



XLIX Annual Meeting

Chilean Society for Biochemistry and Molecular Biology

PROGRAM

2026

5th-8th October
Hotel Club La Serena, Región de Coquimbo



XLIX Annual Meeting Sociedad de Bioquímica y Biología Molecular de Chile
October 5-8, 2026, Hotel Club La Serena, Región de Coquimbo

Monday, October 5th

10:00–14:00 Registration

14:00–16:00 New Members Session

Chairs: Martín Montecino and Roxana Pincheira

14:00 Intrinsic Resistance Mechanism of Squamous Cell Lung Carcinomas to the multi-angiokinase inhibitor Nintedanib: CXCL-1 Upregulation in Tumor-Associated Fibroblasts. Natalia Díaz-Valdivia. Núcleo Interdisciplinario de Biología y Genética (NiBG), Instituto de Ciencias Biomédicas (ICBM), Facultad de Medicina, Universidad de Chile, Santiago, Chile.

14:15 Gene-environment interactions in Parkinson's disease: insights from flies and diverse populations exposed to pesticides. Patricio Olguín. Núcleo Interdisciplinario de Biología y Genética, Instituto de Ciencias Biomédicas y Departamento de Neurociencia, Facultad de Medicina, Universidad de Chile.

14:30 Cryo-EM structure of a brown algal Photosystem I-FCP supercomplex reveals conservation and divergence of antenna architecture in the red lineage. Pablo Maturana, University of California, Davis, USA; Universidad de Concepción, Chile.
Departamento de Bioquímica y Biología Molecular, Facultad de Ciencias Biológicas, Universidad de Concepción, Concepción, Chile.

14:45 A GRN strategy to unveil hubs regulating *Trichoderma atroviride* mycoparasitism progression. Consuelo Olivares-Yáñez. Centro de Genómica y Bioinformática, Universidad Mayor, Santiago, Chile.

15:00 A SINE-derived RNA as a stress-responsive epigenetic ribozyme. Carlos Rivera. Massachusetts General Hospital and Harvard Medical School, Boston, MA, USA.

15:15 From Sexual Recombination to Nuclear Cooperation: Experimental Evolution in Two Fungal Models. Wladimir Mardones. Fundación Instituto Milenio de Biología Integrativa (iBio).

15:30 Unraveling metabolic functions of glucose transporter 8, GLUT8. Lorena Mardones. Research Laboratory in Biomedical Sciences, Faculty of Medicine, Universidad Católica de la Santísima Concepción.

15:45 Alternative polyadenylation and the circadian clock: Uncovering a bidirectional regulatory network in the *Drosophila* nervous system. Gonzalo Olivares. Center for Integrative Biology (CIB), Universidad Mayor, Santiago, Chile.

16:00–16:30 Coffee Break

16:30–18:30 Symposium “Single-Cell Genomics: Emerging Frontiers in Gene Regulation”

Chairs: Elena Vidal and José Miguel Álvarez

A cellular map of LATAM diversity reveals ancestry-specific gene regulatory patterns.

Carlos Ortiz Ramírez, CINVESTAV UGA, México.

Hidden complexity: single-cell approaches to immune regulation and disease risk.

Marcela K. Sjöberg-Herrera, Pontificia Universidad Católica de Chile.

Non-invasive sampling and single-cell profiling to understand wound healing in a rare skin disease. Ignacia Fuentes, Pontificia Universidad Católica de Chile.

Plant stem cell dynamics rewire differentiation and cell identity. Sebastián Moreno-Ramírez, The Sainsbury Laboratory, University of Cambridge, UK.

18:30–18:40 Break

18:40–19:40 Opening Lecture

Chair: Valentina Parra, Vice President of SBBMCh

How Mitochondria Respond to Changes in Caloric Intake. Alicia Kowaltowski, Universidade de São Paulo, Brazil.

19:40–20:30 Tito Ureta Prize awarded to Dr. Yedy Israel.

Chair: Lorena Lobos

20:30–21:00 Herman Niemeyer Medal

Chair: Valentina Parra, Vice President of SBBMCh

21:00 Welcome Dinner

Tuesday, October 6th

8:30–9:00 Poster Mounting (1–65)

9:00–11:00 Oral Sessions 1 and 2

Oral Session 1

Chairs: María Alejandra Moya León and Lorena Pizarro

9:00 FchDOF1 transactivates the FchPL promoter and contributes to cell wall disassembly required for softening of *Fragaria chiloensis* fruit. María Alejandra Moya León, Universidad de Talca.

9:15 **PHR1-Dependent Transcriptional Control of Root Hair Growth Under Concurrent Phosphate Limitation and Salinity in *Arabidopsis*.** Miguel Angel Ibeas, Centro de Biotecnología Vegetal, UNAB.

9:30 **Salt-responsive alternative splicing modifies HHO3/NIGT1.1 isoforms balance during root adaptation to salinity in *Arabidopsis thaliana*.** Jesús Miguel Hernández Urrieta, Facultad de Ciencias Biológicas, Pontificia Universidad Católica de Chile, Chile.

9:45 **Exogenous Trehalose application enhances thermotolerance in tomato plants via downregulation of the Glutamyl-tRNA(Gln) amidotransferase gene.** María Paz Covarrubias Becerra, Facultad de Agronomía y Sistemas Naturales, Departamento de Fruticultura y Enología, Pontificia Universidad Católica de Chile.

10:00 **SCL28 regulates epidermal ploidy to control nitrate-mediated shoot growth.** Eleodoro Javier Riveras Hernandez, Pontificia Universidad Católica de Chile.

10:15 **Nitric oxide sustains Lateral Root formation and water status under moderate water deficit in tomato (*Solanum lycopersicum*).** Carlos Rubilar Hernández, Universidad de O'Higgins.

10:30 **A bZIP Transcription Factor Orchestrates Genotype-Specific Regulatory Hubs involved in Nitrogen and Water Deficit Signals integration in *Solanum lycopersicum*.** Diego Landaeta-Sepúlveda, Centro de Genómica y Bioinformática, Universidad Mayor.

10:45 **Beyond model plants: Genome-wide mapping and validation of drought regulatory networks in Tomato using the TARGET assay.** Mauricio Arias Castro, Universidad Andrés Bello.

Oral Session 2

Chairs: Ignacio Niechi and Vicente Torres

9:00 **Short and long-term signaling triggered by *Helicobacter pylori* infection in gastric cells.** Vicente A. Torres, Universidad de Chile.

9:15 **A DHODH R135C Variant Promotes Mitochondrial Dysfunction in Cytokine-Stimulated Cardiomyocytes.** Claudia Álvarez Martínez-Conde, Universidad de São Paulo.

9:30 **Molecular Profiling and Functional Drug Screening Reveal Therapeutic Opportunities in Gallbladder Cancer.** José Ignacio Erices Rodríguez, Departamento Oncología Básico Clínico, Facultad de Medicina, Universidad de Chile.

9:45 **Mitochondrial DNA as a Diagnostic and Prognostic Biomarker for Thyroid Cancer in a Chilean Patient Cohort.** Xandy Melissa Rodriguez Mesa, Institute of Biomedical Sciences, Faculty of Medicine, Universidad Andrés Bello.

10:00 **JC polyomavirus, bacterial cofactors, and bile acid interactions in colorectal cancer.** Diego Carrillo, Laboratorio de Oncovirología Molecular; Instituto de Bioquímica y Microbiología; Facultad de Ciencias, Universidad Austral de Chile, Valdivia, Chile.

10:15 An abortive EBV lytic program driven by benzo[a]pyrene in preneoplastic lung epithelium. Cristian Andrade Madrigal, Universidad de Tarapacá.

10:30 Epigenetic modulation of macrophage polarization in colorectal cancer. Yanitza Gutierrez Monsalve, Laboratorio de Investigación en Ciencias Biomédicas, Facultad de Medicina, Universidad Católica de la Santísima Concepción, Concepción, Chile.

10:45 Functional loss of TET enzymes reveals their critical role in controlling the epigenetic landscape and heterochromatin function in mouse embryonic stem cells. Bruno Daniel Soto Moraga, Universidad Andrés Bello.

11:00–11:10 Regional universities as articulators of the territorial scientific, technological and innovation ecosystem: A case study from the University of Atacama and the application of an advanced triple-helix model. María José Gallardo and Cristóbal Olivares. Universidad de Atacama, Copiapó, Chile.

11:10–11:30 Coffee Break

11:30–12:45 Protein Society Lecture

Chair: César Ramírez

Allosteric Connections Across the Ras/Raf Dimer. Carla Mattos, Northeastern University College of Science, USA.

12:45–15:00 Free time (*lunch is not included*)

15:00–16:30 Poster Session I

1. Targeting human uncoupling protein 2 with flavonoids: from structure-based virtual screening to mitochondrial functional analysis. Waldo Acevedo, Gisela Cáceres, Trinidad Jorquera, Ricardo Donoso and Juan Reyes.

2. Evaluation of the biostimulant effect and modulation of plant immunity in *Solanum lycopersicum* induced by *Trichoderma atroviride* overexpressing strains of the transcription factors taPRF1 and taTAR. Thomas Aguilera-Espinoza, Michelle Vargas-Menares, Consuelo Olivares-Yáñez.

3. Location of poly(dA:dT) tracts within the nucleosome core impedes the sliding activity of the RSC complex. Roberto Amigo, Fernanda Raiqueo, Leonor Leiva, José L. Gutiérrez.

4. Antiproliferative effects of quercetin in gallbladder cancer cells and the potential role of Endothelin-1. Laura Asencio, Matías Ruiz-Urbe, Ignacio Niechi.

5. DNA Damage-Related Genes and Pathways Modulated by miR-1973 and miR-4485-3p in MDA-MB-231 Tumor Cells. Juan Barraza, Christopher Fitzpatrick y Verónica Burzio.

6. Structural impact of phosphorylation of the neuronal variant of LSD1 on CoREST dissociation. Diego Biermann, Angélica Fierro y María Estela Andrés.

7. NUA1 inhibition enhances ceramidase inhibitor-induced cell death in colorectal cancer. Viviana Coliboro-Dannich, Nicolás Bravo, Alejandro Farías, Roxana Pincheira, Daniel Murphy, Ariel F. Castro.

8. Functional properties of Chilean black rice: phenolic profile, cellular ROS modulation and mapping of digestive peptides. Aloysha Brunet-Loredo, Miguel Garriga, Ingo Dreyer, María Eugenia Rubio, Claudio Valenzuela, Sonia de Pascual-Teresa.

9. GOLPH3 Associates with ACSL3 and Contributes to Palmitate-Induced XBP1s Activation in Triple-Negative Breast Cancer Cells. Germán A. Cabrera, Viviana A. Cavieres, Patricia V. Burgos y Gonzalo A. Mardones.

10. Topical trehalose, a GLUTs inhibitor, attenuates early neurovascular changes in acute and chronic retina damage. Matías Carrillo, Carlos Farkas, Lorena Mardones.

11. Evaluation of lignocellulolytic capacity and transcriptomic response of evolved thermotolerant *Neurospora crassa* isolates. Almudena I. Castro Maliqueo, Isidora Achiardi, Catalina Ardiles, Wladimir Mardones Opazo, Luis F. Larrondo Castro.

12. Effect of EZH2 activity inhibition on epithelial-mesenchymal transition-associated features in gallbladder cancer. Alejandra Conejeros Suazo, José I Erices, Jessica Toro, Christopher Fierro, Valentina Garate, Justo Lorenzo Bermejo, Katherine Marcelain.

13. Inside the cellular niche: Assembly of Virus-Containing Compartments during HIV-1 infection in human microglia. Lucía Cortesi-Patiño, Sebastián Giraldo-Ocampo, Aracelly Gaete-Angel, Fernando Valiente-Echeverría, Ricardo Soto-Rifo.

14. Design and Structural Evaluation of a Chimeric Neuraminidase Integrating Conserved Epitopes Across Influenza A Virus N1-N9 Subtypes. Benjamín Díaz-López, Sebastián A. Echeverría-Araya, María Victoria Sanchez, Jorge A. Soto.

15. A *Botrytis cinerea* gene involved in salicylic acid degradation contributes to virulence. Antonia Donaire, Gustavo Hoppe, Francisca Blanco-Herrera, Paulo Canessa, Ariel Herrera-Vásquez.

16. Effect of Oleic Acid on Palmitic Acid-Induced Cardiac Hypertrophy in Neonatal Rat Cardiomyocytes: Role of Perilipins. David Espinoza-Silva, Constanza Cortés-Bravo, Camila Ortega-Orellana, Ignacio Aedo-Cares, Sebastián Leiva-Navarrete, Rodrigo Troncoso, Valentina Parra.

17. In silico identification of candidate transcriptional regulators of the alternative polyadenylation machinery in the *Drosophila* central nervous system. Analía Foncea-Bitrán, Camilo Villamán, Víctor Aliaga-Tobar, Gonzalo H. Olivares.

18. Exogenous iron treatment of plant embryos as an approach to undercover its acquisition-accumulation processes. Marlene Fuenzalida, Carlos Schomburgk, Pía Urbina, Nathalia Navarro, Hannetz Roschztardt.

19. Optogenetics: light for regulating the expression of a fungal glucoamylase in *Saccharomyces cerevisiae*. Felipe Galaz, Vasni Zavaleta, Luis F. Larrondo and Wladimir Mardones.

- 20. Characterization of the condensate formation properties of the DSUP protein from *Ramazzottius varieornatus*.** Pedro General - Marcelo Ramírez - Exequiel Medina.
- 21. Unveiling the HIV-1 full-RNA RBPome in human microglia.** Sebastian Giraldo-Ocampo, Cecilia Rojas-Fuentes, Sebastian Oyarzun-Oyarzun, Aracelly Gaete-Argel, Fernando Valiente-Echeverría, and Ricardo Soto-Rifo.
- 22. Identification of key metabolites for ZIKV and DENV replication in mosquito cells using a metabolic model.** Alonso González-Poblete, Tomás Hernández-Díaz, Ivan Paredes, Temístocles Molina-Burgos, Lucía Cortesi-Patiño, Sebastián Giraldo-Ocampo, Aracelly Gaete-Argel, Fernando Valiente-Echeverría, Ziomara P. Gerdtzen, Ricardo Soto-Rifo.
- 23. Antiviral activity of a methanolic *Ramalina* sp. extract against HIV-1 in vitro.** Giuliet Gregoriani, Alonso Vega-Gibson, M. Carolina Otero and Gloria Arriagada.
- 24. Ursodeoxycholic acid activates NRF2 and attenuates oxidative stress induced by deoxycholic acid and JC polyomavirus T antigen in colon cells.** Haro Darling, Nahuelpán Yessica, Pérez Martina, Pavez Christian, Salazar Nickolas, Bueno Susan, Carrillo Diego.
- 25. Nanopore-based epitranscriptomic profiling of HIV-1: simultaneous detection of m6A and seven additional RNA modifications during infection in human microglia.** Jorge Ibáñez-Labbé, Cecilia Rojas-Fuentes, Sebastián Giraldo-Ocampo, Ricardo Soto-Rifo.
- 26. Transcriptomic Identification and In Silico Characterization of PTGR1 in a Carboplatin-Resistant Ovarian Cancer Model.** Carolina Larronde, Álvaro Gutiérrez, Tamara Viscarra, Francisca Muñoz, Fabiola Silva, Tatiana Millapán, John Nieves, Priscilla Brebi, Carmen G. Ili.
- 27. Identification of Candidate Transporters Associated with Alkaloid Translocation in *Lupinus luteus*.** Daniela Levicoy, Sebastián Hernández-Soto, Annally Rupayán, Makarena Carrasco-Gutiérrez, Claudio I. Correa, Jorge H. Valdés, Francisco Salinas, Haroldo Salvo-Garrido.
- 28. Functional analysis of LIM and CH domains of LIMCH1.** Ignacia Lillo, Cristián Villegas, Araceli Vallejos, Marcell Gatica, María-Belen Reyes, Antonia Gallardo, Maximiliano Figueroa, José Martínez, Pablo Maturana, Juan Román, Elena-Amparo Uribe.
- 29. Morphodynamics of the Interplay Between Endocytosis and Autophagy During Osmotic Stress in *Arabidopsis thaliana*.** José Madrid-Espinoza, Emilia Rojas-Gallardo, José Ulises Rodríguez-González, Myriam Valenzuela-Bustamante, Simón Ruiz-Lara.
- 30. Structural and functional consequences of the evolutionary divergence of the N-terminal intrinsically disordered region of GOLPH3 oncoprotein family.** Agustín A. Burgos, Tammy P. Pástor, Maximiliano Figueroa, Juan C. Opazo, and Gonzalo A. Mardones.
- 31. Integrated Directed Evolution and Multipoint Covalent Immobilization of *Bacillus subtilis* Chitosanase for the Modulated Enzymatic Depolymerization of Chitosan.** Ronny Martínez, Karen Rodríguez-Núñez, Claudia Vásquez, Valeria Vásquez and Claudia Bernal.
- 32. Early SALL2 loss drives tumor microenvironment remodeling in colonic adenomas.** Paula Medina, Alejandro Farías, Aracelly Quiroz, Araceli Castro, Joaquín Pérez, Catalina Muñoz, Diego Burgos, Carolina Benítez, M. Andrea Concha, Francisco Fuentes, Peter Wescott, Tyler Jacks, Oscar Lermenda, Ariel F. Castro, Roxana Pincheira.
- 33. Association between Stage II-III Periodontitis and Human Herpesvirus Viral Load in Adults from Los Ríos Region, Chile.** Mena-García Katherine, Haro Darling, Nahuelpán Yessica, Pérez Martina, Hernández-Vigueras Scarlett, Carrillo-Beltrán Diego.

34. Molecular Networks Linked to Poor Prognosis Reveal Candidate Genes in Gastric Cancer. Tatiana Millapán, Álvaro Gutiérrez, Fabiola Silva, Francisca Muñoz, Carolina Larronde, John Nieves, Carmen Gloria Ili, Priscilla Brebi.

35. miR-21-5p and miR-148a-3p in Plasma Extracellular Vesicle (EVs) Promote Metabolic Disease in Women with Obesity, in Contrast to Lactadherin in EVs. Maria Jose Montenegro, Karen Carrasco-Maure, Camila Pezet, Constanza Venegas, Lorena Lobos-Gonzalez, Lorena Oróstica.

36. flg22 and Xyn11e Differentially Modulate Early Systemic Defense Gene Expression in Tomato. Francisca Morales, Andree Alvarez, Daniela Muñoz y Lorena Pizarro.

37. Structural Insights into the ECE1c-CCAR2 Interaction Through Molecular Docking and Phosphosite Mutant Analysis. Leyha Morales V., María de los Ángeles Toro, Víctor Castro-Fernández, Julio C. Tapia.

38. Metformin as a potential drug for breast cancer: a possible role in lipid metabolism in the context of excess saturated fatty acids. Anaís Muñoz-Valenzuela, Alexis Salas-Burgos, Kevin Nawarh, Lorena Lobos-González, Patricia V. Burgos-Hitschfeld.

39. Transcriptomic Analysis of Neuroactive Signaling in Colorectal Cancer: GABRD Associated with Reduced Survival. Francisca Muñoz-Poblete, Álvaro Gutierrez, Carolina Larronde, Tatiana Millapan, Fabiola Silva- Mieres, John Nieves, Priscilla Brebi, Carmen Ili.

40. Microtubule Disruption and DYRK2-Dependent PSMC1 Phosphorylation Mediate SRF Accumulation in Poldip2-Deficient Vascular Smooth Muscle Cells. Jonathan Navarro, Katherine Bazán-Llabrés, Alejandra San Martin.

41. Characterization of Protein Hydrolysates Biostimulants Made from Food Industry Wastes in *Arabidopsis*, Tomato and Lettuce. Cristian Salinas, Carla Cifuentes, Frederic Delmas, Michel Hernould, José A. O'Brien*.

42. In vitro evaluation of the effect of propolis extract on the mycelial growth of *Saprolegnia* spp. Javiera Oneto, Natalia Balboa, Daniel Nuñez.

43. Role of the Mitochondrial Antiviral Signaling Protein (MAVS) in Palmitic Acid-Induced Cardiomyocyte Hypertrophy. Camila Ortega-Orellana, Úrsula Zúñiga, Sebastián Aedo, David Espinoza, Sebastián Leiva, Rodrigo Troncoso, Valentina Parra.

44. AI-Assisted Stomatal Phenotyping of Water-Deficit Responses in *Arabidopsis* Using Low-Cost Optical Microscopy. Camilo Osorio, Martina Lara, Elena Rojas-Roa, José M. Álvarez, Carlos Navarrete, Mabel Vidal.

45. Self-assembling viral nanoparticles for targeted therapy in colorectal cancer. Pavez Christian, Haro Darling, Nahuelpán Yessica, Salazar Nickolas, Pérez Martina, Ramírez Carolina, Flores Mario, Asenjo Joel, Ili Carmen Gloria, Quezada-Monrás Claudia, Jara-Gacitúa Ronald, Carrillo-Beltrán Diego.

46. Detection of the co-presence of secondary bile acid-producing bacteria and JC polyomavirus in proliferative colon lesions from Chilean patients. Pérez Martina, Cárcamo Leonardo, Carmen Gloria Ili, Haro Darling, Carrasco Cristian, Nahuelpán Yessica, Pavez Christian, Salazar Nickolas, Ramírez Carolina, Brebi Priscilla, Quezada Claudia, Carrillo-Beltrán Diego.

47. Divergent Remodeling of Mitochondria-ER Contact Sites Drives Senescent Phenotype in Proliferative versus Post-Mitotic Cells during Therapy-Induced Senescence. Andrea Puebla-Huerta, Ulises Ahumada-Castro, Camila Quezada-Gutiérrez, César Cárdenas, Valentina Parra.

48. Tumor microenvironment heterogeneity across mismatch repair deficiency patterns in colorectal cancer: beyond MLH1 loss. Aracelly Quiroz Lagos, Bastián Aravena, Constanza Sanhueza, Carla Alvares, Carlos Farkas, Claudio Benavides, Carolina Delgado.

49. Caveolin-1-dependent PAI-1 inclusion in adipocyte-derived extracellular vesicles promotes pro-angiogenic responses in endothelial cells. Sofía Sanhueza; Gonzalo Ramírez-Negrete; Belén Gaete-Ramírez; Manuel Varas-Godoy; Baohai Shao; Jay Heinecke; Lisette Leyton; Mariana Cifuentes; Andrew F.G. Quest.

50. Molecular Characterization and Stability Profiling of an Interfering Oligonucleotide for Cancer Therapy. Yenavid Reyes Campos, Francisca Sepúlveda, Mauricio Gonzalez-Olivares, Karina New, Lorena Lobos-González.

51. Modulation of CD8⁺ T-cell Functionality through the Oncogenic Interaction between MYC and NSD3S in Colorectal Cancer. Esteban Romero Vera, Sebastián Vera, Javiera Pinol, Marisol E Armijo, Pía Vidal, Estefanía Nova Lamperti, Valentina González Pecchi.

52. Characterization of innexin expression across aphid species, developmental stages, and insecticide resistance profiles: as potential molecular targets for novel aphid control strategies. María Eugenia Rubio-Meléndez, Naomí Hernández-Rojas, Valentina Tapia-Castillo, Fernando Vergara, Claudio Valenzuela, Ingo Dreyer.

53. Functional Interaction between T Antigen of JC Polyomavirus and *Campylobacter jejuni* CDT⁺ to Promote Genetic Damage in Human Colon Cells. Salazar-Ulbrich Nickolas, Nahuelpán Yessica, Ili Carmen Gloria, Haro Darling, Pavez Christian, Brebi Priscilla, Quezada-Monrás Claudia, Collado Luis, Carrillo-Beltrán Diego.

54. Pharmacological Activation of ClpP by TIC10 Induces HSF1 and HSP27 and Protect Intestinal Barrier Integrity Under Inflammatory Conditions. Francisca Muñoz Cortés, Carmen G. Feejoo, Alejandra San Martin.

55. Transcriptional Regulation of FER2 During Embryogenesis and Its Response to Iron Availability in *Arabidopsis thaliana*. Carlos Schomburgk, Marlene Fuenzalida, Nathalia Navarro, Hannetz Roschztardt.

56. Strain-Dependent Sensitization of Cisplatin-Resistant Gastric Cancer Cells by Lactic Acid Bacteria-Derived Cell-Free Supernatants. Fabiola Silva-Mieres, Carolina Larronde Rabanal, Tatiana Millapan Chihhuaihuén, Francisca Muñoz Poblete, John Nieves, Apolinaria García-Cancino, Carmen Gloria Ili, Priscilla Brebi.

57. Comparative genome-wide binding of HB7 transcription factor reveals differential promoter preferences and regulatory architectures between cultivated tomato and drought-adapted *Solanum pennellii*. R. Sjöberg-Tala, TC Moyano, L Ahumada-Langer, G Vásquez-Marambio, M Arias-Castro, C Cofré-Espinoza, A Cerda, JM Álvarez.

58. Physiological, biochemical and agronomic responses to heat stress in *Lupinus luteus*. Maydelin Torres Barrios, Macarena Barra, León Bravo Ramírez, Haroldo Salvo.

59. Effect of 17 β -estradiol on mitochondrial dynamics and OPA1 processing in a model of cardiac lipotoxicity. Katherine Valdebenito, Constanza Cortes-Bravo, Sebastián Leiva, Gonzalo Beaza, David Silva, Andrea del Campo, Valentina Parra.

60. Overexpression of taTAR and taPRF-1 transcription factors enhances the biocontrol activity of *Trichoderma atroviride* against phytopathogenic fungi. Karla Vargas-Menares, Consuelo Olivares-Yáñez.

61. Context-Dependent Regulation of c-MYC by the SALL2 Tumor Suppressor in Colorectal Cancer. Sebastián Vera, Yat Wong, Ebonny Olivera, Joaquín Pérez, Roxana Pincheira and Valentina González-Pecchi.

62. Endothelin-1 regulates ETAR stability and promotes invasion in gallbladder cancer cells. Jetzabel Vidal-Vidal, Valentina Ojeda, Sebastián Brauchi, José Sarmiento, Ignacio Niechi.

63. Polystyrene nanoplastics pollution: search for genetic determinants of the response in *Arabidopsis thaliana*. Benjamín Villalobos-Araya, Noelia Reyes-Machuca, Camila Cid, Francisca Blanco Herrera, Ariel Herrera-Vásquez.

64. Loss of SALL2 transcription factor in colorectal cancer cells promotes a protumoral stromal remodeling. Ana Julia Virote, Yat Wong, Paula Medina, Aracely Castro, Catalina Muñoz, Diego Benitez, Aracely Quiroz, Carolina Delgado, Ariel F. Castro, Roxana Pincheira.

65. Pharmacological ClpP Activation Differentially Modulates Mitochondrial Complex I Subunits in Vascular Smooth Muscle Cells. Catalina Yáñez Gómez and Alejandra San Martín.

16:30–18:30 Symposium “Cancer Beyond Individual Cells: Microbial Signals, Lipid Metabolism and Tumor Ecosystems”

Chairs: Lorena Lobos and Andrew Quest

***Helicobacter pylori* induces senescence through non-coding RNA networks in gastric cancer.** Alejandro Corvalán, Pontificia Universidad Católica de Chile.

The adipose tissue-cancer connection. Andrew Quest, Universidad de Chile.

Lipidomics analysis in cancer: EVs and lipid signaling to identify targets for intervention. Andrés Trostchansky, Universidad de la República, Uruguay.

Metformin: A Protective Tool in Gynecological Cancer Therapy. Dra. Dalhia Nurit Abramovich, Institute of Biology and Experimental Medicine (IBYME-CONICET), Argentina.

18:30–19:30 Technical Talks

Participating companies: Rochem Biocare and Biotecom

19:30–20:30 Severo Ochoa Lecture

Chair: Martín Montecino

Advancing Neurometabolic Disease Research Through iPSC-Derived Cellular Models and Genetic Therapies. Lourdes Ruiz Desviat, Universidad Autónoma de Madrid, Spain.

Wednesday, October 7th

8:30–9:00 Poster Mounting (66–130)

9:00–11:00 Oral Sessions 3 and 4

Oral Session 3

Chairs: César Ramírez and J. Andrés Rivas

9:00 Functional characterization of human acylaminoacyl-peptidase (APEH) variants designed through integration of population genomics and protein language models. Felipe Venegas, Universidad Católica del Norte.

9:15 The C-terminal disordered motif (DM9) in CK1a modulates circadian period tuning in *Neurospora crassa*. Lilian Toro, Facultad de Ciencias Biológicas, Pontificia Universidad Católica de Chile.

9:30 Unveiling the origins of RfaH fold-switching by ancestral sequence reconstruction, structure prediction, functional and biophysical assays. Cyndi Tabilo-Agurto, Pontificia Universidad Católica de Chile.

9:45 Development of a CHO-S-Based Production System for Functional Recombinant Lactadherin as an Immunogen for the Generation of Anti-Lactadherin VHHs in Triple-Negative Breast Cancer. Mauricio González-Olivares, Universidad de Chile.

10:00 Role of CCAR2/DBC-1 interaction with ECE1c in colorectal cancer cells. María de los Ángeles Toro Bahamóndez, Universidad de Chile.

10:15 Molecular Basis of Dual-Site Engagement and Selectivity of CcoTx3-synth for hNaV1.5. Erbio Díaz, Centro de Bioinformática, Simulación y Modelado (CBSM), Facultad de Ingeniería, Universidad de Talca, Talca, Chile.

10:30 Lapatinib inhibits SOCE response by modulating STIM1-SARAF interaction and Orai1 recruitment. Javiera Albornoz Bastidas, Facultad de Medicina, Universidad de Chile.

10:45 Antibacterial activity of plant meristematic cell extracts as a possible application in wound healing. Coral Febré Silva, Pontificia Universidad Católica de Chile.

Oral Session 4

Chairs: Valentina Parra and Carlos Farkas

9:00 What makes a small RNA? Deciphering the machinery and classification of sRNA genes in fungi. Nathan Johnson, Universidad Mayor.

9:15 Comparative functional genomics across one billion years of evolution reveals the grammars of plant transcriptional effector domains. Simón Álamos, University of California, Berkeley.

9:30 **Impact of genetic recombination on evolutive stress-tolerance in *Saccharomyces eubayanus*.** Catalina Ardiles, Pontificia Universidad Católica de Chile.

9:45 **Endothelin-1 drives invadopodia formation and cell invasion through NOX-dependent ROS production in gallbladder cancer cells.** Nelson Eudiel Quilaqueo Millaqueo, Universidad Austral de Chile.

10:00 **Phosphorylation at Serine 474 by GSK3 β directs ER exit and anterograde trafficking of the Kv3.1b potassium channel.** Evrim Servili, Universidad de Chile.

10:15 **Effect of D-Allulose on Food Intake Regulation in Arcuate Nucleus Hypothalamic Circuits Involving NPY and POMC Neurons.** Nancy Segura, Laboratorio de Investigación en Ciencias Biomédicas, Universidad Católica de la Santísima Concepción.

10:30 **The hepatokine LEAP-2 regulates lipid metabolism and mitochondrial dynamics in cardiomyocytes and modulates MASLD-associated cardiac remodeling and liver steatosis.** Sebastián Aedo Cares, Universidad de Chile.

10:45 **Cholesterol regulates Endoplasmic Reticulum (ER) remodelling via selective autophagy.** Alexis Gonzalez, Institute of Biochemistry II, Faculty of Medicine, Goethe University Frankfurt, Theodor-Stern-Kai 7, 60590 Frankfurt am Main, Germany.

11:00–11:30 Coffee Break

11:30–13:30 Symposium “Science with a Gender Perspective”

Chairs: Valentina Parra and Roxana Pincheira

Ciencia, Mujeres y Territorialidad. María José Gallardo, Universidad de Atacama.

Construyendo Universidad con Perspectiva de Género. Vania Figueroa, Universidad Autónoma de Chile.

Ciencia Transdisciplinar: Colectivo de Mujeres Ernestina Pérez Barahona. Lorena Lobos, Universidad de Chile.

Rol de las Sociedades Científicas en la construcción de una ciencia con perspectiva de género. Roxana Pincheira, Universidad de Concepción

13:30–15:00 Society Members Meeting

15:00–16:30 Poster Session II

66. Assessment of ALD6 role in metabolic flux control using light in *Saccharomyces cerevisiae*. Isidora Achiardi-Letelier, Constanza Valderrama, Vasni Zavaleta, Catalina Ardiles, Luis F. Larrondo and Wladimir Mardones.

67. SVCT2 knockdown impairs mitochondrial bioenergetics in breast cancer cells. Catalina Alarcón-Navarro, Carola Muñoz-Montesino, Mara Fiorani, Coralía I. Rivas.

68. **HDAC6-STAT3-PP2Ac interaction in colorectal cancer cell lines.** M. Estrella Armijo, Alejandro Villagra, and Matías I. Hepp.
69. **Molecular mechanisms of FoxP1 dysfunction: Impact of pathogenic variants on biomolecular condensate dynamics.** Javiera Avilés, Amanda Nuñez, Exequiel Medina.
70. **Biochemical Characterization of an Anthocyanin-Degrading Activity from Rosehip (*Rosa spp.*).** Antonia Beltrán, Maximiliano Figueroa, Amparo Uribe, Romina Romero, Juan Román.
71. **SUMOylation, a Novel Post-Translational Regulatory Mechanism of Cx26.** Marcelo Brante, Felipe Vergara, Camila Almarza, Joel Novoa, Maia Zabel, Jaime Maripillán, Isaac García, John Ewer, Agustín D. Martínez.
72. **Exploring Putative RNA Binding by GOLPH3 and the Role of Its N-Terminal Intrinsically Disordered Region.** David A. Brown-Brown, Rodrigo Maldonado, Gonzalo A. Mardones.
73. **Functional GST-Nanobody Fusions as a Versatile Platform for Production and Applications.** Agustín A. Burgos, Pablo Mendoza-Soto, Tammy P. Pástor, José Munizaga, Guillermo Valenzuela-Nieto, Gonzalo A. Mardones.
74. **Molecular Characterization and Stability Profiling of a Lactadherin-Targeting DNA Oligonucleotide for Anticancer Applications.** Stephanie Cárdenas-Mejías, Cristina Mayorga-Lobos, Kevin Nawrath, Francisca Sepúlveda, Vicente López, Lorena Lobos-González.
75. **Purification of the N-terminal domain of the endothelin-converting enzyme-1c: Methodological challenges and structural redesign with GST-tag.** Javiera M. Carvacho, Fernanda Aqueveque, Paula Romero-Vicencio, Assaf Katz, Julio C. Tapia.
76. **N-Acetylcysteine Selectively Targets Senescent Fibroblasts and Reduces Fibrotic Features in Recessive Dystrophic Epidermolysis Bullosa.** Evelyn Catalán, Belén Dianta, Nicole Koplow, Paola Tiozzo-Lyon, Pilar Morandé, Francis Palisson, Boris Rebolledo, Alexander Nyström, Ignacia Fuentes.
77. **17 β -estradiol prevents palmitate-dependent rat cardiomyocyte hypertrophy by inducing the mitochondrial unfolded protein response (UPRmt).** Constanza Cortes-Bravo, David Espinoza-Silva, Katherine Valdevenito, Camila Ortega, Ignacio Aedo-Cares, Sebastian Leiva, Sergio Lavandero, Valentina Parra.
78. **Molecular characterization of High Affinity Potassium Transporters (HKT) from *Pinus radiata*.** Alison Diaz-Hernandez, Joselin Guajardo, María Alejandra Moya-Leon, Ingo Dreyer, Raul Herrera.
79. **Role of Aurora Kinase A (AURKA) in cell death of triple-negative breast tumor cells induced by ASncmtRNA knockdown.** Martín Díaz, Verónica A. Burzio.
80. **Beyond the disulfide bond: Characterization of non-covalent interactions in the oligomerization of the ECE1c catalytic domain.** Ifeanyi Enemuo-Veloso, Paula Romero-Vicencio, Assaf Katz, Karina New, Julio C. Tapia.
81. **OncoTracerAI: An Auditable Multimodal Platform for Pediatric Cancer Monitoring in Chile's Central-Southern Macro-Network.** Carlos Farkas, Vinka Azócar, Bastian Aravena, Constanza Sanhueza, Nancy Segura, Rocío Casas, Claudia Aguilera, Freddy Constanzo, Juan Vázquez, José Miguel Díaz, Ivonne Henríquez.

82. Cis-mediated upregulation of RUNX2 gene transcription associated with tumor progression in glioblastoma cells. Juan Fuentes, Vanessa Segura, Michel Maluenda, Rodrigo Celis, Bruno Soto, Víctor Pola, Brigitte van Zundert, Martín Montecino.

83. Evaluation of the DNA Damage Response Induced by ASncmtRNA Knockdown in Breast Tumor Cells. Constanza Gabilán-Araya, Bárbara Barrera-Caro, Christopher Fitzpatrick, Verónica A. Burzio.

84. RCOR3 sequesters LSD1 reducing its association with RCOR1 and H3K4me2 demethylation. Javiera Gallegos-Jerez, Roberto Munita, María Estela Andrés.

85. Role of alternative polyadenylation in the regulation of the circadian rhythm in *Drosophila* nervous system. Íñigo Genúa, Sofia Paredes, Franco Núñez-Villegas, Analía Foncea-Bitrán, Camilo Villamán, Mariana Labarca, Gonzalo H. Olivares.

86. NUA1 controls lipid metabolic reprogramming in colorectal cancer through the mTORC1-SREBP1 axis. Viviana Coliboro-Dannich, Felipe Gómez, Martina Concha-Vega, Alejandro Farías, Luis Espinoza-Francine, Engy Shorkry, David Sumpton, Roxana Pincheira, Daniel Murphy, Ariel F. Castro.

87. Fructose as a Modulator of Endoplasmic Reticulum Homeostasis and Lipid Metabolism in Human Adenocarcinoma Models. Paulina González-Capello, Alejandro Godoy, Patricia V. Burgos.

88. Integrated molecular surveillance of urban aquatic microbiomes using qPCR and Nanopore metagenomic sequencing. Jeremy Guzmán, Christian Castro, Gester Gutierrez, Carlos Farkas, Matías Hepp.

89. Electrophysiological characterization of the HKT1 channel from *Pinus radiata* reveals a Na⁺-selective transport mechanism. Naomí Hernández-Rojas, Alison Díaz-Hernández, Joselin Guajardo, María Eugenia Rubio-Meléndez, Raúl Herrera, Ingo Dreyer.

90. Environmental pollutants Al³⁺ and 3,4-dichloroaniline induce oxidative stress on human HepG2 hepatoma cells. Constanza Insunsa-Barceló, Rodrigo Díaz, Marcelo Villagrán, Lorena Mardones.

91. Multilayer regulatory reprogramming: *Enterococcus faecalis* as a systems model for study metal homeostasis. Mauricio Latorre, Víctor Aliaga-Tobar, Gabriel Gálvez, Jorge Torres, Valentina Parra.

92. Lactadherin-Enriched MDA-MB-231-Derived Extracellular Vesicles Trigger Astrocyte Reactivity and Migration. Ignacio Leyton-Rivera, Cristina Mayorga-Lobos, Karen Carrasco-Maure, María Montenegro, Lisette Leyton, Lorena Lobos-González.

93. Bioprinted hydroxyapatite-alginate-gelatin microenvironments modulate dental pulp stem cell viability and morphology. Aloyma Lugo, Luis Jimenez, Dayana Perez, Cristina Bucchi, Jorge Farias, Mauricio Zamorano.

94. Functional regions of MALAT1 in MCF7 Breast Cancer Cells. Constanza Mardones-Molina, Aramis Cortes-Arias, Nicolas Díaz, Michelle Tobar-Lara, Marcela Pedraza, Roberto Munita, Fernando J. Bustos, Rodrigo Aguilar.

95. An All-in-One ePEmax vector for Streamlined Prime Editing and RFLP-Based Screening of Editing Outcomes. Nicolás Martínez, Thanya Arenas, Roberto Munita.

96. STIM1 increases nuclear calcium levels and promotes the expulsion of cytoplasmic chromatin fragments. Diego Maureira, Javiera Alborno, Camila Millar, Mónica Cáceres, Oscar Cerda.

97. Comparative network analysis reveals divergent organization of CAZyme-associated modules in *Rhizoctonia solani* AG1 and AG3. Lorena Melet, Cristóbal Briceño, Nathan R. Johnson, Consuelo Olivares, Elena A. Vidal.

98. How do they bind? Cdi0128 responsible for the adhesion in *Clostridium difficile*. Michelle Mendoza-Becerra, Victor Castro-Fernández, Ignacio Aravena-Valenzuela, Pablo Villalobos, J. Andrés Rivas-Pardo.

99. Functional Coupling of the Piezo1-TRPM4 Complex Drives Focal Adhesion Dynamics. Camila Millar, Mariana Brunett, Diego Maureira, Ian Silva, Oscar Cerda.

100. SALL2 loss promotes glycolytic reprogramming and metabolic vulnerability in colorectal cancer. Joaquín Pérez, Alejandro Fariás, Daniel Mora, Ariel Castro, Roxana Pincheira.

101. SIEIL3-1 is a conserved regulator of sulfate-deficiency responses in tomato. Jonathan Morales-Espinoza, José D. Fernández, Ariel Cerda, Tomás C. Moyano, Diego Landaeta-Sepúlveda, Lorena Melet, Javier Canales, José M. Álvarez, Elena A. Vidal.

102. Comparative transcriptomics during fruit development in *Prunus avium* L. grown under open-field and high tunnel conditions. Agustina López, Victoria Lillo-Carmona, Freddy Silva, Alonso Pérez-Donoso, Marlen Ayala, Claudio Meneses.

103. Cultivar-Specific Responses to flg22 and Xyn11e in Bacterial and Fungal Pathosystems of *Prunus*. Daniela Muñoz, Andree Alvarez, Romina Zurita, Lorena Pizarro.

104. Glycosylated Delphinidins, Natural Antioxidants, Functionally Modulate the COX-2/PGE2 Axis and Downregulate MDR1 in Glioblastoma Cells. Nahuelpán Yessica, Cuevas Constanza, Haro Darling, Silva Pamela, Villagran Vicente, Gleisner A. María, Salazar-Onfray Flavio, Muñoz Juan P., Pávez Christian, Garcia-Romero Noemi, Ayuso-Sacido Angel, San Martin Rody, Carrillo-Beltrán Diego and Quezada-Monrás Claudia.

105. Study of Plasma-Derived Small Extracellular Vesicles from Chilean Women. Kevin Nawrath, Cristina Mayorga-Lobos, María José Montenegro, Ana Riveros, Lorena Ortega, Tatiana Danilova, Ariel Zwenguer, Christina Schuh, Sebastián Aguayo, Lorena Oróstica, Lorena Lobos-González.

106. Endothelin-1 increases ETAR protein levels and promotes Src-dependent migration/invasion in gallbladder cancer cells. Ojeda Valentina, Vidal-Vidal Jetzabel, Ruiz-Urbe Matías y Niechi Ignacio.

107. The FAM162A-FUNDC1 mitophagy axis is uncoupled from autophagosome degradation in thyroid cancer as a potential mechanism of malignancy. Andrea Matamoros, Karen Ordoñez, Gino Nardocci, Rodrigo Aguilar, Patricio Cabané, Alvaro A. Elorza.

108. Bacteria from Chilean tomato fields differentially elicit oxidative bursts, modulate flg22 responses, and affect *Pseudomonas syringae* growth. Javiera Ortega-Camilla, Mariela González-Arriagada, Lorena Pizarro-Arcos.

109. TAGL1 and TAGL2: candidate triacylglycerol lipases as putative regulators of cold-responsive root hair elongation in *Arabidopsis thaliana*. Padilla Gabriel, González Nicolás, Urzúa Tomás, Acha-Escobar Romina, Ibeas Miguel, Fusari Corina, Sepúlveda Romina, Padilla Sebastián, Estévez José.

110. Post-translational regulation of SALL2 transcription factor by Wnt/ β -catenin pathway modulators GSK3 β and TNKS. Joaquín Pérez, Paula Medina, Ariel F. Castro, Roxana Pincheira.

111. Untapping prophages' role in antibiotic resistance across the Pseudomonadota human pathogens. Daniel Plaza and Samuel Sheppard.

112. Photoreceptors regulate alternative splicing at the root of *Arabidopsis thaliana* when shoot is exposed to white light and shade. Quián Ulloa, Rocío y O'Brien-Opazo, José.

113. Role of Deoxycholic Acid in NF- κ B regulated JC Polyomavirus Antigen T transcription on human colon cells. Ramírez-Bernan Carolina, Haro Darling, Nahuelpán Yessica, Quezada-Monrás Claudia, Carrillo-Beltrán Diego.

114. Physiological and biochemical responses to water deficit in *Lupinus luteus* L. Rolando Reyes, Macarena Barra-Jiménez, Haroldo Salvo-Garrido, León A. Bravo.

115. SIATG5a from tomato promotes autophagic activity and water deficit tolerance in *Arabidopsis thaliana*. Emilia Rojas-Gallardo, Myriam Valenzuela-Bustamante, José Ulises Rodríguez-González, Ignacio Varas-Henríquez, Simón Ruiz-Lara, José Antonio Madrid-Espinoza.

116. A non-canonical mechanism of gain-of-aggressiveness in colorectal cancer cells based in the phosphorylation of the N-terminal domain of endothelin-converting enzyme-1c. Paula Romero Vicencio, Karla Villalobos-Nova, María de los Ángeles Toro, Leyha Morales V, Javiera Carvacho, Isabel Castro, Carlos Santiviago, Julio C. Tapia.

117. Evaluation of the differential expression of long non-coding RNAs associated with apoptosis and autophagy in an in vitro model of cisplatin-induced nephrotoxicity. Yuliannis Lugones, Pía Loren, Carola E. Matus, Pamela Leal-Rojas, Kathleen Saavedra, Nicolás Saavedra, and Luis A. Salazar.

118. Non-coding variants associated with gene-pesticide exposure interaction in a *Drosophila* model of Parkinson's disease may affect the affinity of the Dorsal/NF- κ B transcription factor to its binding sites. Francisco Salinas, Sophia Sandoval, Daniel Oropesa, Diego Biermann, Maria Estela Andrés, Patricio Olguín.

119. CRISPR/Cas9-mediated mutation of the trehalase gene SITRE1 for enhanced thermotolerance in tomato (*Solanum lycopersicum* cv Micro-Tom). Daniela Scheggia, María Paz Covarrubias, Pablo Meneses, Nicolás Arancibia, Claudio Meneses.

120. Modulation of DNA modifications affects Heterochromatin function and Transposable Element expression in differentiated cells. Camila Rivas Donoso*, Scarleth Larraín Goicovich*, Bruno Soto Moraga, Bruno Villalobos, María Faúndez Fierro, Hugo Sepúlveda.

121. IRE1/XBP1/BDNF axis role in the interaction between neurons and glioblastoma cells during brain cancer progression. Juan Francisco Silva-Agüero, Ignacio Tapia-Dufey, Cristian Gerónimo-Olvera, Luis González-Rojas, Giovanni Tamburini, Brian Rossmiller, Sally Mak, Bárbara Saavedra P., René Vidal G., Lisa M. Ellerby, Hery Urra, Claudio Hetz.

122. Electrophysiological characterization of ALMT channels of *Arabidopsis thaliana* in *Xenopus laevis* oocytes. Tapia-Castillo, V., Hernández-Rojas, N., Diaz-Pico, E., Dreyer, I., Rubio-Meléndez, M.E.

123. How does the *Arabidopsis* embryo respond to iron-induced oxidative damage? Pía Urbina, Marlene Fuenzalida, Carlos Schomburgk, Nathalia Navarro, Felipe Cancino, Pablo González, Hannetz Roschztardt.

124. Morphological and histological characterization of *Hermetia illucens* larval tissues as a baseline for recombinant protein expression. Valentina Varela Silva, Daniela Leiva Carvajal, Jorge Caballero González, Nicolás Órdenes-Aenishanslins, Victoria Riffo Monje, Javier Guerra Serrano, José del Solar Bou, Daniel Troncoso-Espinosa, Clara A. Solari.

125. Establishment of a neuronal CAD cell model to investigate SVCT2 mitochondrial localization and response to β -amyloid. Andrea Vélez, Catalina Alarcón, Coralia Rivas, Carola Muñoz.

126. Four universal modules for decoding the amplitude and frequency of Ca^{2+} signals in plants. Fernando Andrés Vergara-Valladares, Erwan Michard, María Eugenia Rubio-Meléndez, Ingo Dreyer.

127. Individual knockout of U5 snRNA variants produces variant-specific transcriptional and phenotypic responses in BT-549 triple-negative breast cancer cells. Maximiliano Vilches, Valentina Squicciarini, Roberto Munita.

128. Effect of ECE1c-bearing extracellular vesicles derived from malignant colorectal cancer cells on the modulation of epithelial-mesenchymal transition and migration in recipient less-malignant colorectal cancer cells. Karla Villalobos-Nova, Paula Romero-Vicencio, Kevin Nawrath, Constanza Cisternas-Arroyo, Cristina Mayorga-Lobos, María de los Ángeles Toro, Ana L. Riveros, Lorena Lobos-González, Julio C. Tapia.

129. Induction of pathogen resistance mediated by ICS2 during sulfur deficiency in *Arabidopsis thaliana*. Nicolás Vivar, Almendra Molinos, Isidora Montenegro, Francisca Blanco-Herrera, Paula Salinas, Ariel Herrera-Vásquez.

130. The effect of selenium deficiency and supplementation on HFD-induced cardiac ferroptosis. Úrsula Zúñiga-Cuevas, Chloe Guo, Ferdy Lambregtse, Nils Bömer, Valentina Parra.

16:30–18:30 Symposium “Integration of Plant Signalling, Hormones and Stress in Challenging Environments”

Chairs: Rodrigo A. Gutiérrez and José M. Estévez

Identification of a novel link connecting indole-3-acetamide with abscisic acid biosynthesis and signaling. Stephan Pollmann, CBGP, España.

Nitrate-induced Endoreduplication Reprograms the Transcriptome for Cell Differentiation and Expansion in *Arabidopsis thaliana* Cotyledons. Karin Rothkegel, Pontificia Universidad Católica de Chile.

Photoreceptors and plant immunity. Dr. Carlos Ballaré, IFEVA, UBA-CONICET, Argentina.

From NLR-Mediated Defense to Host Manipulation: Uncovering Aphid Effector Strategies in *Arabidopsis*. Micaela Peppino Margutti, Universidad Andrés Bello, Chile.

Redox networks driven by gasotransmitters regulate plant nitrate responses. Noelia Foresi, Pontificia Universidad Católica de Chile.

18:30–19:30 Osvaldo Cori Lecture

Chair: Carlos Rivera

LSD1-RCOR complexes: from repression to regulation. María Estela Andrés, Pontificia Universidad Católica de Chile.

21:00 Closing dinner and awards.

Coordinators: Gloria Arriagada, Secretary of SBBMCh, and Valentina González, Treasurer of SBBMCh.

Thursday, October 8th

Community Engagement Activities

Activities with local school communities coordinated with SLEP Elqui. The detailed schedule and venues will be communicated by the Society.