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EDUCATION

Ph.D. Biochemistry
Universidad de la República/ PEDECIBA
Facultad de Medicina
Montevideo, Uruguay 1988-1991

M.D. General Medicine
Universidad de la República
Facultad de Medicina
Montevideo, Uruguay 1981-1988

POSITIONS

2006 to date *Professor and Chairman*
Department of Biochemistry
Universidad de la República
Montevideo, Uruguay

Director, Centro de Investigaciones Biomédicas
Coordinator, Laboratorio de Oncología Básica y Biología Molecular
Scientific Director, Programa de Alimentos y Salud Humana
Facultad de Medicina, Universidad de la República

1996-2006 Professor
Department of Biochemistry
Universidad de la República
Montevideo, Uruguay

<u>1991-1995</u>	Associate Professor Department of Biochemistry Universidad de la República Montevideo, Uruguay
<u>1989 to 1991</u>	Visiting Professor Research Division Department of Anesthesiology The University of Alabama at Birmingham Birmingham, Alabama United States of America
<u>1988 to 1991</u>	Assistant Professor, Department of Biochemistry (full time)
<u>1987-1988</u>	Assistant Professor, Department of Biochemistry (tenure)
<u>1984-1987</u>	Instructor, Department of Biochemistry, Universidad de la República, Montevideo, Uruguay

RESEARCH INTERESTS

I investigate the biochemistry and metabolism of molecular oxygen, oxygen radicals, nitric oxide and peroxynitrite and how these molecules participate in cell homeostasis, signal transduction and toxicity at the molecular, mitochondrial, cellular, tissue and animal levels. I participate on the development and characterization of probes and methods for the detection of a) transient reactive species and b) intermediates and products formed from the reactions of oxidants with biomolecules. One of the focuses of our work is to understand alterations of mitochondrial redox homeostasis, oxidant formation and its contribution to disease states. Oxidative modifications to biomolecules such as proteins and lipids are investigated with functional and structural biology approaches. I also study the biochemical properties and actions of natural and synthetic redox-active molecules both *in vitro* and *in vivo*. Our work is aimed to define the biochemical mechanisms and role of redox processes in human physiology and pathology, in particular in inflammatory, infectious and degenerative diseases and the aging process. In parallel with these investigations, we search for novel therapeutic strategies that can modulate redox homeostasis, with emphasis in mitochondrial-targeted actions.

PUBLICATIONS (340; ISI *h index* = 95 -web of science-)

1. Rios N, Aicardo A, Chavarría C, Ivagnes R, Mastrogiovanni M, **Radi R**, Souza JM. Photochemically-induced protein tyrosine nitration *in vitro* and *in cellula* by 5-methyl-1,4-dinitro-1H-imidazole (DNI): synthesis and biochemical characterization. *Free Radic Biol Med*. 2023 Nov 20;209(Pt 1):116-126. doi: 10.1016/j.freeradbiomed.2023.09.038. Epub 2023 Sep 30. PMID: 37783316.
2. Möller M, Alleva K, Zeida A and **Radi R**. Diffusion and Transport of Peroxynitrite across Cell Membranes. In: *Peroxioporins: Redox Signal Mediators In and Between Cells*, Ed. Medraño-Fernandez I, Bienert GP and Sitia R, CRC Press, Taylor & Francis Group, Chapter 3: 21-40 eBook ISBN 9781003160649, 2023
3. Kiyuna LA, Candido DS, Bechara LRG, Jesus ICG, Ramalho LS, Krum B, Albuquerque RP, Campos JC, Bozi LHM, Zambelli VO, Alves AN, Campolo N, Mastrogiovanni M, Bartesaghi S, Leyva A, Durán R, **Radi R**, Arantes GM, Cunha-Neto E, Mori MA, Chen CH, Yang W, Mochly-Rosen D, MacRae IJ, Ferreira LRP, Ferreira JCB. 4-Hydroxynonenal impairs miRNA maturation in heart failure via Dicer

- post-translational modification. *Eur Heart J.* 21;44(44):4696-4712. doi: 10.1093/eurheartj/ehad662. PMID: 37944136, 2023
4. Trujillo M, Piacenza L, **Radi R.** Reactivity of mitochondrial peroxiredoxins with biological hydroperoxides. *Redox Biochemistry and Chemistry*, Volumes 5–6, 100017, <https://doi.org/10.1016/j.rbc.2023.100017> 2023
 5. Winterbourn CC, Peskin AV, Kleffmann T, **Radi R**, Pace PE. Carbon dioxide/bicarbonate is required for sensitive inactivation of mammalian glyceraldehyde-3-phosphate dehydrogenase by hydrogen peroxide. *Proc Natl Acad Sci USA.* 2023 May 2;120(18):e2221047120. doi: 10.1073/pnas.2221047120. Epub 2023 Apr 25. PMID: 37098065, 2023
 6. Cardozo G, Mastrogiovanni M, Zeida A, Viera N, **Radi R**, Reyes AM, Trujillo M. Mitochondrial Peroxiredoxin 3 Is Rapidly Oxidized and Hyperoxidized by Fatty Acid Hydroperoxides. *Antioxidants (Basel)*;12(2):408. doi: 10.3390/antiox12020408. PMID: 36829967; PMCID: PMC9952270, 2023
 7. Campolo N, Mastrogiovanni M, Mariotti M, Issoglio FM, Estrin D, Hägglund P, Grune T, Davies MJ, Bartesaghi S, **Radi R.** Multiple oxidative post-translational modifications of human glutamine synthetase mediate peroxynitrite-dependent enzyme inactivation and aggregation. *J Biol Chem.* 2023 Mar;299(3):102941. doi: 10.1016/j.jbc.2023.102941. Epub 2023 Jan 23. PMID: 36702251; PMCID: PMC10011836, 2023
 8. Bago Á, Cayuela ML, Gil A, Calvo E, Vázquez J, Queiro A, Schopfer FJ, **Radi R**, Serrador JM, Íñiguez MA. Nitro-oleic acid regulates T cell activation through post-translational modification of calcineurin. *Proc Natl Acad Sci USA.* 2023 Jan 24;120(4):e2208924120. doi: 10.1073/pnas.2208924120. Epub 2023 Jan 18. PMID: 36652486; PMCID: PMC9942794, 2023
 9. Tomasina F, Martínez J, Zeida A, Chiribao ML, Demicheli V, Correa A, Quijano C, Castro L, Carnahan RH, Vinson P, Goff M, Cooper T, McDonald WH, Castellana N, Hannibal L, Morse PT, Wan J, Hüttemann M, Jemmerson R, Piacenza L, **Radi R.** De novo sequencing and construction of a unique antibody for the recognition of alternative conformations of cytochrome c in cells. *Proc Natl Acad Sci USA*; 119(47):e2213432119. doi: 10.1073/pnas.2213432119. PMID: 36378644, 2022
 10. Sánchez AG, Ibarгойen MN, Mastrogiovanni M, **Radi R**, Keszenman DJ, Peluffo RD. Fast and biphasic 8-nitroguanine production from guanine and peroxynitrite. *Free Radic Biol Med.*; 193(Pt 1):474-484. doi: 10.1016/j.freeradbiomed.2022.10.317. Erratum in: *Free Radic Biol Med.* 2022 Nov 18;193(Pt 2):656. PMID: 36332879, 2022
 11. Bartesaghi S, Garcés G, Barrios E, **Radi R.** A scientific methodology course for advanced medical students: an eight-year perspective. *MedEdPublish*;12:50. doi: 10.12688/mep.19171.1. PMID: 36168539; PMCID: PMC9427080, 2022
 12. **Radi R.** Interplay of carbon dioxide and peroxide metabolism in mammalian cells. *J Biol Chem.* 298(9):102358 doi: 10.1016/j.jbc.2022.102358 PMID: 35961463; PMCID: PMC9485056., 2022
 13. Freeman SL, Skafar V, Kwon H, Fielding AJ, Moody PCE, Martínez A, Issoglio F, Inchausti L, Smircich P, Zeida A, Piacenza L, **Radi R**, Raven EL. Crystal Structure of *Trypanosoma cruzi* Heme Peroxidase and Characterisation of its Substrate Specificity and Compound I Intermediate. *J Biol Chem.* 27:102204. doi: 10.1016/j.jbc.2022.102204. Epub ahead of print. PMID: 35772495, 2022
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 15. Piacenza L, Zeida A, Trujillo M, **Radi R.** The superoxide radical switch in the biology of nitric oxide and peroxynitrite. *Physiol Rev.* doi: 10.1152/physrev.00005.2022. Epub ahead of print. PMID: 35605280, 2022
 16. Zeida A & **Radi R.** Thiol oxidation by biologically-relevant reactive species. In Alvarez B, Comini M, Salinas G, Trujillo M (Eds) *Redox Chemistry and Biology of Thiols* (99-113). *Academic Press*, 2022
 17. Folkes LK, Bartesaghi S, Trujillo M, Wardman P, **Radi R.** Radiolysis Studies of Oxidation and Nitration of Tyrosine and Some Other Biological Targets by Peroxynitrite-Derived Radicals. *Int J Mol Sci*; 23(3):1797. doi: 10.3390/ijms23031797. PMID: 35163717, 2022
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22. Specker G, Piacenza L, **Radi R**, Comini MA. Thiol-Disulphide Redox Signalling/Control during the Life Cycle of Pathogenic Trypanosomatids. In: Redox regulation of differentiation and de-differentiation, Ed. Berndt C and Lillig CH, CRC Press, Taylor & Francis Group, Chapter 3: 37-55 eBook ISBN 9781003204091, 2021
23. Ott C, Tomasina F, Campolo N, Bartesaghi S, Mastrogiovanni M, Leyva A, Batthyány C, Meinl W, Grune T, **Radi R**. Decreased proteasomal cleavage at nitrotyrosine sites in proteins and peptides. *Redox Biology*. Volume 46, 102106, ISSN 2213-2317, doi: 10.1016/j.redox.2021.102106, 2021
24. Demicheli V, Tomasina F, Sastre S, Zeida A, Tórtora V, Lima A, Batthyány C, **Radi R**. Cardiolipin interactions with cytochrome c increase tyrosine nitration yields and site-specificity. *Arch Biochem Biophys.* 30;703:108824. doi: 10.1016/j.abb.2021.108824. Epub 2021 Mar 4. PMID: 33675813, 2021
25. Kameritsch P, Singer M, Nuernbergk C, Rios N, Reyes AM, Schmidt K, Kirsch J, Schneider H, Müller S, Pogoda K, Cui R, Kirchner T, de Wit C, Lange-Sperandio B, Pohl U, Conrad M, **Radi R**, Beck H. The mitochondrial thioredoxin reductase system (TrxR2) in vascular endothelium controls peroxynitrite levels and tissue integrity. *Proc Natl Acad Sci U S A*; 118(7):e1921828118. doi: 10.1073/pnas.1921828118. PMID: 33579817, 2021
26. Folkes LK, Bartesaghi S, Trujillo M, Wardman P, **Radi R**. The effects of nitric oxide or oxygen on the stable products formed from the tyrosine phenoxyl radical. *Free Radic Res*; 1-32. doi: 10.1080/10715762.2020.1870684. Epub ahead of print. PMID: 33399021, 2021
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30. Valera MJ, Boido E, Ramos JC, Manta E, **Radi R**, Dellacassa E, Carrau F. The mandelate pathway, an alternative to the PAL pathway for the synthesis of benzenoids in yeast. *Appl Environ Microbiol.* 2020 Jun 19:AEM.00701-20. doi: 10.1128/AEM.00701-20. Online ahead of print.
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35. Semelak JA, Battistini F, **Radi R**, Trujillo M, Zeida A, Estrin DA. Multi-scale modeling of thiol overoxidation in peroxiredoxins by hydrogen peroxide. *J Chem Inf Model.* doi: 10.1021/acs.jcim.9b00817; 60(2):843-853, 2020
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TECHNICAL REPORTS

WHO Report on Chagas Disease. Scientific Working Group. (http://apps.who.int/tdr/publications/tdr-research-publications/reporte-enfermedad-chagas/pdf/swg_chagas.pdf) (2005)

Reports and conferences for Laboratorios Gramón-Bagó de Uruguay on “Molecular Pharmacology” of different drugs (1998-2019)

Expert Advice, Laboratorio Apiter on “Endothelial dysfunction and alteration of nitric oxide biochemistry” (2012)

Expert Advice, Complexa Biopharmaceuticals (2014-2015)

AUDIOVISUAL MATERIAL

Radi, R. Podcast “The superoxide radical switch in the biology of nitric oxide and peroxynitrite”. Host: Prof. Giovanni Mann (King’s Collage London, UK – Physiological Reviews Associate Editor) (2022)

Radi, R. “#COVID19 in “Preguntas frecuentes sobre la vacunación contra el #COVID19 - Expertos de Uruguay responden”, PAHO (2021)

Radi, R. “Peroxynitrite biochemistry oxidation and nitration reactions”, in Davies, K. (ed.), Free Radicals and the Oxygen Paradox: Oxidative Stress in Biology, Aging and Disease, The Biomedical & Life Sciences Collection, Henry Stewart Talks Ltd, London (online at <http://www.hstalks.com/?t=BL0281739-Radi>) (2007, updated 2018)

VISITING PROFESSOR – INVITED LECTURES

Visiting Professor and Invited lecturer at the following Institutions:

2023

Universidad de Buenos Aires, Argentina
 Universidad de Salamanca, Salamanca, Spain
 CIAL, Universidad Autónoma de Madrid, Madrid, Spain
 IMDEA-Food, Madrid, Spain
 Universidad de Campinas (UNICAMP), São Paulo, Brazil

2022

University of Pittsburgh, USA
 Universidad Autónoma de Madrid, Spain
 Centro de Biología Molecular Severo Ochoa, Madrid, Spain
 ICGEB Trieste, Italy
 Fondazione Italiana Fegato, Italy
 Pontifical Academy of Sciences, Vaticano, Roma, Italy
 Universidad de Valencia, Spain
 Universidad de Buenos Aires, Argentina

2021

Fondazione Italiana Fegato, Italy (virtual)
 Oregon State University, USA (virtual)

2020

University of Alabama at Birmingham, USA
 University of Kentucky, USA
 University of Sao Paulo, Brazil

2019

Institut Pasteur de Montevideo, Uruguay
 Universidad de Salamanca, Salamanca, Spain
 Centro de Biología Molecular Severo Ochoa, Centro
 Mixto CSIC_ Universidad Autónoma de Madrid, Madrid, Spain
 IMDEA Alimentación, Madrid, Spain
 Universidad de Alcala, Alcala de Henares, Spain
 Universidad Federal de Paraná, Curitiba, Brazil
 Universidad de Buenos Aires, Argentina
 Universidad Central de Bogotá, Colombia
 International Centre of Genetic Engineering and Biotechnology, Italy
 University of Pennsylvania, Philadelphia, USA
 University of Pittsburgh, Pittsburgh, USA
 University of West Virginia, Morgantown, USA

2018

Medical College of Wisconsin, USA
 University of Sao Paulo, Brazil
 University of Campinas, Brazil
 Centro de Biología Molecular Severo Ochoa, Madrid, España
 University of Otago, Christchurch, New Zealand
 Universidad de Buenos Aires, Argentina
 Universidad de la Frontera, Pucón, Chile
 Instituto de Investigación Biomédica de Malaga (IBIMA), Málaga, España

2017

Vanderbilt University, Nashville, Tennessee, USA
 Università Degli Study di Perugia, Italy
 Universidade de Campinas, UNICAMP, Campinas, Brazil
 Universidad de Guanajuato, Guanajuato, México
 LANGEBIO_CINVESTAV, Irapuato, México
 Universidad Autónoma de Yucatán, Mérida, México
 Universidad Autónoma de Mexico, Ciudad de México
 International Centre of Genetic Engineering and Biotechnology, Cape Town, South Africa
 University of Turin, Italy
 University of Sao Paulo, Brazil

2016

Universidade Federal de Santa Catarina, Brazil
 International Centre of Genetic Engineering and Biotechnology, Italy
 US National Academy of Sciences, USA
 Karolinska Institut, Sweden
 Universidad de Buenos Aires, Argentina

2015

University of Christchurch, New Zealand
 University of Valencia, Spain
 Centro de Biología Molecular Severo Ochoa, Spain
 Universidade Federal de Santa Catarina, Brazil
 Universidad de Buenos Aires, Argentina
 International Centre of Genetic Engineering and Biotechnology (New Delhi component), India
 University of Bonn, Germany
 Universidade de Sao Paulo, Brazil

2014

University of Frankfurt, Germany
 German Institute of Human Nutrition, Germany
 University of Freiburg, Germany
 University of Heidelberg, Germany
 University of Dusseldorf, Germany
 University of Cape Town, South Africa
 Carleton University, Canada
 Universidad Federal de Santa Catarina, Brazil
 Technical University Darmstadt, Germany
 Universidad de Buenos Aires, Argentina
 Universidad de Antofagasta, Chile

2013

Brazilian Synchrotron Light Laboratory, Campinas, Brazil
 Universidad de Buenos Aires, Argentina
 University of Perugia, Perugia, Italia
 International Centre of Genetic Engineering and Biotechnology, Trieste, Italy
 Technical University Darmstadt, Darmstadt, Germany
 University of Dusseldorf, Dusseldorf, Germany
 University of Jena, Jena, Germany
 Vanderbilt University, USA

2012

Instituto Leloir-Buenos Aires, Argentina
 Universidad de Buenos Aires, Argentina
 Universidad de Valencia, Spain
 Centro de Biología Molecular Severo Ochoa, Spain
 Universidad de Salamanca, Spain
 Institute of Nuclear Chemistry and Technology, Warsaw, Poland

2011

University of Buenos Aires, Argentina
 University Coimbra, Portugal
 Consejo Superior de Investigaciones Científicas, Madrid, Spain
 Universidad de Salamanca, Spain
 Universidad de Jaén, Spain
 Universidad Internacional de Andalucía, Spain
 Darmstadt University, Germany
 Humboldt University, Germany
 Universidad de Gottingen, Germany
 University of Heidelberg, Germany
 Jena University, Germany
 University of Dusseldorf, Germany
 University of Cape Town, South Africa

2010

University of Sao Paulo, Brazil
 Universidad de Buenos Aires, Argentina
 University of Coimbra, Portugal
 Universidad de Perugia, Perugia, Italia
 Centro de Biología Molecular “Severo Ochoa” (CSIC), Spain
 Universidad de Debrecen, Hungary
 Max Planck Institute for Biophysical Chemistry, Germany
 Universidad de Gottingen, Germany

2009

University of Buenos Aires, Argentina
Consejo Superior de Investigaciones Científicas, Madrid, España
University of Coimbra, Portugal
University of Porto, Portugal
University Catolique of Louvain, Belgium
University of Utrecht, Netherlands

2008

University of Buenos Aires, Argentina
University of Coimbra, Portugal
Vanderbilt University, Nashville, USA
University of Pittsburgh, USA

2007

University of Buenos Aires, Argentina
University of Coimbra, Portugal
Vanderbilt University, Nashville, USA
University of Extremadura, Badajoz, Spain
Universidade de Lisboa, Portugal
Instituto Leloir, Buenos Aires, Argentina
Universidad de Valparaíso, Chile
Instituto Mexicano del Seguro Social, México
University of Pittsburgh, USA

2006

University of Buenos Aires, Argentina
University of Coimbra, Portugal
University of Washington, Seattle, USA
Oregon State University, Corvallis, USA
University of Cardiff, Wales, USA
Vanderbilt University, Nashville, USA

2005

University of Buenos Aires, Argentina
Universidad de Perugia, Perugia, Italia
Istituto Superiore di Sanità, Roma, Italia

2004

University of Alabama at Birmingham, USA
University of Buenos Aires, Argentina
University of Heidelberg, Germany
Estación Experimental del Zaidín, CSIC, Granada, Spain
Universidad de Granada, Granada, Spain

2003

University of Buenos Aires, Argentina
University of London, England
Gray Cancer Laboratories, England
University of Coimbra, Portugal
University of Porto, Portugal
University of Extremadura, Spain

2002

University of Buenos Aires, Argentina
University of Otago, New Zealand
University of South Wales, Sidney, Australia
National Institutes of Environmental Medicine, NIH, Research Triangle Park, USA
Consejo Superior de Investigaciones Científicas, Madrid, Spain
Universidade de Rio Grande do Sul, Porto Alegre, Brazil

2001

Universidad de Buenos Aires, Argentina
Oregon State University, USA

2000

Universidad de Buenos Aires, Argentina
University of Alabama at Birmingham, USA
Technological Institute of Zurich, Switzerland
University of Freiburg, Germany

1999

Universidad de Buenos Aires, Argentina
University of Alabama at Birmingham, USA
University of London, Inglaterra
Universidad de Valencia, España
University of Frankfurt, Alemania

1998

University of Pennsylvania, USA
University of Alabama at Birmingham, USA
Medical College of Wisconsin, Milwaukee, USA
University of Cincinnati, Ohio, USA
University of California in Los Angeles, California, USA

1997

University of Stockholm, Sweden
King's College of London, England
University of Dusseldorf, Germany

1996

Universidad de Buenos Aires, Argentina
University of Alabama at Birmingham, USA
Universidad Ciudad de México, México

1995

University of Sao Paulo, Brazil
University of Kumamoto, Japan
University of Osaka, Japan
University of Kyoto, Japan
University of Tokyo, Japan
University of Alabama at Birmingham, USA

University of Stockholm, Sweden
 Technological Institute of Zurich, Switzerland
 University of Iowa, USA

1994

University of Sao Paulo, Brasil
 University of Alabama at Birmingham, USA
 University of Buenos Aires, Argentina
 University of Campinas, Brazil

1993

University of Pennsylvania, USA
 University of Alabama at Birmingham, USA
 Universidad de Buenos Aires, Argentina
 Universidad de Sao Paulo, Brasil

1992

University of Sao Paulo, Brazil
 University of Buenos Aires, Argentina

1991

University of Colorado, USA

INVITED SPEAKER

- Invited speaker, “Carbon dioxide as a metabolic messenger: implications in redox signaling”, at the Workshop "Advanced topics in metabolism and aging", Montevideo, Uruguay, December 2023
- Invited speaker, “Compuestos Bioactivos en Alimentos: Bases Bioquímicas e Impacto en Salud Humana” at the Jornada Divulgación “Agroalimentos INIA: presente y futuro”, Canelones, Uruguay, November 2023
- Invited speaker, “Unraveling the formation and role of free radicals and oxidants in neurodegenerative diseases”, at Symposium “Amyotrophic Lateral Sclerosis: Beyond the Motor Neuron 2023”, Montevideo, Uruguay, November 2023
- Plenary Speaker “Molecular Mechanisms of Aging” IX Congreso Uruguayo de Gerontología y Geriatria and III Foro COMLAT, Montevideo, Uruguay, October 2023
- Opening Conference, 46° Congreso Nacional de Medicina Interna & VII Congreso Nacional de Enfermedades Infecciosas, Montevideo, Uruguay, November 2023
- Panelist in Mesa Intersociedades: Sociedad de Infectología Clínica del Uruguay (SICU), Sociedad Argentina de Infectología (SADI), Asociación Panamericana de Infectología (API), 46° Congreso Nacional de Medicina Interna & VII Congreso Nacional de Enfermedades Infecciosas, Montevideo, Uruguay, November 2023
- Plenary Speaker, “Elucidating the biological chemistry of peroxynitrite, a stealthy oxidant”, Annual Meeting of the Society for Free Radical Research Europe, Vienna, Austria, June 2023
- Plenary Speaker, Resurrecting a unique monoclonal antibody for the recognition of alternative conformations of cytochrome *c* *in vitro* and *in cellula*, VIII Latin American Meeting on Biological Inorganic Chemistry (VIII LABIC), Viña del Mar, Chile, April, 2023
- Plenary Speaker, “Interplay of carbon dioxide and peroxide metabolism in mammalian cells”, XIII MitoMeeting, Guapé, Brazil, April 2023
- Invited Speaker, “*Trypanosoma cruzi* hybrid heme peroxidase catalytically detoxifies peroxynitrite and promotes infection in macrophages”, at the 29th Annual Conference of the Society for Redox Biology and Medicine (SfRBM), Orlando, Florida, USA, November 2022
- Invited speaker, at the Symposium “Translational Opportunities for Redox Biology-Based Therapies for Metabolic and Inflammatory Diseases”, Pittsburgh, USA, November 2022

- Invited speaker, “Experimentos iniciales sobre metabolismo redox mitocondrial en Uruguay: lecciones desde el citocromo c”, at the Symposium “Rol de la mitocondria en la patología”, Uruguay, November 2022
- Invited speaker, “Bioquímica del estrés oxidativo en humanos: relevancia en la formación de AGEs”, at the 5to. Simposio Iberoamericano de AGEs y Salud, Uruguay, November 2022
- Plenary Lecturer, “Science as a human right” at the “Expanding the Frontiers of Science: a Transdisciplinary Approach”, Humboldt Kolleg, Uruguay, October 2022
- Considerations and Comments, research results of “Pandemia y sistema urbano: una caracterización territorial de las cadenas de contagio en la fase inicial de la pandemia Uruguay COVID 19”, Facultad de Arquitectura, Diseño y Urbanismo, October 2022
- Invited speaker, “Oxygen Radicals, Nitric Oxide and Peroxynitrite: Redox Biochemistry in Human Disease”, ICGEB International Seminar Programme, September 2022
- Plenary Lecturer “Basic Science for Humanity and Human Development” at the Symposium “Biochemistry for Human Development, Peace and Planetary Health”, Pontifical Academy of Sciences, Vaticano, Roma, Italia, September 2022
- Considerations and comments, “Covid-19 en Uruguay: una conversación entre Ciencia y Economía” at the Segundo Simposio Inter-Academias, Academia Nacional de Ciencias del Uruguay – Academia Nacional de Economía – Academia Nacional de Medicina, Uruguay, August 2022
- Invited speaker, “Peroxynitrite, Peroxiredoxins and Carbon Dioxide: Thiol Oxidation and Overoxidation” at the “Thiol-Based Redox Regulation and Signaling” GRS/GRC, Spain, July 2022
- Panelist, Session "Protecting Professionals in the Public Sphere", at the WPF2022 Global Conference “Journalism Under Digital Siege”, UNESCO, Uruguay, April 2022
- Invited speaker, Seminar and Closing Conference de RISEP: “La agenda futura de investigación de las ciencias sociales”, RISEP, Uruguay, April 2022
- Panelist at the Conference: “The pandemic two years on: what have we learned, what needs to be done next and how can we be better-placed to deal with future crises”, INGSA-IPPO, March 2022
- Book commentator “Entre la vida y la muerte. Salud y enfermedad en el Uruguay de entresiglos”, Museo Histórico Nacional, Uruguay, December 2021
- Seminar “Experiences during the COVID-19 pandemic: from science advice to redox biochemistry studies on SARS-CoV2”, Oregon State University, USA, December 2021
- Invited speaker “Analizando e integrando el concepto de “Una Salud””, Congreso de la Asociación Uruguaya de Producción Animal, December 2021
- Invited speaker to the forum about the Strategic Institutional Plan, INIA, Uruguay, December 2021
- Panelist at “ECOSISTEMA 1.7- Las alianzas como promotoras de la recuperación”, Annual Conference “DERES 2021”, Uruguay, November 2021
- Invited speaker "Superoxide, peroxynitrite and mitochondria", Simposio en Honor a Alberto Boveris, Sociedad Argentina de Investigación Clínica, Argentina, November 2021
- Chair at the Symposium “Redox Biology”, 20th IUPAB Congress, 45th Annual SBBf Meeting, and 50th Annual SBBq Meeting, Brazil, October 2021
- Invited speaker “La Ciencia como apoyo a las decisiones políticas de los gobiernos” at “Encuentro Uruguay-Chile, Protagonistas de la Innovación con Impacto Global, Líderes Creando Futuro en Tiempos de Pandemia”, Uruguay, October 2021
- Invited lecturer “La ciencia nacional en encrucijada: entre la comprobación y la incertidumbre”, at the “Ceremonia de Conmemoración del Centésimo Aniversario del Ac. Prof. Dr. Roberto Caldeyro-Barcia”; Ministerio de Educación y Cultura, Academia Nacional de Ciencias y Academia Nacional de Medicina, Uruguay, September 2021
- Invited speaker, “Día del Futuro”, Parlamento del Uruguay, September 2021
- Invited speaker, Symposium “Les Diasporas Vecteurs de Développement”, Groupe interacadémique pour le développement (GID), Francia, September 2021
- Panelist at the Seminario “Producción y Comunicación Científica sobre COVID-19 en pandemia”, Diplomatura en Salud Pública, Uruguay, September 2021
- Invited speaker “Conversaciones para la pospandemia”, Taller Velázquez, Facultad de Arquitectura, Diseño y Urbanismo, UDELAR, Uruguay, September 2021
- Opening plenary panel, Build Back Wiser: Knowledge, Policy and Publics in Dialogue at the International Conference on Science Advice to Governments, Canada, August-September 2021

- Plenary Lecture “The Oxygen Paradox in Human Biology and Medicine: Bioenergetics, Free Radicals and Oxidative Stress”, PABMB Lecture in the 45th FEBS Congress, Slovenia, July 2021
- Invited speaker, Jornadas “El derecho de la pandemia”, Instituto de Teoría General y Filosofía del Derecho de la Facultad de Derecho, UDELAR (virtual), June 2021
- Invited speaker, Jornada "Aportes de la Información y la Comunicación para pensar la pandemia", Facultad de Información y Comunicación, UDELAR, Uruguay (virtual), June de 2021
- Invited speaker, Jornada “Inicio a las Residencias Médicas y Postgrados 2021”, Consejo Administrador Honorario del Sistema Nacional de Residencias Médicas, Escuela de Graduados, Facultad de Medicina, UDELAR, Uruguay (virtual), mayo de 2021
- Plenary Speaker, VII Latin American Meeting on Biological Inorganic Chemistry, Uruguay (virtual), April 2021
- Invited Lecture to the Conference: Public Policies for management of the COVID-19 pandemia: The cases of Italy and Uruguay, Italian Embassy in Uruguay and Instituto Italiano de Cultura, April 2021
- Panellist, at the Session “La comunicación de la ciencia con la sociedad: asesoramiento científico para las políticas públicas y lucha contra la desinformación”, in the 3^a edición del Foro Abierto de Ciencias de América Latina y el Caribe -CILAC 2021-, April 2021
- Invited Lecture to the International Symposium of the DFG Priority Program 1710. Dynamics of Thiol-based Redox Switches in Cellular Physiology, “Mitochondrial redox metabolism, peroxiredoxins and the fate of peroxynitrite”, March 2021
- Invited Lecture, The Yellow Webinars, “Nitric Oxide, Peroxynitrite and Protein Tyrosine Nitration: Disruption of Redox Pathways in Human Disease”, Fondazione Italiana Fegato, February 2021
- Invited Lecture, Virtual workshop, Critical scientific capacities to respond to a public health emergency such as Covid-19. Inter-American Development Bank, February 2021
- Invited Lecture to Comisión de Expertos en Seguridad Social, “Biología del Envejecimiento, Salud y Longevidad”, December 2020
- Invited Lecture to 36° Congreso Uruguayo de Cardiología, “Interacciones entre ciencia y medicina en el 2020”, December 2020
- Panellist at 4° Reunión Técnica EIP. Panel: Políticas públicas gubernamentales - Academia/instituciones formadoras - El impacto de la pandemia para la formación y trabajo interprofesional - Conformando Redes Nacionales de EIP: la experiencia de la UNIREN-EIP en la era de la pandemia de COVID-19, “Acerca de la experiencia del Grupo Asesor Científico Honorario (GACH) en Uruguay: lecciones en pandemia”, November 2020
- Invited Speaker, Ciclo de conversatorios El mañana pospandemia, en la mesa Toma de decisiones con base en evidencia (La Diaria), November 2020
- Invited Speaker, 3° Congreso Iberoamericano de Ingeniería de los Alimentos. Mesa redonda: Alimentos y Salud, “Alimentos, salud y longevidad”, Uruguay (virtual), November 2020
- Invited speaker at 3° Congreso Iberoamericano de Ingeniería de los Alimentos, “Programa de Alimentos y Salud Humana”, Uruguay (virtual), November 2020
- Invited Lecture to International Network for Government Science Advice (INGSA), The Americas Discussion Panel: Science Advice and Covid-19, September 2020
- Invited Lecture on the Course on “Covid-19, An approximation to the critical patient”. Unidad de Medicina Intensiva, Hospital Español, Montevideo, Uruguay, September 2020
- Invited Speaker, CILAC Coloquia 2020-2021 “Ciencia en movimiento”, August 2020
- Plenary Lecture/Webinar: Más y Mejor Ciencia. Inter-American Bank of Development (IABD), June 2020
- Plenary Lecture, 4th Protein Biophysics at the end of the world, Montevideo, Uruguay, October 2019
- Plenary Lecture, 9th Simposio Internacional de Innovación y Desarrollo de Alimentos, INNOVA 2019, Montevideo, Uruguay, October 2019
- Keynote Lecture, SPP1710 Conference on Thiol-based Switches and Redox Regulation, Sant Feliu de Guixols, Spain, September 2019
- Keynote Conference, 2nd Auracaria Symposium, Cell Stress, Curitiba, Parana, Brazil, June 2019
- Keynote Conference, Alexander von Humboldt Foundation Colloquium on Curiosity-Driven Research, Buenos Aires, Argentina, October 2018
- Plenary Conference, International Symposium on Mitochondria and Cell Metabolism, Montevideo, Uruguay, October 2018

- Keynote Conference, V Symposium of Human Biology, CENUR Noroeste, Salto, Uruguay, September 2018
- Opening Lecture, XI Uruguayan Congress of Nephrology and V Symposium of Nephrology of Rio de la Plata Region, Montevideo, Uruguay, August 2018
- Inaugural Lecture “Leopoldo DeMeis”, 11th MitoMeeting, Guapé, Brazil, July 2018
- Invited Lecture, 19th Biennial Meeting of the Society for Free Radical Research International, Lisbon, Portugal, June 2018
- Inaugural Christine Winterbourn Conference, University of Otago, Christchurch, New Zealand, April 2018
- Invited Speaker, Alexander von Humboldt Kolleg on Translational Medicine, Pucón, Chile, March 2018
- Keynote Speaker, Academia Nacional de Medicina, Uruguay, December 2017
- Honor Lecture, Curso de la Clínica de Gastroenterología del Uruguay, joint meeting Uruguay-Chile-España, Montevideo, noviembre de 2017
- Invited Speaker, Workshop in Cell Biology and Genetics, The Pontifical Academy of Sciences, Vatican City, October 2017
- Inaugural Lecture, 5th Encuentro Nacional de Química (ENACUI), Montevideo, Uruguay, October 2017
- Keynote Speaker, 46th International Union of Pure and Applied Chemistry World Chemistry Congress (IUPAC 2017), Sao Paulo, July 2017
- Opening Lecture, II Oficina Ibero-americana sobre Metabolismo e Bioenergética em Doenças Neurológicas e Neurodegenerativas, Universidad Federal de Santa Catarina, Florianopolis, Brazil, July 2017
- Invited Speaker, World Congress Oxygen Club of California and Meeting of the Society for Free Radical Research Europe, Berlin, Germany, June 2017
- Keynote Speaker, Gordon Research Conference on Oxidative Stress & Disease, Il Ciocco, Italy, March 2017
- Keynote Speaker, Gordon Research Conference on Nitric Oxide, Ventura, California, February 2017
- Keynote Lecturer, IX Iberoamerican Congress of Biophysics_XLV Congress Sociedad Argentina de Biofísica, Tucumán, Argentina, November 2016
- Keynote Speaker of the Society for Free Radical Research-Europe on the FEBS Advanced Lecture Course on “Redox Regulation of Metabolic Processes”. Spetses, Greece, September 2016
- Invited Speaker, 6th Symposium of the DFG Priority Program “Dynamics of Thiol-based Redox Switches in Cellular Physiology”, Kloster Irsee, Germany, September 2016
- Invited Speaker, Structural Biology Workshop England-Uruguay, "Integrative methods in Structural Biology to enhance high impact research in health and disease", Pasteur Institut Montevideo, February 2016
- Opening Conference, Joint Meeting of the Societies for Free Radical Research Australasia and Japan, Christchurch, New Zealand, December 2015
- Invited Speaker, Congreso Anual de la Sociedad Argentina de Investigaciones Bioquímicas (SAIB 2015), Mar del Plata, Argentina, November 2015
- Invited Speaker, ESF-EMBO Symposium “Thiol-based Redox switches in Life Sciences”, in Sant Feliu, Spain, September 2015
- Invited Speaker, 23rd International Union of Biochemistry and Molecular Biology Congress, Foz de Iguazú, Brazil, August 2015
- Plenary Speaker, Oxygen Club of California World Meeting, Valencia, Spain, June 2015
- XXII Congress of the Asociación Latinoamericana de Patología Clínica y Medicina de Laboratorio. Punta del Este, Uruguay, November 2014
- Kolloquien des Sonderforschungsbereichs974-Kommunikation und Systemrelevanz bei Leberschädigung und Regeneration-Universität Dusseldorf- October 2014
- Invited Speaker, Latin American Summit Meeting on Biological Crystallography and Complementary Methods, Campinas, Brazil, September 2014
- Invited Plenary Speaker, IV Latin America Meeting in Bioinorganic Chemistry, Chascomús, Province of Buenos Aires, Argentina, August 2014
- International Symposium, Mitochondria: bioenergetics, cellular metabolism and signaling. Montevideo, Uruguay, July 2014
- Invited Plenary Speaker, Canadian Oxidative Stress Consortium (COSC) 2014 Conference, Ottawa, Canada, June 2014

- Invited Plenary Speaker, 17th Biennial Meeting of Society for Free Radical Research International, Kyoto, Japan, March 2014
- Invited Speaker, First Conference of the South American Chapter of the Cell Stress Society International, Montevideo, Uruguay, March 2014
- Invited Plenary Speaker on the XII Meeting of the Panamerican Association of Biochemistry and Molecular Biology (PABMB), Puerto Varas, Chile, November 2013
- Invited Plenary Speaker on the VIII Meeting of the Society for Free Radical Biology and Medicine South American Group, Buenos Aires, October 2013
- Invited Plenary Speaker on the 6th Joint Meeting of the Societies for Free Radical Research Australasia and Japan, Sidney, Australia, September 2013
- Invited Plenary Speaker on the XII International Symposium on Metal Ions in Biology and Medicine, Punta del Este, Uruguay, March 2013
- Invited Speaker in the Symposium on Free Radicals in Chemical Biology. Institute of Nuclear Chemistry and Technology, Warsaw, Poland, September 2012
- Invited Speaker at the International Meeting of the Society for Free Radical Research International, London, England, August 2012
- Inaugural Conference in the 5th Mito-Meeting, Guapé, Brazil, August 2012
- Invited Speaker in the International Symposium on “Redox Signaling in Health and Disease”, Valencia, Spain, June 2012
- Plenary Speaker at XLI Reunião Anual da Sociedade Brasileira de Bioquímica e Biologia Molecular – SBBq, Foz de Iguazú, Paraná, Brazil, May 2012
- Plenary Invited Speaker, 18th Annual Meeting of the Society for Free Radical Biology and Medicine, Atlanta, USA, November 2011
- Plenary Invited Speaker, 13th IUBMB Conference, Mérida, Mexico, October 2011
- Plenary Invited Speaker, Workshop on “Protein Dynamics and Reactivity”, Organized by DAAD (Germany) and Universidad Nacional de Tucumán y Universidad Nacional de Santiago del Estero, Tucumán, Argentina, September 2011
- Guest Invitee, Annual Meeting of the Alexander Von Humboldt Foundation, Berlin, Germany, June 2011
- Guest Invitee, 61st Nobel Laureates Meeting (Physiology/Medicine), Lindau, Germany, June 2011
- Session Chair, 4th Symposium International Nutrition, Biologie de l’Oxygène et Médecine, Oxygen Club of California and Societé Francaise de Recherches sur les Radicaux Libres, Paris, June 2011
- Alexander Von Humboldt Symposio “Protein Tyrosine Nitration in Disease and Aging”, Dusseldorf, June 2011
- International Course and Symposium on “Redox Chemistry and Biology of Thiols”, Montevideo-Punta Ballena, Uruguay, March 2011
- 3rd Latin American Protein Society Meeting; Salta, Argentina, October 2010
- Inaugural Conference, Sociedad Uruguaya de Biociencias (Conferencia de Apertura); Piriápolis, Uruguay, May 2010
- International Symposium on the Pathophysiology of Reactive Oxygen and Nitrogen Species, Salamanca, Spain, May 2010
- Gordon Research Conference on “Thiol-Based Redox Regulation and Signaling”. Il Ciocco, Italy, May 2010
- International Conference on EPR and Spin Trapping (“14th In Vivo EPR Spectroscopy and Imaging” and the “11th International EPR Spin Trapping/Spin Labeling”). San Juan, Puerto Rico, May 2010
- VI Meeting of the Society for Free Radical Biology and Medicine-South American Group, Santiago, Chile, 2009
- United Mitochondrial Disease Foundation (UMDF) Mitochondrial Medicine 2009 – Washington, DC Symposium, Tyson Corners, Virginia, USA, June 2009
- Belgium Society of Biochemistry and Molecular Biology, Belgium, May 2009
- Congreso Latinoamericano de Farmacología, Coquimbo, Chile, October 2008
- 12 Congreso Internacional del Hospital de Clínicas, Buenos Aires, Argentina, August 2008
- 236th ACS National Meeting & Exposition, Philadelphia, PA, USA, August 2008
- International Meeting del Howard Hughes Medical Institute, Lisboa, Portugal, June 2008.
- Reunión del South American Group of the Society for Free Radical Biology and Medicine, Buenos Aires, Argentina, April 2008

- III Workshop the Química Bioinorgánica, Buenos Aires, Argentina, March 2008
- II Taller y Workshop Mexicano de “Estrés Oxidativo”, Cuautla, Mexico, October 2007
- 6th International Conference on Biological Physics, Montevideo, Uruguay, August 2007
- 3rd Symposium of Oxygen Radicals in Biological Systems, Valparaíso, Chile, July 2007
- 2nd Symposium Internacional: Nutrition, Oxygen Biology and Medicine. Oxygen Club of California-SFRR Europe. Paris, France, April 2007
- International Symposium “Molecular Immunology of Protozoan Infections” Academia Nacional de Medicina de Argentina, Buenos Aires, Argentina, March 2007
- Inaugural Conference in the XXXV Reunión de la Sociedad Brasileira de Bioquímica y Biología Molecular. Aguas de Lindoia, Brazil, July 2006
- Fourth International Conference on the Biology, Chemistry and Therapeutic Applications of Nitric Oxide. Monterrey, California, June 2006
- 62nd Harden Conference: “Nitric Oxide: A radical under control”; The Biochemical Society, Cirencester, England, April 2006
- International Meeting of the Oxygen Club of California, Alba, Italy 2005
- Expert Advisory Board of WHO/PAHO. Scientific Working Group on Chagas Disease. Buenos Aires, Argentina, April 2005
- Plenary Speaker of the “International Symposium Amyotrophic Lateral Sclerosis: Beyond The Motor Neuron”. Casapueblo/Punta del Este, Uruguay, March 2005
- Plenary Speaker of the 2nd Spanish and Portuguese Congress on Free Radicals, Leioa-Bizkaia, Spain, November 2004
- Plenary Speaker at the Congress of the International Society for Free Radical Research, Buenos Aires, Argentina, May 2004
- XXXII Reunión Anual de la Sociedad Brasileira de Bioquímica y Biología Molecular, Caxambú, Brazil, May 2003
- XXXI Reunión Anual de la Sociedad Argentina de Biofísica, Buenos Aires, December 2002
- Congreso del Grupo Iberoamericano y Español de Radicales Libres, Cáceres, Spain, September 2002
- International Congress of the Society for Free Radical Research, París, France, July 2002
- Howard Hughes Medical Institute, International Meeting, Cairns, Australia, June 2002
- Gordon Research Conference en Oxygen Radicals, Ventura, California, February 2002
- First Meeting on Nitric Oxide in Cell Death and Survival at the Wolfson Biomedical Institute, University of London, September 2001
- Howard Hughes Medical Institute, International Meeting, Vancouver, Canada, June 2001
- Gordon Research Conference en Oxido Nítrico, Ventura, California, February 2001
- International Congress of the International Society for Free Radical Research, Kyoto, Japan, October 2000
- Meeting of the European Society for Free Radical Research, Zurich, Switzerland, July 2000
- Reunión del Grupo Ibero-americano de Radicales Libres, Cádiz, Spain, June 2000
- Second International Conference on Peroxynitrite, Creta, Greece, May 1999
- EUROCONFERENCE on Nitric Oxide, Pasteur Institute, Paris, France, October 1998
- International Congress of the International Society for Free Radical Research, Brazil, September 1998
- UCLA International Nitric Oxide Conference, Los Angeles, California, USA, July 1998
- IV Annual Congress of The Oxygen Society, San Francisco, California, USA, November 1997
- Second International Conference on Reactive Oxygen and Nitrogen Species, Durham, USA, September 1997
- First International Conference on Peroxynitrite, Ascona, Switzerland, May 1997
- Colloquium on Nitric Oxide at the Biochemical Society Meeting, England, April 1997
- International Congress of Orthomolecular Medicine, San Paulo, Brazil, 1993 and 1996
- Congress of the Panamerican Biochemical and Molecular Biology Societies, Pucón, Chile, November 1996
- 3rd International Congress of the Oxygen Society, Miami, USA, November 1996
- International Congress of the International Society for Free Radical Research, Spain, October 1996

GRANT SUPPORT (*Principal Investigator*)

- SARS-CoV-2 spike glycoprotein receptor binding domain (RBD) redox susceptibility. Richard Lounsbury Foundation, 2021-2023
- Centro de Investigaciones Biomédicas (CEINBIO), Espacio Interdisciplinario, Universidad de la República, (competitive renewal) 2021-2025
- Susceptibilidad estructural al ambiente redox del dominio de unión al receptor (RBD) de la glicoproteína espicular de SARS-CoV-2, Fundación Manuel Pérez 2020-2021
- Centro de Investigaciones Biomédicas en Radicales Libres, Comisión Sectorial de Investigación Científica, Universidad de la República. 2018-2023 (competitive renewal)
- A structural framework for understanding Chagas disease, Royal Society International Collaboration Award, 2018-2020
- EU-LAC Health Project, FATZHEIMER International Consortium Agreement, Agencia Nacional de Investigación e Innovación (Uruguay)
- Centro Interdisciplinario: Centro de Investigaciones Biomédicas (CEINBIO), Espacio Interdisciplinario, Universidad de la República, 2015-2020
- Conformaciones alternativas de citocromo c: Caracterización Bioquímica, Detección y Función en Sistemas Biológicos. Fondo Clemente Estable_Agencia Nacional de Investigación e Innovación. 2015-2018
- Centro de Investigaciones Biomédicas en Radicales Libres, Comisión Sectorial de Investigación Científica, Universidad de la República. 2014-2018
- Formation and fate of tyrosine nitrated proteins: the case of peroxynitrite and glutamine synthetase. Alexander von Humboldt Foundation, Research Linkage Program (partner in Germany, Prof. Tilman Grune, University of Jena/German Institute of Human Nutrition at Potsdam). 2013-2016
- *Typanosoma cruzi* Antioxidants Systems, Virulence and Parasite Persistence in Chagas Disease” National Institutes of Health, 2011-2016
- Biochemical Mechanisms of Tyrosine-containing Peptide Reactions with Nitrating Species. Fundación Manuel Pérez, Facultad de Medicina, Universidad de la República, 2013-2014
- Bases Moleculares del Estrés Nitro-Oxidativo en Sistemas Biológicos. Comisión Sectorial de Investigación Científica, Universidad de la República. 2011-2018
- Núcleo Interdisciplinario, Centro de Investigaciones Biomédicas, Universidad de la República, 2010-2013
- Detección y Caracterización de Conformaciones Alternativas de Citocromo c en Sistemas Biológicos. Fondo Clemente Estable_Agencia Nacional de Investigación e Innovación. 2011-2012
- Nitric Oxide Mediated Nitration/Oxidation in Membranes. (National Institutes of Health-Consortium Agreement with Medical College of Wisconsin) 2008-2012
- Novel Biomarkers of Oxidative Stress in Smokers and Relation to Vascular Function. PM USA External Research Program. 2008-2010
- Mn-Porphyrins in the protection against peroxynitrite-mediated injury (ICGEB CRP/URU06-03 2007-2009
- L-Arginine/Redox Metabolism in *T. cruzi*-Mammalian Host Cell Interactions (Howard Hughes Medical Institute, USA) 2005-2010
- Nitric Oxide Mediated Oxidation and Nitration. (NIH-Consortium Agreement with Medical College of Wisconsin) 2004-2007
- Human Serum Albumin: an intravascular dosimeter of inflammatory oxidants (Consortium Agreement with The University of Alabama at Birmingham) 2003-2006
- Nitrocitocromo c: formación biológica y su rol en la disfunción y muerte celular (Fondo Clemente Estable, CONICYT) 2003-2004
- Nitric Oxide mediation of macrophage-*Trypanosoma cruzi* interactions (Howard Hughes Medical Institute, USA) 2000-2005
- Nitric oxide-superoxide interactions in vascular cell injury (FOGARTY-NIH) 2001-2004
- Disfunción Endotelial, Radicales Libres e Hipertensión Arterial. Laboratorios Gramón Bagó de Uruguay/Ley de Fundaciones. 2002
- Peroxynitrite scavengers for the inhibition of oxidative stress mediated injury (International Center for Genetic Engineering and Biotechnology) 1999-2001
- Reactive nitrogen species in cell respiration and injury (FOGARTY-NIH) 1998-2001
- Interacciones de oxido nitrico y peroxinitrito a nivel mitocondrial (CSIC) 1998-1999
- Nitric oxide and peroxynitrite in Chagas’ disease (SAREC) 1999-2001

- Oxygen radicals-S-nitrosothiols interactions (FOGARTY-NIH) 1995-1997
- Producción biológica y toxicidad de peroxinitrito a nivel celular y subcelular (CONICYT) 1994-1996
- Oxidative metabolism and injury in *T. cruzi* (SAREC) 1992-1995
- Interacciones xantino oxidasa-glicosaminoglicanos (CSIC) 1993-1994
- Daño biomolecular causado por el peroxinitrito (CSIC) 1991-1992

TEACHER IN INTERNATIONAL COURSES

- Postgraduate Course (regional), "Radicales libres y procesos redox en biomedicina", Montevideo, Uruguay, May 2023
- Postgraduate Course, Mitocondria: Bioenergética, metabolismo y señalización, Montevideo, Uruguay, October 2022.
- International Course and Symposium on Redox Chemistry and Biology of Thiols, Montevideo, Uruguay, February 2019
- International CEINBIO Course on Mitocondria: bioenergética, metabolismo oxidativo y señalización. Montevideo, Uruguay, October 2018
- International CeBEM course, Structural Biology in Redox Processes, Montevideo, Uruguay, November 2017
- FEBS Advanced Lecture Course on "Redox Regulation of Metabolic Processes". Spetses, Greece, September 2016
- Postgraduate Course, Physiology and Pathophysiology of Free Radicals, Facultad de Medicina, University of Valencia, Spain, June 2015
- Uruguayan Coordinator of Project TREAM (PhD program in Biomedicine, Universidad de Buenos Aires, University of Freiburg, Universidad de la República)
- International Course: Redox Chemistry and Biology of Thiols. Universidad de la República, Instituto Pasteur de Montevideo, Montevideo, Uruguay, February-March 2015
- International Master in Biomedical Sciences. Universidad de Friburgo, Germany, October 2014
- Postgraduate Course, Mitocondria: bioenergetics, cellular metabolism and signaling. Facultad de Medicina, Universidad de la República, Uruguay, July 2014
- Postgraduate Course, Free radicals, reactive species and oxidative modifications in proteins: biochemical mechanisms and biological relevance. Universidade Federal de Santa Catarina, Florianopolis, Brazil, April 2014
- V I2CAM/FAPERJ/CeBEM School in Biological Physics of Protein Folding and Conformational Diseases, Universidade Federal de Rio de Janeiro, Brazil, September 2013
- International Course and Symposium on "Redox Chemistry and Biology of Thiols", Montevideo-Punta Ballena, Uruguay, March 2011
- FEBS course: Techniques in Free Radical Biology. Debrecen, Hungary, August-September 2010
- "Summer Free Radical School" organized by the Society for Free Radical Research Europe; Spetses, Grecia, August-September 2008
- Course "Folding, misfolding and degradation of cellular proteins". Institut Pasteur de Montevideo; Facultad de Ciencias, UdelaR; Amsud-Pasteur; PEDECIBA, November-December 2007
- Workshop: Avaliação pós-genômica da expressão gênica em parasitas" Instituto de Biologia Molecular do Paraná (IBMP), Curitiba, Paraná, Brazil, March 2007
- Postgraduate Course at the University of Coimbra; "Toxicology of Nitric Oxide and Oxygen Free Radicals". Coimbra, Portugal, April 2006
- Teacher of Howard Hughes Medical Institute-sponsored International Course on Pathogen Trypanosomes-Mammalian Host Cell Interactions: Biochemistry, Cell Biology and Prospects for Drug Development. Montevideo, September 2004
- International Courses of ICRO-UNESCO, "Polyphenol Antioxidants in the Biology and Pathology of Free Radicals" Santiago, Chile, August 1999
- "Free Radical School" of the International Congress of the Oxygen Society in Pasadena (1995) and Miami, USA. 1995 - 1996
- Teacher in Course of "Free Radical production and metabolism in biological systems", at the University of Mexico, Mexico City, April 1996.

- Course on "Radicales libres, especies excitadas y defensas antioxidantes en Biología y Medicina", en Montevideo, diciembre de 1995.
- International Courses of ICRO-UNESCO, "Free Radicals and Antioxidant Defenses in Biology and Medicine", Buenos Aires, 1992, 1994 and 1996.

SUPERVISION OF MASTER AND DOCTORAL STUDENTS

On going:

Doctoral (6)

- **Lic. Gabriela Specker** :: (PEDECIBA, Biological Sciences)
- **Dr. Marianela Rodríguez Rey** :: (PROINBIO, Biomedical Sciences)
- **Dr. Nicolás Viera** :: (PEDECIBA, Biological Sciences)
- **Lic. Santiago Sastre** :: (PEDECIBA, Chemical Sciences)
- **Lic. Santiago Garcimartín** :: (PEDECIBA, Chemical Sciences)
- **Dra. Carmen Suárez** :: (PROINBIO, Biomedical Sciences)

Master (5)

- **Dra. Valentina Más** :: (PROINBIO, Biomedical Sciences)
- **Lic. Verena Araujo** :: (PEDECIBA, Biological Sciences)
- **Lic. Manuela Pose** :: (PEDECIBA, Chemical Sciences)
- **Lic. Alfonso Taboada** :: (PEDECIBA, Bioinformatics)
- **Lic. Matilde Abboud** :: (PEDECIBA, Biological Sciences)
-

Finalized (total 43):

Doctoral (30)

1. Nicolás Campolo (Doctorado, PEDECIBA-Biología, 2023). Inactivación oxidativa de la glutamina sintetasa humana: efectos estructurales y aspectos cuantitativos durante la pérdida de función por daño oxidativo
2. Florencia Tomasina (Doctorado, PEDECIBA-Biología, 2022). Caracterización y detección de conformaciones alternativas del citocromo *c in vitro e in cellula*.
3. Adrián Aicardo (Doctorado, PEDECIBA-Biología, 2022). Atrapadores de espín en la detección y prevención de daño oxidativo a biomacromoléculas.
4. Carolina Prolo (Doctorado, PEDECIBA-Biología, 2022). Rutas del superóxido en la infección por *Trypanosoma cruzi*.
5. Damián Estrada (Doctorado, PEDECIBA-Química, 2021). Mecanismos redox de control y persistencia parasitaria en la infección por *Trypanosoma cruzi*.
6. Natalia Ríos (Doctorado, PEDECIBA-Química, 2020). Síntesis y caracterización de compuestos boronados diseñados como sondas para la detección y cuantificación de peroxinitrito.
7. José Gorrasi (Doctorado, PROINBIO, 2020). Estrés nitrooxidativo pulmonar y sistémico en pacientes en ventilación mecánica con sepsis sin lesión pulmonar aguda y en pacientes en ventilación mecánica sin sepsis.
8. Alejandra Martínez (Doctorado, PEDECIBA-Biología, 2018). Fe-Superóxido Dismutasas y Hemoperoxidasa híbrida tipo A (APx-CcP) en *T. cruzi*.
9. Verónica Tórtora (Doctorado, PEDECIBA-Biología, 2014) Estudios estructurales y funcionales de formas modificadas de citocromo *c*: Rol de la nitración de tirosina y su efecto sobre coordinación del hemo.
10. Martín Hugo (Doctorado, PEDECIBA-Biología, 2014) Sistemas enzimáticos de producción y detoxificación de especies reactivas citotóxicas en patógenos intracelulares.
11. Valeria Valez (Doctorado, PEDECIBA-Química, 2013) Formación y reacciones de peroxinitrito y oxidantes en mitocondrias: Estudios con sondas hidrofóbicas análogos de tirosina y protección por mangano-porfirina.

12. Bárbara Rocha (Doctorado, Universidad de Coimbra, 2012). "Biological role of nitrite and nitric oxide in the stomach: from diet to protein tyrosine nitration with implications in gastric physiology"; (codirección con Dr. Joao Laranjinha, Universidade de Coimbra, Portugal)
13. Verónica Demicheli (Doctorado, PEDECIBA-Química, 2012) "Nitración de Proteínas Mitocondriales: Estudios estructurales y funcionales en especies nitradas de citocromo c y superóxido dismutasa de manganeso"
14. Sebastián Carballal. (Doctorado, PEDECIBA-Química, 2010) "Caracterización bioquímica de la cistationina -sintasa y su interacción con especies reactivas"
15. Silvina Bartesaghi (Doctorado, PEDECIBA-Química, 2010) "Mecanismos bioquímicos de la nitración de tirosinas en membranas: Estudios con peroxinitrito y otros sistemas oxidantes"
16. Horacio Botti (Doctorado, PEDECIBA-Biología, 2010) "Reacciones y efectos de radicales libres y oxidantes biológicos a nivel molecular: Formación controlada por distancia de peroxinitrito y modulación alostérica redox en la albúmina humana"
17. Gonzalo Peluffo (Doctorado, PROINBIO, 2009) "Estres Nitroxidativo en la Disfunción Endotelial. Daño oxidativo mediado por humo de tabaco"
18. Lucía Piacenza (Doctorado, PEDECIBA- Química, 2007): "Enzimas antioxidantes de *Trypanosoma cruzi*: Señalización celular y virulencia"
19. María Noel Alvarez (Doctorado, PEDECIBA-Biología, 2007). "Difusión y toxicidad de oxidantes derivados de macrófagos: Aspectos bioquímicos y aplicación al daño oxidativo a *Trypanosoma cruzi*"
20. Natalia Romero (Doctorado, PEDECIBA- Química, 2007) "Difusión y reactividad de óxido nítrico y peroxinitrito en sistemas biológicos: Rol del eritrocito como destino de especies reactivas del nitrógeno"
21. Celia Quijano (Doctorado, PEDECIBA- Química, 2007) "Nitroxidación mediada por flujos de superóxido y óxido nítrico en sistemas biológicos: resolviendo rutas radicalares *in silico e in vitro*"
22. Gerardo Ferrer Sueta (Doctorado, PEDECIBA-Química, 2006) "Porfirinas de manganeso como inactivadores de peroxinitrito: Evaluación cinética y efectos sobre blancos moleculares"
23. Adriana Cassina (Doctorado, PEDECIBA-Biología, 2005) "Peroxinitrito y nitración proteica mitocondrial: mecanismos bioquímicos y consecuencias biológicas"
24. Madia Trujillo (Doctorado, PEDECIBA-Biología, 2005) "Cinética y mecanismos de la reacción de peroxinitrito con tioles: Estudios en ácidos dihidrolipoico y lipoico y en peroxiredoxinas parasitarias y bacterianas"
25. Carlos Batthyany (Doctorado, PEDECIBA-Biología, 2005) "Oxidantes inflamatorios y aterosclerosis. Rol de las especies derivadas del óxido nítrico" (codirección con Dr. Homero Rubbo, Facultad de Medicina, Universidad de la República)
26. Leonor Thomson (Doctorado, PEDECIBA-Biología, 2002) "Mecanismos de daño oxidativo y defensas antioxidantes en *Trypanosoma cruzi*" (codirección con Dra. Ana Denicola, Facultad de Ciencias, Universidad de la República)
27. José María Souza (Doctorado, PEDECIBA-Biología, 2001) "Nitración de residuos de tirosina en proteínas" (codirección el Dr. Harry Ischiropoulos, University of Pennsylvania)
28. Mercedes Navillat (Doctorado, PEDECIBA-Biología, 1999) en "Formación de nitrotirosina en procesos inflamatorios"
29. Beatriz Alvarez (Doctorado, PEDECIBA-Química, 1999) en "Química Biológica del Peroxinitrito"
30. Laura Castro (Doctorado, PEDECIBA-Biología, 1999) en "Reacciones de Aconitasas con Oxido Nítrico y Peroxinitrito: Mecanismos e Implicancias Biológicas"

Master (13)

1. Lic. Santiago Sastre (Maestría, PEDECIBA-Química, 2022). Metionina sulfóxido reductasa A de *Mycobacterium tuberculosis*: Desentrañando los secretos de su ciclo catalítico.
2. Lic. Vera Skafar (Maestría, PEDECIBA-Química, 2022). Estudio de la reacción de la hemoperoxidasa híbrida tipo A de *Trypanosoma cruzi* (APx-CcP) con peroxinitrito *in vitro e in vivo*.
3. Gustavo Bruno (Maestría, PROINBIO, 2017). Tabaquismo, disfunción endotelial y estrés nitroxidativo vascular.
4. Natalia Subelzú (Maestría, PEDECIBA-Química, 2013). Formación de peroxinitrito en el endotelio vascular: interacción con la eNOS y rol en la disfunción endotelial. (codirección)
5. Pablo Calcerrada (Maestría, PEDECIBA-Biología, 2014). Formación y efectos del peroxinitrito en células endoteliales vasculares

6. Marianela Rodríguez (Maestría, PROINBIO, 2010). Disfunción Mitocondrial y su Rol en la Patología.
7. Verónica Tórtora (codirección, Maestría, PEDECIBA-Biología, 2007). Inactivación de la aconitasa mitocondrial por óxido nítrico, S-nitrosoglutatión, peroxinitrito y radical carbonato: mecanismos, cinética y relevancia biológica.
8. Horacio Botti (codirección, Maestría, PEDECIBA-Biología, 2002). Oxidación de α -tocopherol en la LDL mediada por peroxinitrito: Aspectos cinéticos y mecanísticos.
9. Lucía Piacenza (Maestría, PEDECIBA-Química, 2001). Muerte Celular Programada en *Trypanosoma cruzi* y su modulación por vías metabólicas dependientes de la L-arginina.
10. Celia Quijano (Maestría, PEDECIBA-Química, 2000). Interacción de peroxinitrito con la Superóxido Dismutasa de manganeso.
11. Madia Trujillo (Maestría, PEDECIBA-Biología, 1999). Rol de Xantina Oxidasa en la Descomposición de S-Nitrosotioles.
12. María Noel Álvarez (Maestría, PEDECIBA-Biología, 1998). Formación e Interacciones de Óxido Nítrico y Superóxido en Macrófagos Activados.
13. Adriana Cassina (Maestría, PEDECIBA-Biología, 1997). Acción del óxido nítrico y el peroxinitrito sobre la cadena de transporte electrónico mitocondrial.

ORGANIZATION OF INTERNATIONAL EVENTS

- Co-Chair, International Conference Society for Redox Biology and Medicine and Biennial Meeting of Society for Free Radical Research International, Punta del Este, Uruguay, 2023
- International Scientific Committee, annual meeting of the Society for Free Radical Research – Europe (SFRR-E), Vienna, Austria, June 2023
- Permanent Scientific Committee, VIII LABIC, Viña del Mar, Chile, April 2023
- Organizing Committee, 12th International Conference on the Biology, Chemistry, and Therapeutic Applications of Nitric Oxide, Tohoku University, Sendai, Japan, October 2022
- Organizing Committee, VII Simposio CEINBIO, Salto, Uruguay, September 2022
- Scientific Committee, Redox Biology Congress 2022, Annual Meeting of the Society for Free Radical Research Europe and Biannual Meeting of the Plant Oxygen Group, Ghent, Belgium, August 2022
- International Advisory Board, 19th Biennial Meeting of Society for Free Radical Research International, Taipéi, Taiwan, July 2020
- International Scientific Committee Member, 20th Congress of the International Union for Pure and Applied Biophysics (IUPAB), Rio de Janeiro, Brazil, 2020
- International Advisory Board, 25th Annual meeting of the Society for Free Radical Biology and Medicine. Chicago, 2018
- International Advisory Board, 19th Biennial Meeting of Society for Free Radical Research International, Lisbon, Portugal, July 2018
- International Advisory Board, 24th Annual meeting of the Society for Free Radical Biology and Medicine. Baltimore, November 2017
- Organizing Committee, International CeBEM course, Structural Biology in Redox Processes, Montevideo, Uruguay, Nov 2017
- Co-chair of the 18th Biennial Meeting of Society for Free Radical Research International and 23rd Annual meeting of the Society for Free Radical Biology and Medicine, San Francisco, California, USA, Nov 2016
- International Scientific Committee for the Society for Free Radical Research-Europe (SFRR-E) Meeting, Budapest, Hungary, June 2016
- Scientific Advisory Board, 9th International Conference on the Biology, Chemistry and Therapeutic Applications of Nitric Oxide (NO2016), Sendai, Japan, May 2016
- International Advisory Board, 22nd Annual meeting of the Society for Free Radical Biology and Medicine. Boston, November 2015
- International Advisory Board, 21st Annual meeting of the Society for Free Radical Biology and Medicine. Boston, November 2015
- Mini-Symposium ICGEB-CEINBIO, Frontiers in Biomedical Research, Montevideo, Uruguay, September 2015

- International Scientific Committee of the 2015 Society for Free Radical Research Europe/Society of Nutrition and Food Science Conference, Hohenheim, Germany, September 2015
- International Scientific Committee for the 23rd International Union of Biochemistry and Molecular Biology Congress, Brazil, August 2015
- International Advisory Board, Oxygen Club of California World Congress, Valencia, Spain, June 2015
- International Advisory Board, 20th Annual meeting of the Society for Free Radical Biology and Medicine. Seattle, November 2014
- International Advisory Board, IV Latin America Meeting in Bioinorganic Chemistry, Chascomús, Province of Buenos Aires, Argentina, 2014
- International Advisory Board, 17th Biennial Meeting of Society for Free Radical Research International, Kyoto, Japan, 2014
- International Advisory Board, 19th Annual meeting of the Society for Free Radical Biology and Medicine. San Antonio, November 2013
- International Consulting Committee of the 11th World Congress on Inflammation and of the XXXVIII Congress of the Brazilian Society of Immunology, Natal, Brazil, September 2013
- International Advisory Board, 19th Annual meeting of the Society for Free Radical Biology and Medicine. San Diego, November 2012
- International Scientific Program Committee for Society for Free Radical Research International, London, England, August 2012
- International Advisory Board, 18th Annual meeting of the Society for Free Radical Biology and Medicine. Atlanta, November 2011
- Co-organizer of the International Workshop on “Molecular and Cellular Basis of Redox Signaling and Oxidative Stress: Implications in Biomedicine” at the International University of Andalusia (UNIA), Baeza, Spain, October 2011
- International Advisory Board of the VII Meeting of the South American Group of the Society for Free Radical Biology and Medicine, Aguas de San Pedro, Brazil, August 2011
- Scientific Advisory Board, 3rd Latin American Protein Society Meeting, Salta, Argentina, October 2010
- Scientific Advisory Board, VI Meeting of the Society for Free Radical Biology and Medicine-South American Group, Santiago, Chile, September 2009
- Conference Chair, Annual meeting of the Society for Free Radical Biology and Medicine. Indianapolis, November 2008
- Conference Chair, Annual meeting of the Society for Free Radical Biology and Medicine. Washington DC, November 2007
- Conference Chair, Free Radicals in Montevideo 2007; Joint V meeting of the SFRBM-South American Group and V International Conference on Peroxynitrite and Reactive Nitrogen Species; Montevideo, September 2007
- International Advisory Board of the International Meeting of the Society for Free Radical Research. Davos, Switzerland, August 2006.
- Chair of the Gordon Research Conference on Oxygen Radicals. Ventura, California. February 2006
- International Advisory Board of the IV Meeting of the South American Group of the Society for Free Radical Biology and Medicine, Lindoia, Brazil, June 2005
- Scientific Working Group Meeting on Chagas Disease. INPPAZ/OPS-OMS, Buenos Aires, Argentina, April 2005
- Organizing Committee Member, 12th Biennial Congress of the Society for Free Radical Biology and Medicine, Virgin Islands, USA, November 2004
- Organizer of Howard Hughes Medical Institute-sponsored International Course on Pathogen Trypanosomes-Mammalian Host Cell Interactions: Biochemistry, Cell Biology and Prospects for Drug Development. Montevideo, September 2004
- Scientific Advisory Board of the Fourth International Conference on Peroxynitrite. Konstanz, Germany, July 2004
- International Advisory Board of the International Meeting of the Society for Free Radical Research. Buenos Aires, Argentina, May 2004
- Vice-Chair of the Gordon Research Conference on Oxygen Radicals. Ventura, California. February 2004
- Organizing Committee Member of the World Shock Congress, Rio de Janeiro, Brazil, September 2003

- Organizer of the Muestra Interactiva “Doctores Detectives” funded by the Howard Hughes Medical Institute and held at LATU, Montevideo, Uruguay, June-December 2003
- Organizing Committee Member of the 9th International Congress of the Oxygen Society en San Antonio, Texas, EUA, November 2002
- Organizing Committee of the 7th International Congress of the Oxygen Society, San Antonio, USA, November 2002
- Organizing Committee of the International Meeting of the Society for Free Radical Research. Paris, France, July 2002
- Organizing Committee of the 8th International Congress of the Oxygen Society, Research Triangle Park, USA, November 2001
- Organizing Committee of the 7th International Congress of the Oxygen Society, San Diego, USA, November 2000
- International Advisory Board of the International Meeting of the Society for Free Radical Research. Kyoto, Japan, September 2000
- Organizing Committee of the 6th International Congress of the Oxygen Society, New Orleans, USA, November 1999
- Co-Organizer of the Second International Conference on Peroxynitrite, Crete, Greece, May 1999
- Organizing Committee of the 5th International Congress of the Oxygen Society, Washington DC, USA, November 1998
- International Advisory Board of the IX Biennial Meeting of the International Society for Free Radical Research, Sao Paulo, Brazil, September 1998
- Co-Organizer of the First International Conference on Peroxynitrite, Ascona, Switzerland, May 1997
- Organizing Committee of the 3rd International Congress of the Oxygen Society, Miami, USA, November 1996
- Organizer of the First Uruguayan International Course and Symposium on “Free Radicals and Antioxidant Defenses in Biology and Medicine”, Faculty of Medicine, Universidad de la República, Montevideo, Uruguay, December 1995

MEMBER OF EDITORIAL BOARDS

- Editor-in-Chief of *Redox Biochemistry and Chemistry*.
- Editor of *Free Radical Biology and Medicine* (official journal of the Society for Redox Biology and Medicine (Americas) and Society for Free Radical Research-Europe)
- Associate Editor of *Free Radical Research* (official journal of the Society for Free Radical Research-Asia and Society for Free Radical Research Australasia)
- Invited Editor, *Proceedings of the National Academy of Sciences (PNAS)*
- Advisory Board Member of *PeerJ* (Open Access Journal in Biomedical Research, launch December 2012; <https://peerj.com/>)
- Former Associate Editor of *IUBMB Life* (official journal of the International Union of Biochemistry and Molecular Biology)
- Member of the Editorial Board of *Accounts in Chemical Research*, *Archives of Biochemistry and Biophysics*, *Free Radical Biology and Medicine*, *Free Radical Research*, *Redox Biology*, *Toxicology Research*, *Advances in Redox Research*, *FEBS Open Bio*, *Brazilian Journal of Medical and Biological Research* and *Revista de la Academia Colombiana de Ciencias Exactas, Físicas y Naturales* and former member of *Chemical Reviews*, *Chemical Research in Toxicology* and *Antioxidantes y Calidad de Vida* (Argentina).
- Reviewer for *Proceedings of the National Academy of Sciences (USA)*, *Journal of Biological Chemistry*, *Free Radical Biology and Medicine*, *Archives of Biochemistry and Biophysics*, *Chemical Research in Toxicology*, *American Journal of Physiology*, *Pediatric Research*, *Photochemistry and Photobiology*, *Inorganic Chemistry*, *Biochimica et Biophysica Acta*, *Biological Chemistry*, *Biochemistry*, *Nature*.
- Guest Editor, *Archives of Biochemistry and Biophysics*, special issue on “Peroxynitrite and Reactive Nitrogen Species”, April 2009

- Advisory Member of Editorial Board of Methods in Enzymology, Nitric Oxide, Vol F. 2007
- Guest Editor, Amino Acids, special issue on “Free Radicals and Redox Biology”, 2006

HONORS

- Member of the Pontifical Academy of Sciences, Vatican, 2023
- Honorary Member of the Sociedad de Medicina Interna del Uruguay, 2023
- Basic Science Award 2023, Society for Free Radical Research Europe (SFRR-E), 2023
- Tribute to all members of the Honorary Scientific Advisory Group (GACH), for their performance and work during the pandemic, given by the Junta Departamental de Montevideo (September 2022)
- "Mandela Prize" in recognition to the labor as General Coordinator of the Honorary Scientific Advisory Group (GACH) to the government of Uruguay during the COVID-19 pandemic, given by the Association of Directors of Carnival of Uruguay (DAECPU), Uruguay (March 2022)
- “Gran Premio Nacional de Ciencias” first edition, recognition of national and international achievements of Uruguayan scientists, Ministerio de Educación y Cultura, Uruguay (December 2021)
- Tribute to Dr. Rafael Radi for his outstanding work in the fight against the COVID-19 pandemic, Liverpool Fútbol Club (November 2021)
- “Ibirapitá” award for his Contribution to Uruguayan Society, Ditrío Múltiple J of the Lions Clubs International (November 2021)
- Paul Harris Fellow, for great contributions towards the Society’s wellbeing, The Rotary Foundation (August 2021)
- Award “Presidencia de la República - Reconocimiento a la Labor Científica, Cultural y Deportiva”, Presidencia de la República Oriental del Uruguay (July 2021)
- Academia Nacional de Medicina recognition to the members of the Grupo Asesor Científico Honorario for their valuable and selfless contribution to the national scientific response against the COVID-19 pandemic (December 2020)
- *Doctor Honoris Causa*, Universidad Autónoma de Madrid (September 2020)
- Recognition by the Uruguayan National Parliament for the scientific advice activities to the national government during the COVID-19 pandemia (October 2020)
- Recognition by the Asociación Rural del Uruguay and Diario El País for outstanding contribution to society during the COVID-19 pandemia (September 2020)
- Outstanding Man of the Year 2018-2019, Area: Academy. Juan Herrera Producciones, Uruguay (September 2019)
- Active Member of the Academia Nacional de Medicina, Uruguay (August 2018)
- Morosoli Prize (Gold) for the contributions to Culture, Uruguay (December 2017)
- Nominating Member, Nobel Prize of Physiology or Medicine, Karolinka Institute, Sweden (2016-to date)
- Nominating Member, The Shaw Prize, Hong Kong (2016-to date)
- Premio México de Ciencia y Tecnología (2016)
- *Doctor Honoris Causa*, Universidad de Buenos Aires (2016)
- President, Academia Nacional de Ciencias del Uruguay (2016-2020)
- Foreign Member, US National Academy of Sciences (NAS) (2015)
- Honorary Member, Academia Nacional de Medicina del Uruguay (2015)
- President, Society for Free Radical Research International (2015-2016)
- President-Elect, Society for Free Radical Research International (2013)
- Luis Federico Leloir Award to International Scientific Cooperation in Science, Technology and Innovation, Argentina (2012)
- Secretary, Academia Nacional de Ciencias del Uruguay (2012)
- Fellow of the Society for Free Radical Biology and Medicine (2011)
- Discovery Award, Society for Free Radical Biology and Medicine (2011)
- Founding Member of the Academia Nacional de Ciencias del Uruguay (Elected on March 2011)
- Alexander Von Humboldt Award (April 2010)
- Scopus-Elsevier Prize (Uruguay) for high citation index and publication record (September 2010)
- Adjunct Professor of Biochemistry, Vanderbilt University, Nashville, TN (2009-to date)

- Fellow of the Academia de Ciencias de Latino América (Elected on November 2008)
- Adjunct Professor of Pharmacology, University of Pittsburgh, Pittsburgh, PA (2007-to date)
- Morosoli Prize (Uruguay) in Science and Technology (November 2007)
- President, the Society for Free Radical Radical Biology and Medicine (2006-2008)
- Foreign Member of the Brazilian Academy of Sciences (Elected on March 2006)
- President-Elect of the Society for Free Radical Radical Biology and Medicine (2004-2006)
- Foreign Member of Argentinian Academy of Exact, Physical and Natural Sciences (Elected on December 2004)
- Fellow of the The Academy of Sciences for the Developing World (TWAS) (Elected on November 2004)
- John Simon Guggenheim Memorial Foundation Fellow (July 2003)
- Panamerican Society of Biochemistry and Molecular Biology Lecture Award (Caxambú, Brazil, May 2003)
- International Research Scholar of the Howard Hughes Medical Institute (May 2000)
- Researcher III, Fondo Nacional de Investigadores, 1999-to date)
- Award in Basic Sciences "Roberto Caldeyro Barcia" in the Area of Biology, PEDECIBA (December 1999)
- Adjunct Professor of Anesthesiology and Biochemistry, The University of Alabama at Birmingham (1998-to date)
- Fellowship from the Fulbright Foundation to the University of Alabama at Birmingham (1998)
- Secretary General of the Society for Free Radical Radical Biology and Medicine (1997-2000; re-elected 2000-2004)
- Award from the Third World Academy of Sciences (TWAS) and National Research Council to outstanding young Investigator in the Area of Biology (December 1996)
- First Level Investigator of Chemistry, PEDECIBA-Uruguay (1994)
- First Level Investigator of Biology, PEDECIBA-Uruguay (1993)
- Fellowship from International Union of Biochemistry (IUB) to young biochemist to attend the 15th International Union of Biochemistry Meeting in Jerusalem, (August 1992)

COMMITTEES AND BOARDS

- Member of the ICGEB Alumni network (2023)
- Member of Scientific Advisory Board, Universidade de Lisboa, Portugal (2023)
- Member of Scientific Board of the Sociedad Uruguaya de Aterosclerosis, Uruguay (2023)
- Member of the Advisory Board, Morosoli Award in SCIENCE and TECHNOLOGY areas, Fundación "Lolita Rubial", Uruguay (2022)
- Member of the Scientific Advisory Committee in Health, Consejo Nacional del Colegio Médico, Uruguay (2022)
- International Scientific Advisory Panel, SFRR-Europe Congress (2022)
- Member of the Organizing Committee, of the International Nitric Oxide Conference, Japan (2022)
- Member of the International Scientific Committee of the Redox Biology Congress, Belgium (2022)
- Member of the Scientific Advisory Committee of the "Congreso Interdisciplinario: COVID-19, pandemia y pospandemia", Espacio Interdisciplinario, Uruguay (2021)
- Member of the Honorary Executive Committee, Fundación Uruguaya de Enfermedades Reumáticas "Prof. Dr. Herrera Ramos" (2020)
- National Scientific Coordinator, Grupo Asesor Científico Honorario (GACH; Group of Scientific Advisors) on the COVID-19 Response, Government of Uruguay (2020-2021)
- The World Academy of Sciences (TWAS) Membership Advisory Committee (MAC) in Structural, Cell and Molecular Biology, (2019)
- Member of the Advisory Strategic Committee, Institut Pasteur de Montevideo, (2019)
- Selection Committee for position of Director del Instituto de Bioquímica y Biología Molecular (IBIMOL), Universidad de Buenos Aires-CONICET, (2018)
- International Evaluation Committee, DFG Priority Program in "Thiol Redox Switches", Germany (2017)
- Member of the International Advisory Board of CEPID/Redoxoma, FAPESP, Brasil (February 2017)

- Member of the International Evaluation Committee of Sistema Nacional de Investigadores de Paraguay (2016)
- Member of the International Advisory Board of CEPID/Redoxoma, FAPESP, Brasil (2015)
- Member of the International Evaluation Committee of Sistema Nacional de Investigadores de Paraguay (2015)
- Member of the International Board of Network SeS-Redox and Catalysis, Universidad de Perugia, Italia (2015)
- International Evaluation Committee, DFG Priority Program in “Thiol Redox Switches”, Germany (2013)
- Member of the Executive Committee of CeBEM (Centro de Biología Estructural del Mercosur), (2012 to date)
- Chemical Research in Toxicology_American Chemical Society, Editor Search Committee Member, (2012)
- Member of the Scientific Advisory Council of the International Centre of Genetic Engineering and Biotechnology (ICGEB) (2010-2019)
- Member of International Steering Committee, Consolider Project (Spain) in Oxidative Stress in Biological Systems (2010-2013)
- International Committee Member of the Oxygen Club of California (2005 to date)
- Advisory Board Member of Institute Pasteur of Montevideo (2005 to 2010)
- Committee Member of the Fondo Clemente Estable, Uruguay (2005-2008)
- Member of the Honorary Board and Selection Committee of the Uruguayan National Research System (1999 to 2019)
- Member of the External Advisory Board of the Center for Free Radical Biology, University of Alabama at Birmingham, USA (1999 to 2009)
- Member of the Council of the Uruguayan Association for Science, Technology and Development (AUCTD) (1998-2000)
- Member of the International Research Fellowship Nominating Committee of Uruguay for the Fogarty-NIH International Center (1997)
- Member of the National Research and Technology Council (1996 to 2002)
- Member of the Council of the Uruguayan Society of Biosciences (1992 to 1994)
- Member of the Council of the Uruguayan Society of Biosciences (1988 to 1990)

SCIENTIFIC SOCIETIES[#]

- Society for Redox Biology and Medicine
- International Society for Free Radical Research
- American Society for Biochemistry and Molecular Biology
- American Physiological Society
- American Chemical Society
- Society for Neuroscience
- American Association for the Advancement of Science
- Federation of American Societies of Experimental Biology
- Uruguayan Society of Biosciences

[#](present and/or former member)