

CUMBRE CIENTÍFICA DE LA ASAMBLEA GENERAL  
DE LAS NACIONES UNIDAS 2022 – SS UNGA77

SESIÓN DE LA RITS-CONICET

# Translational research network for health care in resource limited environments

 23/09 DE 10 A 14 HS (ARG)

## Convenors



### **Rodolfo Rey, MD, PhD**

Professor Rodolfo Rey is a Senior Researcher with CONICET (National Scientific and Technical Research Council of Argentina) the Director of CEDIE (the Spanish acronym for Centre for Research in Endocrinology), a translational research institute located in Ricardo Gutiérrez Children's Hospital, supported by CONICET, The Ministry of Health of the city of Buenos Aires and FEI (an NGO devoted to pediatric endocrinology). Dr Rey is also currently Professor of Histology, Embryology, Cell Biology and Genetics at the Faculty of Medicine, University of Buenos Aires.

At present, Dr Rey is the chair of RITS (CONICET's Network for Translational Research in Health) and of the International Meeting of Paediatric Endocrinology that will be held in Buenos Aires in 2023.

Professor Rey graduated from the University of Rosario (Argentina) and obtained his PhD from the University of Buenos Aires. He then trained in Endocrinology and Cell Interactions at INSERM and University of Paris (France), in Paediatrics and Paediatric Endocrinology at Ricardo Gutierrez Children's Hospital in Buenos Aires. He also holds a specialty in Human Genetics.

Professor Rey is interested in basic and clinical aspects of the physiology and pathophysiology of the gonadal axis during pre- and post-natal development. Questions that arise from observations made in patients with pathologies that affect the gonads serve as the basis for the development of research projects that can clarify the causes or mechanisms that explain the pathology or that can help in its diagnosis or treatment. He has published more than 180 papers in internationally renowned journals.



## Mora Castro, PhD

Mora Castro is an Associate Researcher at CONICET (National Scientific and Technical Research Council of Argentina), after being awarded a doctoral grant for basic research in this field (2008–2013) and then a postdoctoral scholarship (2016–2017). She has also worked for the Council at the Scientific and Technological Development Management (2013–2016), coordinating a wide range of projects at the science-policy interface. Currently, she is the Technical Coordinator of the RITS (CONICET's Network for Translational Research in Health).

Castro has a PhD in Social Anthropology from the University of Buenos Aires. She has a teaching position as Associate Professor of Anthropology of Health at the School of Health Sciences, Arturo Jauretche National University (UNAJ). She also supervises students for graduation thesis and postgraduate programmes in Anthropology and health related fields in Argentina and other countries. She published articles in different indexed scientific journals at a national and international level.

Mora Castro is interested in Medical Anthropology, Healthcare Systems, Translational Health Sciences, and Applied Anthropology. Her work focuses on the analysis of public health services in a particular region (Southeastern Metropolitan Area of Buenos Aires), characterized by an increasingly vulnerable population with different difficulties in accessing care providers in the area. Her methodological approach includes Social Network Analysis perspective, health statistics and GIS models, which allows exploring basic science fields and science - policy articulation within the health system in Argentina, including an international dimension through Science Diplomacy strategies.

## Organizing Committee

**Rodolfo Rey**, MD, PhD (CONICET - [redestematicas@conicet.gov.ar](mailto:redestematicas@conicet.gov.ar))

**Mora Castro**, PhD (CONICET - [redestematicas@conicet.gov.ar](mailto:redestematicas@conicet.gov.ar))

**Verónica Abello**, M.Sc. (CONICET - [redestematicas@conicet.gov.ar](mailto:redestematicas@conicet.gov.ar))

**Cecilia Szymczak** (CONICET - [redestematicas@conicet.gov.ar](mailto:redestematicas@conicet.gov.ar))

## Program

- 10.00 AM** Introduction: the RITS initiative. Mario Pecheny, PhD (Vice-president of Scientific Affairs, CONICET), Rodolfo Rey and Mora Castro.
- 10.10 AM** Business restrictions for the strengthening of public and universal health systems. Lessons from the pandemic. The cases of Argentina and Brazil – María José Luzuriaga, PhD, Universidad Nacional de Lanús, and Ligia Bahia, MD, PhD. Universidade Federal do Rio de Janeiro.
- 10.30 AM** Chagas disease and syphilis in paediatrics: the best science for the most neglected – Jaime Altcheh, MD, PhD. IMIPP (CONICET)
- 10.50 AM** Thematic network on emerging viruses – Juan Arbiza, PhD. Universidad de la República (Uruguay).
- 11.10 AM** Activities of the infectious disease modeling network during the COVID-19 pandemic – Juan Aparicio, PhD. INENCO (CONICET).
- 11.30 AM** Investigating pain in networks, an opportunity to do translational research – Marcelo Villar, MD, PhD. IIMT (CONICET)
- 11.50 AM** BREAK
- 12.10 PM** Collaborative Research Networks on Global Maternal and Perinatal Health – José Belizán, MD, PhD. CIESP (CONICET)
- 12.30 PM** International Translational Research Networks: opportunities to generate evidence to improve the health of vulnerable populations – Valeria Fink, MD. Fundación Huésped.
- 12.50 PM** Translational research network on liver diseases – Guillermo Mazzolini, MD, PhD. IIMT (CONICET)
- 1.10 PM** Latin American Collaborative Study of Congenital Malformations (ECLAMC): A Model for Health Collaborative Studies – Jorge López Camelo, PhD. CEMIC (CONICET)
- 1.30 PM** Collaboration networks for implementation science to approach NCDs prevention and management in LMICs – Vilma Irazola, MD, MSc. CIESP (CONICET)

**1.50 PM** CONCLUSIONS

## Abstract

Worldwide inequality represents a threat to human progress. Poor outcomes in health, associated with an increased risk of exposure to disease and limited access to up-to-date healthcare, is more frequently observed in regions or countries with limited economic resources. High-quality research locally led is critical for overcoming these health challenges. Solving population health problems is a mission of public policies. In fulfilling this mission and its intermediate objectives, researchers must base themselves on multidisciplinary interaction and on the rational use of existing resources, which requires coordination and a broad collaboration strategy. With this concept in mind, CONICET (National Scientific and Technical Research Council of Argentina) fostered the creation of the Institutional Networks Oriented to the Solution of Problems (Spanish acronym, RIOSP), formed from the association of research groups belonging to Science and Technology Organizations and public and/or private institutions, in order to address complex and significant problems for the development of the social, and productive environment, as well as situations of risk or threats. One of these networks is the Network for Translational Research in Health (Spanish acronym, RITS), whose mission is to promote a translational research of excellence and sustainable for the benefit of the health of the Argentine population. The objectives of RITS are to articulate and strengthen existing capacities in the country to promote the development of networks of translational research in the area, and to foster the development of capacities and strengthen existing ones to promote greater development of clinical research based on basic research and greater population and implementation research based on clinical research, in order to achieve improvements in the quality of the population's health. In this session, examples of networks recently created from CONICET's initiative as well as other successful examples of networks dedicated to translational research with impact in Latin American countries and other regions of limited resources will be presented.

## Speakers



### **María José Luzuriaga, PhD**

Departamento de Salud Comunitaria,  
Universidad Nacional de Lanús  
mariajoseluzuriaga@gmail.com

Doctor in Collective Health from the Federal University of Rio de Janeiro (2016). Researcher in charge of the PICT: Policies and Economics of Health. Teacher/researcher at the National University of Lanús - PIDRI-PRH Researcher Repatriation Program. Member of the Henry Jouval Jr Health Entrepreneurship Research and Documentation Group (GPDES/ IESC/ UFRJ). Member of the Argentine Network of Health Researchers (RAIS).



## Ligia Bahia, MD, PhD

Instituto de Estudos em Saúde Coletiva  
Universidade Federal de Rio de Janeiro (IESC-UFRJ)  
ligiabahia55@gmail.com

Doctor in Public Health from the Sergio Arouca National School of Public Health (Ensp/FIOCRUZ). Associate professor at the Federal University of Rio de Janeiro (UFRJ). Coordinator of the Research and Documentation Group on Entrepreneurship in Health (Gpdes). Her main research topics are social protection systems, the market for health plans and insurance, and public/private relations in the Brazilian health system. She coordinated the Project: “Complexo Econômico Industrial da Saúde (CEIS), Innovation and Capitalist Dynamics: Structural Challenge for the construction of the Universal System in Brazil”. Organizer of the book *Organizações Sociais: political agenda and custos for the public health sector* (2018)



## Jaime Altchek, MD, PhD

CONICET  
Gutierrez Children’s Hospital in Buenos Aires  
jaltchek@gmail.com

Dr Jaime Altchek is a paediatrician trained at the University of Buenos Aires and the Buenos Aires Children’s Hospital, a tertiary referral center of the Buenos Aires City health system. During his postgraduate training he was a guest researcher at the immunology department, Karolinska Institute (Sweden). After his return to the Buenos Aires Children’s hospital, he developed a comprehensive research program on paediatric parasitic diseases with particular emphasis on paediatric Chagas disease. This research program, which has been running for over 20 years, encompasses all aspects of the disease from basic to clinical research to patient care, with special focus on translational research. In addition, he is a partner in a number of collaborations with national and international research centres and also in many joint projects to study basic and clinical aspects of parasitic diseases. Currently he is head of the Parasitology Service at Buenos Aires Children’s Hospital and is a clinical researcher for CONICET (National Scientific and Technical Research Council of Argentina) and the Buenos Aires City Government. In addition, he is a member of the regional Validation Committee (PAHO) for the validation of the elimination of mother to child transmission of HIV, syphilis, Hepatitis B and Chagas, member of the Scientific Advisory Committee of the infectious Diseases Data Observatory (IDDO) Center for Tropical Medicine and Global Health at the University of Oxford, UK. and also a member of RITS (CONICET’s Network for Translational Research in Health)

From 2016-2020 the Parasitology Service was designated as a PAHO/WHO collaborating center in paediatric Chagas disease. Part of his work involved developing clinical workshops about Chagas disease in different paediatric hospitals and epidemiology departments, and being an adviser for Chagas health programs for Latin American governments. Also he participated in the development of PAHO/WHO diagnosis and treatment guidelines. Dr Altchek’s group set up the first paediatric clinical research network (PEDCHAGAS), which includes centres in Argentina, Bolivia and



Colombia, to develop the clinical trials of paediatric formulations of benznidazole and nifurtimox, the main medications for Chagas disease treatment.

As regards syphilis, Dr Altcheh's service is a referral center for the diagnosis and treatment of infected children. Over the last few years an increase in cases assisted in our hospital was observed. To improve the diagnosis of this infection, especially in newborns, we have set up a multicentre collaborative study for the implementation of the PCR test for the diagnosis of congenital syphilis. (ClinicalTrials.gov NCT04084379). In addition, an international collaborative study was initiated with the coordination of Washington university, USA for the genotyping of *T.pallidum* with the aim of developing a syphilis vaccine in the near future. Over the past few years this translational work of the Parasitology Service has succeeded in applying the information from basic research to clinical trials, which has improved the diagnosis and treatment of neglected diseases.



**Juan Arbiza, PhD**

[jrarbiza@gmail.com](mailto:jrarbiza@gmail.com)

Professor Juan Arbiza graduated from the Universidad de la República (Uruguay) and obtained his PhD from the Universidad Autónoma de Madrid (Spain).

He is Professor of Virology at the Facultad de Ciencias de la Universidad de la República, Researcher (Level III) at the National System of Researchers and Member of the National Academy of Sciences from Uruguay.

He has been coordinator of several international networks as: Molecular Virology from Asociación de Universidades Grupo Montevideo (AUGM), AMSUD-Pasteur a network of cooperation between Mercosur and Pasteur Institute, Chair for Uruguay International Centre for Genetic Engineering and Biotechnology (ICGEB), and three networks on emerging viruses from CYTED: RIVE 2005-2009, Viored 2010-2019 and at present Covired since 2020.



**Juan Aparicio, PhD**

CONICET - "INENCO"

Instituto de Investigaciones en Energía no Convencional

[juan.p.aparicio@gmail.com](mailto:juan.p.aparicio@gmail.com)

Dr Aparicio is Principal Investigator with CONICET (National Scientific and Technical Research Council of Argentina), at INENCO, National University of Salta, Argentina.

Dr Aparicio obtained a degree in Physical Sciences and a PhD Doctorate in Natural Sciences, from Faculty of Exact and Natural Sciences, University of Buenos Aires. He subsequently held postdoctoral positions at the Department of Biometrics, Cornell University, New York, and the

Research Department, University of Belgrano, Buenos Aires. Before establishing himself in Salta, he was Professor of Science and Technology, Metropolitan University, San Juan, Puerto Rico.

Dr Aparicio's area of work is Population Dynamics and its applications to epidemiology, ecology, and natural resource management, among others. More recently, his efforts have focused on the use of mathematical and computational models applied to the control and prevention of infectious diseases with an emphasis on Dengue and Leishmaniasis.



**Marcelo J. Villar, MD, PhD**

mvillar@austral.edu.ar

Professor Marcelo J. Villar is a Senior Researcher from CONICET (National Scientific and Technical Research Council of Argentina) and member of the Institute for Research in Translational Medicine (IIMT) at the School of Biomedical Sciences (FCB) in Austral University. Dr. Villar has been Dean of the FCB and also President of Austral University and Director of the IIMT for a period of 6 years. Afterwards he was appointed President of the Scientific and Technological Park of Austral University, with at the moment, more than 90 Companies oriented to development and innovation. At present he is Professor in Anatomy and Neuroscience.

With more than 150 papers in well ranked journals Dr. Villar has been interested in Pain and Pain Disorders with a particular focus on Chronic Pain, and has started within the RITS, together with Drs Pablo Brumovsky and Cecilia Catanesi, the Network for Translational Research in Pain.

Professor Villar is graduated from the University of Buenos Aires (Argentina) and obtained his PhD from the University of Buenos Aires. He also did a posdoc training in neural systems both in the peripheral and central nervous system at the Department of Neuroscience at the Karolinska Institute and has kept this collaboration over the last 30 years.



**Pablo Brumovsky, MD, PhD**

PBRUMOV@austral.edu.ar

Dr. Pablo R. Brumovsky is an Associate Professor from CONICET and a member of the IIMT at FCB, Austral University. Dr. Brumovsky is Council Member at IIMT, Director of the Special Interest Group on Research on Pain at the Argentinean Association for the Study of Pain, and Director of two postgraduate courses focused on pain mechanisms, diagnosis and therapeutics for health professionals.

Dr. Brumovsky has published more than 50 original and review peer-reviewed papers, as well as book chapters, specializing in neuroscience and chronic pain. Today, his main focus is on the role

of neuroimmune interactions, both for the improvement of our understanding of pain mechanisms, as well as for the identification of potentially interesting therapeutic targets.

Dr. Brumovsky graduated from the University of Buenos Aires (Argentina), obtained a PhD from Austral University (Argentina), and a second PhD from Karolinska Institutet (Sweden), and completed his education with a postdoctoral training at the University of Pittsburgh Medical Center (USA). He maintains active collaborations in Chile, USA, Sweden and France.



### **José Belizán, MD, PhD**

Researcher of the Institute for Clinical Effectiveness and Health Policy (IECS)  
Department of Mother & Child Health Research  
[jbelizan@iecs.org.ar](mailto:jbelizan@iecs.org.ar)

José Belizán is an obstetrician, doctor in Biology of Reproduction from the Universidad del Salvador (Buenos Aires) and doctor in Medicine from the National University of Rosario (UNR), Argentina.

He currently works as principal investigator in the Department of Research in Maternal and Child Health of the Institute for Clinical Effectiveness, Buenos Aires, Argentina. He is also an associate professor at Tulane University and the University of North Carolina at Chapel Hill (United States) and Senior Researcher at the National Council for Scientific and Technical Research of Argentina (CONICET).

It has a prolific scientific production, with more than 270 publications indexed in Pubmed, including in high-impact journals such as The New England Journal of Medicine, Lancet, British Medical Journal, JAMA, among others. In Scopus it has an h-index of 58 and more than 11000 citations. In Google Scholar it has an h-index of 77 and more than 25,000 citations.

He was an associate professor at the Faculty of Medicine of the National University of Rosario; head of the Perinatal Intensive Care Unit of the Hospital 20 de November, in Mexico City; and scientist at the Institute of Nutrition of Central America and Panama (INCAP), PAHO/WHO in Guatemala City. In addition, he was founder and director of the Rosario Center for Perinatal Studies (CREP) and director of the Latin American Center for Perinatology and Human Development

(CLAP) of the Pan American Health Organization / WHO. In addition, he directed the Fogarty / NIH Center in Argentina.



### **Valeria Fink, MD**

Fundación Huésped  
[valeria.fink@huesped.org.ar](mailto:valeria.fink@huesped.org.ar)

Valeria Fink obtained her medical degree at the University of Buenos Aires (Argentina) and was trained as an Infectious Diseases specialist at Hospital Fernández (Buenos Aires). Since 2007, she has worked in the Clinical Research area at Fundación Huésped (Buenos Aires), the largest NGO in



Argentina serving people with and at risk of HIV/AIDS in Argentina, initially as investigator, then coordinating the clinical research site and, since 2022, as director of the Division of Innovation and

Translational Research. She has participated in several projects, international cohorts, translational and epidemiological studies, with a special focus in cancer, oncogenic viruses and HIV. She has been part of the Caribbean, Central and South America network for HIV epidemiology (CCASAnet) (IeDEA Region 2), where she has participated in cancer related projects, that allowed the characterization of the cancer situation in the HIV population in this region.

She has developed HPV-related projects in different HIV+ populations (HIV+ women, HIV+ men who have sex with men and transgender women) with grant supports of the National Cancer Institute (Argentina).

She is a member of the UM CFAR/ Sylvester CCC– Argentina Collaborative Consortium for Research and Training in Virally Induced Cancers disproportionately affecting the Argentinian population at highest risk for HIV infection and AIDS, a NIH supported translational network for research in cancer and HIV, involving the University of Miami and reference basic science research centers in Argentina, where research and training in AIDS related malignancies are core issues.

Fundación Huésped became one of the four Latin American sites for the AIDS Malignancy Consortium (AMC) in 2018. Dr Fink has served as the Associate Chair for Latin America International Sites of the AMC since 2019.



### **Guillermo Mazzolini, MD, PhD**

CONICET - "IIMT"

Instituto de Investigaciones en Medicina Traslacional  
GMAZZOLI@austral.edu.ar

Professor Guillermo D. Mazzolini is a Senior Researcher at CONICET (National Scientific and Technical Research Council of Argentina), and Deputy Director of IIMT (the Spanish acronym for Institute for Research in Translational Medicine), a translational research institute located in the School of Biomedical Sciences, Austral University, supported by CONICET and Austral University. Dr Mazzolini is also currently Professor of Pathophysiology, and Vicedean at the School of Biomedical Sciences, Austral University.

At present, Dr Mazzolini is the leader of the Translational research network on liver diseases at RITS (CONICET's Network for Translational Research in Health).

Professor Mazzolini graduated from the University of Rosario (Rosario, Argentina) and obtained his PhD from the University of Navarra, Spain. He then trained in Liver Diseases at Clinica Universidad de Navarra (Spain). He also holds a specialty in Internal Medicine (Hospital de Emergencias Dr. Clemente Alvarez) and Hepatology (Sociedad Argentina de Hepatología), Argentina.

Professor Mazzolini is interested in basic and clinical aspects of the pathophysiology of acute and chronic liver diseases, with a special interest in innovative therapeutic strategies such as gene and

cell-based therapy. He has published more than 120 papers in internationally renowned journals, and has an Scopus h-index of 35.



**Jorge López Camelo, PhD.**

[jslc@eclamc.org](mailto:jslc@eclamc.org)

Professor Lopez Camelo has a PhD in Science, specialist Genetics at the Federal University of Rio de Janeiro, Brazil since 1994. He is a Senior Researcher with CONICET (National Scientific and Technical Research Council of Argentina) the Director of CEMIC (the Spanish acronym for Center for Medical Education and Clinical Research), a research institute located in CEMIC, supported by CONICET. Dr Lopez Camelo has a specialty in Epidemiology granted by the National School of Public Health (Brazil). He was a researcher at the CNPq (National Research Council, Brazil) in the Genetics Department of the Oswaldo Cruz Foundation, from 1987 to 1994. Professor of undergraduate and graduate degrees in Scientific Research Methodology at the CEMIC University Institute and at the Faculty of Medicine of the National University of La Plata, Argentina.

He actively participated in the creation of the National Registry of Congenital Malformations in Argentina (RENAC) and the Latin American Network of Congenital Malformations (RELAMC). Participated in the implementation and evaluation of the impact of flour fortification with folic acid for the prevention of neural tube defects in Chile (Ministry of Health) and in Argentina. Since 1983 he has worked at ECLAMC (acronym, Latin American Collaborative Study of Congenital Malformations) and since 2013 is the coordinator of the ECLAMC network.

Currently, he is a professor and member of the Academic Council of the Latin American School of Human Genetics. Member of the Advisory Council of the National Institute of Population Medical Genetics. Lopez Camelo is Epidemiological advisor to the International Clearinghouse for Birth Defects and Surveillance Research, Rome, Italy.

Its lines of work are oriented to the detection of geographical/temporal aggregates of congenital anomalies, study of risk factors and epidemiological genetics of congenital defects, prematurity and low birth weight, and creation and implementation of National or Metropolitan Birth Defects Registries in the South American Region. He has published more than 130 papers in internationally renowned journals, and he was awarded the Platinum Kones award in 1983, Argentina, and the Latin American Geneticist award in the field of Public Health, awarded by the National University of Guadalajara, Mexico.



## Vilma Irazola. MD, MPH, PhD

“IECS” - Instituto de Efectividad Clínica y Sanitaria  
virazola@iecs.org.ar

Vilma Irazola is a cardiologist and epidemiologist. She is the Director of the Department of Research in Chronic Diseases at the Institute for Clinical Effectiveness and Health Policy (IECS), an academic

institution affiliated to the University of Buenos Aires, Argentina. She is the Director of the South American Center of Excellence for Cardiovascular Health (CESCAS). She is also associate researcher at the National Scientific and Technical Research Council of Argentina (CONICET).

Over the last 25 years, Vilma has led epidemiological and intervention studies aimed at health promotion, and chronic disease prevention and management in Argentina, Latin America and globally. In the last 20 years her work and research have been focused on implementation science and public health research in cardiometabolic health, cancer prevention and early detection, and aging.

Dr Irazola is Co-Director of the Master's Degree Program in Clinical Effectiveness at the University of Buenos Aires, where she also teaches Advanced Analytical Methods. She is faculty of the Implementation Science School run by the Global Alliance for Chronic Diseases (GACD). She is Associate Professor of the Cross-Continental MPH, College of Global Public Health at New York University (NYU), and Visiting Professor of the Low Cardiovascular Health Program at the School of Public Health, Harvard University.

## Abstracts

**10.10 AM Business restrictions for the strengthening of public and universal health systems. Lessons from the pandemic. The cases of Argentina and Brazil – María José Luzuriaga, Universidad Nacional de Lanús, and Ligia Bahia, Universidade Federal do Rio de Janeiro.**

The main empirical evidence regarding the operation of companies that sell private health plans and insurance has not been translated into the content of public policies in the sector. In this work, we characterize the actions carried out by the main companies that sell private health plans and insurance in relation to the prevention and/or assistance of people with COVID-19 in Argentina and Brazil, in particular their level of compliance and accompaniment to the official measures implemented since the pandemic was declared. It can be concluded that the impacts of the pandemic are multiple, as are the responses given by States and societies. The role of the private health sector analyzed shows similarities but also singularities. The measures taken by the States towards the private sector were similar, although in the Argentine case official projects and initiatives aimed at intervening in the role of the private sector in the health system during the pandemic and

after it are identified. Finally, it should be noted that health plan and insurance companies were not only not affected, but were also among the sectors that benefited the most during the pandemic.

**10.30 AM Chagas disease and syphilis in paediatrics: the best science for the most neglected – Jaime Altcheh. IMIPP, CONICET-Hospital de Niños Ricardo Gutiérrez, Buenos Aires.**

Parasitology, Ricardo Gutiérrez Children's Hospital and Multidisciplinary Institute for Research in Pediatric Pathologies (IMIPP), CONICET-GCBA. Buenos Aires, Argentina.

Chagas disease is an infection that can be transmitted by a vector, blood transfusions or via transplacental transmission. Due to migratory phenomena, it is currently an urbanized disease where the greatest number of new cases occur via the transplacental route. In Argentina, it is estimated that there are about 1.5 million infected people and between 1,300 and 1,500 infected babies are born each year. Unfortunately, in spite of being mandatory, the screening of the infection in pregnant women and their newborns, few children are diagnosed and fewer receive treatment.

Two drugs are currently available for Chagas disease treatment: benznidazole and nifurtimox. In recent years there have been important advances in the development of their pediatric formulations. A Phase 3 multicenter study was conducted with the participation of 25 pediatric groups from Argentina, Bolivia and Colombia, belonging to the PEDCHAGAS clinical research network. This study was coordinated by the Parasitology Service of the Ricardo Gutierrez Children's Hospital and the Multidisciplinary Institute for Research in Pediatric Pathologies (IMIPP), CONICET-GCBA, allowing the registration by the FDA of the pediatric formulation of nifurtimox. It is expected that in the second half of this year this formulation will be registered in Latin American countries. In addition, the pharmacological study of available medications in children showed that lower doses are effective for the clearance of *T.cruzi* in blood. These studies laid the foundations for the development of clinical studies in adults using lower therapeutic doses. We have also worked together with other national and international research centers for the development of diagnostic and therapeutic biomarkers. We have validated different molecular assays that have been published in high impact journals. An innovative platform (Multicruzi test) has been developed in collaboration with the Drugs for Neglected Disease initiative (DNDi) for the study of the immune response to Chagas disease. This is currently being validated in different cohorts of treated patients.

In relation to syphilis, in recent years, there has been a significant increase in the number of cases, which has put the health system on alert. We should consider syphilis as a neglected disease since there have been no advances in diagnostic tools in the last 70 years. This is critical for the diagnosis of newborns with suspected infection since we do not have tests that allow us to confirm the presence of *T.pallidum*. What is more, the available serological tests are not useful due to the passage of maternal antibodies to the newborn. In response to this problem, within the framework for the elimination of Mother-to-Child Transmission of HIV, Syphilis, Hepatitis B, and Chagas (EMTCT-plus – PAHO/WHO) we have set up a mother-child clinical research network, with centers throughout our country, to develop and validate diagnostic molecular biology techniques. For this purpose, we have been awarded a grant by the Argentine Ministry of Science (MINCYT). The implementation of this

study has led to a collaborative project with the University of Washington, Seattle, USA, for the genotyping of *T.pallidum* with the aim of developing a syphilis vaccine in the near future.

Our work clearly demonstrates that the implementation of translational clinical research networks is an important step forward to improve the health of those who need it most.

### **10.50 AM Thematic network on emerging viruses – Juan Arbiza. Universidad de la República, Montevideo.**

Emerging viruses continue to be a Public Health problem in Ibero-American countries, demonstrated by the constant appearance of epidemic outbreaks caused by emerging and re-emerging viruses in our countries. Those with the greatest impact are the constant annual outbreaks of dengue that occur in the American continent and the sudden appearance of influenza A (H1N1) that has had a pandemic behavior and recently the emergence of a new disease called COVID 19, caused by the SARS-CoV-2 coronavirus. These examples mark the importance of scientific interest in this subject, highlighting the need to address the different topics of the problem in a coordinated manner and among all.

A good example of this is the articulation made by PAHO-WHO in Latin America, through the network of national reference laboratories in each country, trying to establish rapid and effective protocols for diagnostic and epidemiological action for effective detection, follow-up and control of emerging infections. The existence of Reference Laboratories that carry out these tasks is essential to implement these control and monitoring mechanisms rigorously and effectively.

On the other hand, CYTED has the strength of connecting institutions of the 21 Ibero-American countries that are part of it, through actions such as networks or joint projects, which has allowed it to have extensive experience throughout its existence in research and development issues carried out jointly by the countries. Among those topics that CYTED has promoted, the previous execution of two networks on emerging viruses should be taken into account, such as: a) RIVE (Red Iberoamericana de Virus Emergentes) (2004 - 2008) that mainly covered emergencies at that time in Ibero-America of Hantavirus, some Arenavirus and West Nile virus and b) VIRORED (2009 - 2019) which was created as a consequence of the H1N1 emergency and which has subsequently taken action in the emergencies of Dengue, Respiratory Virus, Ebola, Chikungunia, Zika, Saint Louis, among others. These networks have brought together public health institutions (National Reference Centers) and academic institutions (mainly Universities) from most of the 21 Ibero-American countries that, through the establishment of stable relationships between the institutions that formed it, have allowed a scientific academic approach. on emerging viruses, synergizing with other activities carried out by other organizations on this subject, such as those mentioned by PAHO-WHO. In this way, it has contributed with recommendations for the actions carried out by the Public Health authorities of the different countries.

Given the health emergency of COVID 19, and taking into account the aforementioned background of CYTED, a "Strategic Action" of the Program was developed on this subject, which undoubtedly constituted an excellent opportunity for the implementation of concrete actions considering the institutions that the countries proposed through the National Organisms of Science and Technology.



Taking into account the health emergency situation in our countries, it was proposed to begin with two aspects that were considered to be of urgent treatment so that the countries could count on recommendations obtained from scientifically based discussions and consensus of the participants to make decisions and actions, these were: a) Diagnosis/virological aspects and b) Clinical aspects, treatment, prevention.

### **11.10 AM Activities of the infectious disease modelling network during the COVID-19 pandemic – Juan Aparicio. INENCO (CONICET).**

The network for mathematical modeling of infectious diseases brings together groups that work in the area of mathematical and theoretical epidemiology from different parts of Argentina. The network is currently part of RITS, the Network for Translational Research in Health of the National Scientific and Technical Research Council of Argentina. At the beginning of the COVID-19 pandemic, the network's efforts focused on determining possible courses of action to control the spread of the disease. Taking into account that many of the projections that were released at the time were the result of overly simplified models, emphasis was placed on highlighting the complexities inherent in epidemiological processes and the necessity of caution when making projections.

The transdisciplinary nature of complex processes, such as global epidemics led us to build a multidisciplinary space to share experiences with researchers from various areas such as epidemiology, philosophy, immunology, communication, etc., and to reflect on more comprehensive approaches for managing the pandemic.

Finally, we will briefly comment on some of the results of various research works that different members of the network carried out.

### **11.30 AM Investigating pain in networks, an opportunity to do translational research – Marcelo Villar and Pablo Brumovsky. IIMT, CONICET-Universidad Austral, Pilar.**

Translational and clinical research are core components of a full-spectrum of biomedical research enterprise that also includes basic science. Yet, these critical areas of research are hampered by increases in costs, complexity and regulatory burden. Moreover, access to financial resources for translational research projects remains elusive, resulting in more time spent in seeking funding, and less time giving proper attention to the research mission of our academic institutions. Considering the natural difficulties in recruitment and retention of human subjects that clinical trials impose, the problematic outlined above only complicates the scenario even more and leads to considerable delays in the completion of critical studies. Faced with this reality, the RITS initiative supported by the CONICET provides a new tool that may strengthen our possibilities for research, building a bridge between basic and clinical scientists, as well as fostering much needed connections with a variety of funding agents. One such initiative focuses on pain, which is particularly relevant in the discussion about translational research, as it requires a multidisciplinary approach not only towards each suffering patient, but also to orient the basic and clinical research necessary to generate novel

therapeutic opportunities. Whether of acute or chronic nature, pain is a major problem worldwide, Argentina included. Chronic pain is particularly problematic, often refractory to treatment and leading to poor quality of life and unnecessary suffering. Without any doubt, the fascinating opportunities and breakthrough methodologies in neuroscience experienced in the last few decades have resulted in a massive increase in our scientific comprehension of the mechanisms underlying pain perception. This includes specific understanding of the animal nociceptive system, as well as insight into maladaptive processes that underlie pathological conditions in non-human animals. However, as a research community, we must be critical and acknowledge the ever present lack of translation between instrumental findings about nociceptive processing in non-human animals and proposed clinical intervention strategies in patients. In fact, for the most part, the clinical relevance of the different pathophysiological processes identified in preclinical models of pain remains largely unknown. Sharing the knowledge that has been gained through pain research – spanning a wide spectrum going from molecules to systems, from animals to patients – with researchers, clinicians, healthcare professionals and patients worldwide is not a simple task. However, it may provide a novel tool to overcome some of these difficulties and to increase awareness within the pain community and beyond. Ultimately, our aim is to increase the awareness of clinicians, scientists, policy makers, funding bodies and investors, as well as the general public, of our accumulating pain knowledge and how this may be used for the benefit of those living with pain.

#### **12.10 PM Collaborative Research Networks on Global Maternal and Perinatal Health –José Belizán. CIESP, IECS-CONICET, Buenos Aires.**

We briefly describe two global networks that design and conduct prospective multicountry studies on maternal and perinatal health. The NICHD Global Network for Women’s and Children’s Health Research conducts clinical and public health research since 2001 in eight LMIC’s in America, Africa and Asia. Since then, the network has designed and conducted more than **30** clinical trials and prospective observational studies in maternal and newborn health that enrolled more than 1,000,000 women and babies in more than **100** communities and health facilities in the eight countries, addressing major maternal and infant health problems including preterm birth, newborn asphyxia, postpartum haemorrhage, pre/eclampsia, antepartum care, and maternal and infant nutrition.

The Human Reproduction Program Maternal and Perinatal Health team at WHO has extensive experience in conducting large, multicentric high quality prospective studies in women during pregnancy and childbirth in LMICs worldwide. Since 2000, the team have led the design and conduct of **25** multicentric clinical trials or prospective observational studies in maternal and perinatal health. These studies have included more than 1,000,000 women giving birth in more than **700** health facilities in **60** countries and have addressed major maternal and perinatal health problems, including postpartum haemorrhage, pre/eclampsia, obstetric fistula, maternal sepsis, caesarean section, antenatal and intrapartum care, women’s mistreatment, and maternal near miss.

#### **12.30 PM International Translational Research Networks: opportunities to generate evidence to improve the health of vulnerable populations – Valeria Fink. Fundación Huésped, Buenos Aires.**

Participation in international networks becomes a unique opportunity for scientific institutions in low and middle income countries for capacity building and career enhancement. These collaborations help bridging the gaps related to disparities in access to funding and training opportunities in these settings and allow fruitful exchange experiences between different stage career researchers. These networks also foster interaction and transdisciplinary work both between local and international institutions bringing the possibility of identifying regional unsolved issues and developing research strategies and potential solutions.

Fundacion Huesped is a non-for-profit organization aiming to guarantee access to health and control of diseases through research and development of practical solutions related to public health policies in our country and region. As one of the main research institutions in the HIV field in Argentina, Fundacion Huesped has participated in different international networks for over 20 years, including epidemiological, translational and clinical and social research projects.

Several studies on the health of key and vulnerable populations, mainly focused in populations with and at high risk of HIV infection, were developed within these networks, allowing to generate local evidence that can help to better understand and prioritize these specific groups' health status and needs. An example is an NIH sponsored consortium for translational research and training in virally induced AIDS malignancies in men who have sex with men and transgender women from Argentina, involving University of Miami and Instituto de Fisiología, Biología Molecular y Neurociencias (IFIBYNE), Instituto de Biología y Medicina Experimental (IBYME) and Centro de Investigaciones Inmunológicas Básicas y Aplicadas (CINIBA), all leading basic science research institutions in Argentina, along with Fundacion Huesped, in which we aim to study oncogenic viruses such as HPV and KSHV in these key populations.

The aim of this presentation is to share and discuss the experience and lessons learned of Fundacion Huesped as part of international networks, and how this approach provided a framework to develop local and international collaborations with a transdisciplinary approach to obtain local information that can eventually help to inform the health system for better understanding of health approaches for key populations.

### **12.50 PM Translational research network on liver diseases – Guillermo Mazzolini. IIMT, CONICET-Universidad Austral, Pilar.**

Liver diseases represent an area of special relevance, both clinically and in research. Acute and chronic diseases are common in Argentina, and carry a high socioeconomic cost. Thus, cirrhosis accounts for 16 deaths per 100,000 inhabitants per year in 2010, and liver cancer has an incidence of 5.6 cases/100,000 persons per year. About 0.5-1% of the Argentine population is chronically infected by the hepatitis C virus, and about 2% by the hepatitis B virus. On the other hand, about 60% of Argentines are current consumers of alcohol; and the incidence of non-alcoholic fatty liver is increasing, approximately 25% of the world population, in a context in which 6 out of 10 adults are overweight or obese. In recent years, significant advances have been generated in the knowledge of the pathophysiological mechanisms of the most important liver diseases, as well as relevant advances in therapy, such as the treatment of hepatitis C with direct-acting antivirals, and in hepatocellular carcinoma with immunostimulatory monoclonal antibodies, immune checkpoint inhibitors. In addition, the treatment of irreversible liver diseases using liver transplantation has advanced substantially. The impact on the health system of complications derived from acute and

chronic liver diseases is a matter of concern, since they generate morbidity and mortality in the adult population of productive age. In Argentina, we have prestigious research groups in basic and clinical/translational areas. The connection between both areas of research is still an unresolved problem, so it is necessary to generate initiatives and actions for a synergistic work, which would result in the generation of better treatments for our patients, and a positive impact on the productive sector of biomedicine. This is a network of basic, translational and clinical researchers, from CONICET and from other public and private non-profit research institutions. This multidisciplinary network is open to the incorporation of those who want to be part of the group.

**1.10 PM Latin American Collaborative Study of Congenital Malformations (ECLAMC): A Model for Health Collaborative Studies - Jorge López Camelo. CEMIC (CONICET), Buenos Aires, Argentina.**

During the mid-sixties, the pandemic of congenital malformations produced by a new medication, thalidomide, stunned the world and triggered the creation of registries and surveillance systems in several countries, including Argentina. In 1967, a clinical epidemiologic research program started at the national Ministry of Health in this country. It mainly focused on causal identification, aimed at primary prevention of congenital anomalies. This program is now recognized as ECLAMC: Estudio Colaborativo Latinoamericano de Malformaciones Congénitas (Latin American Collaborative Study of Congenital Malformations; <http://www.eclamc.org>) . Based on its long-term survival of almost half a century, and great impact on the international scientific literature, ECLAMC proved to be a successful experience in health research in the developing world. More than 300 scientific publications generated from data collected by the ECLAMC program are indexed in PubMed. ECLAMC constitutes an organizational innovation, applicable to other health programs in low- and middle-income countries and even to other disciplines than health. This presentation aims to propose the essence of the ECLAMC structure hoping to initiate the design of similar programs in health sciences.

**1.30 PM Collaboration networks for implementation science to approach NCDs prevention and management in LMICs – Vilma Irazola. CIESP, IECS-CONICET, Buenos Aires.**

NCDs (noncommunicable diseases) are the #1 cause of death and disability worldwide, accounting for 74% of all deaths and more than three out of four years lived with a disability. These chronic conditions require long term or lifelong care, and include cancers, cardiovascular disease, stroke, chronic respiratory diseases, diabetes, mental health and neurological conditions, chronic kidney disease, among many others. An estimated 80% of NCDs are preventable. They are driven by modifiable risk factors including tobacco use, unhealthy diet, physical inactivity, harmful use of alcohol, and air pollution. NCDs are a sustainable development issue. NCDs represent far more than a health issue – they are a major development and human rights issue, as they disproportionately affect the poorest and most vulnerable populations. This is due in part to some NCD risk factors being more prevalent among poorer communities than in those with high socioeconomic status. They have a disproportionate impact on people living in low- and middle-income countries (LMICs), and are both a cause and a consequence of poverty. There is a huge gap between knowledge about proven effective strategies to prevent and manage NCDs, and



their implementation in practice, especially in LMICs. This presentation aims at highlighting the role of ongoing collaborative networks and future potential avenues for collaboration to strengthen Implementation Science (IS) capabilities in LMICs to promote the adoption and integration of evidence-based practices, interventions, and policies into routine health care and public health settings to improve the impact on population health.