

**FULL PROGRAM**  
**XLIII ANNUAL MEETING SOCIEDAD DE FARMACOLOGIA DE CHILE**  
**CADI, PUNTA ARENAS, CHILE, 2022**

| <b>MONDAY, DECEMBER 5<sup>th</sup></b> |   |
|--|---|
| <b>8:30 – 11:00</b>                    | <b>REGISTRATION</b>   |
| <b>9:00 -11:00</b>                     | <u>Symposium 1: “Biomedical Sciences from Magallanes”</u><br><u>Coordinator: Dr. Waldo Cerpa</u>  |
| 9:00 – 9:30                            | <i>Regulation of NMDA receptor signaling and distribution in traumatic brain injury</i><br><b>Dr. Waldo Cerpa</b> , U. de Magallanes and P. Universidad Católica de Chile                                     |
| 9:30 – 10:00                           | <i>Skeletal Muscle dysfunction and pathological features due to Binge-Alcohol administration</i><br><b>Dra. Daniela Rebolledo</b> , Universidad de Magallanes   |
| 10:00 – 10:30                          | <i>Purinergic mediated signaling in brainstem chemoreceptor neurons: Role in disordered-breathing during cardiac failure</i><br><b>Dr. Rodrigo del Río</b> , P. Universidad Católica de Chile                 |
| 10:30 – 11:00                          | <i>Non respiratory functions of the carotid body in health and disease</i><br><b>Dr. Rodrigo Iturriaga</b> , U. de Magallanes and U. De Antofagasta   |
| <b>11:00-11:30</b>                     | <b>Coffee Break</b>   |
| <b>11:30-13:30</b>                     | <u>Symposium 2: “Purinergic Signaling on Pathophysiology: A latinoamerican view”</u><br><u>Coordinator: Dr. Claudio Coddou</u>  |
| 11:30-12:00                            | <i>Regulation of the purinergic receptors and its potential role on pain signaling</i><br><b>Dr. Claudio Coddou</b> , Universidad Católica del Norte  |
| 12:00-12:30                            | <i>Extracellular ATP/P2X7 receptor, a regulatory axis of cell survival and migration in ovarian carcinoma-derived cells.</i><br><b>Dr. Francisco Vázquez-Cuevas</b> , Universidad Nacional Autónoma de México |
| 12:30-13:00                            | <i>P2Y2 receptor signaling in Gabaergic differentiation and Huntington disease</i><br><b>Dr. Henning Ulrich</b> , University of São Paulo   |
| 13:00-13:30                            | <i>Extracellular nucleotides in muscle plasticity and muscle-bone crosstalk</i><br><b>Dra. Sonja Buvinic</b> , Universidad de Chile   |
| <b>13:30:15:00</b>                     | <b>LUNCH</b> (not included)   |
| <b>15:00-15:30</b>                     | <b>OPENING CEREMONY</b><br><b>Dr. Javier Bravo</b> , SOFARCHI president   |
| 15:30-17:00                            | <b>OPENING LECTURE</b><br><u>65 years of antidepressants- where are we now?</u><br><u>Dr. Alan Frazer</u> , University of Texas Health Science Center, USA  |
| <b>17:00-17:30</b>                     | <b>Coffee Break</b>   |
| 17:30-18:30                            | <b>Oral Communications</b> (see below)  |
| 18:30-20:30                            | <b>Poster Presentation</b> (see below)  |
| <b>20:30-21:00</b>                     | <b>OPENING COCKTAIL</b>   |

## ORAL COMMUNICATIONS

**Monday 5/12/2022. Time: 17:30-18:30; Room: AUDITORIO PRINCIPAL.**

| Presentation | Title   | Expositor                   |
|--------------|---|-----------------------------|
| 1            | A network pharmacology approach to identify molecular targets for polypharmacological therapies against Alzheimer disease                   | Ramírez Sánchez, David      |
| 2            | Serotonin-endocannabinoid crosstalk induces selective long-term depression at GABAergic inhibitory synapses in the medial prefrontal cortex | Chávez Navarrete, Andrés    |
| 3            | Mechanism for Microbial Regulation of Psychostimulant Abuse   | Carter, Angela              |
| 4            | Anti-inflammatory steroids as potential allosteric modulators of the human 5-lipoxygenase   | Mascayano Collado, Carolina |

**Monday 5/12/2022. Time: 17:30-18:30; Room: AULA TECNOLÓGICA**

|   |  |                              |
|---|--|------------------------------|
| 5 | Dextran nanocapsules: novel platform for imiquimod transdermal delivery  | Carreño, Gisela              |
| 6 | Design and optimization of nanosystems for drugs with poor biopharmaceutical properties through mathematical modeling  | Valdivia, Rayen              |
| 7 | Brain oxidative stress and cardiac inflammation during early adulthood following adolescent binge drinking behavior: implications for long-lasting cardiac dysfunction | Díaz Alvarado, Hugo          |
| 8 | NUDT15, MRP4 and the development of precision medicine in Chile  | De la Rivera Morales, Alonso |

## POSTER PRESENTATION

**Monday 5/12/2022. Time: 18:30-20:30; Room: PANELS AND SPONSORS HALL**

| Panel | Título  | Expositor                      |
|-------|---|--------------------------------|
| 1     | Indorenate, an antihypertensive drug with novel antihyperglycemic properties mediated by PPAR $\gamma$ and GLUT4  | Giacoman Martínez, Abraham     |
| 2     | Anti-inflammatory activity of alpha-amyrin and lupeol   | Almanza Pérez, Julio Cesar     |
| 3     | Unraveling therapeutic effect of secretome from human mesenchymal stem cells on murine chronic alcoholism by bioinformatics analysis and network pharmacology | Valenzuela Martínez, Ignacio   |
| 4     | Natural compounds as inhibitors tyrosine kinase receptors linked to oncological diseases and its monitoring by molecular diagnosis                            | Méndez Rojas, Claudio          |
| 5     | Trisubstituted pyrimidines as possible regulators of autophagy and mitophagy  | Silva Urbina, María José       |
| 6     | Senescence in skeletal muscle, a potential cross-talk between UPRT and mitochondrial morphology   | Marimán, Andrea                |
| 7     | Glutamate-induced oxidative stress in astrocytes decreases P2X7r expression through gene promoter hypermethylation  | Ríos Gallardo, Angélica        |
| 8     | Differential modulation of inhibitory receptors by Gelsemium alkaloids  | Marileo Cordova, Ana           |
| 9     | Effect of type and percentage of fourth generation PAMAM dendrimers superficial modification on in vitro internalization kinetics                             | Cifuentes, Diego               |
| 10    | In silico screening of small molecules designed to interact with resistant phenotypes of GABA R $\alpha$ 1 receptors  | Burgos Arias, Carlos           |
| 11    | Prenatal alcohol exposure alters alternative splicing patterns in neurons   | Olivares Costa, Montserrat     |
| 12    | Behavioral evaluation of the entactogen MDMA (3,4-methylenedioxyamphetamine, "ecstasy") on the helping behavior paradigm in sprague-dawley rats               | Morales Vidal, Michelle        |
| 13    | The effect of aromatic bromination of MDMA (3,4-methylenedioxyamphetamine, "ecstasy") on short-term and long-term visuospatial memory in sprague dawley rats  | Palma, Boris                   |
| 14    | Participation of pannexin-1 channels in the addiction-like process induced by high-fat diet in mice   | Hernández Kunstmann, Alejandro |
| 15    | Design, modeling and validation of peptides that interfere with the reelin signaling in mature hippocampal neurons  | Ampuero, Estíbaliz             |
| 16    | Effects of ethanol are altered in double knock-in mice expressing two ethanol insensitive glycine receptor subunits   | San Martín Vásquez, Loreto     |
| 17    | Determining the role of Glycine inhibitory currents in the pain processing in the Central amygdala  | Mariqueo Cancino, Trinidad     |
| 18    | Changes in physiological and pharmacological properties of glycine receptors in aged accumbal neurons   | Gallegos Gallegos, Scarlet     |
| 19    |   |                                |
| 20    | Effect of alda-1, a pharmacological activator of aldh2, on the consummative behavior of a rat model of concurrent intake of alcohol and nicotine              | Solís, Fresia                  |
| 21    | Influence of subchronic atorvastatin treatment on memory in ovariectomized female mice  | Briones Aranda, Alfredo        |
| 22    | HCN2 ion channel blockade as a strategy to inhibit the ethanol-induced dopamine release in the nucleus accumbens of rats                                      | Gutiérrez, Ignacio             |

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|----|--|-----------------------------------|
| 23 | Reduction of relapse-like alcohol or nicotine consumption by oral administration of alda-1 to rats: assessment of neuroinflammation and oxidative stress markers                                 | Adasme Reyes, Sofia               |
| 24 | Pharmacological inhibition of Wnt/beta-catenin signaling improves the regeneration of the neuromuscular synapse  | Henríquez, Juan Pablo             |
| 25 | Copao pulp intake improves spatial memory and hippocampal plasticity in models of Alzheimer's disease  | Sandoval, Rodrigo                 |
| 26 | Allosteric modulation of glycine receptors by resveratrol  | Espinoza Rubilar, Nicole          |
| 27 | Elucidating the molecular determinants underlying the interaction of neurosteroids with the alpha 3 glycine receptor   | Quintana, Santiago                |
| 28 | Effects of PKA-mediated phosphorylation in function of the glycine receptor alfa 3k variant  | Fariña Oliva, Katerine            |
| 29 | Intrinsic apoptotic pathway is increased in perinatal asphyxia-exposed female rats: intranasal-mesenchymal stem-cells secretome treatment  | Farfán, Nancy                     |
| 30 | Nucleus accumbens dopaminergic neuromodulation of synaptic transmission is impaired in adult rats exposed to chronic high fat diet during childhood and adolescence                              | Plaza Briceño, Wladimir           |
| 31 | Effects of nicotine and the nAChRs antagonist UFR2709 on behavior and gene expression of Sprague Dawley rats   | Hodar Salazar, Martín             |
| 32 | Role of the chronic reduction of mesolimbic dopaminergic activity on the Quinpirole-induced locomotor sensitization  | Sejas Muñoz, Rubén                |
| 33 | Behavioral study of 3-chlorocytisine in zebrafish using the novel tank diving test (NTT)   | Farías Cea, Amaury                |
| 34 | Role of glucocorticoid receptors on the expression of GABAA receptor subunits in the hippocampus of chronically stressed rats  | Alarcón Mardones Matías, Ignacio  |
| 35 | Modulation of synaptic transmission in nucleus accumbens core by the activation of 5-HT2a receptor   | Estay, Camila                     |
| 36 | Clodronate-induced adenosine accumulation in the rat mesenteric bed perfusate following electrical nerve terminal depolarization and extracellular media of cultured mesentery endothelial cells | Donoso Gomien, Verónica           |
| 37 | FoxO1 is necessary for cardiac fibroblasts inflammation induced by high glucose  | Vivar Sánchez, Raúl               |
| 38 | LPS induces premature adult rat cardiac fibroblast senescence  | Osorio Sandoval José Miguel       |
| 39 | Role of hyperpolarization-activated cyclic nucleotide-gated channels in the nlrp3 inflammasome activation induced by simulated ischemia/reperfusion in rat cardiac fibroblasts                   | Torres, Katalina                  |
| 40 | Ivabradine blockade of hyperpolarization-activated cyclic nucleotide-gated channels in the tgf-beta1-induced differentiation of cardiac fibroblast to myofibroblast                              | Leiva, Belén                      |
| 41 | Spectroscopic determination of secondary metabolites of pseudocypbellaria berberina and antimicrobial activity against staphylococcus aureus and pseudomonas aeruginosa                          | Quiñones, Natalia                 |
| 42 | Cytotoxic activity and Topoisomerase I inhibition of new sesquiterpene/phenol derivatives from drimenol  | Cuellar Fritis, Mauricio          |
| 43 | Evaluation of synthetic arylketones and chromen-4-ones as antivirulence agents against mrsa, antiviral agents against beta coronavirus oc-43 and as cox/ 5-lox inhibitors                        | Vásquez Martínez, Yesseny         |
| 44 | Biological evaluation of ferrocenyl chalcones and their organic analogs as new dual 5-lox/cox-2 inhibitors   | Muñoz Osses, Michelle Loreto      |
| 45 | Evaluation of the dual anti-inflammatory activity against COX-2 and 5-LOX of ferroleuton, a new organometallic complex derivative from the drug zileuton   | Navarrete Tudela, Elizabeth       |
| 46 | Novel schiff base type ferrocenylthiazole as a potent human 5-lipoxygenase inhibitor   | Torres González, Simón            |
| 47 | Changes in the plasma metabolome of covid-19 patients associated with their degree of severity, using a metabolomic analytical tool based on UHPLC-QTOF  | Mardones Peña, Claudia            |
| 48 | synthesis of a new series of $\beta$ -carbonyls by ugi reaction and their possible inhibitory effect against pseudomonas aureginosa  | Cavagnero Alvarez, Pablo          |
| 49 | Antibacterial and antibiofilm activity of crude alkaloid from Fusarium sp  | Correa Otero, Diana               |
| 50 | Ornithine decarboxylase as a new target for improving the effect of KRAS-G12C inhibitors in non-small cell lung cancer cells   | Martin Martin, Antonia            |
| 51 | Quetiapine prescription pattern at public primary healthcare centre cesfam angachilla (cav) in valdivia-región de los ríos between october 2019-october 2021                                     | Sánchez Montoya, Eliana           |
| 52 | Impact of white strawberries polyphenols on intestinal and liver health in obese mice  | Thomas Valdés, Samanta            |
| 53 | Antibacterial activity of the resinous exudate of adesmia balsamica against human pathogenic bacteria  | Reyes Vera, Constanza             |
| 54 | Antifungal study of the essential oil and main components of Gardoquia gilliesii (Lamiaceae)   | Valdés Navarro, Francisca Javiera |
| 55 | Evaluation of secondary metabolite content, antioxidant and anticancer activity of extracts of notanthera heterophylla (ruiz et pav) g. don.   | Martínez Lobos, Manuel            |
| 56 | Sequential and combined administration of specialized pro-resolving mediators as a novel therapeutic strategy in the resolution of vascular inflammation   | Campos Estrada, Carolina          |
| 57 | Fecal microbiota transplant from young and trained donors improves muscle function of aged mice  | Jorquera Olave, Gonzalo           |
| 58 | Determination of the polymorphic variants in enzymes related to the metabolism of capecitabine an its association with treatment toxicity in patients with colorectal cancer                     | Peña, Sebastian                   |
| 59 | Evaluation of the antitumor activity of Districhia viscosa exudate against melanoma  | Flores González, Susana Belén     |
| 60 | Validation of a t-maze for zebrafish (danio rerio) animal model in memory and learning   | Martínez, Luis                    |

**TUESDAY, DECEMBER 6<sup>th</sup>**

|               |  |
|---------------|--|
| 8:50-9:20     | Precision Microscopy and Tissue Cytometry in Immunology Research. <b>Dr. Rupert Ecker</b><br>Talk sponsored by Ursula Biggemann y Cía. Ltda.   |
| 9:20-11:00    | <u><a href="#">Symposium 3: "New insights in the pharmacological modulation of central synapses"</a></u><br><u>Coordinator: Dr. Gonzalo Yévenes</u>  |
| 09:20-09:50   | <i>Functional modulation of inhibitory synapses by novel pharmacological tools</i><br><b>Dr. Gonzalo Yévenes</b> , Universidad de Concepción   |
| 09:50-10:20   | <i>Mechanism of mu opioid receptor-mediated synaptic plasticity in the dorsal striatum</i><br><b>Dr. Braulio Muñoz</b> , Indiana University School of Medicine, USA  |
| 10:20-10:50   | <i>Super-resolution imaging of receptor-scaffold interactions at inhibitory synapses as pharmacological target</i><br><b>Dr. Christian Specht</b> , Université Paris-Saclay  |
| 11:00 – 11:30 | <b>Coffee break</b>  |
| 11:30-13:00   | <b>KEYNOTE LECTURE</b><br><u><a href="#">Brain circuits for regulating emotion</a></u><br><u>Dr. Andrew Holmes, NIAAA, NIH, USA</u>  |
| 13:00 – 15:00 | <b>LUNCH (not included) / Incorporations for new members</b>   |
| 15:00-17:00   | <u><a href="#">Symposium 4: "Surgical pain: Monitoring and strategies to prevent chronification"</a></u><br><u>Coordinator: Dr. Luis Constandil</u>  |
| 15:00 – 15:30 | <i>Pharmacological strategies to prevent postoperative chronic pain</i><br><b>Dr. Luis Constandil</b> , Universidad de Santiago de Chile   |
| 15:30 – 16:00 | <i>Towards an animal model of intraoperative nociceptive activity during general anesthesia</i><br><b>Dr. Francisco Flores</b> , Massachusetts General Hospital, USA   |
| 16:00 – 16:30 | <i>Intraoperative nociception monitoring</i><br><b>Dr. José I. Egaña</b> , Universidad de Chile  |
| 16:30 – 17:00 | <i>Alcohol-induced neuroinflammation-oxidative stress cycle: Inflammatory and antioxidant drugs inhibit chronic alcohol intake and blunt relapse binge-drinking</i><br><b>Dr. Pablo Brumovsky</b> , Universidad Austral, Argentina |
| 17:00 -17:30  | <b>Coffee break</b>  |
| 17:30-19:00   | <b>KEYNOTE LECTURE</b><br><u><a href="#">Gut microbiota: fellow travellers that regulate brain &amp; behaviour across the lifespan</a></u><br><u>Dr. John Cryan, University College Cork, Irlanda</u>                              |
| 19:00-20:00   | <b>Oral Communications (see below)</b>   |

## ORAL COMMUNICATIONS

**Tuesday 6/12/2022. Time: 19:00-20:00; Room: AUDITORIO PRINCIPAL.**

| Presentación | Título   | Expositor               |
|--------------|--|-------------------------|
| 9            | In vitro and in vivo binding capacity analysis of antibodies against the MICA immunotarget in gastric cancer   | Toledo Stuardo, Karen   |
| 10           | Comparing software performance for comprehensive drug synergy studies developed in a robotic platform for in vitro combinations                            | López Muñoz, Rodrigo    |
| 11           | Efecto antihipertensivo dependiente del tiempo de aspirina using mathematical modeling to understand the time-dependent antihypertensive effect of aspirin | Cortés Ríos, Javiera    |
| 12           | Bovine tumor necrosis factor-alpha increases il-6, il-8, and pge2 in bovine fibroblast-like synoviocytes by metabolic reprogramming                        | Burgos Aguilera, Rafael |

**Tuesday 6/12/2022. Time: 19:00-20:00; Room: AULA TECNOLÓGICA**

|    |   |                    |
|----|---|--------------------|
| 13 | The pharmacological targeting of the ald2 as a common mechanism for treating alcohol and nicotine use disorders | Rivera Meza, Mario |
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| 14 | Antibiofilm activity of Essential Oils against Candida albicans  | Molina Berrios, Alfredo    |
| 15 | Chemical composition and in vitro antitumor activity of Gomortega keule essential oil                        | Madrid Villegas, Alejandro |
| 16 | Chemical modification of the antidepressant fluoxetine to prevent its absorption through the intestinal wall | Rojas Hidalgo, Francisca   |

## WEDNESDAY, DECEMBER 7<sup>th</sup>

|               |  |  |
|---------------|--|--|
| 9:00-11:00    | <u><a href="#">Symposium 5: "Alzheimer Disease: an Update from basic to clinical research"</a></u><br><u>Coordinator: Dr. Jorge Fuentealba</u>   |  |
| 09:00-09:30   | <i>Menopause and development of alzheimer's disease</i><br><b>Dr. Nibaldo Inestrosa</b> , U. de Magallanes and P. Universidad Católica de Chile  |  |
| 09:30-10:00   | <i>Alzheimer's disease is the most common cause of dementia</i><br><b>Dr. Gonzalo Klassen</b> , Universidad de Concepción  |  |
| 10:00-10:30   | <i>Progress with the cure for alzheimer's disease</i><br><b>Dr. Carlos Opazo</b> , The University of Melbourne, Australia  |  |
| 10:30-11:00   | <i>A great forgotten: the role of P2X2 receptors in alzheimer's disease</i><br><b>Dr. Jorge Fuentealba</b> , Universidad de Concepción   |  |
| 11:00 – 11:30 | <b>Coffee break</b>  |  |
| 11:30-13:00   | <b>KEYNOTE LECTURE</b><br><u><a href="#">New therapeutic approaches in the renin-angiotensin system</a></u><br><u>Dr. Sergio Lavandero</u> , Universidad de Chile                                |  |
| 13:00 – 15:00 | <b>LUNCH (not included) / Incorporations for new members</b>   |  |
| 15:00-17:00   | <u><a href="#">Symposium 6: "Natural products that promote tissue regeneration"</a></u><br><u>Coordinator: Dra. Caroline Weinstein</u>   |  |
| 15:00 – 15:30 | <i>Preclinical assays for matpatch™, a phytotherapeutical patch for the treatment of ischemic skin ulcers in the elderly</i><br><b>Dra. Caroline Weinstein</b> , Universidad de Valparaíso       |  |
| 15:30 – 16:00 | <i>Formulation of water soluble Buddleja globosa hope extracts and their antimicrobial properties against Pseudomonas aeruginosa</i><br><b>Dra. Tania Bahamondez</b> , Universidad de Valparaíso |  |
| 16:00 – 16:30 | <i>Natural products for wound healing in veterinary medicine</i><br><b>Dra. Andrea Muller</b> , Universidad de O'Higgins   |  |
| 16:30 – 17:00 | <b>MEL prize finalists</b>   |  |
| 17:00 -17:30  | <b>Coffee break</b>  |  |
| 17:30-18:30   | <b>Oral Communications (see below)</b>   |  |
| 18:30-20:30   | <b>Poster Presentation (see below)</b>   |  |

## ORAL COMMUNICATIONS

**Wednesday 7/12/2022. Time: 17:30-18:30; Room: AUDITORIO PRINCIPAL.**

| Presentation | Title   | Expositor                        |
|--------------|---|----------------------------------|
| 17           | Rapid no production by aldosterone in endothelial cells elicits intracellular signaling cascades contributing to vascular communication | García-Huidobro Toro, Juan Pablo |
| 18           | Maresin-1, promotes anti-inflammatory response in liver fibrosis by switching liver macrophages phenotype from M1 to M2                 | Zuñiga Hernández, Jessica        |
| 19           | Effects of arsenic (As) exposure on the microbiota-gut-brain axis of young healthy female sprague-dawley rats                           | Barrera Bugueño, Camila          |
|              |   |                                  |

**Wednesday 7/12/2022. Time: 17:30-18:30; Room: AULA TECNOLÓGICA**

|           |   |                         |
|-----------|---|-------------------------|
| <b>20</b> | Novel mitochondrial strategies to modulate Mitochondria–Endoplasmic Reticulum Contacts formation on Alzheimer disease: the role of inhibitors of mitochondria complex I and transglutaminase type 2 | Panes, Jessica          |
| <b>21</b> | MITSVCT2, its role in disease and its pharmacological opportunities   | Muñoz Montesino, Carola |
| <b>22</b> | Analytical developments in miniaturized extraction systems for the determination of drugs and pharmaceuticals in biological samples   | Vejar Vivar, Carmina    |

**POSTER PRESENTATION**

**Wednesday 7/12/2022. Time: 18:30-20:30; Room: PANELS AND SPONSORS HALL**

| Panel     | Título  | Expositor                              |
|-----------|---|--|
| <b>1</b>  | Search for pharmacophores based on bioactive molecules in key proteins for Alzheimer's disease  | Valenzuela Paulina                     |
| <b>2</b>  | Hunting novel Alzheimer-disease related targets using networks  | Peña Varas Carlos                      |
| <b>3</b>  | Assessment of nociception and chronic pain in a glycine receptor alpha1 subunit knock-in mouse model  | San Martín Murga Victoria              |
| <b>4</b>  | Beta-amyloid accumulation and its implications on SVCT2 localization: focus on neuronal cell lines and mouse hippocampal neurons  | Morel Soto Camila                      |
| <b>5</b>  | Analysis Of Purified Microglia And Astrocytes From Mice That Voluntarily Drink Ethanol Chronically  | Berrios Cárcamo Pablo                  |
| <b>6</b>  | Increases calpain-1 levels by P2X2r activation promote the amyloidogenic pathway and beta-amyloid peptide generation  | Gavilán Javieria                       |
| <b>7</b>  | BDNF-mediated modifications in the mitochondrial network  | Soto Saavedra Camila                   |
| <b>8</b>  | Identification of drug-like molecules through molecular modeling of the interaction between the trpm4 ion channel and the kctd5 protein   | Peña Luciano                           |
| <b>9</b>  | Naryl-2-(ndisubstituted)acetamide compounds blocking nav1.5, kv1.5 and task-1 channels, a polypharmacological strategy for the treatment of atrial fibrillation                       | Camargo Ayala Lorena                   |
| <b>10</b> | Functional pharmacology of a tricyclic sulfonamide on glycine receptors   | Lara Sanhuesa César                    |
| <b>11</b> | Spinal adenylyl cyclases in chronic pain  | Sazo Anggelo                           |
| <b>12</b> | Arsenic nanoparticles trigger apoptosis via anoikis induction in OECM-1 cells   | Covarrubias Pinto Alejandra            |
| <b>13</b> | Structural-functional analysis of the Oligomeric Structure of the Human Sodium-Coupled Ascorbic Acid Transporter SVCT2  | Gatica Miranda Marcell                 |
| <b>14</b> | Mechanism of action and binding modes of naphthylisopropylamine (nipa) and its methoxylated derivative (meonipa) on the serotonin transporter (SERT)                                  | Iturriaga Vásquez Patricio             |
| <b>15</b> | Ascorbic acid decreases oxidative stress against glucose starvation in breast cancer cells in vitro model   | Alarcón Catalina                       |
| <b>16</b> | The role of Maresin1 in the reversibility of chronic liver fibrosis   | Herrera Vielma Francisca               |
| <b>17</b> | Role of rho kinase (ROCK) on the antiinflammatory effect of atorvastatin on trypanosoma cruzi-infected macrophages  | González Herrera Fabiola               |
| <b>18</b> | Systematic study of functionalization type and percentage in PAMAM dendrimers on cell viability and methotrexate drug delivery  | Oyarzún Maximiliano                    |
| <b>19</b> | Peripheral chemoreceptors drive increases in glutamate spillover at the retrotrapezoid nucleus: role in breathing and cardiac dysfunction in heart failure rats                       | Bravo Urquiza Liena                    |
| <b>20</b> | Exposure to high-fat diet plus sucrose solution alters gene expression of dopamine and crf receptors in the lateral septum of sprague dawley rats                                     | Olivares Barraza Rossy                 |
| <b>21</b> | Effects of intranasal vasopressin administration on amphetamine relapse in adolescent rats  | Fuentes Andrea                         |
| <b>22</b> | Evaluation of dopamine levels in the nucleus accumbens in mice with overexpression of eaat3 under mild unpredictable chronic stress condition   | Tapia Cuevas Vissente Tarantino Hamiet |
| <b>23</b> | Excitation/inhibition balance in hippocampal neurons of ca1 in a murine model of chronic epilepsy induced by pentylene tetrazol   | Aguilar Hernández Freddy               |
| <b>24</b> | Changes in Mitochondrial Dynamics After Perinatal Asphyxia and Intranasal Administration of MSC-Derived Secretome in Hippocampus  | Zamorano Cataldo Marta                 |
| <b>25</b> | Vasopressin in the lateral septum decrease amphetamine induced addictive like behaviors in male and females with a sex-dependent neurochemical effects                                | Cáceres Daniela                        |
| <b>26</b> | Exposure to chronic high fat diet during childhood and adolescence affects release and reuptake of dopamine in nucleus accumbens  | Velásquez Pineda Victoria              |
| <b>27</b> | Pharmacological treatment with phentermine reverses the weight gained after chronic exposure to an obesogenic diet and affects fasting-induced eating behavior in sprague dawley rats | Covarrubias Toro María José            |
| <b>28</b> | Neuronal glutamate transporter eaat3 regulates heterosynaptic gabaergic plasticity and reversal learning  | Ancatén González Carlos                |
| <b>29</b> | Effect of chronic stress on the regulation of nrf2 pathway in the hippocampus of male and female rats   | González-Morí Pablo                    |
| <b>30</b> | Comparison of transcriptional signatures in the hippocampus of depressive patients and chronically stressed rats  | Fiedler Temer Jenny                    |
| <b>31</b> | Anxiolytic effect of miR-17-5p: Potential target in the treatment of mood disorders   | Olave Olave Felipe                     |
| <b>32</b> | CDK5: a possible modulator of glycine receptor in chronic pain models. Potential modulation of glycine receptors by Cdk5 signaling in chronic pain states                             | Pérez Fernández Viviana                |

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|----|---|-------------------------------|
| 33 | Vitamin C reverts the increase in ROS levels and cell death caused by stroke in a blood-brain barrier in vitro model  | Arriagada Solange             |
| 34 | Clemastine restore normal breathing patterns and improves cardiac function in experimental heart failure  | Schwarz Flores Karla          |
| 35 | Beneficial effect of calafate fruit on risk factors associated with cardiovascular disease through a nutritional intervention assay and a metabolomic strategy based on UHPLC-QTOF/MS                                   | Olivares Caro Lia             |
| 36 | Adult rat cardiac fibroblast senescence induced by Ang II   | Díaz Araya Guillermo          |
| 37 | Resolvin D1 modulates TGF- $\beta$ 1-induced senescence in cardiac fibroblasts  | Espinoza Pérez Claudio        |
| 38 | Chronic treatment with lithium chloride improves cardiac function in experimental non-ischemic heart failure  | Pereyra Florian Katherin      |
| 39 | Dihydro- $\beta$ -agarofurans natural and synthetic as acetylcholinesterase and COX inhibitors: interaction with the peripheral anionic site (AChE-PAS), and anti-inflammatory potentials                               | Muñoz Nuñez Evelyn            |
| 40 | Pharmacological effects of lipophilic cation derived from gallic acid in obese mice   | Gutiérrez Figueroa Renata     |
| 41 | Exploring macrocyclic nuclei in beta-tubulin models as possible candidates for microtubule stabilization  | Castro Alvarez Luis Alejandro |
| 42 | Effect of the essential oil of the leaves of <i>Lampayo medicinalis</i> (Verbenaceae) on the in vitro cell viability of human fibroblasts   | Vera Quezada Waleska          |
| 43 | Synthesis and Biological Activity of a Series of Polyoxygenated Flavones  | Osorio Olivares Mauricio      |
| 44 | Changes in the murine plasma metabolome after an intervention with exercise and calafate consumption  | Nova Baza Daniela             |
| 45 | In vitro evaluation of the pharmacological activity of <i>L. rivularis</i> stem extract   | Marillán Baez Claudia         |
| 46 | Evidence of a nucleolin-CDK1-related induction of spermidine/spermine-N1-acetyltransferase-1 by indomethacin and its synergistic effect with a polyamine oxidase inhibitor in decreasing viability of lung cancer cells | Buelvas Jiménez Neudo         |
| 47 | Trypanocidal effect of <i>Baccharis</i> species and chemical profile by LC MS-MS  | Cortés Rubiano Carmen         |
| 48 | Maternal supplementation of a polyphenolic extract of white strawberry on the offspring of obese pregnant rats  | Valero Jara Viviana           |
| 49 | In vitro effects of the resinous exudate of <i>Escallonia pulverulenta</i> on Human Skin Melanoma A375 cells  | Silva Pedreros Valentina      |
| 50 | Substitutions on the pyridine ring of 3-(pyridin-3-yloxy)quinuclidine generates positive allosteric modulators type I   | López Villa Jhon Jairo        |
| 51 | Colonic neurons in the young rat: morphological changes occur after weaning with differences between sexes  | Villaruel Guzmán Valentina    |
| 52 | Can we reproduce the metabolic status induced in young rats by a short period of high fat diet via ceacal microbiota transfer?  | Eyzaguirre Johana             |
| 53 | Changes in purinergic signaling induced by a <i>Lactiplantibacillus plantarum</i> probiotic   | Rossi Vargas Gabriela         |
| 54 | Effects of arsenic (As) exposure on motor activity in female sprague-dawley rats  | Heresmann Ilyn                |
| 55 | Preliminary clinical validation of pharmacogenetic algorithm for dosage of acenocoumarol in atrial fibrillation patients  | Galleguillos Alarcón Macarena |
| 56 | Use of a pharmacogenetic algorithm to optimize quality of the anticoagulant therapy in atrial fibrillation patients   | Carrasco Cabezas Matías       |
| 57 | Genetic variants associated with arsenic metabolism and its effect on oxidative stress in individuals exposed by drinking water in Colombian Caribbean populations  | Inostroza Torres Valentina    |
| 58 | $\beta$ -hydroxybutyrate administration fails to mimic beneficial metabolic effects of trf in obese mice  | Astudillo Guerrero Camila     |
| 59 | Episodic binge-like ethanol exposure reduces skeletal muscle strength associated with atrophy, fibrosis, and inflammation in young rats   | Cáceres Ayala Constanza       |
| 60 | Maresin-1 is an antioxidant agent in chronic oxidative stress   | Zuñiga Ahumada María José     |

## FRIDAY, DECEMBER 9<sup>th</sup>

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|-------------|---|
| 9:00-11:00  | <b><u><a href="#">Symposium 7: "Pharmacological opportunities targeting long-term metabolic deficits induced by perinatal asphyxia"</a></u></b><br><b><u><a href="#">Coordinator: Dr. Mario Herrera-Marschitz</a></u></b> |
| 09:00-09:30 | <i>Delivery, a metabolic reprogramming hub leading to an uncertain outcome: clinical and experimental considerations</i><br><b>Dr. Mario Herrera-Marschitz</b> , Universidad de Chile                                     |
| 09:30-10:00 | <i>Secretome-derived from mesenchymal stem cells: a novel biopharmaceutical approach for preventing long-term metabolic insults elicited by perinatal asphyxia</i><br><b>Dra. Paola Morales</b> , Universidad de Chile    |
| 10:00-10:30 | <i>Pulmonary circulation submitted to perinatal chronic hypoxia. is more than vascular reactivity matter</i><br><b>Dr. Germán Ebensperger</b> , Universidad de Chile  |
| 10:30-11:00 | <i>Using 3-D brain organoids as a model in hypoxic brain injury</i><br><b>Dr. José Inzunza</b> , Karolinska Institutet University Hospital, Sweden  |

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| 11:00 – 11:30 | <b>Coffee break</b>  |
| 11:30-13:00   | <b>KEYNOTE LECTURE</b><br><u><a href="#">PHARMACOLOGIC MODULATION OF TDP-43: A NEW FUTURE TO FIGHT AGAINST NEURODEGENERATION</a></u><br><u><a href="#">Dra. Ana Martínez, Centro de Investigaciones Biológicas, España</a></u> |
| 13:00 – 15:00 | <b>LUNCH</b> (not included)  |
| 15:00-17:00   | <u><a href="#">Symposium 8: “New Insights into Monoamine Transporter Function: From Structure to Disease”</a></u><br><u><a href="#">Coordinator: Dr. Gonzalo Torres</a></u>  |
| 15:00 – 15:30 | <i>Monoamine transporter mechanisms: insights from molecular modeling</i><br><b>Dr. Angélica Fierro</b> , P. Universidad Católica de Chile   |
| 15:30 – 16:00 | <i>Interplay between hormones, endocannabinoids, and the dopamine transporter in the actions of cocaine</i><br><b>Dr. José Pino</b> , Universidad de Atacama   |
| 16:00 – 16:30 | <i>Watch flies teaching us mechanisms of neurological disorders</i><br><b>Dr. Aurelio Galli</b> , University of Alabama Birmingham   |
| 16:30 – 17:00 | <i>The reverse transport of monoamines: what is the physiological significance?</i><br><b>Dr. Gonzalo Torres</b> , Loyola University Chicago   |
| 17:00 -17:30  | <b>Coffee break</b>  |
| 17:30-19:00   | <b>CLOSING LECTURE</b><br><u><a href="#">Alzheimer’s disease: role of Wnt signaling pathway</a></u><br><u><a href="#">Dr. Nivaldo Inestrosa, Universidad de Magallanes and P. Universidad Católica de Chile</a></u>            |
| 19:00-19:30   | <b>CLOSING CEREMONY</b><br><b>Dr. Javier Bravo</b> , SOFARCHI President  |
| 19:30-20:30   | <b>Closing Cocktail</b>  |

# XLIII Congreso Anual de la Sociedad de Farmacología de Chile

05 al 09 de diciembre de 2022

Lugar: Centro Asistencial Docente e Investigación (CADI) - UMAG, Punta Arenas, Región de Magallanes y de la Antártica Chilena.



Organizan:



Universidad de Magallanes

