scientific program

keynote lectures

04/10 – 9:30 to 10:30 am
Keynote Lecture 1
Chair: Manuel Prieto, iBB-IST, Portugal

Richard Henderson, MRC Labs, Cambridge, UK
Impact of single particle electron cryo-microscopy in structural biology

04/10 – 1:30 to 2:30 pm
Keynote Lecture 2
Chair: Leandro Barbosa, IF-USP, Brazil

Carlos Bustamante, University of Berkeley, USA
Co-temporal Force and Fluorescence Measurements Reveal a Ribosomal Gear-shift Mechanism of Translation Regulation by mRNA Secondary Structures

05/10 – 9:00 to 10 am
Keynote Lecture 3
Chair: Leda Q. Vieira, UFMG, Brazil

Giorgio Trinchieri, Center for Cancer Research, NCI, NIH, Maryland, USA
Targeting the microbiome in cancer immunotherapy

06/10 – 9:00 to 10 am
Bei Shizhang Keynote Lecture 4
Chair: Pingsheng Liu, Institute of Biophysics, Chinese Academy of Sciences

Tao Xu, Institute of Biophysics, Chinese Academy of Sciences, China
Cryogenic superresolution correlative light and electron microscopy on the frontier of subcellular imaging

06/10 – 1:15 to 2:15 pm
Keynote Lecture 5
Chair: Koby Levy, Weizmann Institute, Israel

Michael Levitt, Stanford University, USA
Lessons from 620 Days Studying Covid-19
07/10 – 9:00 to 10 am
Keynote Lecture 6
Chair: Maurício da Silva Baptista, IQ-USP, Brazil

**Ohara Augusto**, University of São Paulo, Brazil
*Carbon dioxide redox metabolites in eustress and oxidative distress*

07/10 – 1:15 to 2:15 pm
Keynote Lecture 7
Chair: Daniel Peluffo, UDELAR, Uruguay

**Ramon Latorre**, University of Valparaiso, Chile
*Calcium-driven voltage sensing and the role of charged residues in the voltage sensor domain of BK channels*

08/10 – 9:00 to 10 am
Keynote Lecture 8
Chair: Rosangela Itri, IF-USP, Brazil

**Angela Gronenborn**, University of Pittsburgh, USA
*The awesome power of Fluorine NMR*

08/10 – 12:30 to 1:00 pm
IUPAB Award Keynote Lecture 9
Chair: John Baenziger, University of Ottawa, Canada

**Yoav Shechtman**, Technion, Haifa, Israel
*Next generation localization microscopy - or - how and why to ruin a perfectly good microscope*

08/10 – 1:00 to 2:00 pm
IUPAB Award Keynote Lecture 10
Chair: Juan Carmelo Gómez Fernandez, Universidad de Murcia, Spain

**Anthony Watts**, University of Oxford, UK
*Lipids are important: Avanti/IUPAB Award lecture*
October 4th – 10:45 am to 12:45 pm
Room 1

SP-01. Drug design and delivery
Chair: Joke Bouwstra (Leiden University, The Netherlands)
Speakers:

Peter Swaan, University of Maryland, USA
Targeting Membrane Transporters for Oral Drug Delivery

Silvia Alonso, Universidad de Quilmes, Argentina
Polymer-Based Nanoparticles: Fabrication and Health Applications

Joke Bouwstra, Leiden University, The Netherlands
Microneedles and nanoparticles for dermal vaccination

Adriana R. Pohlmann, Universidade Federal do Rio Grande do Sul, Brazil
Interfacial reactions in water to functionalize the surface of polymeric nanocapsules intended for drug targeting

October 4th – 10:45 am to 12:45 pm
Room 2

SP-02. Protein Structure Dynamics and Functions
Chair: Richard C. Garrat (IFSC-USP)
Speakers:

Frances Separovic, University of Melbourne, Australia
Structure determination of antimicrobial peptides in live bacteria

Marius Schmidt, University of Wisconsin
Time-Resolved Crystallography at X-ray Free Electron Lasers

Bonnie A. Wallace, University of London, UK
Structure, Function, and Dynamics of Voltage-Gated Sodium Channels and their Complexes with Drug

Andrea Dessen, LNBio, Campinas and IBS, Grenoble, France
Structural snapshots of bacterial cell wall biosynthesis
October 4th – 10:45 am to 12:45 pm
Room 3

SP-03) Biological Photosensors and their Applications in Optogenetics
Chair: Silvia Braslavsky, MPI, Germany
Speakers:

Masahide Terazima, Kiyoto University, Japan
Time-resolved detection of association/dissociation reaction and conformation changes of photosensor proteins towards applications in Optogenetics

Andrew Woolley, University of Toronto
Light switchable protein engineering with photoactive yellow protein

Matias Zurbriggen, University of Dusseldorf, Germany
Optogenetic control of biological processes: from photoreceptor engineering to their implementation in microbial, animal and plant systems

Leonardo Vinicius Monteiro de Assis, University of Lübeck, Germany
An overview of the photosensitive system of the skin, a novel therapeutic target?

October 4th – 2:45 to 4:45 pm
Room 1

SP-04. Macromolecular Machines and Switching Devices
Chair: Alejandro Buschiazzo, Inst Pasteur, Montevideo, Uruguay
Speakers:

Axel Brunger, Stanford University, USA
Molecular Mechanisms of Neuronal Exocytosis

Charles Sindelar, Yale University, USA
Honing in on motile filamentous assemblies by cryo-EM

Alejandro Buschiazzo, Institut Pasteur Montevideo, Uruguay
Watching bacterial sensors as they move: pliable proteins that transmit signals

Alessandra Del Giudice, Sapienza University of Rome, Italy
Regulation of the photosynthetic AB-GAPDH via self-assembly

Leticia Irene Llarrull, Universidad de Rosario, Argentina
Functional characterization of β-lactam sensor proteins in Staphylococcus aureus
October 4th – 2:45 to 4:45 pm
Room 2

SP-05) Chemical Biology
Chair: Randall Peterson (University of Utah)
Speakers:

Sara Sattin, University of Milan, Italy
Probing bacterial survival strategies: inhibitors of (p)ppGpp synthesis

Frederico Gueiros, USP, Brazil
Many birds with one stone: targeting a universal signaling pathway of bacteria to improve antimicrobial therapy

Randall Peterson, University of Utah, USA
Chemo-Optogenetic Probes for Light-Controlled Switching of Ion Channel Activity

Mariana Chaves Micheletto, Faculdade de Filosofia, Ciências e Letras de Ribeirão Preto, USP, Brazil
Interaction of genetically encoded photosensitizers with scintillating nanoparticles for X-PDT

Isaac de Araujo Matos, Universidade de São Paulo, Brazil
Discovery of Nanomolar Myeloperoxidase Inhibitors with Anti-Arthritis Properties: A Computational, in vitro and in vivo study

October 4th – 2:45 to 4:45 pm
Room 3

SP-06. 24th Prize for Young Talent in Life Sciences
Chair: Juliana Fietto, UFV Brazil

Bruna Alice Gomes de Melo, UNIFESP, Brazil
3D Bioprinting Neurogenic Niches aiming the Biofabrication of In Vitro Models to Study Neurodegenerative Diseases and Treatments

Carolina Manganeli Polonio, USP, SP, Brazil
Evaluation of the microRNAs in the immunopathogenesis of microcephaly caused by ZIKV

Célio Junior da Costa Fernandes, Unesp Botucatu, Brazil
Vascular smooth muscle cells drive osteoblast-toosteocyte transition via β-catenin signaling through exosome communication

Marlon Henrique e Silva Cardoso, Universidade Católica Dom Bosco, DF, Brazil
An N-capping asparagine-lysine-proline (NKP) motif contributes to a hybrid flexible/stable multifunctional peptide scaffold

Robson Tramontina, University of Campinas, Brazil
Integrated production high-value aromatic alcohols directly from lignocellulosic biomass
October 5th - 6:30 to 8:30 am
Room 1

Biophysical Reviews Journal

Damien Hall - (Editor)
Meran Lloyd-Owen (Japan)
Joshua Ho (Hong Kong China)
Kuniaki Nagayama (Japan)
N. Jaganathan (India)
German Rivas (Spain)
Steven Harding (UK)
Rosangela Itri (Brazil)
Wilma Olson (USA)

October 5th - 10:15 am to 12:15 am
Room 1

SP-07) Deforming membranes
Chair: Patricia Basserau, Institut Curie (France)

Speakers:

Michael Kozlov, Tel Aviv University, Israel
Mechanism of shaping membrane nanostructures of Endoplasmic Reticulum

Rumiana Dimova, Max Planck, Germany
To bud or not to bud: remodeling of artificial cells

Paul A Janmey, Univ. of Pennsylvania, USA
Control of actin assembly at the cell membrane by phosphatidylinositol 4,5 bisphosphate

Luís Guilherme Mansor Basso, UENF, RJ
Lipid bilayer membrane as a possible target for inhibition of the SARS-CoV-2 Spike-mediated membrane fusion process

Clara Malizia Leal Ferreira da Motta, UFRJ, RJ
The SARS-CoV-2 nucleocapsid protein N-terminal domain phase separation is triggered by the serine-rich region and modulated by TRS binding
October 5th - 10:15 am to 12:15 am
Room 2

SP-08. Systems biology and biomarkers for human disorders
Chair: Peter Nilsson (KTH Royal Institute of Technology, Stockholm)
Speakers:

Hiroki Ueda, RIKEN Center for Biosystems Dynamics Research, Japan
*Systems Biology of Mammalian and Human Sleep/Wake Cycles ~Phosphorylation Hypothesis of Sleep~*

Daniel Martins de Souza, Unicamp, São Paulo, Brazil
*The effects of COVID-19 in the human brain*

Peter Nilsson, KTH Royal Institute of Technology, Stockholm, Sweden
*Development and utilization of a highly specific and sensitive multiplex serological COVID-19 assay*

Bianca Cruz Pachane, Universidade Federal de São Carlos, Brazil
*Invasive behaviour of breast cancer cells as a response to hypoxic signalling via extracellular vesicles*

Augsto Frantz Uberti, Pontificia Universidade Católica do Rio Grande do Sul, Brazil
*Urease of Helicobacter pylori: role in neuroinflammation*

October 5th - 10:15 am to 12:15 am
Room 4

SP-09) Metabolism and Bioenergetics
Chair: Alicia J. Kowaltowski, USP, Brazil
Speakers:

Antonio Zorzano, IRB Barcelona, Spain
*Mitochondrial fusion proteins and their role in metabolic disorders.*

Marcos Chiaratti, UFSCAR, Brazil
*A role for mitofusins in oocyte development: impact on fertility and offspring viability*

Valentina Parra, University of Chile, Chile
*Systems Biology Approach of the Down Syndrome Critical Region 1 gene, RCAN1: implications in mitochondrial biology, cellular proliferation, and differentiation*

Caroline Simões Pereira, University of São Paulo, Brazil
*Mechanism of rotenone inhibition of respiratory complex I*

October 5th - 1:00 to 3:00 pm
E-poster Session
(PS-01 Odd-numbered panels)
The presenters are expected to be logged in the platform during their respective poster section and interact with the audience using a chat interface (typing only).
October 5th - 3 to 5 pm
Room 1

SP-10. Biophotonics
Chairs: Georg Wondrak and Martha S. Ribeiro
Speakers:

Martha S. Ribeiro, USP, Brazil
Light-based non-thermal therapy: from basis to clinical applications

Georg Wondrak, University of Arizona, USA
The water-isotopologue deuterium oxide (D2O; ‘heavy’ water): From biophysical properties to experimental cancer therapeutic

Martina Meinke, University of Berlin, Germany
Wavelength, dose skin type and skin model related radical formation in skin

Tania Mateus Yoshimura, Nuclear and Energy Research Institute, Brazil
Low power light triggers opposite effects on stem cells: influence of the wavelength and culture conditions

Matheus del Valle, Centro de Lasers e Aplicações, IPEN, SP
Breast tissue diagnosis using artificial intelligence applied to FTIR spectroscopy images

October 5th - 3 to 5 pm
Room 2

SP-11. Microbiomes: human and enviromental
Chair: Leda Quercia Vieira - UFMG, Brazil
Speakers:

Lars Engstrand, Karolinska Institutet, Sweden
Studies of the human microbiome in health and disease

João C. Setubal, IQ-USP, Brazil
Metagenome-assembled genomes and their contribution to microbiome studies

Emmanuel Dias Neto, AC Camargo Center, Brazil
Microbiome studies of the built environment: from commensals, to cancer & COVID-19

Jumpei Yamagishi, The University of Tokyo, Japan
Microbial Potlatch: The advantage of leakage of essential metabolites and resultant symbiosis of diverse species

Ivan Rosa e Silva, Queen Mary University of London, UK
Molecular mechanisms underlying the role of the centriolar CEP164-TTBK2 complex in human ciliopathies
October 5th - 3 to 5 pm
Room 3

SP-12. Molecular and Cell Imaging
Chair: Paulo Bisch (UFRJ)
Speakers:

Fernando Stefani, University Buenos Aires, Argentina
*Far-field fluorescence nanoscopy with sub-10 nm resolution*

Enrico Gratton, University of California, USA
*Single cell physiological characterization in living tissue. Determination of cell fate*

Marco Capitanio, LENS, University of Florence, Italy
*Alpha-catenin forms a cooperative and asymmetric catch bond with F-actin to regulate cell junction fluidity*

Sara Anselmo, University of Palermo, Italy
*Advanced fluorescence microscopy techniques to study the interaction of amphiphilic peptides with model membranes*

Fabiana Avila Carneiro, Universidade Federal do Rio de Janeiro, Brazil
*Study of SARS-CoV-2 morphogenesis and interaction with the cell by transmission and high-resolution scanning electron microscopy*

October 5th – 5:30 to 7:00 pm
50 Anos da Pós Graduação em Bioquímica da FMRP-USP
Chair: Vitor M. Faça

*Graduate Program in Biochemistry - FMRP - USP: 50 years of history and achievement*
Prof. Vitor Marcel Faça

*Proteoliposomes as a mimic model of matrix vesicles and bone mineralization*
Prof. Pietro Ciancaglini

*Deletion of AA9 lytic polysaccharide monooxygenases impairs fungal growth on lignocellulose*
Prof. André Damasio

*Unraveling the neurotropic potential of the emergent viruses Oropouche and SARS-CoV-2 using adult human brain slice cultures*
Glaucia Almeida

*Glucocorticoids decrease the thermogenic capacity and increase the triacylglycerol synthesis by glycerokinase activation in brown adipose tissue of rats*
Ana Paula De Assis

*Effects of NT157 on tyrosine kinase signaling pathways in BCR-ABL1 T315I cells*
Virginia Campos Silvestrini
October 6th – 10:15 to 12:15 pm
Room 1

SP-13. Ionic channels and membrane transporters
Chair: John Baenziger, University of Ottawa, Canada
Speakers:

Francisco Bezanilla, University of Chicago, USA
Sensing voltage and opening of ion channels

Alexander I. Sobolevsky, Columbia University, USA
Structural mechanism of heat-induced opening of a temperature-sensitive TRP channel

Renae Ryan, University of Sydney, Australia
Glutamate transporters contain a conserved chloride channel with two hydrophobic gates

John Baenziger, University of Ottawa, Canada
Conformational transitions and ligand-binding to a lipid-sensitive muscle-type acetylcholine receptor

October 6th – 10:15 to 12:15 pm
Room 2

SP-14) Biomolecular association and dynamics
Chair: Paul Whitford, Northeastern University College of Science (USA)
Speakers:

Andrei Korostelev, University of Massachusetts, USA
Time-resolved cryo-EM visualizes the structural dynamics of translation

Hue Sun Chan, University of Toronto, Canada
Theory of Protein Phase Separation in Biomolecular Condensates

Pablo I.D. Dans Puiggros, Uruguay
40 Years Learning from the Sequence-Dependent Mechanical Properties of B-DNA

Koby Levy, Weizmann Institute, Israel
Diffusion of proteins along biopolymers: from biophysics to function
October 6th – 10:15 to 12:15 pm
Room 3

SP-15. Gender in Science
Chair: Maria Cristina Nonato, FFCLRP-USP, Brazil and David Crossman, New Zealand, University of Auckland

Carla Mattos, Northeastern University, USA
Frances Separovic, University of Melbourne, Australia
Lauren Arendse, University of Cape Town, South Africa
Milagros Medina, University of Zaragoza, Spain
Pimchai Chaiyen, Institute of Science and Technology (VISTEC), Thailand

PICTURE A SCIENTIST
YEAR 2020 | RUN TIME 97 mins | LANGUAGE English
https://www.pictureascientist.com/

DIRECTED BY IAN CHENEY and SHARON SHATTUCK
PRODUCED BY MANETTE POTTLE, IAN CHENEY, and SHARON SHATTUCK

SYNOPSIS
PICTURE A SCIENTIST is a feature-length documentary film chronicling the groundswell of researchers who are writing a new chapter for women scientists. A biologist, a chemist and a geologist lead viewers on a journey deep into their own experiences in the sciences, overcoming brutal harassment, institutional discrimination, and years of subtle slights to revolutionize the culture of science. From cramped laboratories to spectacular field stations, we also encounter scientific luminaries who provide new perspectives on how to make science itself more diverse, equitable, and open to all.

We have 200 viewings available that are sponsored by IUPAB. The viewings are part of the “Gender in Science”
The movie will be available online for 72 hours from 10:00 am the 5th of October São Paulo, Brazil time. We will send applicants the link for viewing on Monday the 4th of October.
Please note this event is for everyone and we would like to encourage both male and female colleagues to attend.

October 6th – 2:30 to 3:30 pm

Exhibitor Presentation – 1 - Cytiva
Purifying samples for cryo-EM preps
Technical improvements related to cryogenic electron microscopy (cryo-EM) have triggered a revolution in structural biology and made single-particle cryo-EM the dominant discipline for determining structures. Cryo-EM has opened new opportunities to determine large and complex molecules, but has also introduced new challenges for purification of samples.

Speakers:
Lotta Hedkvist, Global Product Manager, Cytiva
Veronica Fridh, Global Product Manager for Biacore systems, Cytiva
Emma Lind, Global Product Manager for resins, Cytiva

Q&A Session:
Melissa Armelini, Product Specialist, Cytiva
Rafael Santos, Product Specialist, Cytiva
October 6th – 2:30 to 4:30 pm  
Room 2

Exhibitor Presentation – 2 and 5 – DAAD & DFG

2:30 pm: Introduction (5 min.)
2:35 pm: Testimonials
   Prof. Dr. Werner Mäntele (20 min.)
   Prof. Dr. Matias Zurbriggen (20 min.)
   Prof. Dr. Rumiana Dimova (15 min.)
3:30 pm: Exchange and Fellowship Programs of the German Academic Exchange Service (DAAD)
3:45 pm: Funding Programmes of the German Research Foundation (DFG)
4:00 pm: Q&A and networking
4:25 pm: Closing Remarks

October 6th – 3:30 to 4:30 pm  
Room 1

Exhibitor Presentation – 4 – Thermo Fisher Scientific

Recombinant Protein Cloning: New Frontiers

Helder Teixeira de Freitas, Brazil - Product Specialist (Molecular biology and Sample prep)

October 6th – 4:30 to 5:30 pm  
Room 2

Exhibitor Presentation – 8 – Sartorius

Application of Octet BLI-Technology for Characterization and Life Cycle Management of Critical Reagents for Development of Contemporary Biotherapeutics

Ronald Bowsher, Ph.D. – CSO & Partner B2S Life Sciences
Alyssa Cieslak – Scientist II Custom Reagents

Q&A and networking

Ronald Bowsher, Ph.D. – CSO & Partner B2S Life Sciences
Alyssa Cieslak – Scientist II Custom Reagents
Sanofar J. Abdeen, Ph.D. – Associate Director Custom Reagents
October 7th – 10:15 am to 12:15 pm
Room 1

SP-16. Protein Folding Misfolding and Unfolding
Chair: Vladimir Uversky (University of South Florida, USA)
Speakers:

Prakash Kulkarni, City of Hope National medical Center, USA.
Protein conformational dynamics and phenotypic switching

Gonzalo de Prat-Gay, Protein Structure-Function and Engineering Lab., Fundación Instituto Leloir and IIBBA-CONICET
Liquid-liquid phase separation and assembly of viral factories: molten globule does the trick

Orkid Coskuner-Weber, Turkish-German University, Molecular Biotechnology, Turkey
In Vivo Effects in Alzheimer’s and Parkinson’s Diseases: A Computational Biophysicists Perspective

Alexander V. Fonin, Russia
The new view of PML-bodies formation

October 7th – 10:15 am to 12:15 pm
Room 2

SP-17) EBSA Symposium on “Translational Biophysics”
Chairs: Anthony Watts and Jesús Pérez-Gil
Speakers:

Amitabda Chattopadhyay, Centre for Cellular & Mol Biology, Hyderabad, India
Cholesterol-dependent Oligomerization and Endocytosis of GPCRs: Novel Insights in Therapeutics

Anthony Wilkinson, York University, UK
Drug Discovery in Parasitic and Viral Diseases Using Protein Lipidation as a Target

Peter Pohl, Vienna University, Austria
Water transport through membrane channels

Jesus Pérez-Gil, President of EBSA, Universidad Complutense, Madrid, Spain
Interfacial Biophysics to Restore the Respiratory Surface under Breathing Mechanics
October 7th – 10:15 am to 12:15 pm
Room 3

SP-18. Autophagy: mechanisms and applications
Chair: Marcelo Mori, Unicamp, São Paulo, Brazil
Speakers:

Maho Hamasaki, Osaka University, Japan
Chemical activation of LC3 conjugation system uncover the new insight of LC3 lipidation site.

Julio C.B. Ferreira, USP, Brazil
Targeting autophagy in skeletal muscle diseases

Louis R. Lapierre, Brown University, USA
Location, location, location: Autophagy proteins interact with organelles to modulate lifespan.

Nektarios Tavernarakis, Institute of Molecular Biology and Biotechnology, Greece
Autophagic pathways in neuronal physiology and pathology during ageing

October 7th – 2:30 to 4:30 pm
Room 1

SP-19. Membrane Simulations
Chair: Mikko Kartunnen (Canada)
Speakers:

Peter Tieleman, University of Calgary, Canada
Insights in lipid-protein interactions from computer simulations

Mikko Kartunnen, Western University, Canada
Nanocellulose-membrane contacts, insights from Molecular Dynamics simulation

Syma Khalid, University of Oxford, UK
Computational assays of bacterial cell envelopes: doing microbiology with computers

Thereza Amelia Soares da Silva, UFPE, Brazil
SuAVE (Surface Assessment via Grid Evaluation) for Every Surface Curvature and Every Cavity Shape
October 7th – 2:30 to 4:30 pm
Room 2

SP-20. Systems Biologics: At the interfaces of engineered proteins, their cell surface receptors and cellular molecular networks
Chair: Stephen Michnick (Canada)
Speakers

Sachdev Sidhu, University of Toronto, Canada
*Systems Biologics: Large-Scale Engineering of Modulators of Protein Networks*

Madan Babu, St. Jude Children’s Research Hospital
*Variation in GPCR signaling: Implications for drug discovery*

Emerson Rodrigo Da Silva, Universidade Federal de São Paulo, Brazil
*Biophysics of peptiplexes based on cell penetrating peptides*

Stephen Michnick, University of Montreal, Canada
*Changes of Cell Biochemical Network States Revealed in Protein Homomeric Complex Dynamics*

October 7th – 2:30 to 4:30 pm
Room 3

SP-21) IUBMB Symposium: Science Education
Chair: Manuel João Costa, University of Minho, Portugal

Speakers:

Erin Dolan, University of Georgia, USA
*Course-based undergraduate research experiences: what if the treatment is a CURE?*

Luciane V. Mello, University of Liverpool, UK
*Reflecting and evidencing transferable skills*

Manuel João Costa, University of Minho, Portugal
*Evidence-based post-pandemic biochemistry and molecular biology education: redesigning courses to enhance the student and teacher experiences*

Vera Maria Treis Trindade, Universidade Federal do Rio Grande do Sul, Brazil
*Biokimi App: Interactive Study of Hepatic Glycolysis and Gluconeogenesis Regulations*

October 7th – 4:30 to 6:30 pm
E-poster Session
(PS-02 Even-numbered panels )
The presenters are expected to be logged in the platform during their respective poster section and interact with the audience using a chat interface (typing only).
October 8th –10:15 am to 12:15 pm
Room 1

SP-22) Scissioning membranes
Chair: Rumiana Dimova, Max Planck, Germany
Speakers:

Jeanne Stachowiak, Univ of Texas, Austin, USA
Intrinsically disordered proteins organize and shape cellular membranes

Patricia Basserau, Institut Curie, France
ESCRT-III complexes assembling on membranes

Markus Deserno, Carnegie Mellon University, USA
The role of scaffold reshaping and disassembly in dynamin driven membrane fission

Ernesto Ambroggio, Universidad de Cordoba, Argentina
The interaction of Dengue and Zika capsids with oligonucleotides and membranes generate liquid-liquid phase separations.

October 8th –10:15 am to 12:15 pm
Room 2

SP-23. Redox Biology
Chair: Rafael Radi, UDELAR, Uruguay
Speakers:

Rafael Radi, UDELAR, Uruguay
Mitochondrial formation, catabolism and toxicity of peroxynitrite

Kostas Tokatlidis, University of Glasgow, UK
Redox control of mitochondria biogenesis as a cellular stress response mechanism

Luis E.S. Netto, USP, Brazil
Mechanisms of peroxiredoxins targeting to mitochondrial subcompartments

Valdecir Farias Ximenes, Universidade Estadual Paulista, Brazil
Experimental Studies and Computational Modeling on Cytochrome C Reduction by Quercetin: the role of oxidability and binding affinity

Mariana Juliani do Amaral, Universidade Federal do Rio de Janeiro, Brazil
The antioxidant role of the prion protein explained by copper storage in liquid condensates
October 8th –10:15 am to 12:15 pm
Room 3

SP-24) Biophysics of immune system
Chair: Jean-Marie Ruysschaert, Université Livres de Bruxeles, Belgium
Speakers:

Nicholas J. Gay, University of Cambridge, UK
*Structure and dynamics of signalling complexes in the innate immune response and inflammation.*

Jean-Marie Ruysschaert, Université Livres de Bruxeles, Belgium
*New activators of the innate system: from assembled lipids to amyloids*

Roman Jerala, National Institute of Chemistry, Slovenia
*Design of mammalian cell regulatory circuits*

Georgina Herrera, Universidad de Buenos Aires, Argentina
*Gladin proteolytical resistant peptides: the interplay between structure and self-assembly in gluten-related disorders*

Malvina Pizzuto, Universidad de Murcia, Spain
*Mechanistic basis of immune response modulation by cardiolipin, a matter of double bonds*

October 8th, 2021 - 2:00-2:30 pm

Closing Ceremony and Awards
The announcement of Awards for poster presentations and 24th Prize for Young Talent in Life Sciences