinez from the National Academy of Sciences (NAS, USA/Puerto Rico) and Mr. Reynaldo Lee Varela from the International Relations Division of SENACYT (Panamá) formed a panel to discuss the Science Diplomacy concept and its importance as an instrument to reduce inequality and to address regional challenges of the American Region. This discussion was moderated by Edwin Castellanos, Science Director of IAI.

Afterwards, Dr. Anna Stewart, Executive Director of IAI shared IAI initiatives regarding Science Diplomacy in the context of Global Environmental Change in the Americas and the main accomplishments in this area so far, and explained the example of the Climate Change for Health in the Americas. Then, Dr. Stewart discussed these initiatives with the moderator, Ana Vasquez from Ana Vasquez, ANII (Uruguay).

The final session was focused on the Summary of the first SDC training in Panama, where Reynaldo Lee Varela (SENACyT-Panamá), Marcella Ohira (IAI) and Marcos Oliveira from the Planning and Strategic Programs Advisor, Santa Catarina Research Foundation (FAPESC, Brazil) talked about the main outputs of the Science Diplomacy Week that took place in Panama City, Panama, in October 2023.



Agustina Salvati from the International Cooperation Office of CONICET (Argentina) and Sharapiya Kakimova from ANID (Chile) shared a brief summary and closing remarks for this event.

Science Diplomacy has been practiced for some time now, however, the term is new and IAI's efforts to strengthen capacity within the region on the topic and connect it with past, existing and future collaborative activities of international cooperation within the region and beyond were applauded. GRC America's region and its agencies agreed that they should take an active role in the process to generate a clear and unified understanding of the concept and how it can foster collaborations within the region.

## Setting a Joint Ocean Science Agenda in the Americas: How can research councils contribute to Ocean Sustainability?

Dr. Ana Franchi, President of CONICET (Argentina), Mrs. Alejandra Pizarro, National Director, ANID (Chile) and Dr. Concepta Margaret Mcmanus Pimentel, FAPESP (Brazil) opened the event. Then, Dr. Alexander Turra presented the "International Frameworks to Promote Ocean Sustainability". Dr. Turra emphasized the relevance of understanding and participating in international frameworks that promote ocean sustainability, such as the United Nations 2030 Agenda and the UN Ocean Conferences. It was highlighted that "The Ocean" and not "Oceans" concept should be used as it better reflects the realities and interconnectedness of the concept. Along these lines, he highlighted the importance of considering the Ocean as the transforming agent of Society. Finally, he shared the achievements in the framework of the Ocean Decade: the High Level Panel for a Sustainabile Ocean Economy and Sustainable Ocean Plans, the International Panel for Ocean Sustainability (IPOS) and the FAPESP PROASA Program.

Right afterwards, the panel "Sharing existing efforts to support ocean sciences in the Americas", moderated by Dr, Nicole Arbour, Executive Director of Belmont Forum,gathered Prof. Humberto González, Director of the Center for Dynamic Research of High Latitude Marine Ecosystems (IDEAL), Dr. Eugenia Lattuca from the Austral Center of Scientific Research (CADIC, Argentina) and Dr. Alberto Piola, CONICET Researcher (Argentina).



First, Prof. González spoke about the collaboration between Chile and Argentina in the First Scientific, interdisciplinary and comprehensive Campaign along the Beagle Channel. He highlighted the joint efforts of the foreign ministries, backed by solid scientific support, which contributed to the climate of cooperation and peace relations of both countries. Then, Dr. Lattuca provided a detailed review of various experiments carried out in CADIC to understand the possible effects of acidification on species to evaluate the vulnerability of early life stages. She talked about the ROMA project as an example of National effort for preservation, research and budget optimization, as well as for the coordination of shared activities in ocean acidification research.

Dr. Lattuca also spoke about the collaboration between Argentina and Canada (Presentation by Dr. Gustavo Ferreyra CADIC-CONICET), focusing on the differential responses of phytoplankton to changes in UV radiation and variations in the ozone layer; the work carried out in polar (Antarctica, Argentina) and subpolar (Rimouski, Canada) areas and her presentation concluded with a detailed analysis of the geological and environmental conditions of the Golfo San Jorge. The panel finished with the lecture of Dr. Piola, who stated that international cooperation is a key instrument for Ocean Sciences since interconnectivity is required, which must necessarily involve multiple national actors to address scientific analysis problems in their completeness. That is, it is necessary to transcend geographical borders in research given that the object of study requires it.

The final panel, titled "Exploring the challenges and opportunities to foster a regional transdisciplinary science agenda for ocean sustainability in the Americas" was moderated by Dr. Karen Lips, Program Director, NSF (USA). The panel sought to generate discussion between funding agencies and researchers from multiple disciplines to see how all involved actors jointly can move forward towards ocean sustainability. Panel consisted of four panelists: Alberto Piola, CONICET (Argentina), Gustavo Blanco, IDEAL Centre and Austral University of Chile (Chile), Anna Stewart, InterAmerican Institute for Global Change Research (IAI) and Olive-Jean Burrowes, Executive Director, NCST (Jamaica). The participants agreed on the importance of considering the ocean as a common resource in order to identify shared values and needs. This approach seeks to foster broader and stronger collaboration between scientific and local communities and to encourage transdisciplinary research, emphasizing the incorporation of knowledge from local,







indigenous and traditional communities. Likewise, emphasis was placed on the construction and promotion of open data tools for the democratization of knowledge and open access. The importance of being considerate of new narratives and claims that do not consider the ecological effects of activities was discussed. Also, "Blue Justice" concept was introduced in order to identify the communities most affected by pollution practices.

Eugenia Tola, Director of the Cooperation Office of CONICET (Argentina) and Sharapiya Kakimova, Internationalization Expert, ANID (Chile), shared a brief summary and closing remarks for this event.

The event was a culmination of all activities of the GRC Regional meeting incorporating in itself (1) research on sustainability when discussing about existing collaborative initiatives and projects that encompass global challenges of climate change; (2) sustainability of research, while talking about importance of political, technical and financial support for continuous research; and (3) sustainable research impact of society when addressing interboarder cooperation and information sharing in order to protect societies from different countries from possible negative effect of climate change and showcasing existing efforts to incorporate local communities in the initiatives.

In addition, the discussion touched upon science diplomacy as an effective tool to advance transborder initiatives and the importance of open science, research integrity and ethics that are necessary to foster regional science communities.







#### DISCUSSANT PERSPECTIVES

#### Bottom up Funding

Bottom-up funding will make important contributions. For example, in Latin America
there are several collaborative projects funded or co-funded by DFG on biodiversity in
the Amazon states, and there is a research unit in Ecuador studying biogeochemical
cycles in tropical forests. Another example of fundamental research and targeted
knowledge discovery is the DFG project with NSERC on sustainable processes in
chemistry that may lead to discoveries with significant impact.

#### Multi Stakeholder Governance

 Climate change constitutes a challenge in all dimensions: economic, social, environmental, and geopolitical. A governance system that brings all institutions and stakeholders together is imperative both at the local, regional, national and international levels. This includes spaces for permanent dialogue and consultation such as an advisory committee of researchers, academia, and knowledge centers.

#### Public Policy and the Challenge of Integration

- When public policy is implemented, several problems arise, given the diverse sectors and issues involved (agriculture, social, poverty, energy, risk management education). Each sector has its own public agenda and each agenda has its own knowledge creation agenda. The challenge is bringing sectors together into an integrated whole.
- To be impactful, scientific advances and knowledge creation must be translated into policy for decision makers and rationale for action by the population. The Intergovernmental Panel on Climate Change (IPCC) does it well. At the local and national levels, translation and science communication is sometimes lacking and weak.

#### Interdisciplinarity and Multisectoral

• Similarly, collaboration within and across the academic system is challenging, because of specialization that leads to an array of values, assessment and evaluation practices.



• Implementation requires an interdisciplinary, multidisciplinary approach. Researchers specialize in topics but we need an interdisciplinary approach. How do we then do peer review; how do we assess specific and transdisciplinary expertise and offers.

#### Lack of Records, Data and Information on Quantification of Damages and Losses

 Data is a fundamental tool for decision makers for social cohesion as finite resources are allocated within society. This includes analyses, modelling, and data on risks and losses, as the economy and society restructures for adaptation and mitigation. The contribution of academia is incontrovertible. However, even at the IPCC level, there is no definition of loss, no clear methodology, and information and data is sometimes lacking. These gaps are amplified at the national and local levels.

#### Transition, Social Cost, Adaptation

- How much will a (fair) transition cost? Who will be the most affected and who will fund it? What is the role of the State? There is opportunity for research agencies and for spaces like GRC to advise the public sector on defining the less expensive and less damaging ways to go through a fair transition, and also on compensation mechanisms.
- Environmental sciences are more advanced than other dimensions of development, such as social vulnerability, ecosystem adaptations, cities adaptation, among others. We need dialogue with policy makers as we assess trade-offs between agricultural concerns and production; climate research; natural resources; urban development. Developing countries are vulnerable, with larger gaps in scientific translation to public policy.
- The ongoing transformation of the energy matrix worldwide is an example of intersectoral articulation from academia into public policy. International cooperation is key. Coastal adaptation in the Uruguayan context is a specific example of a model that works. A technology transfer agreement between the University of Cantabria and experts at the University of the Republic led to the creation of vulnerability maps of the southern coast (Río de la Plata and Southern Atlantic Ocean). Academic and scientific information informs policy on adaptation measures in the region.