Connections to Sustain Science in Latin America

Committee

Victor Manuel Cantillo

Member

Dr. Víctor Cantillo is a professor and senior researcher of the Department of Civil an Environmental Engineering at the Universidad del Norte (Barranquilla, Colombia). He is vice-president of the Pan-American Society of Transport and Logistics Research (www.panamstr.org) and member of the Colombian Academic Mobility Network (ramcolombia.co). In addition to his work as an academic and researcher, he has worked as a consultant in the areas of transport planning, road safety, logistics, transport infrastructure and logistics. He has been appointed Co-Editor-in-Chief of the new journal Latin American Transport Studies LATS. Professor Cantillo is a member for the editorial board of several journals.

Dr. Cantillo has more than 30 years of experience in transport and mobility research. He is an expert in the use of econometric techniques to study travel behavior. Víctor has worked on issues related to social and environmental impact assessment of transport projects, informality in public transport services and energy transition in vehicles, engineering education, among others.

Another of his areas of interest is humanitarian logistics, where he has been a pioneer in the assessment of the deprivation costs of communities affected by natural disasters.

Hernan Chaimovich

Member

Dr. Hernan Chaimovich has a professional degree in biochemistry, from the Universidad de Chile (1962), and is a full professor (1984) and emeritus (2015) at the Institute of Chemistry, University of São Paulo, IQUSP. He belongs to the following learned societies: a) Brazil: Academy of Sciences, Society of Biochemistry and Molecular Biology, Chemistry Society, Society for the Advancement of Science; b) Latin-American Academy of Sciences (ACAL), The World Academy of Sciences (TWAS), Foreign Member of the Academies of Science of Chile (2004) and Venezuela (2006), and is a fellow of the American Association for the Advancement of Science (AAAS). He has been awarded the following prizes and honors: Humboldt-Hauptmann Prize in Chemistry (USP), PABMB Medal Lecture, TWAS Medal Lecture, Brazilian Order of Merit in Science and Technology, Butantan Medal, State of São Paulo, Brazil. He has been the Chairperson, Department of Biochemistry, IQUSP; Director, School of Molecular Sciences, USP; Research Chancellor, USP; Director, IQUSP; Vice-Director, Institute of Advanced Studies, USP. President, Brazilian Society of Biochemistry and Molecular Biology; President, Board of Trustees, Instituto Butantan, Brazil; Vice-President of the Brazilian Academy of Sciences; Vice-President, ICSU; Co-Chair, Inter-American Network of Academies of Science (IANAS); President of the National Council of Scientific and Technological Development, CNPq. Early contributions to enzymology, with apyrase and phosphotyrosine phosphatase, are still recognized. Later he described one of the first artificial surfactant systems forming vesicles, contributing to the birth of a part of nanosciences. By elaborating conceptual frameworks for the quantitative analysis of reaction rates in aggregated systems, he has advanced the understanding of interfacial effects on chemical and biological reactivity. Micelles and vesicles have been used to describe the diverse chemical and physical transitions, specificity of ion binding to interfaces and as models to investigate the origin of life. He has supervised thirty-five graduate theses. Dr. Chaimovich also contributes to the current debates with research and opinions on Higher Education, Science, Technology and Policy.

Anthony Clayton

Member

Dr. Anthony Clayton is the Alcan Professor of Caribbean Sustainable Development at the University of the West Indies, Visiting Professor at the Centre for Environment and Sustainability in the School of Engineering at the University of Surrey, and Affiliated Scholar at the Jack Gordon Institute for Public Policy in the Steven Green School of International and Public Affairs at Florida International University. He has served as Visiting Professor at the Institute for Studies of Science, Technology and Innovation in the School of Social and Political Studies at the University of Edinburgh, Adjunct Distinguished Professor of Sustainable Development in the Faculty of Business and Management, University of Technology, Jamaica, and International Associate of the Centre for Social and Environmental Accounting Research in the School of Management at the University of St Andrews. He is a Fellow of the Caribbean Academy of Sciences, a Fellow of the World Academy of Sciences, where I serve as the Chairman of the Membership Advisory Committee for Social and Economic Sciences, Co-Chair of the Energy Program of the Inter-American Network of Academies of Science, and Distinguished Fellow of the Caribbean Association of Eastern European Trained Professionals. He is the Chairman of the Broadcasting Commission of Jamaica. His main research areas include fore sighting, national and citizen security, energy security, planning and regulation, urban development, and the transition to a digital society and economy.

Elva Escobar-Briones

Member

Dr. Elva Escobar-Briones is a full-time professor in oceanography at ICML UNAM. She has been a leader in advancing science and knowledge in marine biodiversity of the Mexican deep-sea ecosystems. Her science, of the highest standards, is timely delivered to decision- makers and has been used to define policies, design conservation networks and programs in the deep ocean in the Mexican EEZ and ABNJ. Her long-term ecological research in the deep sea Gulf of Mexico is strategic to guide the long-term planning actions in collaboration with national and international institutions. She has authored and coauthored with students and collaborators more than 150 publications, 95 of which are in the Science Citation Index (Institute for Scientific Information, Thomson Reuters), book chapters and books describing biodiversity patterns in the abyssal oceanic regions and aquatic ecosystems of Mexico, with a profile of 3104 references, an Hi of 26 and an Hi10 of 61 in Google Scholar. She certified a technique to collect deep sea sediment. Her deep-sea research has been conducted over the past three decades in more than 40 oceanographic expeditions in the Eastern Tropical Pacific, the Gulf of Mexico and the Northern Caribbean Sea using UNAM’s research vessels. She has served as chief scientist on more than half of these. Her cruise results, data and metadata are publicly available at UNINMAR institutional repository. In collaborative efforts supported with submersibles and remotely operated vehicles, to sample new undescribed ecosystems. She has descended to the deep ocean on the French Nautile, a mini submarine operated by IFREMER. She has contributed with biological oceanography capacity building at the undergraduate and graduate levels. Under her mentorship 70 students have graduated and postdoctoral students have been engaged in her research projects.

Jorge A. Huete-Pérez

Member

Dr. Jorge A. Huete-Pérez is the founder and director of the Molecular Biology Center at the University of Central America (MBC-UCA). He received his Ph.D. in Biological Sciences/Biochemistry through a joint program at the University of Sao Paulo, School of Medicine, Brazil, and the University of California San Francisco School of Medicine (UCSF). Dr. Huete has received numerous awards from diverse organizations including the WHO, McArthur Foundation, CAPES International Science Fellowships, Rockefeller Foundation, Sandler Center, and UCSF. He also won a Pew Latin American Fellowship for postdoctoral research in molecular parasitology at the University of California UCSF (1996-1998). In 1999, he returned to Nicaragua to build a solid foundation for science in his homeland, at which time he founded the MBC-UCA. In 2001, Dr. Huete participated in the STI Program at the Center for International Development, Kennedy School of Government, Harvard University. In 2004 he spent a sabbatical year as a Research Fellow at the Sandler Molecular Parasitology Center of UCSF. Since 2014 Dr. Huete is Vice Rector of Research and Social Outreach at the University of Central America, Managua. He is a consultant to numerous governmental and non-governmental organizations, including the Economic Commission for Latin America and the Caribbean (CEPAL-ECLAC). His current research includes molecular parasitology and microbiology, forensic DNA typing and bioprospecting for industrial enzymes. He is an outspoken advocate for improving science education and the appropriate use of biotechnology for development. Dr. Huete is Associate Editor of the international journal PLOS Neglected Tropical Diseases. In 2009 he became the founding President of the Nicaraguan Academy of Sciences, serving for two consecutive terms. In 2010 he became a founding member of the Global Young Academy. He has also been a member of the Executive Board of the Inter-American Network of Academies of Science, IANAS.

Bradley A. Malin

Member

Dr. Bradley Malin, Ph.D., is the Accenture Professor of Biomedical Informatics, Biostatistics, and Computer Science at Vanderbilt University, as well as Vice Chair for Research Affairs in the Department of Biomedical Informatics at Vanderbilt University Medical Center. He is the co-director of the Vanderbilt AI Discovery & Vigilance to Accelerate Innovation & Clinical Excellence (ADVANCE) Center. He is one of the principal investigators (PIs) of the Artificial Intelligence/Machine Learning Consortium to Advance Health Equity and Researcher Diversity (AIM-AHEAD) initiative of the U.S. National Institutes of Health (NIH), as well as the NIH’s Bridge2AI Center. He is an appointed member of the Board of Scientific Counselors of the National Center for Health Statistics of the Centers for Disease Control and Prevention (CDC), as well as the Technical Anonymisation Group of the European Medicines Agency. Among various honors, he is an elected fellow of the U.S. National Academy of Medicine (NAM), the American College of Medical Informatics (ACMI), the American Institute for Medical and Biological Engineering (AIMBE), Institute of Electrical and Electronics Engineers (IEEE), and the International Academy for Health Sciences Informatics (IAHSI). He was also a recipient of the Presidential Early Career Award for Scientists and Engineers (PECASE) from the White House.

Monica Orozco Figueroa

Member

Dr. Monica Orozco Figueroa has a BSc in Biochemistry (Universidad del Valle de Guatemala (UVG), 1999), MSc in Food Science and Technology (UVG, 2004), and PhD in Food and Nutritional Sciences (University of Manitoba, Canada, 2008). In 2001 she began working at the Center for the Studies of Sensory Impairment, Aging and Metabolism (CeSSIAM), where she continues conducting research on the safe and effective delivery of micronutrients to vulnerable populations, childhood stunting, environmental toxicology, iron metabolism and inflammation. Since 2008 she held different positions within the UVG, working in and directing various academic and research units, such as the MSc in Food Technology & Management Program, the Center for Atitlán Studies, the Center for Agricultural and Food Studies, and the Sustainable Economic Observatory. In 2012 she was awarded the TWAS Prize for Young Scientists in Developing Countries and later she was inducted in Guatemala´s Medical, Physical and Natural Sciences Academy, where she is currently part of the Board of Members. Author of several articles in international peer-reviewed journals, Monica has also participated in numerous national and international conferences. To promote evidence-based decision-making at different levels, she has also been involved in numerous regional and national technical commissions addressing Guatemala’s water and food security issues.

Leonard Pease

Member

Dr. Leonard Pease, the Senior Director of Operations at the Center for Hydrogen Safety, is a distinguished engineer with a diverse career spanning entrepreneurial ventures, government, and academia. Highlights include inventing novel image contrast agents for the esophagus and advancing them to clinical trials, developing modular mesofluidic separators to accelerate particle removal from process streams at scale, growing an interdisciplinary research and development group from 50 to 70 professionals, leading multi-million-dollar programs for DOE, serving on a U.S. Delegation to the United Nations, and co-chairing symposia for the U.S. National Academies of Science, Engineering and Medicine (NASEM). Dr. Pease has over 100 publications and intellectual property filings and is a newly minted Fellow of the American Institute of Chemical Engineers (AIChE). Dr. Pease received a Silver Metal from the U.S. Department of Commerce for work developing the first gold nanoparticle reference material, the William H. Corcoran Award from the American Society of Engineering Education, and numerous outstanding performance awards from the Pacific Northwest National Laboratory (PNNL). He earned a Ph.D. from Princeton University in chemical and materials engineering and completed a National Research Council postdoctoral research fellowship at the National Institute of Standards and Technology (NIST).

Juan Carlos Rodriguez-Reyes

Member

Dr. Juan Carlos Rodriguez-Reyes is the Director of the Research Center for Heritage Conservation and Professor at the Department of Chemical Engineering, both at UTEC – Universidad de Ingenieria y Tecnologia in Lima, Peru. He is a chemist, trained in materials science and engineering (Pontificia Universidad Católica del Peru, B. S.), surface and materials chemistry (University of Delaware, Ph. D.) and heterogeneous catalysis (Harvard University, Postdoctoral fellow). Upon his return to Peru, he focused on directing his knowledge in surface and materials science to mineral processing and extractive metallurgy, heritage conservation and nanomaterials. He has received numerous distinctions, including the Hoffmann Award (American Vacuum Society, 2009), the Wolf Award (University of Delaware, 2011), the Phosagro-UNESCO-IUPAC award (2014) and UTEC´s award to excellence in research (2016, 2018, 2019). He is currently a fellow of the International Institute for Conservation (IIC) and member of the international advisory committee of the International Mineral Processing Council (IMPC).

Karen B. Strier

Member

Dr. Karen B. Strier is Vilas Research Professor and Irven DeVore Professor of Anthropology at the University of Wisconsin-Madison. She earned her PhD from Harvard University, and is an international authority on the endangered northern muriqui monkey, which she has been studying in the Brazilian Atlantic Forest since 1982. She is Co-chair of the Inter-American Network of Academies of Sciences – IANAS and served as president of the International Primatological Society from 2016-2022. She is a member of the Brazilian Academy of Sciences (ABC), the U.S. National Academy of Sciences (NAS), the American Academy of Arts and Sciences, and a fellow of the American Association for the Advancement of Sciences. She has chaired committees and served in leadership roles within these and other professional societies. A distinguished primatologist and conservationist, she has received numerous awards. Her pioneering, long-term field research has been critical to conservation efforts on behalf of the muriqui and has been influential in shaping comparative perspectives on primate behavioral and ecological diversity more broadly.

Giselle Tamayo-Castillo

Member

Dr. Giselle Tamayo-Castillo is Professor of the School of Chemistry at the University of Costa Rica (UCR), where she holds a tenure position since 1991. Currently Dr. Tamayo-Castillo is Director of the Center for Natural Products Research (CIPRONA) at UCR and holds representation at the Postgraduate Program in Chemistry, which she directed in several non-consecutive periods, until 2018. She was also part of the Scientific Council of the Center for Electrochemistry and Chemical Energy Research (CELEQ).

In 2012, she was elected in the National Academy of Sciences of Costa Rica being one of the few women memberships. Dr. Tamayo-Castillo has been president of the Board of Directors of the National Council for Scientific and Technological Research (CONICIT) for four periods, an appointment that ends on April 30, 2021. Her appointment at the Board of Directors as member has recently been renewed for another 5 years.

She served as Scientific and Technical Coordinator of the Bioprospecting Program of the National Institute of Biodiversity (INBio) for more than 20 years, where she led over 60 different research projects. She actively participated in the development of the 21st Century Strategy for the next 50 years and collaborated in the conception of the infrastructure for CENIBiot, a biotechnological research laboratory of the National Center of High Technology (CeNAT-CONARE) and in the evaluation of its equipment.

Dr. Tamayo-Castillo is an associate of the 21st Century Strategy Association (2010-) and was part of the OPENNAPIS project steering committee of the National Institutes of Health of the United States (NIGMS-NIH). She obtained a bachelor's degree and a Licentiate degree in Chemistry from the University of Costa Rica and later her Ph.D. in Natural Sciences from the Technical University of Berlin, Germany. She has been a master thesis tutor at the University of Costa Rica (since 2004, all cum laude) and is the author or co-author of more than 60 scientific research articles and 5 book chapters.

Her current field of research focuses on the discovery of Natural Products from different sources with potential therapeutic value. In addition, she performs works on metabonomics, metabolomics and chemical profiles, as well as synthesis of Natural Products derivatives. She has received different distinctions, two "Contributions to Excellence" Awards (FIFCO), a special recognition for the "Contributions to research in the field of Natural Products" of the Federated Association of Chemists, the "Family of Girolami Award 2005 for the article "Invitro antiviral activity of Chamaecrista nictitans (Fabaceae) against herpes simplex virus: Biological characterization of mechanisms of action"; Honorable mention to the creativity and innovation of INBio and the dedication of a species: Diradops tamayoae, INBio (2001).

Daniel Placht

Staff Officer