

## MARTES 15 DE OCTUBRE – Programa de actividades

**9:15 – 14:30** **Inscripciones**

**14:45 – 15:00** **Saludo de Bienvenida**

Dra Sonja Buvinic, Presidenta SChCF

**15:00 – 16:30** **SIMPOSIO 1 – “Advances in Cardiac Pathophysiology: Insights from Molecular Mechanisms to Clinical Translation”**

Coordina: Dra. Ivonne Olmedo, Universidad de Chile, Chile

15:00 – 15:20 **Dr. Zully Pedrozo**, Universidad de Chile, Chile

*Influence of microgravity and prolonged rest on cardiovascular function*

15:20 – 15:40 **Dr. Ivonne Olmedo**, Universidad de Chile, Chile

*Miro1 in Cardiomyocytes: Uncovering New Functions of a Key Protein in Mitochondrial Trafficking*

15:40 – 16:00 **Dr. Manuel Estrada**, Universidad de Chile, Chile

*Metabolic Reprogramming and Intracellular Signaling in Testosterone-Induced Cardiac Hypertrophy*

16:00 – 16:20 **Dr. Abraham Gajardo**, Universidad de Chile, Chile

*Translating Cardiac Ischemia-Reperfusion Research: From Laboratory Discoveries to Clinical Practice*

16:20 – 16:30 **Ronda de preguntas**

**16:30 – 17:15** **CONFERENCIA PLENARIA 1**

Modera: Dra. Paola Llanos, Universidad de Chile, Chile

**Dr. Enrique Brandan**, Universidad San Sebastián, Fundación Ciencia y Vida, Chile

*Advances in Muscular Dystrophies: From Basic Knowledge to Application in Translational Medicine*

**17:15 – 17:45** **COFFEE BREAK**

**17:45 – 19:15** **SIMPOSIO 2 – "How diet impacts our brain. A cellular, tissue and body perspective"**

Coordina: Dra. Eugenia Morselli, Universidad San Sebastián, Chile

17:45 – 18:05 **Dr. Patricia Burgos**, Universidad San Sebastián, Chile

*Immunoproteasome Upregulation in Obesity-Linked Hypothalamic Dysfunction: Mechanisms and Therapeutic Potential*

18:05 – 18:25 **Dr. Eugenia Morselli**, Universidad San Sebastián, Chile

*The mitophagy protein PINK1 in AgRP Neurons controls Metabolic Homeostasis and Body Weight*

18:25 – 18:45 **Dr. Bredford Kerr**, Universidad San Sebastián, Chile

*High-fat/low-carb diet induces neural plasticity-associated modifications and changes in epigenetic factors in the arcuate nucleus of the hypothalamus*

18:45 – 19:05 **Dr. Claudio Perez**, Pontificia Universidad Católica de Chile, Chile

*How the food environment alters our behavior: Insights into brain function in response to cafeteria diet and uncertain food access*

19:05 – 19:15 **Ronda de preguntas**

**19:15 – 20:15** **CONFERENCIA PLENARIA 2**

Modera: Dra. Sonja Buvinic, Universidad de Chile, Chile

**Dr. Mónica Rubio**, Universidad de Chile, Chile. Centro de Excelencia en Astrofísica

y Tecnologías Afines, CATA. *Premio Nacional de Ciencias 2021*

*The discovery of a star incubator*

**20:15 – 22:00** **CÓCTEL DE BIENVENIDA**

## MIÉRCOLES 16 DE OCTUBRE – Programa de actividades

9:15 – 10:45	<b>SIMPOSIO 3 – "Complex interactions in muscle pathology: from cellular pathways to dietary interventions"</b> Coordina: MUSCLE research group; Dra. Denisse Valladares, Universidad de O'Higgins, Chile; Dra. Paola Llanos, Universidad de Chile, Chile
9:15 – 9:35	<b>Dr. Claudio Cabello</b> , Universidad Andrés Bello, Chile <i>Role of satellite cells in the sarcopenia induced by chronic cholestatic liver disease</i>
9:35 – 9:55	<b>Dr. Andrea del Campo</b> , Pontificia Universidad Católica de Chile, Chile <i>Mitochondrial Adaptation Mechanisms as a Common Feature in the Development of Primary and Secondary Sarcopenia</i>
9:55 – 10:15	<b>Dr. Paola Llanos</b> , Universidad de Chile, Chile <i>Activation of the ROS/TXNIP/NLRP3 pathway disrupts insulin-dependent glucose uptake in skeletal muscle of insulin-resistant obese mice</i>
10:15 – 10:35	<b>Dr. Matías Monsalve</b> , Universidad Andrés Bello, Chile <i>No Whey: High Protein Dairy Products and Resistance Exercises to Improve the Microbiota and Muscle Function of Older People</i>
10:35 – 10:45	<b>Ronda de preguntas</b>
<b>10:45 – 11:15</b>	<b>COFFEE BREAK</b>
11:15 – 12:45	<b>SIMPOSIO 4 – "Young Scientists Symposium: New physiological mechanisms involved in hypoxia-induced responses in health and disease"</b> Coordina: Dr. Rodrigo Iturriaga, Universidad Autónoma, Chile
11:15 – 11:35	<b>Dr. Sebastián Castillo-Galán</b> , Universidad Los Andes, Chile <i>New pharmacological technologies and a-cellular therapies in In vivo models that present Hypoxic Pulmonary Hypertension</i>
11:35 – 11:55	<b>Dr. Katherin Pereyra</b> , P. Universidad Católica de Chile, Chile <i>The carotid body plays a crucial role in hypertension and neuroinflammation in the nucleus of the solitary tract induced by long-term intermittent hypoxia</i>
11:55 – 12:15	<b>Dr. David C. Andrade</b> , Universidad de Antofagasta, Chile <i>Oxytocin is able to maintain exercise performance and cardiovagal control during hypobaric hypoxia in rats</i>
12:15 – 12:35	<b>Dr. Valeria Páez Ramírez</b> , Pontificia Universidad Católica de Chile, Chile <i>Prediction of cardiorespiratory performance and baroreflex sensitivity during exposure to acute hypobaric hypoxia</i>
12:35 – 12:45	<b>Ronda de preguntas</b>
<b>12:45 – 13:30</b>	<b>CONFERENCIA PLENARIA 3</b> Modera: Dra. Sonja Buvinic, Universidad de Chile, Chile <b>Dr. Gerardo García Rivas</b> , The Institute for Obesity Research, Tecnológico de Monterrey. Centro de Investigación Biomédica, Hospital Zambrano Hellion, TecSalud, San Pedro Garza García, México. <b>Plenary Lecture ALACF:</b> <i>Targeting the mitochondrial Ca<sup>2+</sup> uniporter as potential treatment for heart failure</i>
<b>13:30 – 15:30</b>	<b>LIBRE</b>

15:30 – 16:30	<b>SESIÓN DE COMUNICACIONES ORALES 1</b> Modera: Eugenia Morselli, Universidad San Sebastián, Chile
15:30 – 15:45	<b>Rocío Cikutovic</b> , Universidad de Talca, Chile <i>Combined Strategies in the Treatment of Colorectal Cancer: Inhibition of mTOR and ERK1/2 Pathways with Chemotherapeutic Agents.</i>
15:45 – 16:00	<b>Esteban Salazar-Petres</b> , Universidad San Sebastián, Chile <i>Placental endocrine malfunction impacts maternal metabolic state during obese mouse pregnancies</i>
16:00 – 16:15	<b>Camila Bravo</b> , Universidad de Chile, Chile <i>Sexual dimorphism in masseter muscle atrophy evoked by botulinum toxin type A in mice</i>
16:15 – 16:30	<b>Zacarías Lizana</b> , Universidad de Chile, Chile <i>Body Composition and Cardiometabolic Health as Determinants of Biological Age in Young Adults from a Chilean Birth Cohort: Preliminary Results</i>
16:30 – 17:15	<b>CONFERENCIA PLENARIA 4</b> Modera: Dra. Carla Basualto, Universidad de Aysén, Chile <b>Dr. Pedro Maldonado</b> , Universidad de Chile, Chile. Centro Nacional de Inteligencia Artificial CENIA, Chile. <i>Advances and Challenges in Artificial Intelligence and Neurotechnology</i>
17:15 – 17:45	<b>COFFEE BREAK</b>
17:45 – 19:15	<b>SIMPOSIO 5 – "Physiological and pathophysiological mechanisms of neurodevelopment"</b> Coordinan: Dr. Marcelo González, Universidad de Concepción, Chile y Dr. Patricio Castro, Universidad de Concepción, Chile
17:45 – 18:05	<b>Dr. Marcelo González</b> , Universidad de Concepción, Chile <i>Allostatic overload during pregnancy and the effects on neurodevelopment: what can we learn from pandemic experience?</i>
18:05 – 18:25	<b>Professor Laura Borodinsky</b> , University of California, Davis, USA <i>Mechanisms of folate action during neural tube formation</i>
18:25 – 18:45	<b>Dr. Patricio Castro</b> , Universidad de Concepción, Chile <i>Paracrine purinergic &amp; glutamatergic signaling in neural tube formation. Effects of anti-seizure medications (ASM)</i>
18:45 – 19:05	<b>Dr. Karina Bravo</b> , Carver College of Medicine, USA <i>Neurodevelopment of the serotonergic system and central respiratory chemoreception: expanded approaches in health and disease</i>
19:05 – 19:15	<b>Ronda de preguntas</b>
19:15 – 20:30	<b>SESIÓN DE PÓSTERS 1 (Pares)</b>

## JUEVES 17 DE OCTUBRE – Programa de actividades

9:15 – 10:45	<b>SIMPOSIO 6 – "Preclinical and clinical views of chronic obstructive pulmonary disease"</b> Coordina: Dr. Mauricio Henríquez, Universidad de Chile, Chile
9:15 – 9:35	<b>Dr. Andrea Méndez</b> , Universidad de Las Américas, Chile <i>Lung damage and pulmonary hypertension in a model of COPD induced by cigarette smoke: different perspectives of a disease</i>
9:35 – 9:55	<b>Dr. Diego Rojas</b> , Universidad Autónoma, Chile <i>Role of the Pneumocystis fungus in the severity of elastase-induced COPD in animal models</i>
9:55 – 10:15	<b>Dr. Luis Peñailillo</b> , Universidad Andrés Bello, Chile <i>COPD and skeletal muscle in animal models</i>
10:15 – 10:35	<b>Dr. Laura Mendoza</b> , Universidad de Chile, Chile <i>Effect of a physical activity stimulation program using pedometers on the incidence of exacerbations in patients with Chronic Obstructive Pulmonary Disease</i>
10:35 – 10:45	<b>Ronda de preguntas</b>
<b>10:45 – 11:15</b>	<b>COFFEE BREAK</b>
11:15 – 12:45	<b>SIMPOSIO 7 – "Teaching Physiology: from school to university"</b> Coordinan: Dra. Loreto Véliz, Pontificia Universidad Católica de Chile, Chile y Dra. Victoria Velarde, Universidad de Valparaíso, Chile.
11:15 – 11:35	<b>Dr. Victoria Velarde</b> , Universidad de Valparaíso, Chile <i>Development of an instrument to identify alternative conceptions about the urinary system in 8<sup>th</sup> grade and 12<sup>th</sup> grade school students</i>
11:35 – 11:55	<b>Dr. Carolina Álvarez Aguilera – Dra. Loreto Véliz García</b> , Pontificia Universidad Católica de Chile, Chile <i>Innovations and adaptations for inclusive teaching in an introductory Biology course</i>
11:55 – 12:15	<b>Dr. Manuel Arias-Calderón</b> , Universidad Andrés Bello, Chile <i>Near-peer teaching in Physiology: Benefits for students and assistants</i>
12:15 – 12:35	<b>Dr. Víctor Moya – Dr. Alexis González</b> , Universidad Católica de Valparaíso, Chile <i>Enhancing Scientific Research Skills in Students of Basic and Applied Sciences</i>
12:35 – 12:45	<b>Ronda de preguntas</b>
12:45 – 14:00	<b>ASAMBLEA GENERAL DE SOCIOS SChCF</b>
<b>14:00 – 15:30</b>	<b>LIBRE</b>
15:30 – 16:30	<b>SESIÓN DE COMUNICACIONES ORALES 1</b> Modera: Ivonne Olmedo, Universidad de Chile, Chile
15:30 – 15:45	<b>Esteban Figueroa</b> , Universidad de O'Higgins, Chile <i>Impact of gestational hypoxia on neuronal survival and its interaction with oxidative stress in the neonatal and juvenile guinea pig cortex</i>
15:45 – 16:00	<b>Pamela Benavides</b> , Universidad de Valparaíso, Chile <i>Evaluation of Sirtuin 1 and its Association with Renal Endothelial Dysfunction in a Rat Model of Diabetic Nephropathy</i>

- 16:00 – 16:15 **Franco Tacchi**, Universidad Andrés Bello, Chile  
*Contribution of CCL5 to skeletal muscle fibrosis through ECM accumulation and immune cell infiltration*
- 16:15 – 16:30 **María Triolo**, Universidad de Santiago de Chile, Chile  
*Morphological changes characterization in microglia of the SRD and its relationship with the pain changes observed in fibromyalgic rats (NLB)*
- 16:30 – 17:15 CONFERENCIA PLENARIA 5**  
Modera: Dra. Paola Casanello, Pontificia Universidad Católica de Chile, Chile  
**Dr. Francisco Bolaños-Jiménez**, Nantes Université – INRAE, Francia  
*Sex-associated epigenetic differences determine metabolic alterations induced in offspring by maternal and paternal obesity*
- 17:15 – 17:45 COFFEE BREAK**
- 17:45 – 19:15 SIMPOSIO 8 – "Pathophysiology of Vascular Function During Pregnancy "**  
Coordinan: Dr. Ramón Lorca, University of Colorado Anschutz Medical Campus, USA y Dr. Bernardo Krause, Universidad de O'Higgins, Chile
- 17:45 – 18:05 **Dra. Tamara Sáez**, Universidad de Valparaíso, Chile  
*Hypercholesterolemia in Pregnancy: Impact on Maternal Vascular Function and Postpartum Health*
- 18:05 – 18:25 **Dr. Claudio García-Herrera**, Universidad de Santiago de Chile, Chile  
*Study of the biomechanics of arteries affected by fetal growth restriction: Experimental analysis and numerical simulation*
- 18:25 – 18:45 **Dr. Bernardo J. Krause**, Universidad de O'Higgins, Chile  
*Epigenetic-based interventions against fetal vascular dysfunction resulting from chronic hypoxia*
- 18:45 – 19:05 **Dr. Ramón Lorca**, University of Colorado Anschutz Medical Campus, USA  
*Regulating uterine blood flow with optogenetics: novel models for modulating fetal growth*
- 19:05 – 19:15 **Ronda de preguntas**
- 19:15 – 20:30 SESIÓN DE PÓSTERS 2 (Impares)**

## VIERNES 18 DE OCTUBRE – Programa de actividades

9:15 – 10:45	<b>SIMPOSIO 9 – "Current explorations in the pathophysiology of pregnancy and postpartum: from basic research to clinical implementation "</b> Coordinan: Dra. Andrea Leiva, Universidad San Sebastián, Chile y Dr. Jaime Gutiérrez, Universidad San Sebastián, Chile.
9:15 – 9:35	<b>Dra. María José Yañez</b> , Universidad San Sebastián, Chile <i>Dynamics of cholesterol and organelle dysfunction in the syncytiotrophoblast: perspectives in placental biology</i>
9:35 – 9:55	<b>Dra. Claudette Cantin</b> , Universidad San Sebastián, Chile <i>Placental transport and materno-fetal communication: the role of extracellular vesicles in maternal hypercholesterolemia and preeclampsia</i>
9:55 – 10:15	<b>Dra. Delia I Chiarello</b> , Universidad San Sebastián, Chile <i>Focusing on the Maternal Exposome to Analyze the Impact of Ubiquitous Contaminants in Pregnancy and Nutritional Interventions During Gestation</i>
10:15 – 10:35	<b>Dra. Andrea Leiva</b> , Universidad San Sebastián, Chile <i>Exploring the impact of pregnancy on postpartum, analyzing its consequences</i>
10:35 – 10:45	<b>Ronda de preguntas</b>
<b>10:45 – 11:15</b>	<b>COFFEE BREAK</b>
11:15 – 12:45	<b>SIMPOSIO 10 – "Aging and Functional Performance: New Perspectives in the Assessment and Programming of Training in Older People"</b> Coordina: Dr. Emilio Jofré Saldía, Universidad de Santiago, Chile
11:15 – 11:35	<b>Dr. Ignacio Orizola-Cáceres</b> , Clínica MEDS, Chile <i>Assessment of body composition using octopolar bioimpedance in elderly individuals. Pilot study.</i>
11:35 – 11:55	<b>Dr. Álvaro Huerta Ojeda</b> , Universidad de Las Américas, Chile <i>Test-retest reliability of Latin American Group for Maturity (GDLAM) protocol in older women</i>
11:55 – 12:15	<b>Dr. Cristian Cofré Bolados</b> , Universidad de Santiago de Chile, Chile <i>Ergospirometric Submaximal Parameters Measurement and Training in Untrained Octogenarians Without Frailty</i>
12:15 – 12:35	<b>Dr. Emilio Jofre Saldia</b> , Universidad de Santiago de Chile, Chile <i>Effects of programmed strength training on the neuromuscular consequences of aging in older women</i>
12:35 – 12:45	<b>Ronda de preguntas</b>
<b>12:45 – 13:30</b>	<b>CONFERENCIA PLENARIA 6</b> Modera: Dr. Julio Alcayaga, Universidad de Chile, Chile <b>Dr. Rodrigo Iturriaga</b> , Universidad Autónoma de Chile, Chile <i>New non-respiratory functions for the carotid body</i>
<b>13:30 – 14:00</b>	<b>ACTO DE CLAUSURA Y PREMIACIÓN</b>