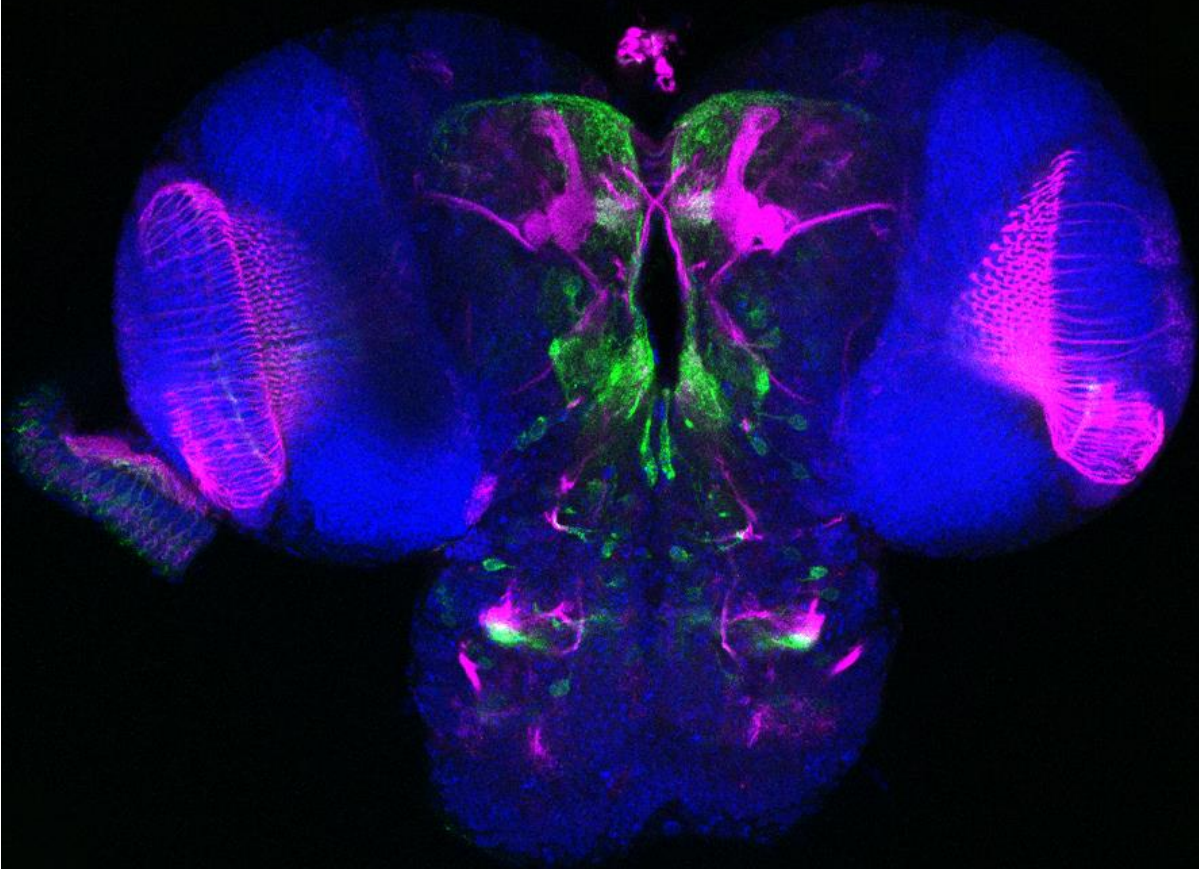


PROGRAM



CHILEAN SOCIETY
FOR CELL BIOLOGY
XXXIX ANNUAL MEETING
DECEMBER 12-16, 2022

CHILEAN SOCIETY FOR CELL BIOLOGY

XXXIV ANNUAL MEETING

December 12 – 16, 2022

Puerto Varas, Chile

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**CHILEAN SOCIETY FOR CELL BIOLOGY
XXXIV ANNUAL MEETING**

**DECEMBER 12-16, 2022
PUERTO VARAS**

P R O G R A M

MONDAY, DECEMBER 12, 2022

08:30 – 13:30 REGISTRATION
Convention Center Foyer

12:00 – 13:00 TECHNICAL LECTURE: TCL GROUP
Volcanes Room

SECUENCIACIÓN EN EL TIEMPO. MGI, UNA PODEROSA TECNOLOGÍA DE SECUENCIACIÓN EN CHILE. Alejandra Serrano, Adrián González, Diego Forttes. TCL Group.

13:00 – 14:30 Lunch

14:30 – 16:00 OPENING REMARKS
Volcanes Room
Chair: Lorena Varela-Nallar, SBCCH President

**PLENARY LECTURE “FEDERICO LEIGHTON PUGA”
FUNDACION CHILENA PARA BIOLOGIA CELULAR**
Chair: Maria Paz Marzolo, P. Universidad Católica de Chile

ROLE OF LYSOSOMES IN THE MAINTENANCE OF AXONAL STRUCTURE AND FUNCTION; IMPLICATIONS IN NEURODEVELOPMENTAL AND NEURODEGENERATIVE DISORDERS. Juan S. Bonifacino, Neurosciences and Cellular and Structural Biology Division (NCSBD); Eunice Kennedy Shriver National Institute of Child Health and Human Development (NICHD); National Institutes of Health (NIH), USA.

16:15 – 16:45 Coffee Break
Convention Center Foyer

16:45 – 17:45 TECHNICAL LECTURE: GRUPO BIOS
Volcanes Room

USING THE SEAHORSE XF TECHNOLOGY FOR REAL-TIME ADVANCED METABOLIC STUDIES. Alvaro A. Elorza. Institute of Biomedical Sciences, Faculty of Medicine and Faculty of Life Sciences, Universidad Andres Bello.

17:45 – 19:45 SYMPOSIUM “HEALTHY AND PATHOLOGICAL BRAIN AGING, COGNITIVE IMPAIRMENT, AND THERAPEUTIC INTERVENTIONS”.
Volcanes Room
Chair: Felipe Court and Macarena Arrázola, U. Mayor

GEROPROTECTIVE STRATEGIES TO SLOW BRAIN AGING AND AGE-ASSOCIATED PATHOLOGIES IN THE CENTRAL NERVOUS SYSTEM. Felipe A. Court^{1,2,3}. ¹Center for Integrative Biology, Faculty of Sciences, Universidad Mayor, Santiago, Chile. ²Geroscience Center for Brain Health and Metabolism (GERO), Santiago, Chile. ³Buck Institute for Research on Aging, Novato, CA, USA.

AUTOPHAGY DYSFUNCTION CONTRIBUTES TO NEURONAL SENESCENCE IN BRAIN AGING. Susana Castro-Obregon. Departamento de Neurodesarrollo y

Fisiología, División de Neurociencias, Instituto de Fisiología Celular, UNAM, Mexico.
scastro@ifc.unam.mx

NECROPTOSIS INHIBITION AS A THERAPEUTIC TARGET TO HALT THE PROGRESSION OF BRAIN AGING AND COGNITIVE IMPAIRMENT. Macarena S. Arrázola. Center for Integrative Biology, Faculty of Sciences, Universidad Mayor, Santiago, Chile. macarena.arrazola@umayor.cl

SYNAPTIC MITOCHONDRIA AND THEIR CONTRIBUTION TO HIPPOCAMPAL-DEPENDENT MEMORY LOSS IN AGING: POTENTIAL TREATMENTS. Cheril Tapia-Rojas. Laboratory of Neurobiology of Aging, Centro de Biología Celular y Biomedicina (CEBICEM), Facultad de Medicina y Ciencia, Universidad San Sebastián, Santiago, Chile; Centro Ciencia & Vida, Fundación Ciencia & Vida, Avda. Zañartu 1482, Ñuñoa, Santiago, Chile.

20:00 – 21:30 ORAL PRESENTATIONS I

Calbuco Room

**Chairs: Silvana Zanlungo, P. Universidad Católica de Chile
Patricia Luz-Crawford, Universidad de los Andes**

20:00 LYMPH LEAKAGE PROMOTES IMMUNOSUPPRESSION BY ENHANCING ANTI-INFLAMMATORY MACROPHAGE POLARIZATION. Andres A. Herrada¹, Alexandra Olate-Briones¹, Rodrigo Lazo-Amador¹, Bairon Hernandez-Rojas², Gonzalo Riadi³ and Noelia Escobedo¹. ¹Instituto de Ciencias Biomédicas, Facultad de Ciencias de la Salud, Universidad Autónoma de Chile, Talca. ²Ph.D Program in Sciences Mention in Modeling of Chemical and Biological Systems, Faculty of Engineering, University of Talca, Chile. ³Millennium Science Initiative Program Millennium Nucleus of Ion Channels-Associated Diseases (MiNICAD), Center for Bioinformatics, University of Talca.

20:15 REDUCTION IN ACCUMBAL GLYCINE RECEPTORS AND REWARD IN AN ALZHEIMER'S DISEASE MODEL. Lorena Armijo Weingart, Scarlet Gallegos, Anibal Araya, Alejandra Guzmán, Macarena Konar Nie, Eduardo Fernández Pérez, Loreto San Martín, Luis G. Aguayo. Department of Physiology, Universidad de Concepción, Chile. larmijo@udec.cl

20:30 EFFECTS OF PA IN PRIMARY CILIUM OF HYPOTHALAMIC NEURONS. Catalina Kretschmar¹, Maria Paz Hernández-Cáceres¹, Eugenia Morselli², Alfredo Criollo¹. ¹Instituto de Investigación en Ciencias Odontológicas, Facultad de Odontología, Universidad de Chile. ²Department of Basic Sciences, Faculty of Medicine and Sciences, Universidad San Sebastián, Santiago de Chile.

20:45 NEW CONFORMATIONAL ARRANGEMENTS OF VINCULIN-CATENINS COMPLEX MODULATE FORCE TRANSDUCTION AT THE ADHERENS JUNCTION. Nicole Morales^{1,2}, Juan José Alegría², Hui Ting Ong³, Nelson Barrera¹, Angélica Fierro⁴, Yusuke Toyama³, Ben Goult⁵, Yilin Wang³, Pakorn Kanchanawong³, Andrea Ravasio², and Cristina Bertocchi¹. ¹Faculty of Biological Sciences, Pontificia Universidad Católica De Chile. ²Institute for Biological and Medical Engineering, Pontificia Universidad Católica de Chile. ³Mechanobiology Institute, Singapore. National University of Singapore, Singapore. ⁴Faculty of Chemistry and Pharmacy, Pontificia Universidad Católica de Chile, Santiago, Chile. ⁵School of Biosciences, University of Kent, UK.

21:00 THE CHOLINERGIC-DRIVEN AIRWAY CLEARANCE IS IMPAIRED IN CYSTIC FIBROSIS. Sandra Villanueva^{1,2}, Anita Guequen^{2,3}, Marisol Barros^{2,3}, Livia Delpiano⁴, Bárbara Tapia^{2,3}, Michael A. Gray⁴ and Carlos A. Flores^{1,2}. ¹Centro de Estudios Científicos. ²Facultad de Medicina y Ciencia, Universidad San Sebastián. ³Universidad Austral de Chile. ⁴Biosciences Institute, Newcastle University, UK.

21:15 HIV-1 INFECTION CHANGES THE N6-METHYLADENOSINE (M6A) PROFILE ON MRNAS IN MICROGLIA, IMPACTING THE INTERFERON-STIMULATED GENES (ISG) SIGNALING AND ANTIVIRAL INNATE IMMUNE RESPONSE. Masyelly Rojas^{1,2,3}, Camila Pereira-Montecinos³, Victoria Rojas-Celis^{3,4}, Cecilia Rojas-Fuentes⁵, Ivana Orellana⁶, J. Andrés Rivas-Pardo⁶, Sebastián Reyes-Cerpa⁶, Ricardo Soto-Rifo⁵, Patricia Luz-Crawford^{1,2}, Daniela Toro-Ascuy³. ¹IMPACT, Center of Interventional Medicine for Precision and Advanced Cellular Therapy, Chile. ²CiiB, Facultad de Medicina, Universidad de los Andes, Chile. ³ICB, Facultad de Ciencias de la Salud, Universidad Autónoma de Chile. ⁴Facultad de Química y Biología, Universidad de Santiago de Chile. ⁵ICBM, Facultad de Medicina, Universidad de Chile. ⁶CGB, Facultad de Ciencias, Universidad Mayor.

ORAL PRESENTATIONS II

Tronador Room

Chairs: René Vidal, Universidad Mayor

Verónica Eisner, P. Universidad Católica de Chile

20:00 AN ENHANCER-TRAP SCREEN REVEALS THE EXPRESSION OF ATAXIN2 IN PROGENITOR CELLS OF THE ZEBRAFISH VISUAL SYSTEM. Pablo Allendes¹, Natalia Cruz¹, Bruno Magliona¹, María Vargas¹, María J. Vásquez¹, Camila Weiss-Garrido¹, Aaron Villanueva¹, Koichi Kawakami², Leonardo E. Valdivia^{1,3}. ¹Center for Integrative Biology, Universidad Mayor, Chile. ²Division of Molecular and Developmental Biology, National Institute of Genetics, Department of Genetics, SOKENDAI, Japan. ³Escuela de Biotecnología, Universidad Mayor, Chile.

20:15 IMMUNOMODULATORY EFFECTS OF ACTIVATED COAGULATION FACTOR X. Catalina Asencio-Barría^{1,3,4}, Carolina Pradenas^{1,2}, Daniela Tapia-Molina^{1,2,3,4}, Noymar Luque-Campos^{1,2}, Ana María Vega^{1,2}, Patricia Luz-Crawford^{1,2,4*} and Gareth I. Owen^{3,4*}. ¹Centro de Investigación e Innovación Biomédica, Universidad de los Andes. ²IMPACT, Center of Interventional Medicine for Precision and Advanced Cellular Therapy. ³Faculty of Biological Sciences and Faculty of Medicine, Pontificia Universidad Católica de Chile. ⁴Millennium Institute on Immunology and Immunotherapy. caasencio@uc.cl

20:30 COMBINED SECRETOME DERIVED FROM MESENCHYMAL STEM CELLS AND KERATINOCYTES PROMOTES WOUND HEALING AND PREVENTS SKIN FIBROSIS IN EPIDERMOLYSIS BULLOSA. Cristian De Gregorio¹, Ignacia Fuentes^{1,2}, Marcelo Ezquer¹. ¹Regenerative Medicine Center, Universidad del Desarrollo-Clinica Alemana, Chile. ²Fundación DEBRA-Chile, Chile.

20:45 METTL3 PHOSPHORYLATION CONVERTS EXTRACELLULAR GROWTH FACTOR SIGNALS INTO TRANSCRIPTIONAL RESPONSES. Marcelo Perez-Pepe¹, Anthony W. Desotell¹, Hengyi Li¹, Wenxue Li¹, Bing Han¹, Qishan Lin², Daryl E. Klein¹, Yansheng Liu¹, Hani Goodarzi³, Claudio R. Alarcón^{1*}. ¹Department of Pharmacology, Yale University School of Medicine, New Haven, CT, USA. ²RNA

Epitranscriptomics and Proteomics Resource, University at Albany, NY USA. ³Department of Biochemistry and Biophysics, University of California, San Francisco, CA, USA.

21:00 MITOCHONDRIAL NUCLEOID DISTRIBUTION IS PERTUBED BY OPA1 ADOA-CAUSING MUTANTS. Macuada, Josefa¹; Vidal, Gonzalo^{2,3}; Molina, Isidora¹; Lagos, Daniel¹; Aedo, Geraldine¹; Pérez, Nicolás¹; Rudge, Timothy^{2,3}; Cartes-Saavedra, Benjamín¹; Eisner, Verónica¹. ¹Department of Cellular and Molecular Biology, Pontificia Universidad Católica de Chile. ²Institute for Biological and Medical Engineering, Pontificia Universidad Católica de Chile. ³School of Computing, Newcastle University.

21:15 MACROPHAGES TREATED WITH IGF2 INDUCE NEUROPROTECTION IN PD PRECLINICAL MODELS BY MODULATION OF IMMUNE RESPONSE. Felipe Grünwald Bravo^{1,2,3}, Marisol Cisterna^{1,2,3}, Denisse Sepúlveda^{1,2,3}, Tomas Huerta^{1,2,3}, Carolina Jerez^{1,2,3}, Rodrigo Pacheco⁴, René Vidal^{1,2,3}. ¹Center for Integrative Biology, Universidad Mayor, Chile. ²Biomedical Neuroscience Institute, University of Chile, Santiago, Chile. ³Center for Geroscience, Brain Health and Metabolism, Santiago, Chile. ⁴Science for Life Foundation, Santiago, Chile.

21:30 Dinner

TUESDAY, DECEMBER 13, 2022

08:00 POSTER MOUNTING SESSION I (1-80)
Convention Center Foyer

09:00 – 10:30 ORAL PRESENTATIONS III
Calbuco Room
Chairs: Cheril Tapia-Rojas, Universidad San Sebastián
Leonardo Valdivia, Universidad Mayor

09:00 PT-DF01 CONTRIBUTE TO THE FORMATION OF PRE-METASTATIC NICHE IN LYMPH NODES. Georges N¹, Hidalgo Y^{1,2,3}, González-Arriagada WA⁵, Tobar HE¹, Cereceda L², Pinos-Lagos K⁴, Khoury M^{1,2,3,4}, Alcayaga-Miranda F^{1,2,3}. ¹Laboratory of Nano-Regenerative Medicine, Centro de Investigación e Innovación Biomédica. (CIIB), Faculty of Medicine, Universidad de los Andes, Chile. ²IMPACT, Center of Interventional Medicine for Precision and Advanced Cellular Therapy, Santiago, Chile. ³Cells for Cells, Chile. ⁴Faculty of Medicine, Universidad de los Andes, Santiago, Chile. ⁵Universidad de los Andes, Chile. Faculty of Odontology.

09:15 LPA-LPA1/INTEGRINS/FAK CROSSTALK THROUGH THE HIPPO PATHWAY REGULATE FIBRO/ADIPOGENIC PROGENITORS' FIBROTIC RESPONSE. Meilyn Cruz-Soca^{1,2}, Adriana Córdova-Casanova^{1,2}, Jennifer Faúndez-Contreras^{1,2}, Juan Carlos Casar³, and Enrique Brandan^{1,2}. ¹Laboratory of Cell Differentiation and Pathology. PUC, Chile. ²Fundación Ciencia & Vida, Ñuñoa, Chile. ³Department of Neurology, Faculty of Medicine, PUC, Chile.

09:30 UNRAVELING THE ROLE OF THE MITOCHONDRIAL UNFOLDED PROTEIN RESPONSE (MTUPR) ON MITOCHONDRIAL FUNCTION IN THE AGED HIPPOCAMPUS. Matías Lira^{1,2}, Claudia Jara¹, Angie K. Torres¹, Jesús Llanquino¹ & Cheril Tapia-Rojas^{1,2}. ¹Neurobiology of Aging Lab, Centro de Biología Celular y

Biomedicina (CEBICEM), Universidad San Sebastián, Facultad de Medicina y Ciencia, Santiago, Chile. ²Centro Ciencia & Vida, Fundación Ciencia & Vida, Santiago, Chile.

- 09:45 TARGETING COX-2 ACTIVITY RESTORE NK CELL-MEDIATED CYTOTOXIC CAPACITY AND IMPROVE THERAPEUTIC OUTCOMES OF THE ANTI-CTLA-4-BASED IMMUNOTHERAPY IN HIGH-GRADE SEROUS OVARIAN CANCER.** Fernán Gómez-Valenzuela¹, Felipe Suárez¹, Ignacio Wichmann^{2,3,4}, Sumie Kato¹, Mauricio A. Cuello¹. Departments of ¹Gynecology and ²Obstetrics, School of Medicine, Pontificia Universidad Católica de Chile. Santiago, Chile. ³Advanced Center for Chronic Diseases (ACCDiS). Pontificia Universidad Católica de Chile. ⁴Division of Oncology, Department of Medicine, Stanford School of Medicine.
- 10:00 METABOLISM GOVERNS THE IMMUNOMODULATORY EFFECT OF UMBILICAL-CORD DERIVED MESENCHYMAL STEM/STROMAL CELLS ON T-CELLS FROM RHEUMATOID ARTHRITIS PATIENTS.** Luque-Campos N^{1,2}, Pradenas C^{1,2}, Elizondo-Vega R³, Hidalgo Y², Vega-Letter A^{1,2}, Djouad F⁴, Luz-Crawford P^{1,2}. ¹Centro de Investigación e Innovación Biomédica, Universidad de los Andes, Santiago, Chile. ²IMPACT, Center of Interventional Medicine and Advanced Cellular Therapy, Santiago, Chile. ³Departamento de Biología Celular, Universidad de Concepción, Concepción Chile. ⁴INSERM U1183-Universite de Montpellier, Montpellier, France.
- 10:15 MORPHOGENESIS AND CONNECTIVITY IN DEVELOPING ZEBRAFISH EYES: THE mab21l2 FUNCTION.** Camila Weiss-Garrido^{1*}, Cristian Sobarzo^{1,2*}, Stephen Carter³, Lisa Tucker³, Aaron Villanueva¹, Octavia Santis^{1,2}, Joaquín Letelier¹, Juan Martínez-Morales⁴, Gaia Gestri³, Stephen W. Wilson³, Leonardo E. Valdivia^{1,2}. ¹Center for Integrative Biology, Facultad de Ciencias, Universidad Mayor, Santiago, Chile. ²Escuela de Biotecnología, Facultad de Ciencias, Universidad Mayor, Santiago, Chile. ³Department of Cell and Developmental Biology, University College London, London, United Kingdom. ⁴Centro Andaluz de Biología del Desarrollo-CABD (CSIC/UPO/JA), Seville, Spain.

ORAL PRESENTATIONS IV

Tronador Room

Chairs: Gonzalo Cancino, P. Universidad Católica de Chile
Rodrigo Pacheco, Fundación Ciencia y Vida

- 09:00 PACER REPRESSES RIPK1-DEPENDENT APOPTOSIS AND NECROPTOSIS INDEPENDENTLY OF ITS ROLE IN AUTOPHAGY.** Diego Rojas-Rivera^{1,2,3,5}, Sebastián Beltrán², Melissa Calegaro-Nassif^{1,2}, Lorena Abarzúa¹, Cristian Bergmann⁴, Mathieu J.M. Bertrand^{3,5}, Patricio A. Manque^{4,6}, Ute Woehlbier^{1,4}. ¹Escuela de Biotecnología, Facultad de Medicina, Universidad Mayor. ²Escuela de Tecnología Médica, Facultad de Medicina, Universidad Mayor. ³VIB Center for Inflammation Research (Belgium). ⁴Center for Integrative Biology, Universidad Mayor. ⁵Department of Biomedical Molecular Biology, Ghent University (Belgium). ⁶Centro de Oncología de Precisión, Facultad de Medicina, Universidad Mayor.
- 09:15 DESCIPHERING THE ROLE OF ADAPTIVE IMMUNITY AS A MEDIATOR IN THE MICROBIOTA-NERVOUS SYSTEM AXIS IN PARKINSON'S DISEASE.** Zulmary Manjarres^{1,2}, Margarita Calvo², Rodrigo Pacheco^{1,3}. ¹Laboratorio de Neuroinmunología, Centro Ciencia & Vida, Ñuñoa, Santiago, Chile. ²Departamento de Fisiología, Facultad de Ciencias Biológicas, Pontificia Universidad Católica de Chile and Millennium Nucleus for the Study of Pain, Santiago, Chile. ³Facultad de Medicina y Ciencia, Universidad San Sebastián, Providencia, Santiago, Chile.

- 09:30 ROLE OF MESODERMAL FN1 DURING OFT ELONGATION. Cecilia Arriagada**, Sophie Astrof. Department of Cell Biology and Molecular Medicine, Rutgers Biomedical and Health Sciences, USA. cecilia.arriagada@rutgers.edu
- 09:45 THE LOSS OF PTPRD PROMOTES AN IMBALANCE IN THE NUMBER AND FUNCTION OF GLUTAMATERGIC AND GABAERGIC NEURONS CONTRIBUTING TO AUTISTIC-LIKE BEHAVIORS. Bastían I. Cortés^{1,#}**, Francisca Cornejo¹, Marcela Navarrete², Ricardo Delgado², Nicolás Ardiles³, Alexia Nuñez-Parra², Pablo Moya³, Gonzalo I. Cancino^{1,4}. ¹Center for Integrative Biology, Facultad de Ciencias, Universidad Mayor, Santiago, Chile. ²Departamento de Biología, Facultad de Ciencias, Universidad de Chile, Santiago, Chile. ³Instituto de Fisiología, Facultad de Ciencias, Universidad de Valparaíso, Valparaíso, Chile. ⁴Facultad de Ciencias Biológicas, Pontificia Universidad Católica de Chile, Santiago, Chile. #cortes.bastian@gmail.com
- 10:00 DISCOVERY AND CHARACTERIZATION OF THE HUMAN ERYTHROID PROTEIN ERYM3 AND ITS IMPLICATIONS ON MITOCHONDRIAL FUNCTION AND MITOPHAGY. Gabriela Gomez-Lillo¹**, Andrea Matamoros¹, Paola Tiozzo¹, Amori Malleda¹, Gonzalo Mardones², Jonathan Canan³, Danilo Gonzalez³, Alvaro A. Elorza¹. ¹ICB, UNAB. ²Institute of Physiology, UACH. ³CBIB, UNAB. gaby.gomez.lillo@gmail.com
- 10:15 PKR-eIF2ALPHA AXIS IS A NOVEL PROTEOSTATIC REGULATING PATHWAY AT CNS SYNAPSES. N.W. Martínez^{1,2}**, F.E. Gómez¹, I. Alfaro^{1,3}, and S. Matus^{1,2}. ¹Fundación Ciencia & Vida, Santiago, Chile. ²Facultad de Medicina y Ciencia, Universidad San Sebastián. ³Institute of Sciences and Innovation in Medicine, Faculty of Medicine, Clínica Alemana, U. del Desarrollo. smatus@cienciavida.org
- 10:30 – 12:00 POSTER VIEWING SESSION I (1-80)**
Convention Center Foyer
- 001 EXTRACELLULAR VESICLES OF THE COMMENSAL INTESTINAL MICROBIOTA OF NEWBORNS AND THEIR REGULATORY EFFECT ON IMMUNE CELLS. Adasme-Vidal, C.^{1,4}**, Figueroa-Valdés, A.I.^{1,2,3}, De Solminihac, J.³, Pino-Lagos, K.³, Valdebenito, P.⁴, Illanes, S. E.^{1,3,4}, Alcayaga-Miranda, F.^{1,2,3,4}. ¹IMPACT, Center of Interventional Medicine for Precision and Advanced Cellular Therapy, Centro de Investigación e Innovación Biomédica (CiiB), Universidad de los Andes, Santiago, Chile. ²Cells for Cells, Consorcio Regenero, Chile. ³Facultad de Medicina, CiiB, Universidad de los Andes, Santiago, Chile. ⁴Laboratory of Reproductive Biology, CiiB, Universidad de los Andes, Santiago, Chile.
- 002 MATERNAL Mgat1a REGULATES CORTICAL GRANULE BIOLOGY DURING VERTEBRATE EGG ACTIVATION. Constanza Aguirre-Campos¹**, Catalina Díaz¹, Felipe Aguilera², Mary C. Mullins³ and Ricardo Fuentes^{1,*}. ¹Laboratory of Phenomics and Early Embryogenesis (LAFET), GDeP, Department of Cell Biology, Faculty of Biological Sciences, Universidad de Concepción, Chile. ²Department of Biochemistry and Molecular Biology, Faculty of Biological Sciences, Universidad de Concepción, Chile. ³Department of Cell and Developmental Biology, University of Pennsylvania, Philadelphia, PA, USA.
- 003 TMBIM6 PREVENTS THE APOPTOSIS ON IN VITRO AND IN VIVO MODELS OF PARKINSON'S DISEASE. Pablo Ahumada-Montalva¹**; Carolina Jerez^{2,3}; Sara Borquez^{1,5}; Maria José Cabedo^{1,5}; Yulliet Zabala^{1,5}; Catalina Plaza^{1,5}; Wileidy Gómez⁶; Melissa Calegaro-Nassif⁶; Mario Sanhueza⁷; Rene Vidal^{2,3,4}; Diego Rojas-Rivera^{1,4,5}. ¹Cell

Death and Biomedicine Lab. ²Center for Integrative Biology. ³Center for Geroscience, Brain Health and Metabolism. ⁴School of Biotechnology. ⁵School of Medical Technology. ⁶Autophagy and Neuroprotection Laboratory, Universidad Mayor, Santiago, Chile. ⁷Centro de Resiliencia, Adaptación y Mitigación, Universidad Mayor, Temuco, Chile. ⁸Biomedical Neuroscience Institute, University of Chile.

- 004 AUTOPHAGY INHIBITION BY PALMITIC ACID IN VITRO OR BY HFD-DIET INDUCED OBESITY IN VIVO PROMOTES INFLAMMATORY SIGNATURES IN ADIPOCYTES RELATED WITH GALECTIN-3 EXPRESSION.** Javiera Alvarez¹, Omar Cortés^{1,2}, Carlos Lagos^{2,3}, Mariana Cifuentes^{4,5}, María José Barrera⁶, Eugenia Morselli³, Jorge Cancino¹, Bredford Kerr¹ and Patricia Burgos^{1,2}. ¹CEBICEM, Facultad de Medicina y Ciencia, USS, Santiago, Chile. ²Centro Ciencia & Vida, Fundación Ciencia & Vida, Santiago, Chile. ³Facultad de Medicina y Ciencia, USS, Santiago, Chile. ⁴Institute of Nutrition and Food Technology (INTA), University of Chile, Santiago, Chile. ⁵Advanced Center for Chronic Diseases (ACCDiS), Santiago, Chile. ⁶Facultad de Odontología, USS, Santiago, Chile.
- 005 IDENTIFYING GENE NETWORKS MEDIATING THE ESTABLISHMENT OF LONG-TERM MEMORY IN MOUSE HIPPOCAMPAL NEURONS.** Yennyfer Arancibia, Mario Sánchez, Alejandro Blanco, Brigitte van Zundert & Martín Montecino. Instituto Ciencias Biomédicas, Facultad de Medicina y Facultad de Ciencias de la Vida, Universidad Andrés Bello.
- 006 CHONDROPROTECTIVE AND REGENERATIVE EFFECT OF sEVs FROM GLYCOLYTIC MSC.** María Jesús Araya^{1,4}, Cynthia García^{1,4}, Eliana Lara-Barba^{1,4}, Carolina Pradenas^{1,4}, Yeimi Herrera-Luna^{1,4}, Alexander Ortloff², José Barraza³, José Matas⁵, Carolina Díaz⁵, Patricia Luz-Crawford^{1,4*}, Ana María Vega-Letter^{1,4*}. ¹Centro de Invest. e Innovación Biomédica, Univ. de Los Andes, Stgo, Chile. ²Dep de Ciencias Vet. y Salud Pública, Univ. Católica de Temuco, Temuco, Chile. ³Centro Diagnóstico Histopatología-Citopatología-Ltda, Clínica Alemana, Temuco, Chile. ⁴IMPACT, Center of Interventional Medicine for Precision and Advanced Cellular Therapy, Stgo, Chile. ⁵Orthopedic Department Univ de los Andes, Stgo, Chile.
- 007 IGF2 TREATMENT DECREASES aSYNUCLEIN AGGREGATES AND PREVENT THE DOPAMINERGIC NEURONAL LOSS IN PARKINSON DISEASE MODEL.** Javiera Arcos, Carolina Jerez, Denisse Sepúlveda, Felipe Grunenwald, Jorge Toledo, Ulrich Kubitscheck, Diego Rojas-Rivera, René L Vidal. Center for Integrative Biology, Universidad Mayor, Santiago, Chile.
- 008 THE UNFOLDED PROTEIN RESPONSE TRANSCRIPTION FACTOR XBP1S AMELIORATES ALZHEIMER'S DISEASE BY IMPROVING SYNAPTIC FUNCTION AND PROTEOSTASIS.** Diego Arriagada Pozo, Claudia Duran-Aniotz, Catalina Rivera-Krstulovic, Natalia Poblete, Álvaro O. Ardiles, Mei-Li Díaz-Hung, Carleen Mae P. Sabusap, Yannis Gerakis, Felipe Cabral Miranda, Javier Diaz, Matias Fuentealba, Ernesto Muñoz, Sandra Espinoza, Gabriela Martinez, Gabriel Quiroz, Giovanni Tamburini, Danilo B. Medinas, Darwin Contreras, Ricardo Piña, Mychael V. Lourenco, Felipe C. Ribeiro, Sergio T. Ferreira, Carlos Rozas, Bernardo Morales, Lars Plate, Christian Gonzalez-Billault, Adrian G. Palacios, and Claudio Hetz*. Biomedical Neuroscience Institute (BNI), Faculty of Medicine, University of Chile. Claudio.hetz@gmail.com, meilidiazhung@gmail.com

- 009 HYPOTHALAMIC TANYCYTE-ASSOCIATED G6PASE SYSTEM CONTROL PERIPHERAL ADIPOSITY AND FOOD INTAKE.** María José Barahona¹, Luciano Ferrada² and Francisco Nualart^{1,2}. ¹Laboratorio de Neurobiología y Células Madre (NeuroCellIT), Departamento de Biología Celular, Facultad de Ciencias Biológicas, Universidad de Concepción, Concepción, Chile. ²Centro de Microscopía Avanzada CMA BIO BIO, Universidad de Concepción, Concepción, Chile. Mjbarahona@cmabiobio.cl
- 010 ALPHA-SNAP (M105I) MUTATION ALTERS THE NEUROGENIC CAPACITY OF INTERNEURON PROGENITOR CELLS BY DEREGULATING AMPK ACTIVITY AND MACROAUTOPHAGY.** Méndez-Ruette, M^{1,2}, Sánchez-Rubio, M¹, Bustamante-Barrientos, FA¹, Burgos, PV³, Wyneken, U^{1,4,5}, Bátiz, LF^{1,4,5}. ¹Center for Biomedical Research and Innovation (CiiB), Universidad de los Andes (UANDES), Chile. ²PhD Program in Biomedicine, UANDES, Chile. ³CEBICEM, Universidad San Sebastián, Chile. ⁴School of Medicine, Faculty of Medicine, UANDES, Chile. ⁵IMPACT Center, Chile.
- 011 GENERATION OF A NOVEL MOUSE MODEL OF INTELLECTUAL DISABILITY.** Danilo B. Medinas^{1,2,3}, Pablo Rozas^{1,2,3}, Harrison Baker⁴, Julio Ferreira⁵, Fadzai Teramayi⁴, Patricia Ojeda-Provoste^{1,2,3}, Daria Mochly-Rosen⁵, Lisa Ellerby⁴, and Claudio Hetz^{1,2,3,4}. ¹Biomedical Neuroscience Institute, Santiago, Chile. ²Center for Geroscience, Brain Health and Metabolism, Santiago, Chile. ³Program of Cellular and Molecular Biology, Institute of Biomedical Sciences, University of Chile, Santiago, Chile. ⁴Buck Institute for Research on Aging, Novato, CA, USA. ⁵Stanford University School of Medicine.
- 012 ROLE OF HISTONE MODIFYING ENZYMES KDM6B (JMJD3) AND KMT2C (MLL3) IN THE DEVELOPMENT OF AUTISM SPECTRUM DISORDERS.** Bastián Brauer, Gloria Arriagada y Fernando Bustos. Instituto de Ciencias Biomédicas, Facultad de Medicina y Facultad de Ciencias de la Vida, Universidad Andrés Bello.
- 013 ROLE OF CD36 AND TRAFFICKING OF LYSOSOMES IN B LYMPHOCYTES DURING ACTIVATION AND HEPATOCYTES WITH NIEMANN PICK TYPE C (NPC) DISEASE.** Fernanda Cabrera-Reyes^{1,2}, María-Isabel Yuseff² and Silvana Zanlungo¹. ¹Pontificia Universidad Católica de Chile, Facultad de Medicina, Lysolab. ²Pontificia Universidad Católica de Chile, Facultad Ciencias Biológicas, Laboratory in Immune Cell Biology. fecabrera@uc.cl
- 014 DISCOVERING THE EFFECT OF LOW-GRADE INFLAMMATION IN CARCINOGENESIS, THE RELATIONSHIP BETWEEN ORAL SQUAMOUS CELL CARCINOMA AND PERIODONTAL DISEASE.** Gisela Canedo-Marroquín, Wilfredo A. González-Arriagada, Claudia Brizuela. Faculty of Dentistry, Universidad de los Andes, Santiago, Chile.
- 015 hsa-miR-424-5p AND hsa-miR-513c-3p DYSREGULATION MEDIATED BY IFN γ IS ASSOCIATED WITH ALTERED EXPRESSION OF KEY UNFOLDED PROTEIN RESPONSE COMPONENTS RELATED WITH SALIVARY GLAND DYSFUNCTION IN SJÖGREN'S SYNDROME PATIENTS.** Patricia Carvajal¹, Sergio Aguilera², Sebastián Indo³, Daniela Jara¹, Isabel Castro³, María José Barrera⁴, Sergio González⁵, Claudio Molina⁴ and María Julieta González¹. ¹Programa de Biología Celular y Molecular, ICBM, Universidad de Chile. ²Departamento de Reumatología, Clínica Indisa. ³Departamento de Tecnología Médica, Facultad de Medicina, Universidad de Chile.

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- 016 ALTERED EXPRESSION OF THE INTEGRATED STRESS RESPONSE COMPONENTS IN SALIVARY GLANDS OF SJÖGREN'S SYNDROME PATIENTS.** Patricia Carvajal¹, Verónica Bahamondes^{2,3}, Daniela Jara¹, **Isabel Castro**², María-José Barrera⁴, Soledad Matus⁵, Sergio Aguilera⁶, Claudio Molina⁴, Sergio González⁷, María-Julieta González¹. ¹Programa de Biología Celular y Molecular, ICBM, Facultad de Medicina, Universidad de Chile. ²Departamento de Tecnología Médica, Facultad de Medicina, Universidad de Chile. ³Edison Biotechnology Institute, Ohio University, Ohio, USA. ⁴Facultad de Odontología, Universidad San Sebastián. ⁵Fundación Ciencia & Vida. ⁶Clínica Indisa. ⁷Facultad de Medicina y Ciencias de la Salud, Universidad Mayor.
- 017 ISOLATION, CHARACTERIZATION, AND DETERMINATION OF THE IMMUNOMODULATORY POTENTIAL OF SMALL EXTRACELLULAR VESICLES DERIVED FROM MENSTRUAL FLUID FROM NULLIPAROUS AND MULTIPAROUS WOMEN.** **Cerda-Castro P.**^{1,2}, Tobar H.E.³, Acuña-Gallardo S.⁴, De Solminihaç J.³, Pino-Lagos K.³, Valdebenito P.⁴, Peragallo-Papic V.^{1,4}, Illanes S.E.^{1,3,4}, Alcayaga-Miranda F.^{1,2,3}. ¹IMPACT, Center of Interventional Medicine for Precision and Advanced Cellular Therapy, Santiago, Chile. ²Cells for Cells, Consorcio Regenero, Chile. ³Facultad de Medicina, CiiB, Universidad de los Andes, Chile. ⁴Laboratory of Reproductive Biology, CiiB, Universidad de los Andes, Chile.
- 018 MURTILLA EXTRACTS PREVENT HUNTINGTON'S DISEASE SYMPTOMS IN PRECLINICAL MODELS.** **Marisol Cisternas-Olmedo**^{1,2,3}, Rodrigo Perez^{1,4}, Mauricio Saez¹, Carla Delporte⁴, Rene Vidal^{1,2,3}. ¹Center for Integrative Biology, Faculty of Sciences, Universidad Mayor, Chile. ²Biomedical Neuroscience Institute, Faculty of Medicine, University of Chile, Chile. ³Center for Geroscience, Brain Health and Metabolism, Santiago, Chile. ⁴Laboratorio de Productos Naturales, Faculty of Chemical and Pharmaceutical Sciences, Universidad de Chile, Chile.
- 019 SWAP70 COUPLES MECHANOSENSITIVE RESPONSES TO ACTIN CYTOSKELETON DYNAMICS IN B LYMPHOCYTES.** **Teemly Contreras**, María-Isabel Yuseff. Laboratory of Immune Cell Biology, Pontificia Universidad Católica de Chile.
- 020 IMMUNE SYNAPSE OF B LYMPHOCYTES IS MODULATED BY HMGB1 THROUGH THE INDUCTION OF CELL MIGRATION.** **Oreste Corrales Vázquez**, María Isabel Yuseff Sepúlveda. Departamento de Biología Celular y Molecular, Facultad de Ciencias Biológicas, Pontificia Universidad Católica de Chile.
- 021 MITOCHONDRIAL TRANSFER IMPACT ON UMBILICAL CORD BLOOD TRANSPLANTATION.** **Angela Court**^{1,2}, Sarah Ezquerro¹, Francesca Velarde¹, Maroun Khoury^{1,2,3}. ¹Laboratory of Nano-Regenerative Medicine, Universidad de los Andes, Santiago-Chile. ²IMPACT, Center of Interventional Medicine for Precision and Advanced Cellular Therapy, Santiago-Chile. ³Cells for Cells and Regenero Consortium, Santiago-Chile.
- 022 MITOCHONDRIAL CHARACTERIZATION OF MESENCHYMAL STROMAL CELLS STIMULATED TO A VIRAL ACTIVATED STATE.** **Juan Ignacio D'olivo**^{1,2}, Sebastián Castillo-Galán^{1,2}, Yessia Hidalgo^{1,2,3}, Francisca Alcayaga-Miranda^{1,2,3,4}, Maroun Khoury^{1,2,3,4}, Jimena Cuenca^{1,2,3,4}. ¹Laboratory of Nano-Regenerative Medicine, Centro de

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- 023 WHITE ADIPOCYTE ENDOPLASMIC RETICULUM (ER) STRESS AND ITS RELATIONSHIP WITH THE INFLAMMATORY PHENOTYPE OF ADIPOSE (AT) TISSUE INFILTRATING MACROPHAGES IN THE OFFSPRING GESTATED IN HYPOTHYROXINEMIA CONDITIONS.** Cheryl Delgado^{1,2}, Johana Santos², Claudia Riedel^{2,3} and Ma. Cecilia Opazo^{1,3}. ¹Instituto de Ciencias Naturales, Facultad de Medicina Veterinaria, Universidad de las Américas. ²Facultad de Ciencias de la Vida, Universidad Andrés Bello. ³Instituto Milenio en Inmunoterapia e Inmunología.
- 024 EFFICACY OF A NOVEL TOPICAL TREATMENT FOR PSORIASIS BY COMBINED USE OF STEM CELLS SECRETOME AND A HYALURONIC ACID MATRIX.** Daniela Carrillo^{1,6}, Natalie Edwards¹, David Arancibia-Altamirano¹, Fabiola Otárola¹, Cynthia Villarroel¹, Catalina P. Prieto¹, Estefanía Elgueta¹, Dan Pérez¹, Constanza Martínez², María Villamizar-Sarmiento^{3,4}, Daniela Sauma¹, Fernando Valenzuela⁵, José Lattus⁵, Felipe Oyarzún-Ampuero^{3,4}, Verónica Palma¹. ¹Faculty of Sciences, Universidad de Chile, Santiago, Chile. ²Facultad de Medicina, Pontificia Universidad Católica de Chile. ³(ACCDiS), Universidad de Chile, Santiago, Chile. ⁴Faculty of Chemical and Pharmaceutical Sciences, Universidad de Chile, Santiago, Chile. ⁵Faculty of Medicine, Universidad de Chile, Santiago, Chile. ⁶Facultad de Medicina y Ciencia, Universidad San Sebastian.
- 025 THE COAGULATION FXa PROMOTES ENDOTHELIAL PERMEABILITY THROUGH PROTEASE ACTIVATOR RECEPTOR 1 IN HUMAN AND RAT MODELS.** Cristian Espinoza¹, María José Garcés¹, Soledad Lange¹, Pamela González^{1,4}, Cristina Bertocchi¹, Gareth I. Owen^{1,2,3,4}. ¹Faculty of Biological Sciences. ²Faculty of Medicine, Pontifical Catholic University of Chile. ³FONDAP-ACCDIS. ⁴Millennium Institute on Immunology and Immunotherapy. caespinoza13@uc.cl
- 026 HOXD1 IS A POTENTIAL TUMOR SUPPRESSOR GENE IN GLIOBLASTOMA.** Edelmira Fernández^{1,2}, Felipe Gajardo¹, Verónica Palma², Ricardo Armisen³, Manuel Varas⁴, Miguel Allende¹. ¹Center for Genome Regulation, Universidad de Chile ²Laboratory of Stem Cells & Developmental Biology, Universidad de Chile. ³Cancer Functional Genomics Lab, Universidad del Desarrollo. ⁴Center for Cell Biology and Biomedicine, Universidad San Sebastián.
- 027 INVASIVE CAPACITY OF ORAL DYSPLASIA AND DEPENDENCY ON HIF-1 α .** Tania Flores^{1,5}, Manuel Varas⁶, Montserrat Reyes⁵ and Vicente A. Torres^{1,2,3}. ¹Institute for Research in Dental Science, Faculty of Dentistry, Universidad de Chile. ²Advanced Center for Chronic Diseases (ACCDIS). ³Millenium Institute on Immunology and Immunotherapy (MIII). ⁴Research Centre in Dental Sciences (CICO), Faculty of Dentistry, Universidad de la Frontera. ⁵Department of Oral Pathology, Faculty of Dentistry, Universidad de Chile. ⁶Universidad San Sebastián.
- 028 DOXYCYCLINE ENHANCES THE ANTI-CANCER, ANTI-MIGRATORY, AND ANTIANGIOGENIC EFFICACY OF MITOCHONDRIA-TARGETED GENTISIC ACID IN BREAST CANCER IN VITRO AND IN VIVO.** Sebastián Fuentes-Retamal¹, Liliana Peredo-Silva², Ana Liempi³, Ulrike Kemmerling³, Vicente Torres⁴, Félix Urra¹. ¹Clinical and Molecular Pharmacology Program, Faculty of Medicine, University of Chile.

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- 029 INVOLVEMENT OF YAP/TAZ IN SKELETAL MUSCLE FIBROSIS: DETERMINANTS OF TGF-B1-MEDIATED FATE OF FIBRO/ADIPOGENIC PROGENITORS.** Felipe S. Gallardo^{1,2}, Meilyn Cruz-Soca^{1,2}, Alexia Bock^{1,2}, Adriana Córdova-Casanova^{1,2}, Jennifer Faúndez-Contreras^{1,2}, Andrea Ravasio¹ and Enrique Brandan^{1,2}. ¹Pontificia Universidad Católica de Chile, Santiago, Chile. ²Centro Científico y Tecnológico de Excelencia Ciencia & Vida, Santiago, Chile.
- 030 A CELLULAR THERAPY BASED ON MESENCHYMAL STEM/STROMAL CELL-DERIVED MITOCHONDRIA AS A NEW TREATMENT FOR OSTEOARTHRITIS.** Cynthia García^{1,4*}, Ana María Vega-Letter^{1*}, Angela Court^{1,4}, Carolina Pradenas¹, Alexander Ortloff², José Barraza², Fernando Figueroa^{4*}, Maroun Khoury^{4*}, Patricia Luz-Crawford^{1,4*}. *Equally-contributor. ¹Centro de Investigación e Innovación Biomédica, Facultad de Medicina, Univ. de Los Andes, Santiago, Chile. ²Departamento de Ciencias Veterinarias y Salud Pública, Univ. Católica de Temuco, Temuco, Chile. ³Centro Diagnóstico Histopatología – Citopatología Ltda, Clínica Alemana Temuco, Temuco. ⁴IMPACT, Center of Interventional Medicine for Precision and Advanced Cellular Therapy, Santiago, Chile.
- 031 NEURONAL ABNORMALITIES IN SCHIZOPHRENIA: NEUROVASCULAR NICHE PERSPECTIVE.** Delia Garrido-Jara, Bárbara Casas, Sofía Puvogel, Verónica Palma. Laboratory of Stem Cell and Development, Universidad de Chile, Chile.
- 032 DPSC DIFFERENTIATION IS OPTIMIZED BY OVEREXPRESSION OF THE CONSTITUTIVELY ACTIVE BMPI RECEPTOR AND EXTRACELLULAR CALCIUM.** Marianela Gómez-Gaete^{1,4}, Omayra Contreras¹, Noymar Luque-Campos³, Patricia Luz-Crawford³, Sylvain Marcellini², Roberto Elizondo-Vega¹ and María de los Ángeles García-Robles¹. ¹Laboratorio de Biología Celular, Universidad de Concepción. ²Laboratorio de Desarrollo y Evolución, Universidad de Concepción. ³Centro de Investigación Biomédica, Universidad de Los Andes. ⁴Departamento de Odontología Restauradora, Facultad de Odontología, Universidad de Concepción. mariangomezg@udec.cl
- 033 GESTATIONAL HYPOTHYROXINEMIA INDUCES AN AUTISTIC-LIKE PHENOTYPE IN THE OFFSPRING.** Enrique González-Madrid^{1,2}, Ma. Andreina Rangel-Ramírez^{1,2}, Ma. Cecilia Opazo³, Claudia A. Riedel^{1,2}. ¹Laboratorio Endocrino-Immunología, Departamento de Ciencias Biológicas, Facultad de Ciencias de la Vida, Universidad Andrés Bello. Chile. ²Millennium Institute on Immunology and Immunotherapy. Santiago, Chile. ³Instituto de Ciencias Naturales, Facultad de Medicina Veterinaria y Agronomía, Universidad de Las Américas. e.gonzlezmadrid@uandresbello.edu, m.rangelramirez@uandresbello.edu, mopazod@udla.cl, claudia.riedel@unab.cl
- 034 THE ROLE OF ELECTROGENIC AND ELECTRONEUTRAL MONOCARBOXYLATE TRANSPORT IN AIRWAY CLEARANCE.** Anita Guequen^{1,2}, Bárbara Tapia^{1,2}, and Carlos A. Flores^{1,3}. ¹Centro de Estudios Científicos. ²Universidad Austral de Chile. ³Facultad de Medicina y Ciencia, Universidad San Sebastián.

- 035 IDENTIFICATION OF AN E3 UBIQUITIN LIGASE THAT REGULATES THE DIFFERENTIATION OF NEURAL PROGENITOR CELLS IN THE ADULT BRAIN.** Stephanie Gutiérrez-Jiménez¹, Muriel D. Mardones¹, Sebastián B. Arredondo¹, Camila Gálvez-González¹, Manuel Varas-Godoy², Lorena Varela-Nallar¹. ¹Instituto de Ciencias Biomédicas, Facultad de Medicina y Facultad de Ciencias de la Vida, Universidad Andrés Bello. ²Centro de Biología Celular y Biomedicina, Facultad de Medicina y Ciencia, Universidad San Sebastián.
- 036 AGING IS ASSOCIATED WITH GLYCINE RECEPTOR REDUCTION IN THE NUCLEUS ACCUMBENS AND REDUCED ETHANOL CONSUMPTION AND PREFERENCE IN MICE.** Alejandra Guzmán-Castillo^{1,2}, Lorena Armijo-Weingart¹, Loreto San Martín-Vásquez¹, Scarlet Gallegos¹, Luis Aguayo-Hernández¹. ¹Department of Physiology, Faculty of Biological Sciences, Universidad de Concepción, Concepción, Chile. ²Department of Basic Sciences and Morphology, Faculty of Medicine, Universidad Católica de la Santísima Concepción, Concepción, Chile.
- 037 POLARIZED EPITHELIAL CELLS GROWN THREE-DIMENSIONAL CULTURE UNDERGO EPITHELIAL-MESENCHYMAL TRANSITION UNDER GALECTIN-8 TREATMENT.** Ronny Hernández-Santander¹, Jorge Cancino¹, Francisca Perez-Molina¹, Cristian Herrera-Cid¹, Alfonso González^{1,2,3} and Andrea Soza^{1,2,3}. ¹Centro de Biología Celular y Biomedicina, Facultad de Medicina y Ciencia, Universidad San Sebastián. ²Centro de Envejecimiento y Regeneración, P. Universidad Católica de Chile. ³Centro Ciencia & Vida.
- 038 SMALL EXTRACELLULAR VESICLES (SEV) FROM GLYCOLYTICALLY ACTIVATED MESENCHYMAL STEM/STROMAL CELLS PROMOTE POLARIZATION OF ANTI-INFLAMMATORY MACROPHAGES.** Herrera-Luna Y^{2*}, Araya MJ^{2*}, Figueroa-Valdés A.I.¹, Vega-Letter AM², Luz-Crawford P^{1,2}. ¹IMPACT, Center of Interventional Medicine for Precision and Advanced Cellular Therapy, Santiago, Chile. ²Laboratorio de Inmunología Celular y Molecular, Centro de Investigación e Innovación Biomédica, Facultad de Medicina, Universidad de los Andes, Santiago, Chile. ^{*}Equally-contributor.
- 039 RED630LIGHT TRANSCRANIAL LED THERAPY (RL-TCLT) REDUCES HIPPOCAMPAL MEMORY LOSS IMPROVING THE SYNAPTIC STRUCTURE AND MITOCHONDRIAL FUNCTION IN AGED SAMP8 MICE.** Claudia Jara¹, Italo Fuentes¹, Matias Lira^{1,2}, Débora Buendía³, Cheril Tapia-Rojas^{1,2}. ¹Neurobiology of Aging Laboratory, CEBICEM, USS, Chile; ²Centro Ciencia & Vida, Fundación Ciencia y Vida, Chile. ³Escuela de Ingeniería civil Biomédica, Universidad de Valparaíso, Chile.
- 040 c-Abl AND RIPK3 KINASES REGULATE MITOCHONDRIAL FUNCTION AND AUTOPHAGY IN MODELS OF GAUCHER DISEASE.** Cristian M. Lamaizon¹, Nohela Arévalo^{1,2}, Sebastián Ahumada¹, Silvana Zanlungo², Andrea del Campo³, Alejandra Álvarez¹. ¹Cell Signaling Laboratory. Department of Cellular and Molecular Biology, Faculty of Biological Sciences, Millennium Institute on Immunology and Immunotherapy, Pontificia Universidad Católica de Chile, Santiago, Chile. ²Department of Gastroenterology, Faculty of Medicine, Pontificia Universidad Católica de Chile. ³Laboratorio de Fisiología y Bioenergética Celular, Faculty of Chemistry and Pharmacy.
- 041 EPIGALLOCATECHIN GALLATE INCREASES SYNTHESIS OF PHOTOSENSITIZER PROTOPORPHYRIN IX IN SKIN SQUAMOUS CELL CARCINOMA CELL LINE RESISTANT TO PHOTODYNAMIC THERAPY.**

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- 042 DELETION OF METHYL-CpG-BINDING PROTEIN2 (MECP2) ALTERS BODY ENERGY BALANCE AND HYPOTHALAMIC MITOCHONDRIAL FUNCTION.** **Nuria Llontop^{1,2}**, Cheril Tapia-Rojas^{2,3} and Bredford Kerr¹. ¹Laboratory of Neuroendocrinology and metabolism, CEBICEM-USS. ²Laboratory of Neurobiology of Aging, CEBICEM-USS. ³Centro Ciencia & Vida, Fundación Ciencia & Vida, Chile.
- 043 TRANSFER OF MESENCHYMAL STEM CELL-DERIVED MITOCHONDRIA AS A REGULATORY MECHANISM OF AUTOPHAGY IN CHONDROCYTES FROM OSTEOARTHRITIS PATIENTS.** **Rocio Lorca¹**, Angela Court^{1,2}, Maroun Khoury^{1,2,3}, Fernando Figueroa^{1,2,3}. ¹Laboratory of Nano-Regenerative Medicine, Faculty of Medicine, Universidad de los Andes, Santiago-Chile. ²IMPACT, Center of Interventional Medicine for Precision and Advanced Cellular Therapy, Santiago-Chile. ³Cells for Cells and Regenero Consortium, Santiago, Chile.
- 044 THE ONCOPROTEIN GOLPH3 OF THE GOLGI APPARATUS PARTITIONS IN BIOMOLECULAR CONDENSATES BY LIQUID-LIQUID PHASE SEPARATION.** Viviana A. Cavieres¹, Abigail Galarza², Patricia V. Burgos¹ and **Gonzalo A. Mardones²**. ¹CEBICEM, Universidad San Sebastián, Santiago, Chile. ²Department of Physiology, Universidad Austral Chile, Valdivia.
- 045 CHARACTERIZATION OF THE NICOTINIC ACETYLCHOLINE RECEPTOR (nAChR) AT THE NEUROMUSCULAR SYNAPSE OF BRANCHIOSTOMA LANCEOLATUM.** **Esperanza Martínez¹**, Fabian Segovia², Stephanie Bertrand³, Hector Escrivá³, Juan Pablo Henríquez^{1*}. ¹Neuromuscular Studies Laboratory (NeSt Lab), ²Cell & Tissue architecture lab, ³GDeP, Faculty of Biological Sciences, Universidad de Concepción, Concepción, Chile. ³Sorbonne Université, CNRS, Banyuls-sur-Mer, France. *jhenriquez@udec.cl
- 046 FUNCTIONALIZED GOLD NANOPARTICLES BLOCKING LACTADHERIN PRESENT IN EXTRACELLULAR VESICLES SECRETED BY TRIPLE NEGATIVE BREAST CANCER CELLS DIMINISHED THE MIGRATORY CAPACITY IN RECEPTOR CELLS.** **Cristina Mayorga-Lobos^{1,2,3}**, Francisca Sepúlveda^{1,3}, Ana Riveros^{2,3}, Marcelo Kogan^{2,3}, Lorena Lobos-González^{1,3}. ¹Centro de Medicina Regenerativa, Facultad de Medicina, Universidad del Desarrollo-Clinica Alemana. ²Laboratorio de Nanobiotecnología y Nanotoxicología, Universidad de Chile. ³Centro de Enfermedades Crónicas ACDDIS.
- 047 MITOCHONDRIAL BIOGENESIS AND NRF-2 ACTIVITY IN RESPONSE TO THE COMMENSAL BACTERIUM PARABACTEROIDES DISTASONIS.** **Karen Mella**, Pablo Morgado, Jorge Meneses, Osman Díaz, Gonzalo Olivares, Franco Nuñez, Julio César Cárdenas, Alenka Lovy. Center for Integrative Biology, Faculty of Sciences, Universidad Mayor, Santiago, Chile.

- 048 LINE-1 ROLE IN PTSD SUSCEPTIBILITY IN A MURINE MODEL: SEARCH OF A THERAPEUTIC TARGET.** Nicolás Merino-Véliz¹, Carlos Ancatén-González², Andrés E. Chávez², Fernando J. Bustos¹, Gloria Arriagada¹. ¹Instituto de Ciencias Biomédicas, Universidad Andrés Bello, Santiago, Chile. ²Instituto de Neurociencias, Centro Interdisciplinario de Neurociencias de Valparaíso, Universidad de Valparaíso, Chile.
- 049 COOPERATIVE EFFECTS OF IRE1 SIGNALING PROMOTES GLIOBLASTOMA MULTIFORME (GBM) PROGRESSION.** Paloma Moraga^{1,2}, Raúl Aravena^{1,2}, Karina Cordero^{1,2}, Rodrigo Fernández^{1,2}, Philippe Pihan^{1,2}, Celia Limia^{1,2}, Benjamin Suarez², Claudio Hetz^{1,2,3} and Hery Urra^{1,2}. ¹Biomedical Neuroscience Institute (BNI), University of Chile, Chile. ²Fondap Geroscience Center for Brain Health and Metabolism (GERO), Chile. ³Buck Institute for Research on Aging, Novato, CA, USA. hery.urr@ug.uchile.cl
- 050 GUT DYSBIOSIS WORSENS LOCOMOTOR FUNCTION IN A MOUSE MODEL OF DEGENERATIVE CERVICAL MYELOPATHY.** Samir L. Musleh-Vega¹, Eduardo Retamal², Jose Miguel Pacheco¹, Jorge Ojeda¹, Ariel Ávila², Pia M. Vidal¹. ¹Neuroimmunology and Regeneration of the Central Nervous System Unit, Biomedical Science Research Laboratory, Basic Sciences Department, Faculty of Medicine, Universidad Católica de la Santísima Concepción, Concepción, Chile. ²Developmental Neurobiology Unit, Biomedical Science Research Laboratory, Basic Sciences Department, Faculty of Medicine, Universidad Católica de la Santísima Concepción.
- 051 CONDITIONAL DELETION OF PDIA3 IN NEURONS IMPAIRS LEARNING AND MEMORY OF MICE.** Patricia Ojeda-Provoste^{1,2,3}, Giselle Espinosa^{1,2,4}, Gabriel Quiroz², Darwin Contreras⁴, Pablo Rozas^{1,2,3}, Felipe Godoy⁴, Carlos Rozas⁴, and Claudio Hetz^{1,2,3,5}, and Danilo B. Medinas^{1,2,3}. ¹Biomedical Neuroscience Institute, Santiago, Chile. ²Center for Geroscience, Brain Health and Metabolism, Santiago, Chile. ³Program of Cellular and Molecular Biology, Institute of Biomedical Sciences, University of Chile, Santiago, Chile. ⁴Faculty of Chemistry and Biology, University of Santiago de Chile, Santiago, Chile. ⁵Buck Institute for Research on Aging, Novato, CA, USA.
- 052 ROLE OF PRIMERS LOCATION IN THE QUANTITATIVE PCR FOR THE DETECTION OF dsRNA-INDUCED lncRNA SILENCING.** Wilda Olivares^{1,2}, Keila Torres^{1,2}, Pablo Santoro^{1,2}, Alejandro Corvalán^{1,2}. ¹Advanced Center for Chronic Diseases, Pontificia Universidad Católica de Chile. ²Department of Hematology-Oncology, School of Medicine, Pontificia Universidad Católica de Chile.
- 053 MATERNAL PRENATAL STRESS NEGATIVELY AFFECTS FETAL NEUROGENESIS.** Oyarce-Pezoa, S.^{1,2}, Sánchez-Rubio, M.¹, Méndez-Ruette, M.^{1,2}, Corvalán-Bustos, D.¹, Bátiz L.F.^{1,3,4}. ¹Center for Biomedical Research and Innovation (CiiB), Universidad de los Andes (UANDES), Chile. ²PhD Program in Biomedicine, UANDES, Chile. ³School of Medicine, Faculty of Medicine, UANDES, Chile. ⁴IMPACT Center, Chile.
- 054 NATURAL KILLER T CELLS PROMOTE ANTIBODY CLASS-SWITCH RECOMBINATION TOWARDS IgG SUBTYPES IN INNATE B CELLS THAT RESPOND AGAINST T-INDEPENDENT ANTIGENS.** Pablo A. Palacios^{1,2}, Francisco F. Otero^{1,2}, Álvaro Santibáñez^{1,2}, Cristián Gutiérrez-Vera^{1,2}, Richard García-Betancourt^{1,2}, Leandro J. Carreño^{1,2}. ¹Programa de Inmunología, Instituto de Ciencias Biomédicas, Facultad de Medicina, Universidad de Chile. ²Millennium Institute on Immunology and Immunotherapy.

- 055 EFFECTS OF CORTISOL ON THE EXPRESSION OF IMMUNE-RELATED GENES IN MYOTUBES IN OF RAINBOW TROUT (ONCORHYNCHUS MYKISS). Parada-Block, C.^{1,2}, Aedo, J.^{1,2}, Aravena-Canales, D.^{1,2}, Molina, A.^{1,2}, Valdes, J.A.^{1,2}. ¹Laboratorio de Biotecnología Molecular, Facultad de Ciencias de la Vida, Universidad Andres Bello. ²Interdisciplinary Center for Aquaculture Research (INCAR), Universidad de Concepción.**
- 056 EVOLUTION AND FUNCTIONAL ANALYSIS OF THE INTRINSICALLY DISORDERED REGION OF THE GOLGI APPARATUS GOLPH3 ONCOPROTEIN REVEAL DIFFERENT CAPACITIES TO FORM BIOMOLECULAR CONDENSATES FROM YEAST TO MAMMALS. Tammy Pástor¹, Abigail Galarza¹, Sebastián Triviño², Andrés Flores², Charlotte Luchsinger¹, Juan C. Opazo², and Gonzalo A. Mardones¹. ¹Instituto de Fisiología, Facultad de Medicina. ²Instituto de Ciencias Ambientales y Evolutivas, Facultad de Ciencias, Universidad Austral Chile, Valdivia.**
- 057 GALECTIN-8 INDUCES CHANGES IN THE DISTRIBUTION OF E-CADHERIN AND B1 INTEGRIN IN POLARIZED MDCK CELLS. Francisca Pérez-Molina¹, Cristian Herrera¹, Adely de la Peña¹, Alfonso Gonzalez^{1,2,3}, Claudia Oyanadel¹ and Andrea Soza^{1,2,3}. ¹Centro de Biología Celular y Biomedicina (CEBICEM). Facultad de Medicina y Ciencia, Universidad San Sebastián. ²Centro de Envejecimiento y Regeneración (CARE), Pontificia Universidad Católica de Chile. ³Centro Ciencia & Vida, Fundación Ciencia & Vida.**
- 058 THE MATERNAL-EFFECT *osbpl7* GENE CONTROLS THE ESTABLISHMENT OF THE FIRST CELL CYCLE IN THE ZEBRAFISH EARLY EMBRYO. Ingrid Pinto-Borguero¹, Michael An³, Natalia Benavente-Cabrera¹, Felipe Aguilera², Mary C. Mullins³, and Ricardo Fuentes¹. ¹Laboratory of Phenomics and Early Embryogenesis (LAFET), GDeP, Department of Cell Biology, Faculty of Biological Sciences, Universidad de Concepción, Chile. ²Department of Biochemistry and Molecular Biology, Faculty of Biological Sciences, Universidad de Concepción, Chile. ³Department of Cell and Developmental Biology, University of Pennsylvania, Philadelphia, PA, USA.**
- 059 A MIXED ARRAY OF CACO-2 WITH HT29 CELLS IS SUITABLE FOR EVALUATING THE BIOLOGICAL IMPACT OF DIGESTED OLIVE OIL. Yarella Pizarro, Miltha Hidalgo, Ailynne Sepúlveda, Nicolás Tobar, Igor Pacheco, Omar Porras. INTA, Universidad de Chile.**
- 060 INTERACTION BETWEEN BCL-XL AND VDAC1 REGULATES MITOCHONDRIAL CA²⁺ UPTAKE AS A SURVIVAL MECHANISM IN EARLY STAGE OF THERAPY-INDUCED SENESENCE (TIS). Andrea Puebla-Huerta¹, Ulises Ahumada-Castro^{1,3}, Ariela Vergara-Jaque², Roberto Rosales-Rojas² and J. César Cárdenas³. ¹Universidad de Chile. ²Universidad de Talca. ³Universidad Mayor.**
- 061 VITAMIN C ENHANCES COLLAGEN SECRETION AND INVASION OF GLIOBLASTOMA STEM CELLS OF MESENCHYMAL ORIGIN. Eder Ramírez¹, Luciano Ferrada¹, Nery Jara², Fernando Martínez¹, Katterine Salazar¹, and Francisco Nualart¹. ¹Laboratory of Neurobiology and Stem Cells, NeuroCellIT, Center for Advanced Microscopy, CMA Bio-Bio, University of Concepción, Chile. ²Department of Pharmacology, University of Concepción, Chile. edramirez@udec.cl**

- 062 ON THE CONNEXIN36 EXPRESSION IN ELECTRICALLY COUPLED PARTITION CELLS IN THE SPINAL CORD AND THEIR C-TERMINAL INNERVATION OF MOTONEURONS.** A.J. Recabal-Beyer¹, J.M.M. Seneca^{1,2}, J.E.M. Seneca^{1,2}, B.D. Lynn² and J.I. Nagy². ¹Department of Cell Biology, Faculty of Biological Sciences, University of Concepcion. ²Department of Physiology and Pathophysiology, Rady Faculty of Health Sciences, University of Manitoba, Winnipeg, Canada.
- 063 INHIBITION OF WNT SIGNALING PREVENTS ORAL CARCINOGENESIS.** Daniel Peña-Oyarzún^{1,2}, Tania Flores^{1,3}, Vicente A. Torres^{1,4,5}, Andrew F.G. Quest^{4,5}, Montserrat Reyes³. ¹ICOD, Faculty of Dentistry, Universidad de Chile. ²Physiology Department, Faculty of Biological Sciences, Pontificia Universidad Católica de Chile. ³Department of Pathology and Oral Medicine, Faculty of Dentistry, Universidad de Chile. ⁴ACCDiS, Universidad de Chile. ⁵Millennium Institute on Immunology and Immunotherapy. ⁶Laboratory of Cellular Communication, Faculty of Medicine, Universidad de Chile.
- 064 SHAPING THE IMMUNE SYNAPSE THROUGH ER-CYTOSKELETON INTERACTIONS.** Isidora Riobó¹, Martina Alamo¹, Felipe del Valle¹, Danitza Fuentes¹, Jorge Cancino², María Isabel Yuseff¹. ¹Laboratory of Immune Cell Biology – Department of Cellular and Molecular Biology – Pontificia Universidad Católica de Chile ²Centro de Biología Celular y Biomedicina (CEBICEM) – Facultad de Medicina y Ciencia – Universidad San Sebastián.
- 065 STUDY OF THE ROLE OF INHIBITORY RECEPTORS ON CD8+ T CELL FUNCTION DURING RSV INFECTION.** Linmar Rodríguez-Guilarte¹, Karen Bohmwald¹, José Muñoz¹, Catalina Andrade¹, Mario Ramírez¹ and Alexis Kalergis^{1,2}. ¹Millennium Institute of Immunology and Immunotherapy, Departamento de Genética Molecular y Microbiología, Facultad de Ciencias Biológicas, Pontificia Universidad Católica de Chile. ²Departamento de Endocrinología, Facultad de Medicina, Pontificia Universidad Católica de Chile.
- 066 NORDIHYDROGUAIERETIC ACID (NDGA) INDUCES DNA DAMAGE AND APOPTOSIS IN MCF-7 AND MDA-MB-231 BREAST CANCER CELL LINES.** Matias Ruiz¹, Sebastián Hernández¹, Alexander Rodriguez¹, Pamela Ehrenfeld² and Angara Zambrano¹. ¹Instituto de Bioquímica y Microbiología. ²Instituto de Histología y Patología, Universidad Austral de Chile. Valdivia.
- 067 POLY (I:C) INDUCES PANX1 HCS ACTIVATION VIA A CA2+/CAMKII-DEPENDENT MECHANISM.** Magdiel Salgado, Juan Carlos Sáez. Centro Interdisciplinario de Neurociencia de Valparaíso, Universidad de Valparaíso.
- 068 EXTRACELLULAR VESICLES FROM ADIPOSE CELLS PROMOTE IN VITRO VASCULAR NETWORK FORMATION BY ENDOTHELIAL CELLS.** Sofía Sanhueza^{1,2,3}, Mariana Cifuentes^{2,3}, Andrew F.G. Quest^{1,2}. ¹Laboratory of Cellular Communication, Center for Studies on Exercise, Metabolism and Cancer (CEMC), Faculty of Medicine, Universidad de Chile. ²Advanced Center for Chronic Diseases (ACCDiS), Universidad de Chile. ³Laboratory of Obesity and Metabolism in Geriatrics and Adults (OMEGA), Institute of Nutrition and Food Technology (INTA), Universidad de Chile.
- 069 CHARACTERIZATION OF miR-597-5p AND ITS COMPETING ENDOGENOUS NETWORK (KCNQ1OT1/miR-597-5p/RUNX1) IN GASTRIC CANCER.** Pablo Santoro^{1,2}, Alejandra Sandoval-Borquez^{1,2,3}, Wilda Olivares^{1,2}, Keila Torres^{1,2}, Andrew

Quest³, Alejandro H. Corvalan^{1,2}. ¹Advanced Center for Chronic Diseases, Pontificia Universidad Católica de Chile. ²Department of Hematology-Oncology, School of Medicine, Pontificia Universidad Católica de Chile. ³Advanced Center for Chronic Diseases, Faculty of Medicine, Universidad de Chile.

- 070 GCN2 KINASE REGULATES AXONAL DEGENERATION AND REGENERATION AFTER AN INJURY IN THE PERIPHERAL NERVOUS SYSTEM. I. Ignacio Silva-Pizarro¹**, Nicolás W. Martínez^{1,2}, Soledad Matus^{1,2}. ¹Fundación Ciencia & Vida, Santiago, Chile. ²Facultad de Medicina y Ciencia, Universidad San Sebastián.
- 071 CHARACTERIZING THE OSTEOGENESIS-ANGIOGENESIS RELATIONSHIP DURING XENOPUS SKULL REGENERATION. Isidora Sovino Brown**, Héctor Castillo Córdova, Fabián Segovia Miranda, Sylvain Marcellini Liotaud. Group for the study of Developmental Processes GDeP, University of Concepcion, Concepcion, Chile.
- 072 EVALUATION OF THE IMMUNOREGULATORY EFFECT OF FXA ON CD8+ T LYMPHOCYTES. Daniela Tapia-Molina^{1,2,3}**, Catalina Asencio-Barría^{1,3}, Carolina Pradenas^{1,2}, Noymar Luque-Campos^{1,2}, Ana María Vega^{1,2}, Patricia Luz-Crawford^{1,2*} and Gareth Owen^{3*}. ¹Centro de Investigación e Innovación Biomédica, Universidad de los Andes, Santiago, Chile. ²IMPACT, Center of Interventional Medicine for Precision and Advanced Cellular Therapy, Santiago, Chile. ³Faculty of Biological Sciences, Pontificia Universidad Católica de Chile, Santiago 8331150, Chile.
- 073 RECOMBINANT ANTI-P HUMAN MONOCLONAL ANTIBODIES AS AN APPROACH TO NEUROPATHOGENIC MECHANISMS AND TREATMENT OF LUPUS COGNITIVE DYSFUNCTION. Tomás Toledo^{1,3}**, Francisca Barake^{1,2,3}, Carlos Lagos⁵, Mariana Labarca^{1,3}, Venkatesh Jeganathan⁴, Juan Francisco Codocedo², Carolina Oliva², Nibaldo Inestrosa², Marcela Bravo-Zehnder^{1,2}, Loreto Massardo^{1,2}, Betty Diamond⁴, Alfonso González^{1,2,3}. ¹Centro de Biología Celular y Biomedicina (CEBICEM), Facultad de Medicina y Ciencia, Universidad San Sebastián. ²Centro de Envejecimiento y Regeneración (CARE), P. Universidad Católica de Chile. ³Centro Ciencia y Vida, Fundación Ciencia y Vida. ⁴Feinstein Institutes for Medical Research, Northwell Health, NY, USA. ⁵Escuela de Farmacia, Facultad de Medicina y Ciencia, Universidad San Sebastián.
- 074 ROLE OF CDKN2B ANTISENSE RNA 1 IN EPSTEIN-BARR VIRUS ASSOCIATED WITH GASTRIC CARCINOMA. Keila Torres^{1,2}**, Wilda Olivares^{1,2}, Gonzalo Carrasco³, Andrés Rodríguez¹, Alejandro Corvalan^{1,2}. ¹Advanced Center for Chronic Diseases, Pontificia Universidad Católica de Chile, Santiago, Chile. ²Department of Hematology-Oncology, School of Medicine, Pontificia Universidad Católica de Chile, Santiago, Chile. ³Department of Pathology, Hospital Clínico Universidad de Chile. ktorrese@uc.cl, acorvalan@uc.cl
- 075 THE RNA-DEPENDENT PROTEIN KINASE REGULATES MOTOR FUNCTION RECOVERY AFTER PERIPHERAL NERVE DAMAGE. A. Trujillo¹**, N. W. Martínez^{1,2}, and S. Matus^{1,2}. ¹Fundación Ciencia & Vida, Santiago, Chile. ²Facultad de Medicina y Ciencia, Universidad San Sebastián. smatus@cienciavida.org
- 076 A MUTAGENIC gal4 INSERTION IN THE RX3 LOCUS AS A TOOL FOR VISUALIZATION AND MANIPULATION OF EYE FATED CELLS IN ZEBRAFISH. María J. Vásquez^{1,3}**, Esteban Lira¹, Daniel Nahuelpan¹, Aarón Villanueva¹,

Koichi Kawakami², Leonardo E. Valdivia^{1,3}. ¹Center for Integrative Biology, Facultad de Ciencias, Universidad Mayor, Chile. ²Division of Molecular and Developmental Biology, National Institute of Genetics, Department of Genetics, SOKENDAI, Japan. ³Escuela de Biotecnología, Facultad de Ciencias, Universidad Mayor, Chile.

- 077 RELOCATION OF THE MITOCHONDRIAL PROTEIN HADHA/GBP TO THE CELL SURFACE UNDER STARVATION AND HYPOXIC STRESS CONDITIONS.** **Francisco Veloso-Bahamondes**¹, Nicole Diaz, Claudio Retamal¹, Alfonso González^{1,2,3}, Claudia. Oyanadel¹. ¹Centro de Biología Celular y Biomedicina (CEBICEM), Facultad de Medicina y Ciencia, Universidad San Sebastián. ²Centro de Envejecimiento y Regeneración (CARE-UC), P. Universidad Católica de Chile. ³Centro Científico y Tecnológico de Excelencia Ciencia & Vida. fvelosob@correo.uss.cl
- 078 ALTERED SECRETION OF ASTROCYTE-DERIVED EXTRACELLULAR VESICLES CONTRIBUTE TO THE EARLY METABOLIC FAILURE AND REDOX IMBALANCE IN HUNTINGTON'S DISEASE.** Felipe A. Beltrán^{1,2}, Leandro Torres^{1,2}, Paulina Troncoso-Escudero^{1,2}, **Juan Villalobos-González**^{1,2}, Gonzalo Mayorga-Weber^{1,2}, Marcelo Lara⁴, Adriana Covarrubias-Pinto^{1,2}, Sharin Valdivia^{1,2}, Isidora Vicencio^{1,2}, Eduardo Papic^{1,2}, Alejandro Rojas^{2,3}, Luis Lamberti⁴, Felipe Court⁵, Abraham Rosas-Arellano⁶, Federico Bátiz⁷, Patricio Rojas⁸, Maite A. Castro^{1,2}. ¹Instituto de Bioquímica y Microbiología, UACH, Valdivia, Chile. ²CISNe, UACH, Valdivia, Chile. ³Instituto de Medicina, UACH. ⁴Facultad de Medicina de Ribeirão, São Paulo, Brazil. ⁵Center for Integrative Biology, Universidad Mayor, Stgo, Chile. ⁶Instituto de Neurobiología, UNAM, Querétaro, México. ⁷Centro de Investigación Biomédica, Universidad de Los Andes, Chile. ⁸Lab de Neurociencias, USACH.
- 079 ASTROCYTE-DERIVED SMALL EXTRACELLULAR VESICLES AS KEY MEDIATORS OF INTESTINAL AND SYSTEMIC INFLAMMATION INDUCED BY CHRONIC RESTRAINT STRESS IN RATS.** **Yanten-Fuentes Liliana**^{1,2}, Pizarro Matias¹, Bustos Gonzalo¹, Pradenas Carolina¹, Pino-Lagos Karina^{1,2}, Luz-Crawford Patricia^{1,2}, Wyneken Ursula^{1,2}. ¹Facultad de Medicina, Universidad de los Andes, Chile. ²IMPACT, Center of Interventional Medicine for Precision and Advanced Cellular Therapy, Santiago, Chile.
- 080 DEVELOPMENTAL DYNAMICS OF MYOGENESIS IN CHILEAN SEA URCHIN AND PACIFIC OYSTER DOES NOT REVEAL HOMOLOGY OF LARVAL MUSCLES AND PROVIDES NEW INSIGHTS INTO BILATERIAN EVOLUTION.** **Nicolás Zúñiga-Soto**^{1,3}, Melanie Anabalón^{1,3}, Juan Pablo Henríquez^{2,3}, Thomas Schwaha⁴, Felipe Aguilera^{1,3}. ¹Departamento de Bioquímica y Biología Molecular, Universidad de Concepción. ²Departamento de Biología Celular, Universidad de Concepción. ³Group for the Study of Developmental Processes (GDeP). ⁴Department of Evolutionary Biology, University of Vienna, Austria.

12:00 – 13:00 PLENARY LECTURE

Volcanes Room

Chair: Andrea Soza, Universidad San Sebastián

HOW CELLS DEPLOY AUTOPHAGY TO DEFEND AGAINST CYTOSOL-INVADING BACTERIA. **Felix Randow**, MRC Laboratory of Molecular Biology, Cambridge, UK.

13:00 – 15:00 Lunch

15:00 – 17:00 SYMPOSIUM “CELL TYPES, TISSUES AND DEVELOPMENTAL PROCESSES: LESSONS FROM GENOMES, PHENOMS AND SHAPES”.

Volcanes Room

Chair: Felipe Aguilera, Marcela Torrejón, Juan Pablo Henríquez, Universidad de Concepción

THE ARISING OF NEW MODEL SYSTEMS FOR STUDYING CELL TYPE EVOLUTION AND DEVELOPMENTAL PROCESSES IN ANIMALS. Felipe Aguilera^{1,2*}. ¹Departamento de Bioquímica y Biología Molecular, Facultad de Ciencias Biológicas, Universidad de Concepción, Chile. ²Group for the Study of Developmental Processes (GDeP), Universidad de Concepción, Chile. *faguilera@udec.cl

WHAT DOES YOUR MOTHER TELL YOU? MATERNALLY CONTROLLED OOCYTE-TO-EMBRYO TRANSITION. Ricardo Fuentes^{1,2*}. ¹Laboratory of Phenomics and Early Embryogenesis (LAFET), Department of Cell Biology, Faculty of Biological Sciences, Universidad de Concepción, Chile. ²Group for the Study of Developmental Processes (GDeP), Universidad de Concepción, Chile. *ricfuentes@udec.cl

CALCIUM CHANNEL ROLE AT FERTILIZATION: MYTHS AND TRUTHS OF AN EXCITABLE EGG. Ingrid Carvacho. School of Pharmacy, Department of Translational Medicine, Faculty of Medicine, Universidad Católica del Maule, Talca, Chile. icarvacho@ucm.cl

ORDER IN THE CHAOS: HOW CELLS SHAPE LIVER TISSUE. Fabián Segovia-Miranda^{1,2}. ¹Department of Cell Biology, Faculty of Biological Sciences, Universidad de Concepción, Chile. ²Group for the Study of Developmental Processes, Universidad de Concepción, Chile. fabiansegovia@udec.cl

17:00 – 18:30 POSTER VIEWING SESSION I (1-80)

Convention Center Foyer

18:30 – 19:30 TECHNICAL LECTURE: LIFE TECHNOLOGIES

Volcanes Room

DILUCIDAR LA RESPUESTA INMUNITARIA CON NUEVAS INNOVACIONES EN LA DETECCIÓN DE PROTEINAS Y EL ANALISIS DE LA EXPRESION GENICA. Ursula León. Thermo Fisher – Especialista de Productos en el Area de Análisis Celular y de Proteínas.

**19:30 – 20:30 PLENARY LECTURE “LUIS IZQUIERDO FERNANDEZ”
SOCIEDAD DE BIOLOGIA CELULAR DE CHILE**

Volcanes Room

Chairs: Lorena Varela-Nallar, SBCCH President

Carmen Gloria Feijóo, Universidad Andrés Bello

UNA CARRERA SALPICADA DE ALETAZOS Y CABEZAS DE PESCADO.

Miguel Allende, Facultad de Ciencias, Universidad de Chile.

20:30

Dinner

WEDNESDAY, DECEMBER 14, 2022

08:00 POSTER MOUNTING SESSION II (81-159)
Convention Center Foyer

09:00 – 10:30 ORAL PRESENTATIONS V
Calbuco Room

Chairs: María Isabel Yuseff, P. Universidad Católica de Chile
Juan Pablo Henríquez, Universidad de Concepción

09:00 **MODELLING OF MUTATIONS FOUND IN PATIENTS WITH EYE GLOBE DEFECTS IN ZEBRAFISH IDENTIFIES NEW GENES REQUIRED FOR EYE DEVELOPMENT.** **Rodrigo Young**^{1,2}, Aphen Huang², Gavin Arno². ¹Centro de Biología Integrativa, Universidad Mayor. ²Institute of Ophthalmology, University College London.

09:15 **TUBULIN ACETYLATION AS A MECHANOSENSORY TARGET FOR B CELL ACTIVATION.** **Felipe Del Valle Batalla**¹, Sara Hernández Pérez², Pieta Mattila², María-Isabel Yuseff¹. ¹Immune cell biology laboratory, Pontificia Universidad Católica de Chile, Chile. ²Institute of Biomedicine, and MediCity Research Laboratories, University of Turku, Finland.

09:30 **INTRA-ARTICULAR ADMINISTRATION OF MESENCHYMAL STROMAL CELLS-DERIVED SMALL EXTRACELLULAR VESICLES FOR THE TREATMENT OF KNEE OSTEOARTHRITIS: A PRE-CLINICAL STUDY.** **Aliosha I. Figueroa-Valdés**^{1,3}, Ana María Vega-Letter², Catalina de la Fuente³, Yessia Hidalgo^{1,3}, Nicolás Georges^{1,3}, Cynthia García², Patricia Luz-Crawford^{1,2}, Maroun Khoury^{1,3,4}, Francisca Alcayaga-Miranda^{1,3,4}. ¹IMPACT, Center of Interventional Medicine for Precision and Advanced Cellular Therapy, Santiago, Chile. ²Laboratory of Molecular and Cellular Immunology, Faculty of Medicine, Universidad de los Andes, Santiago, Chile. ³Consortio Regenero, Chilean Consortium for Regenerative Medicine, Santiago, Chile. ⁴Cells for Cells, Santiago, Chile.

09:45 **ROLE OF RSPO SIGNALING IN THE PROLIFERATION AND DIFFERENTIATION OF ADULT NEURAL PROGENITOR CELLS.** **Daniela Valenzuela-Bezanilla**, Sebastián B. Arredondo, Maximiliano C. Galassi, N. Merino-Véliz, Fernando J. Bustos and Lorena Varela-Nallar. Instituto de Ciencias Biomédicas, Facultad de Medicina y Facultad de Ciencias de la Vida, Universidad Andrés Bello. danielavbezanilla@gmail.com

10:00 **ONTOGENESIS OF THE ASYMMETRIC PARAPINEAL ORGAN IN THE ZEBRAFISH EPITHALAMUS.** **K. Palma**^{1,2,†}, I. Signore^{1,2,†}, M. Meynard^{1,2,3}, J. Ibarra^{1,2}, L. Armijo-Weingart⁴, M. Cayuleo^{1,2}, S. Härtel^{1,2,5}, M.L. Concha^{1,2,3}. ¹Integrative Biology Program, ICBM, F-Med, U-Chile. ²BNI, Chile. ³GERO, Chile. ⁴Dept. of Physiology, UdeC. ⁵CENS, Chile. kpalmag@u.uchile.cl

10:15 **MUSCLE-TARGETED WNT3A OVEREXPRESSION INDUCES PRE AND POSTSYNAPTIC INSTABILITY AT THE VERTEBRATE NMJ.** **Jessica Mella**¹, Viviana Perez¹, Jorge Ojeda¹, Rocío Tejero², Lucía Tabares² and Juan Pablo Henríquez^{1*}. ¹Neuromuscular Studies Laboratory (NeSt Lab), GDeP, Faculty of Biological Sciences, Universidad de Concepción, Concepción, Chile. ²Universidad de Sevilla, Sevilla, Spain. *jhenriquez@udec.cl

ORAL PRESENTATIONS VI**Tronador Room**

Chairs: Karina Pino-Lagos, Universidad de los Andes
Rodrigo Quintanilla, U. Autónoma de Chile

- 09:00 PEROXIDATION OF LIPID DROPLETS, A NEW THERAPEUTIC TARGET FOR THE INDUCTION OF FERROPTOSIS IN DIFFICULT-TO-TREAT CANCER CELLS. Luciano Ferrada¹, María José Barahona^{1,2}, Matías Vera¹, Brent R. Stockwell^{3,4} and Francisco Nualart^{1,2}. ¹CMA BIOBIO, Facultad de Ciencias Biológicas, Universidad de Concepción, Chile. ²Laboratorio de Neurobiología y Células Madre, NeuroCellT, Facultad de Ciencias Biológicas, Universidad de Concepción, Chile. ³Department of Chemistry, Columbia University, New York, USA. ⁴Department of Biological Sciences, Columbia University, New York, USA.**
- 09:15 IL-2R SIGNALING AND FOXP1 MAINTAIN TREG IDENTITY IN THE ABSENCE OF FOXP3. Charlotte N. Hill^{1,2}, Yuelin Zhong¹, David Zemmour³, Louis-Marie Charbonnier^{1,2}. ¹Division of Immunology, Boston Children's Hospital, USA. ²Department of Pediatrics, Harvard Medical School, USA. ³Department of Pathology, University of Chicago, USA.**
- 09:30 EPITHELIAL-MESENCHYMAL TRANSITION OF TUMOR BREAST CELLS IS CAUSED BY ACTIVATION OF NF- κ B PATHWAY CAUSED BY TUMOUR ASSOCIATED NEUTROPHILS. Violeta Kallens^{1,2}, Daniela Sauma², Miguel L. Allende¹. ¹Center for Genome Regulation, Universidad de Chile. ²Laboratorio de Inmunología, Facultad de Ciencias, Universidad de Chile.**
- 09:45 RATREG-DERIVED EXTRACELLULAR VESICLES PROMOTE T CELL SUPPRESSION AND PREVENT ALVEOLAR BONE LOSS DURING PERIODONTITIS: ROLE OF CD73-MEDIATED ADENOSINE PRODUCTION. Carolina Rojas^{1,2}, Michelle García¹, Luis González-Osuna¹, Alfredo Sierra-Cristancho¹, Javiera De Solminihac², Lesley Smyth³, Rolando Vernal¹, Karina Pino-Lagos². ¹Laboratorio de Biología Periodontal, Facultad de Odontología, Universidad de Chile. ²Centro de Investigación e Innovación Biomédica, Universidad de los Andes. ³Health, Sports and Bioscience School, University of East London.**
- 10:00 PROTECTIVE ROLE OF GALECTIN-8 IN ACUTE KIDNEY INJURY. Elisa Pérez-Moreno¹, Mariana Labarca¹, Adely de la Peña¹, Jonathan Navarro¹, Lorena Azócar¹, Alejandro Godoy¹, Alfonso González^{1,2,3} and Andrea Soza^{1,2,3}. ¹Centro de Biología Celular y Biomedicina (CEBICEM), Facultad de Medicina y Ciencia, Universidad San Sebastián. ²Centro de Envejecimiento y Regeneración (CARE), Pontificia Universidad Católica de Chile. ³Centro Ciencia & Vida.**
- 10:15 ACTIVATION OF NRF2-ANTIOXIDANT PATHWAY PREVENTS MITOCHONDRIAL IMPAIRMENT INDUCED BY TRUNCATED TAU. Francisca Villavicencio-Tejo, Margrethe A. Olesen, Alejandra Aránguiz, and Rodrigo A. Quintanilla. Universidad Autónoma de Chile.**
- 10:30 – 12:00 POSTER VIEWING SESSION II (81-159)**
Convention Center Foyer
- 081 POTENTIAL SIGNALING PATHWAYS ACTIVATED BY MEMBRANE-INITIATED ACTIONS ON RAINBOW TROUT (ONCORHYNCHUS MYKISS)**

- GILLS. Jorge Aedo^{1,2}**, Daniela Aravena-Canales^{1,2}, Rodrigo Zuloaga^{1,2}, Denisse Alegría^{1,2}, Juan Antonio Valdés^{1,2}, Alfredo Molina^{1,2}. ¹Laboratorio de Biotecnología Molecular, Facultad de Ciencias de la Vida, Universidad Andres Bello. ²Interdisciplinary Center for Aquaculture Research (INCAR), Universidad de Concepción.
- 082 ROLE OF VPS50 IN THE DEVELOPMENT OF AUTISM SPECTRUM DISORDER BEHAVIORS. Constanza Ahumada Marchant**, Fernando José Bustos. Institute of Biomedical Sciences, Universidad Andres Bello, Santiago, Chile. ahumadamarchantc@gmail.com
- 083 QUANTITATIVE ANALYSIS OF Ric-8A EXPRESSION DURING NEURAL CREST INDUCTION AND MIGRATION IN XENOPUS LAEVIS EMBRYOS. Pablo Aliaga Briones**, María-José Ruiz, Carlos Pérez, Marcela Torrejón. Laboratory of Signaling and Development, Department of Biochemistry and Molecular Biology, University of Concepción, Concepción, Chile.
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- 104 DISEASE-CAUSING-Mfn2 MUTATIONS DISTINCTLY ALTER MITOCHONDRIAL FUSION AND FISSION DYNAMICS.** Daniel Lagos, Pamela Rojas de Santiago, Diego Troncoso, Benjamín Cartes-Saavedra, Rita Horvath**, **Verónica Eisner**. School of Biological Sciences, Department of Cellular and Molecular Biology, Pontificia Universidad Católica de Chile. **Cambridge Centre for Brain Repair and MRC Mitochondrial Biology Unit, Department of Clinical Neurosciences, University of Cambridge, UK.
- 105 TCF4 EMBRYONIC REINSERTION AMELIORATES DEFECTIVE CORTICAL NEUROGENESIS IN PITT-HOPKINS SYNDROME MOUSE MODEL.** **Francisca Espinoza**¹, Denisse Ávila², Ramón Carraza¹, Eduardo Retamal¹, Carlos Escudero³, Patricia Cogram⁴, Ariel Ávila¹. ¹Biomedical Sciences Research Laboratory, Department of Basic Sciences, Faculty of Medicine, Universidad Católica de la Santísima Concepción, Chile. ²Department of Biochemical Engineering, University College London, UK. ³Faculty of Sciences, Universidad del Bío-Bío, Chile. ⁴Instituto de Ecología y Biodiversidad, Universidad de Chile, Chile.
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- 109 NOVEL ROLE FOR MAST CELLS IN AMYOTROPHIC LATERAL SCLEROSIS PROGRESSION.** **Polett Garcés**¹, Paloma A. Harcha², Brigitte van Zundert¹. ¹Instituto de Ciencias Biomédicas, Facultad de Medicina, Universidad Andrés Bello, Santiago-Chile. ²Instituto de Neurociencia, Centro Interdisciplinario de Neurociencia de Valparaíso, Valparaíso-Chile.

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- 117 HELICOBACTER PYLORI ACTIVATES THE HIF-1 α /ALS2/Rab5 SIGNALING PATHWAY TO INDUCE B-CATENIN TRANSLOCATION TO THE NUCLEUS IN GASTRIC CELLS. Daniela Herrera^{1,2}, Álvaro Neira³, Manuel Varas^{2,3}, Andrew F.G. Quest^{1,2}, Vicente Torres^{2,4}.** ¹Laboratory of Cellular Communication, Faculty of Medicine, Universidad de Chile. ²Advanced Center for Chronic Diseases (ACCDiS). ³Universidad San Sebastián. ⁴Millennium Institute on Immunology and Immunotherapy.
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- 121 α -SYNUCLEIN ALTERS INTRACELLULAR Ca²⁺ AND K⁺ DYNAMICS EVOKED BY SPREADING DEPOLARIZATION IN BRAIN SLICES. Andrés Liberona¹,** Juan E. Tichauer^{1,2}, Maximiliano Rovegno² and Juan A. Orellana¹. ¹Departamento de Neurología, Escuela de Medicina and Centro Interdisciplinario de Neurociencias, Facultad de Medicina, Pontificia Universidad Católica de Chile, Santiago, Chile. ²Departamento de Medicina Intensiva, Facultad de Medicina, Pontificia Universidad Católica de Chile, Santiago, Chile.
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- 123** **INTESTINAL OXIDATIVE STRESS RESPONSE IN DROSOPHILA REVEALED BY LIGHTSHEET MICROSCOPY.** Karen Mella, Franco Nuñez, Gonzalo Olivares, César Cárdenas, Alenka Lovy. Center for Integrative Biology, Faculty of Sciences, Universidad Mayor, Santiago, Chile.
- 124** **c-Abl KINASE ACTIVATION IN AN EPILEPSY MOUSE MODEL IS ASSOCIATED WITH NEURONAL LOSS AND ASTROGLIOSIS.** Marín T¹; Pinto C¹; Almarza-Salazar H¹; Troncoso S¹; Acevedo K²; Zanlungo S³; Álvarez AR¹. ¹Cell Signaling Laboratory, Department of Cellular and Molecular Biology, Millennium Institute on Immunology and Immunotherapy, Faculty of Biological Sciences, ²Pediatric Division, Neurology Unit, ³Medicine Faculty, Pontificia Universidad Católica de Chile, Santiago, 8331010, Chile. tamara.marin.m@gmail.com
- 125** **VEGFR2 IS THE ENDOTHELIAL CELL RECEPTOR FOR THE ANGIOGENIC PEPTIDE HISTATIN-1.** Carlos Mateluna¹, Pedro Torres¹, Marcelo Rodríguez¹, Patricio Silva¹, Douglas Matthies², Christian Wilson², Gerald Zapata², Floris Bikker³, Vicente A. Torres¹. ¹Institute for Research in Dental Sciences, Faculty of Dentistry, Universidad de Chile; Advanced Center for Chronic Diseases (ACCDiS), Millennium Institute on Immunology and Immunotherapy (MIII). ²Faculty of Chemical and Pharmaceutical Sciences, Universidad de Chile. ³Department of Oral Biochemistry, University of Amsterdam.
- 126** **ANALYSES OF THE PROTECTIVE EFFECT OF WALNUT USED AS A SUPPLEMENT OF AN OBESOGENIC DIET ON THE TRANSCRIPTOME OF MOUSE POMC NEURONS.** José Medina-Moraga^{1*}, Valentina Opazo-Mellado¹, Daniel Candia-Herrera¹, Isidora Manríquez¹, Elena Uribe², María de los Ángeles García-Robles³, Marcell Gatica², Estefanía Tarifeño-Saldivia^{1*}. ¹GearLab, Departamento Bioquímica y Biología Molecular, Facultad Ciencias Biológicas, Universidad de Concepción. ²Laboratorio de Enzimología, Departamento Bioquímica y Biología Molecular, Facultad Ciencias Biológicas, Universidad de Concepción. ³Laboratorio de Biología Celular, Departamento Bioquímica y Biología Molecular, Facultad Ciencias Biológicas, Universidad de Concepción. josenmedina@udec.cl, etarisa@udec.cl
- 127** **OFFSPRING GESTATED IN HYPOTHYROXINEMIA DEVELOPED STRONG INFLAMMATION IN ULCERATIVE COLITIS.** Rivera J.^{1,2}, Álvarez O.^{1,2}, Mendoza-León M.^{1,2}, Hernández R.^{1,2}, Opazo M.^{1,5}, Gatica S.^{1,2}, Bohmwald K.³, Bueno S.³, González P.³, Kalergis A.^{3,4} and Riedel C.^{1,2*}. ¹Departamento de Ciencias Biológicas Universidad Andrés Bello. ²Millennium Institute on Immunology and Immunotherapy. ³Departamento de Ciencias Biológicas Facultad de Ciencias Biológicas Pontificia Universidad Católica de Chile. ⁴Departamento de Endocrinología Facultad de Medicina Pontificia Universidad Católica de Chile. ⁵Facultad de Medicina Veterinaria y Agronomía, Universidad de las Américas.
- 128** **COMPUTATIONAL MODELING OF CELL AGGREGATION IDENTIFIES MINIMAL MECHANICAL INTERACTIONS FOR ONSET OF MULTICELLULARITY IN EARLY ANNUAL KILLIFISH EMBRYOGENESIS.** Ignacio Montenegro¹, Guillermo Yañez², Emily Skog¹, Martin Andaur¹, Óscar Guerrero¹, Luca Dolfi³, Alessandro Cellerino⁴, Mauricio Cerda⁵, Miguel L. Concha⁵, Cristina Bertocchi⁶, Nicolás O. Rojas¹, Timothy J. Rudge², Andrea Ravasio¹. ¹Institute for Biological and Medical Engineering, Pontificia Universidad Católica de Chile. ²School of Computing, Newcastle University, United Kingdom. ³Max Planck Institute for Biology of Ageing, Germany. ⁴BIO@SNS, Scuola Normale Superiore, Italy. ⁵Institute of Biomedical

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- 129 PARABACTEROIDES DISTASONIS IMPROVES AGED INTESTINE AND SKELETAL MUSCLE IN MICE.** Pablo Morgado-Cáceres¹, Hernán Huerta¹, Cristian Bergman¹, Reinaldo Figueroa¹, Nicolas Bahmondes¹, Michelle Riquelme¹, Osmán Díaz¹, Karen Mella¹, Sergio Linsam Barth¹, Jorge Meneses¹, Paulina Calderón¹, Daniela Sauma², César Cárdenas¹ and Alenka Lovy¹. ¹Center for Integrative Biology, Faculty of Sciences, Universidad Mayor, Santiago, Chile. ²Department of Biology, Faculty of Sciences, Universidad of Chile, Santiago, Chile.
- 130 GENERATION AND CHARACTERIZATION OF HUMAN INTESTINAL ORGANOIDS GENERATED FROM EMBRYONIC STEM CELLS.** Daniela Nahuelquén, Álvaro Barahona, Sebastián Abarzúa, Rodrigo Aguilar. Institute of Biomedical Sciences, Universidad Andres Bello, Santiago, Chile.
- 131 DEFECTIVE MENINGEAL LYMPHATIC VASCULATURE IS ASSOCIATED WITH CNS B-CELL INFILTRATION AND DEPRESSIVE BEHAVIOR IN A MURINE LUPUS MODEL.** Alexandra Olate-Briones, Francisca Rodríguez, Sabina Rojas, Emilia Escalona, Noelia Escobedo and Andrés Herrada. Lymphatic Vasculature and Inflammation Research Laboratory, Facultad de Ciencias de la Salud, Instituto de Ciencias Biomédicas, Universidad Autónoma de Chile, Talca, Chile.
- 132 EPIGENETICS AND OBESITY: ELUCIDATING WHAT HAPPENS IN POMC NEURONS.** Valentina Opazo-Mellado^{1*}, José Medina-Moraga¹, Isidora Manríquez¹, Daniel Candia-Herrera¹, Patricio Ordenes², Elena Uribe¹, María de los Ángeles García-Robles², Estefanía Tarifeño-Saldivia^{1*}. ¹GEaRLab, Departamento de Bioquímica y Biología Molecular, Facultad de Ciencias Biológicas, Universidad de Concepción. ²Laboratorio de Biología Celular, Departamento de Biología Celular, Facultad de Ciencias Biológicas, Universidad de Concepción.
- 133 QUANTITATIVE ANALYSES OF COLLECTIVE EPITHELIAL DELAMINATION IN THE EARLY ZEBRAFISH EMBRYO.** Karina Oyarce-Sáez^{1,2}, Constanza Vásquez^{1,2}, Eduardo Pulgar^{1,2}, Dante Castagnini^{1,2}, Karina Palma^{1,2}, Steffen Härtel^{1,2,3}, Mauricio Cerda^{1,2} y Miguel Concha^{1,2,4}. ¹ICBM, Facultad de Medicina, Universidad de Chile. ²Instituto de Neurociencia Biomédica. ³Centro Nacional en Sistemas de Información en Salud. ⁴Centro de Gerociencia, Salud Mental y Metabolismo.
- 134 A SHORT-TERM SUCROSE DIET AFFECTS B-TANYCYTE PROLIFERATION IN THE ADULT HYPOTHALAMUS.** Alejandra Palma¹, Antonia Recabal¹, Andrés Rodríguez¹, Magdiel Salgado^{1,2}, Roberto Elizondo-Vega¹, Juan C. Sáez^{1,2}, and María Á. García-Robles^{1,2}. ¹Laboratorio de Biología Celular, Facultad de Ciencias Biológicas, Universidad de Concepción, Concepción Chile. ²Instituto de Neurociencias, Centro Interdisciplinario de Neurociencias de Valparaíso, Universidad de Valparaíso, Valparaíso 2340000, Chile. alejandrapalma@udec.cl, juancarlos.saez@uv.cl
- 135 MITOCHONDRIAL OXIDATIVE METABOLISMS IN MOUSE BRAIN CELL PRIMARY CULTURES.** Carolina Paredes Martínez^{1,2}, Maite Castro^{1,2,3}. ¹Instituto de Bioquímica y Microbiología, UACH, Valdivia, Chile. ²Center for Interdisciplinary Studies on Nervous System (CISNe), UACH, Valdivia, Chile. ³Janelia Research Campus HHMI, Ashburn, VA.

- 136 CHARACTERIZATIONS OF EXTRACELLULAR VESICLES FROM MENSTRUAL FLUID: A NEW BIOLOGICAL SOURCE FOR DEVELOPING NON-INVASIVE ENDOMETRIOSIS DIAGNOSIS.** Vicente Peragallo-Papic, Paz Cerda-Castro, Stephanie Acuña-Gallardo, Patricia Valdebenito, Sebastián Illanes, Lara J Monteiro, Francisca Alcayaga-Miranda. Centro de Investigación e Innovación Biomédica (CiiB), IMPACT, Center of Interventional Medicine for Precision and Advanced Cellular Therapy, Universidad de los Andes. vicente.peragallo@gmail.com, (Sponsor: M. Khoury).
- 137 FILAMIN A PROMOTES GLIOBLASTOMA CELL MIGRATION AND INVASION THROUGH ACTIN CYTOSKELETON REMODELING.** Philippe Pihán^{1,2}, Paloma Moraga^{1,2}, Rodrigo Fernandez^{1,2}, Christian Gonzalez-Billault^{2,3}, Hery Urria^{1,2,3*}, and Claudio Hetz^{1,2,3*}. ¹Biomedical Neuroscience Institute (BNI), University of Chile, Chile. ²Fondap Geroscience Center for Brain Health and Metabolism (GERO), Chile. ³Buck Institute for Research on Aging, Novato, CA, USA. chetz@uchile.cl, hery.urria@ug.uchile.cl
- 138 EXPRESSIONS OF NPC1 AND STARD3 IS INCREASED IN HUMAN PLACENTAL BEWO CELLS TREATED WITH OX-LDL: ASSOCIATION WITH LYSOSOMAL AND MITOCHONDRIAL DYSFUNCTION.** Camila Pizarro C¹, Viviana Cavieres², Cheril Tapia-Rojas^{2,3}, Patricia Burgos^{2,3}, Silvana Zanlungo⁴, Andrea Leiva¹, María José Yañez¹. ¹Escuela de Tecnología Médica, Facultad de Medicina y Ciencia, Universidad San Sebastián. ²Centro de Biología Celular y Biomedicina, Facultad de Medicina y Ciencia, Universidad San Sebastián. ³Centro Ciencia & Vida, Fundación Ciencia & Vida, Santiago, Chile. ⁴Facultad de Medicina, P. Universidad Católica de Chile.
- 139 LACTATES: A NOVEL MEDIATOR OF REGULATES THE IMMUNOSUPPRESSIVE ACTIVITY OF MESENCHYMAL STEM/STROMAL CELL IMMUNOREGULATORY PROPERTIES.** Carolina Pradenas^{1,2,3}, Rafael Contreras-Lopez¹, Noymar Luque-Campos^{1,2}, Karina Oyarce-Merino³, Felipe Gálvez¹, Ana María Vega-Letter^{1,2}, *Patricia Luz-Crawford^{1,2} and *Roberto Elizondo³. ¹Centro de Investigación e Innovación Biomédica, Universidad de los Andes, Santiago, Chile. ²IMPACT, Center of Interventional Medicine for Precision and Advanced Cellular Therapy, Santiago, Chile. ³Laboratorio de Biología Celular, Universidad de Concepción, Concepción, Chile. *Equally-contributor.
- 140 EFFECTS OF SEAWATER ACIDITY ON SHELL FORMATION IN THE PACIFIC OYSTER (*Crassostrea gigas*).** Claudio Quevedo^{1,2}, Nicolás Zúñiga-Soto^{1,2}, Cristian Muñoz^{1,2}, Felipe Aguilera^{1,2}. ¹Departamento de Bioquímica y Biología Molecular, Universidad de Concepción. ²Group for the Study of Developmental Processes (GDeP).
- 141 NEDD4 IS A MECHANORESPONDING PROTEIN IN MUSCLE PROGENITORS.** Ramirez M¹, Bertocchi C², Olgún H¹. ¹Department of Cell and Molecular Biology, PUC. ²Department of Physiology, PUC.
- 142 STUDY OF THE EFFECT OF CAFETERIA DIET (CAF) ON GLUCOSE METABOLISM IN THE OFFSPRING GESTATED UNDER MATERNAL HYPOTHYROXINEMIA (mHTX).** Alejandro Regaldiz^{1,2,3}, Johana Santos^{2,3}, Claudia Riedel^{2,3} and Ma. Cecilia Opazo^{1,2}. ¹Instituto de Ciencias Naturales, Facultad de Medicina Veterinaria y Agronomía, Universidad de las Américas, Santiago, Chile. ²Millennium Institute of Immunology and Immunotherapy, Santiago, Chile. ³Facultad de Ciencias de la Vida, Universidad Andrés Bello, Santiago, Chile.

- 143 HYPOXIA PROMOTES THE FORMATION OF PRO-ANGIOGENIC EXTRACELLULAR VESICLES CONTAINING CONNEXIN-46 IN BREAST CANCER CELLS.** Richards A., Vásquez L., Acuña RA. Centro de Medicina Regenerativa, Facultad de Medicina, Universidad del Desarrollo, Santiago, Chile. (Sponsor: M. Ezquer).
- 144 CONTRIBUTION OF THE METABOLIC STRESS SENSOR GCN2 IN OLIGODENDROCYTES IN DISEASE PROGRESSION OF AN AMYOTROPHIC LATERAL SCLEROSIS MOUSE MODEL.** J. F. Roa-Petit¹, P. Falcón¹, M. Escandón¹, and S. Matus^{1,2}. ¹Fundación Ciencia & Vida, Santiago, Chile. ²Facultad de Medicina y Ciencia, Universidad San Sebastián.
- 145 STUDY OF MITOCHONDRIAL TRANSCRIPTION FACTOR A “TFAM” IN AUTISM SPECTRUM DISORDER.** Carlos Carrasco-Gallardo, Valentina Rojas, Victor Tapia, Manuel Carrasco, Lina Ruiz*. Instituto de Ciencias Biomédicas, Facultad Ciencias de la Salud, Universidad Autónoma de Chile, Santiago, Chile. *lina.ruiz@uautonoma.cl (Sponsor: R. Quintanilla).
- 146 VITAMIN E DEFICIENCY IS ASSOCIATED WITH LIPID OXIDATION AND LOW STEM CELL PROLIFERATION IN SR-B1-/- FETAL BRAINS.** Fujiko Saavedra^{1,2}, Nicolas Santander³, Maxs Mendez^{1,2}, Federico Batiz^{2,4} and Dolores Busso^{2,4}. ¹Ph.D. Program in Biomedicine, Faculty of Medicine, Universidad de los Andes, Chile. ²Center for Biomedical Research and Innovation (CIIB), Universidad de los Andes, Chile. ³Instituto de Ciencias de la Salud, Universidad de O'Higgins, Chile. ⁴IMPACT, Universidad de los Andes, Chile.
- 147 NEW TOOLS FOR ADVANCED TEM IMAGING IN CHILE AT UMA UC.** Nicole Salgado Cortes. Unidad de Microscopía Avanzada, Facultad de Ciencias Biológicas. Pontificia Universidad Católica de Chile.
- 148 IDENTIFICATIONS OF THE CANCER CELL LINES THAT FORM VASCULOGENIC MIMICRY AND A CHARACTERIZATION OF THIS PROCESS.** Santander N^{1,3,4}, Mingo G^{1,5}, Babbitt N^{1,4}, Chaparro I¹, González P^{1,4}, F Nualart⁶, Tapia JC⁷, Ravasio A³, Bertocchi C^{1,3} & Owen GI^{1,2,4,5}. ¹Faculty of Biological Sciences, ²Faculty of Medicine; ³IIBM, Pontificia Universidad Católica de Chile. ⁴Millennium Institute on Immunology and Immunotherapy. ⁵FONDAP-ACCDIS. ⁶Faculty of Biological Sciences, University of Concepcion. ⁷Programa de Biología Celular y Molecular, Instituto de Ciencias BioMedicas, Facultad de Medicina, Universidad de Chile, Santiago, Chile. nicollesantander30060@gmail.com
- 149 LUTEIN IMPROVES LIPID ACCUMULATION VIA ACTIVATION OF LIPOPHAGY IN MAFLD IN VITRO MODELS.** Faride Saud^{1,2}; Claudio Cabello-Verrugio^{3,4,5}; Daniel Cabrera²; Elisa Balboa¹. ¹Escuela de Medicina, Universidad Finis Terrae, Santiago, Chile. ²Pontificia Universidad Católica de Chile. ³Laboratory of Muscle Pathology, Fragility, and Aging, Faculty of Life Sciences, UNAB, Chile. ⁴Millennium Institute on Immunology and Immunotherapy, UNAB, Chile. ⁵Center for the Development of Nanoscience and Nanotechnology (CEDENNA).
- 150 BCL6: A NOVEL TRANSCRIPTION FACTOR INVOLVED IN CARDIAC HYPERTROPHY REVEALED THROUGH HUMAN TRANSCRIPTIONAL REGULATORY NETWORKS.** Juan Francisco Silva-Agüero¹, Victor Aliaga-Tobar², Leslye Venegas-Zamora¹, Mauricio Latorre², Valentina Parra^{1,2}. ¹Department of

Biochemistry and Molecular Biology and ACCDiS Center, Faculty of Chemical and Pharmaceutical Sciences, University of Chile, Santiago, Chile. ²Bioengineering Laboratory; Institute of Engineering Sciences and SYSTEMIX Center; O'Higgins University, Rancagua, Chile.

- 151 DIFFERENTIAL CYTOKINE PROFILE IN ASCITES AND PLASMA AMONG ADVANCED HIGH-SEROUS OVARIAN CANCER PATIENTS WITH DIFFERENT INFLAMMATORY STATUS.** Suárez-Narbona F¹, Kato S¹, Gómez-Valenzuela F¹, Bravo ML², Ibáñez C², Cuello M¹. ¹Departments of Gynecology and ²Hematology/Oncology, School of Medicine; Pontificia Universidad Católica de Chile. felipe.suarez@uc.cl
- 152 BDNF-DEPENDENT TRANSLATIONAL CONTROL OF SIGNALING ENDOSOMES IN AXONS OF CORTICAL NEURONS.** Reynaldo Tiburcio-Felix¹, Moya-Alvarado G.², Francisca C. Bronfman¹. ¹Institute of Biomedical Sciences (ICB), Faculty of Medicine and Faculty of Life Sciences, Universidad Andres Bello, Santiago, Chile. ²Department of Biology, Johns Hopkins University, Baltimore, USA.
- 153 ACTIVATIONS OF CANONICAL WNT SIGNALING INDUCES THE EXPRESSION OF mtUPR-RELATED PROTEINS: POSSIBLE ROLE ON ALZHEIMER'S DISEASE.** Angie K. Torres^{1,3}, Karina A. Cicali¹, Cheril Tapia-Rojas^{1,2}, Nibaldo Inestrosa^{3,4}. ¹Neurobiology of Aging Lab, Centro de Biología Celular y Biomedicina (CEBICEM), Facultad de Medicina y Ciencia, Universidad San Sebastián, Santiago, Chile. ²Centro Ciencia & Vida, Fundación Ciencia & Vida, Santiago, Chile. ³Laboratory of Molecular Neurobiology, Facultad de Ciencias Biológicas, Pontificia Universidad Católica de Chile, Santiago, Chile. ⁴Centro de Excelencia en Biomedicina de Magallanes.
- 154 Gai2 INTERACTS WITH CYTOSKELETON PROTEINS IN ORDER TO CONTROL CRANIAL NEURAL CREST MIGRATION.** L. Mariana Tovar, J. Ignacio Leal, Soraya Villaseca, Teresa Caprile, Marcela Torrejón. ¹Laboratory of Signaling and Development. Department of Biochemistry and Molecular Biology. University of Concepción. ²Laboratory Axonal Guidance. Department of Cellular Biology. University of Concepción.
- 155 CHARACTERIZATIONS OF NEURONAL EXOSOMES PURIFIED FROM PLASMA OF PARKINSON'S DISEASE PATIENTS.** Valentina Urbina^{1,2,3,4}, Ignacio Aravena^{1,2,3,5}, Mariana Sepulveda^{1,2,3,5}, Denisse Sepúlveda^{1,2,3}, René Vidal^{1,2,3,4}. ¹Center for Integrative Biology, Faculty of Sciences, Universidad Mayor, Chile. ²Biomedical Neuroscience Institute, Faculty of Medicine, University of Chile, Santiago, Chile. ³Center for Geroscience, Brain Health and Metabolism, Santiago, Chile. ⁴Escuela de Biotecnología, Universidad Mayor, Chile. ⁵Escuela de Tecnología Médica, Universidad Mayor, Chile.
- 156 ANALYSIS OF POSSIBLE MECHANICAL FEATURES DRIVING EARLY EMBRYONIC DEVELOPMENT OF A. NIGRIPINNIS USING ENGINEERED BIOMIMETIC ENVIRONMENTS.** Sebastián Vásquez^{1,2}, Isabella Cardona¹, Montserrat Droguett¹, Hector Urra¹, Nestor Guerrero³, Daniela Salas¹, Mauricio Cerda³, Miguel Concha³, Timothy J. Rudge⁴, Cristina Bertocchi² & Andrea Ravasio¹. ¹Institute of Biological and Medical Engineering (IIBM), Pontificia Universidad Católica de Chile. ²Faculty of Biological Sciences, Pontificia Universidad Católica De Chile. ³Institute of Biomedical Sciences, Faculty of Medicine, Universidad de Chile. ⁴School of Computing, Newcastle University, Newcastle upon Tyne, United Kingdom.

- 157 PKA ACTIVITY REGULATES EGFR TRAFFICKING FROM PERINUCLEAR RECYCLING ENDOSOMES INVOLVING RAB-COUPPLING PROTEIN AS SUBSTRATE. Jaime Venegas¹, Jonathan Barra^{1,2}, Catalina López¹, Claudio Retamal¹, Alfonso González^{1,2,3}. ¹Centro de Biología Celular y Biomedicina (CEBICEM), Facultad de Medicina y Ciencia, Universidad San Sebastián. ²Centro de Envejecimiento y Regeneración (CARE-UC), P. Universidad Católica de Chile. ³Centro Científico y Tecnológico de Excelencia Ciencia & Vida.**
- 158 A REVERSE GENETIC SCREEN FOR OF GENES THAT MEDIATE EYE GROWTH IN ZEBRAFISH. Aarón Villanueva^{1,3}, Lisa Tucker², Steve W. Wilson³, Leonardo E. Valdivia^{1,3}. ¹Center for Integrative Biology, Facultad de Ciencias, Universidad Mayor, Chile. ²Department of Cell and Developmental Biology, University College London, UK. ³Escuela de Biotecnología, Universidad Mayor, Santiago, Chile.**
- 159 RECAPITULATIONS OF HEALTHY HYALINE PHENOTYPES OF OSTEOARTHRITIC CHONDROCYTES BY EMBEDDING IN SPECIALIZED STRUCTURAL NICHEs. Gabriela Zavala^{1,2*}, Sergio Viáfara^{1,2}, Javier Novoa^{1,2}, Wilfredo González^{1,2}, Maroun Khoury^{1,2}, Juan Pablo Acevedo^{1,2}. ¹Universidad de los Andes, Chile, Centro de Investigación e Innovación Biomédica (CIIB). ²IMPACT, Center of Interventional Medicine for Precision and Advanced Cellular Therapy, Santiago, Chile.**

**12:00 -13:00 PLENARY LECTURE
EUROPEAN MOLECULAR BIOLOGY ORGANIZATION (EMBO)
Volcanes Room**

Chair: Felipe Barros, Centro de Estudios Científicos del Sur

CANNABINOID RECEPTORS IN THE BRAIN: EXTRACTING SPECIFICITY FROM UBIQUITY. Giovanni Marsicano, DVM, PhD, NeuroCentre Magendie, Bordeaux, France.

13:00 – 15:00 Lunch

**15:00 – 17:00 “EARLY CAREER SYMPOSIUM”
SOCIEDAD DE BIOLOGIA CELULAR DE CHILE
Volcanes Room**

Chair: Manuel Varas, Universidad San Sebastián

ROLE OF THE PRIMARY CILIUM IN HYPOTHALAMIC NEURONS: IMPACT IN AUTOPHAGY AND INFLAMMATION. María Paz Hernández-Cáceres^{1,2}, Catalina Kretschmar^{1,2,3}, Daniela Pinto⁴, Daniel Peña-Oyarzún^{2,3,5}, Alfredo Criollo^{1,2,3}, Eugenia Morselli^{2,4}. ¹Instituto de Investigación en Ciencias Odontológicas, Facultad de Odontología, Universidad de Chile. ²Autophagy Research Center. ³Advanced Center for Chronic Diseases (ACCDiS), University of Chile, Santiago, Chile. ⁴Faculty of Medicine and Sciences, Universidad San Sebastián, Santiago, Chile. ⁵Interdisciplinary Center for Research in Territorial Health of the Aconcagua Valley.

MODULATION OF ADAPTIVE IMMUNITY BY USING LOW-COST TOOLS BASED ON THE STIMULATION OF NATURAL KILLER T CELLS. Leandro J. Carreño. Millennium Institute on Immunology and Immunotherapy, Programa de Inmunología, Instituto de Ciencias Biomédicas, Facultad de Medicina, Universidad de Chile. leandrocarreno@uchile.cl

JUST LIKE YOUR FAVORITE PROTEIN: CONTROL OF GENE EXPRESSION MEDIATED BY LONG NON-CODING RNAs. Rodrigo Aguilar. Institute of Biomedical Sciences, Universidad Andrés Bello, Santiago, Chile.

IMMUNOMODULATION OF CD4 T-CELLS IN ORAL CANCER. Estefania Nova-Lamperti. Universidad de Concepción. enova@udec.cl

17:15 – 18:15 PLENARY LECTURE

Volcanes Room

Chair: Alejandra Alvarez, P. Universidad Católica de Chile

FUNCTIONAL IMPACT OF NEURODEVELOPMENTAL DISORDER-RELATED VARIANTS IN *TRIO*. Tony Koleske, Yale School of Medicine, USA.

18:15 – 19:45 POSTER VIEWING SESSION II (81-159)

Convention Center Foyer

19:45 – 20:45 BEST THESES AWARDS “FUNDACION CHILENA PARA BIOLOGIA CELULAR”

Volcanes Room

Chair: Silvana Zanlungo, SBCCH Vice President

Undergraduate

Daniela Pinto Núñez

Bioquímica, P. Universidad Católica de Chile

“Rol del cilio primario en la respuesta a la insulina en neuronas hipotalámicas”

Directora Tesis: Eugenia Morselli, Universidad San Sebastián

Graduate

Felipe Baeza Lehnert

Doctor en Ciencias, mención Biología Celular y Molecular, Universidad Austral de Chile

“Characterization of the energy fluxes and energy homeostasis control at rest and during neurotransmission in hippocampal neurons”

Director Tesis: Felipe Barros, Centro de Estudios Científicos y Universidad San Sebastián

20:45 SOCIETY MEMBERS MEETING

21:15 Dinner

THURSDAY, DECEMBER 15, 2022

08:00 POSTER MOUNTING SESSION III (160-238)

Convention Center Foyer

09:00 – 10:30 ORAL PRESENTATIONS VII

Calbuco Room

Chairs: Eugenia Morselli, Universidad San Sebastián

Alvaro Lladser, Fundación Ciencia y Vida

- 09:00 QUESTIONING THE RELATIONSHIP BETWEEN MECHANICAL AND FUNCTIONAL PROPERTIES OF COLLAGEN: INTRIGUING EFFECT OF SELENIUM-COMPOUNDS. Christine Kreindl^{1,2}, Roberto Raiteri³, Elena Dellacasa³, Ana Luisa Riveros⁴, Omar Porras¹. ¹Laboratorio de Investigación en Nutrición Funcional, INTA, Universidad de Chile. ²Carrera de Nutrición y Dietética, Universidad Autónoma de Chile, Chile. ³Department of Informatics, Bioengineering, Robotics, and System Engineering, University of Genova, Italy. ⁴Facultad de Ciencias Químicas y Farmacéuticas, Universidad de Chile.**
- 09:15 FUNCTIONALLY HETEROGENEOUS TUMOR-REACTIVE TISSUE-RESIDENT MEMORY CD8+ T CELLS INFILTRATE HUMAN RENAL CELL CARCINOMA TUMORS. Sofía Hidalgo¹, Jimena Tosello-Boari², Andres Hernandez¹, Yoann Missolo-Koussou², Farides Saavedra¹, Eduardo Roa¹, Ernesto López¹, Diego Figueroa¹, Wilfrid Richer², Christine Sedlik², Luis Alarcón³, Camélia Radulescu⁴, Yves Allory⁴, Vincenzo Borgna^{1,3,5*}, Eliane Piaggio^{2*}, Alvaro Lladser^{1,5*}. ¹Laboratory of Immunoncology, Fundación Ciencia & Vida, Chile. ²Laboratory of Translational Immunotherapy, Institut Curie, France. ³Servicio de Urología, Hospital Barros Luco, Chile. ⁵Facultad de Medicina y Ciencia, Universidad San Sebastián, Chile.**
- 09:30 REDUCED LEVELS OF THE METHYLTRANSFERASES Suv39h1/2 IN ALS ASTROCYTES ACCOMPANY THE LOSS OF H3K9me2/3 AND CONTRIBUTE TO MOTONEURON DEATH. Iván Díaz, Guillermo Díaz, Sebastián Abarzúa, Kevin Leiva, Martín Montecino, Brigitte van Zundert. Instituto de Ciencias Biomédicas, Facultad de Medicina, Universidad Andrés Bello.**
- 09:45 SUCRALOSE RECOVERS PERIODONTITIS BY INHIBITING AUTOPHAGIC DEGRADATION OF CELL-TO-CELL CONTACTS. Daniel Peña-Oyarzún¹, Montserrat Reyes², María Paz Hernández-Cáceres³, Alfredo Criollo³, Eugenia Morselli^{1,4}. ¹Physiology Department, Faculty of Biological Sciences, Pontificia Universidad Católica de Chile. ²Department of Pathology and Oral Medicine, Faculty of Dentistry, Universidad de Chile. ³Institute for Research in Dental Sciences, Faculty of Dentistry, Universidad de Chile. ⁴Department of Basic Sciences, Faculty of Medicine and Sciences, Universidad San Sebastián.**
- 10:00 ADHERENS JUNCTION MAINTENANCE AND IIG9 FUNCTION IN RADIAL GLIA CELLS DURING CEREBRAL CORTEX DEVELOPMENT. Oviedo, M.J.¹, Cifuentes M.³, Saldivia N.¹, Ramírez E.¹, Martínez F.¹, Nualart F.^{1,2}, Salazar K.^{1,2}. ¹Laboratory of Neurobiology and Stem Cells, Neuro-CellT. ²Center for Advanced Microscopy, CMA BIO-BIO. Faculty of Biological Sciences, University of Concepción, Concepción, Chile. ³Department of Cell Biology, Genetics and Physiology, University of Malaga, Malaga, Spain.**
- 10:15 EFFECT OF TH1-TYPE AND TH2-TYPE ACTIVATION OF iNKT CELLS IN CLASS-SWITCH RECOMBINATION OF ANTIBODIES. Santibañez A.^{1,2}, Palacios PA.^{1,2}, Gutiérrez-Vera C.^{1,2}, García-Betancourt R.^{1,2}, Carreño LJ.^{1,2}. ¹Programa de Inmunología, Instituto de Ciencias Biomédicas, Facultad de Medicina, Universidad de Chile, Santiago, Chile. ²Instituto Milenio en Inmunología e Inmunoterapia. alvaro.santibanez9@gmail.com**

ORAL PRESENTATIONS VIII**Tronador Room****Chairs: Alejandra Alvarez, P. Universidad Católica de Chile****Marcelo Ezquer, Universidad del Desarrollo**

- 09:00 HUMAN MESENCHYMAL STEM CELLS-DERIVED SECRETOME MARKEDLY INHIBITS ORAL MORPHINE SELF-ADMINISTRATION AND BLOCKS RELAPSE IN TWO RAT MODELS OF MORPHINE DEPENDENCE. Mauricio Quezada¹, María-Elena Quintanilla², Pablo Berrios-Cárcamo¹, Daniela Santapau¹, Paola Morales², Marcelo Ezquer¹, Mario Herrera-Marschitz², Yedy Israel^{1,2}, Fernando Ezquer¹. ¹Center for Regenerative Medicine, School of Medicine, Universidad del Desarrollo. ²Molecular and Clinical Pharmacology Program, School of Medicine, Universidad de Chile.**
- 09:15 THE METABOLIC SENSOR GCN2 CONTRIBUTES TO THE COGNITIVE IMPROVEMENT IN AGING IN RESPONSE TO A NUTRITIONAL STRATEGY BASED ON LOW PROTEIN DIET CONTENT. Marcela Escandón^{1,2}, Paulina Falcon¹, Soledad Matus^{1,2}. ¹Fundación Ciencia & Vida. ²Facultad de Medicina y Ciencia, Universidad San Sebastián.**
- 09:30 IDENTIFICATION OF NOVEL DNA METHYLATION BIOMARKERS IN COLORECTAL CANCER. Hannah Demond¹, Juan Castillo-Fernandez², Santiago Sepulveda³, Alexis Kalergis⁴, Carmen Ili¹, Priscilla Brebi¹. ¹Millennium Institute on Immunology and Immunotherapy, Laboratory of Integrative Biology (LIBi), Centro de Excelencia en Medicina Traslacional (CEMT), Scientific and Technological Bioresource Nucleus (BIOREN), Universidad de La Frontera, Temuco, Chile. ²Epigenetics Programme, Babraham Institute, Cambridge, UK. ³Pathology Department, Faculty of Medicine, Pontificia Universidad Católica de Chile, Santiago, Chile. ⁴Millennium Institute on Immunology and Immunotherapy, Facultad de Ciencias Biológicas, Facultad de Medicina, Pontificia Universidad Católica de Chile, Santiago, Chile. Hannah.Demond@ufrontera.cl**
- 09:45 BIDIRECTIONAL COMMUNICATION BETWEEN THE NMDA RECEPTOR AND c-Abl. Daniela A. Gutiérrez¹, Pol Picon-Pages², Nicolás Stuardo¹, Mercè Izquierdo-Serra², Hugo Almarza¹, Romina Catalán¹, Alvaro Cáceres¹, José M. Fernandez-Fernandez², Francisco Muñoz², Alejandra R. Álvarez¹. ¹Cell Signaling Laboratory, Department of Cell and Molecular Biology, Millennium Institute on Immunology and Immunotherapy, Pontificia Universidad Católica de Chile, Chile. ²Laboratory of Molecular Physiology, Faculty of Health and Life Sciences, Universitat Pompeu Fabra, Spain.**
- 10:00 MUSCLE BDNF/TrkB SIGNALING ORGANIZES THE MATURE NEUROMUSCULAR SYNAPSE THROUGH CREB ACTIVATION. Viviana Pérez^{1,2}, Francisca Bermedo-García¹, Jessica Mella¹, Francisca C. Bronfman^{2*}, Juan Pablo Henríquez^{1*}. ¹Neuromuscular Studies Laboratory (NeSt Lab), GDeP, Universidad de Concepción, Chile. ²Institute of Biomedical Sciences, Universidad Andrés Bello, Chile. *francisca.bronfman@unab.cl, *jhenriquez@udec.cl**
- 10:15 EMT-PROMOTOR EV-miRs INCREASE THE MIGRATION CAPACITY OF MCF10A HUMAN BREAST EPITHELIAL CELLS. Eduardo Durán-Jara¹, Nicole Farfán¹, Marcelo Ezquer¹, Lorena Lobos-González^{1,2}. ¹Centro de Medicina Regenerativa, Instituto de Ciencias e Innovación en Medicina, Clínica Alemana Universidad del Desarrollo. ²Advanced Center for Chronic Diseases, ACCDiS.**

10:30 – 11:30 PLENARY LECTURE
SOCIEDAD DE BIOLOGIA CELULAR DE CHILE
Volcanes Room
Chair: Marcela Torrejón, Universidad de Concepción

INTERPLAY BETWEEN MECHANICAL AND CHEMICAL CUES THAT SQUEEZE THE FACE INTO SHAPE. Roberto Mayor, University College London, UK.

11:30 – 13:00 POSTER VIEWING SESSION III (160-238)
Convention Center Foyer

- 160 EXPRESSIONS OF EPH/EPHRIN AT DIENCEPHALIC ROOF PLATE DURING BRAIN DEVELOPMENT. Jaime Aguayo, Maryori Gonzalez, Felipe Maurelia, Vania Sepúlveda, Carlos Farkas, Teresa Caprile. Laboratorio Guía Axonal, Departamento de Biología Celular, Universidad de Concepción.**
- 161 IDENTIFICATIONS OF LONG NONCODING RNAs MODULATED BY PISCIRICKETTSIA SALMONIS IN SKELETAL MUSCLE OF RAINBOW TROUT (ONCORHYNCHUS MYKISS). Ahumada, L.^{1,2}, Zuloaga, R.^{1,2}, Molina, A.^{1,2} and Valdés, J.A.^{1,2}. ¹Laboratorio de Biotecnología Molecular, Facultad de Ciencias de la Vida, Universidad Andres Bello. ²Interdisciplinary Center for Aquaculture Research (INCAR), Universidad de Concepción. lucianofranco.a@gmail.com**
- 162 c-Abl KINASE ACTIVATION ASSOCIATED WITH INCREASED NEURONAL EXCITABILITY BY THE MUSCARINIC CHOLINERGIC AGONIST (M1) PILOCARPINE. Hugo Almarza-Salazar; Daniela Gutiérrez; América Chandia-Cristi; Claudio Pinto; Tamara Marín; Alejandra Álvarez. Cell Signaling Laboratory, Department of Cellular and Molecular Biology, Faculty of Biological Sciences, Millennium Institute on Immunology and Immunotherapy, Pontificia Universidad Católica de Chile, Santiago, Chile.**
- 163 HUMAN METAPNEUMOVIRUS INFECTION ENHANCES PRO-INFLAMMATORY CYTOKINES PRODUCTION IN THE BRAIN AND LONG-TERM NEUROLOGICAL SEQUELS IN MICE. Catalina A. Andrade¹, Karen Bohmwald¹, Valentina P. Mora¹, Jorge A. Soto^{1,2}, and Alexis M. Kalergis^{1,3}. ¹Millennium Institute on Immunology and Immunotherapy. Departamento de Genética Molecular y Microbiología, Facultad de Ciencias Biológicas, Pontificia Universidad Católica de Chile. ²Millennium Institute on Immunology and Immunotherapy, Departamento de Ciencias Biológicas, Facultad de Ciencias de la Vida, Universidad Andrés Bello. ³Departamento de Endocrinología, Facultad de Medicina, PUC.**
- 164 LIGATIONS OF SCIATIC NERVE INCREASED CDK5 ACTIVITY IN MOUSE DRG (L4-L6). José-Manuel Araya^{1,2,3}, Camila Duran^{1,2}, Julio Alcayaga¹, Elías Utreras^{1,2}. ¹Department of Biology, Faculty of Sciences, Universidad de Chile. ²Millennium Nucleus for the Study of Pain (MiNuSPain). ³School of Biotechnology, Universidad Mayor.**
- 165 ROLE OF CADHERIN-6 DURING ASYMMETRIC MORPHOGENESIS OF THE PARAPINEAL ORGAN IN ZEBRAFISH. Mercedes Araya^{1,2}, Carmen Gloria Lemus^{1,2}, Steffen Härtel^{1,2,3} and Miguel L. Concha^{1,2,4}. ¹ICBM, Facultad de Medicina, Universidad de Chile. ²Instituto de Neurociencia Biomédica. ³Centro Nacional en Sistemas de Información en Salud. ⁴Centro de Gerociencia, Salud Mental y Metabolismo.**

- 166 IMPAIRED INSULIN SENSITIVITY IN HYPOTHALAMIC NEURONS BY PALMITIC ACID IS MEDIATED BY THE RECRUITMENT OF GALECTIN-3 TO LATE ENDOSOMES/MVBs.** Eloísa Arias-Muñoz¹, Viviana A. Cavieres¹, Maria Paz Hernández-Cáceres^{2,3}, Omar Cortés¹, Manuel Varas-Godoy¹, Raúl Araya-Secchi⁴, Mauricio Budini³, Alfredo Criollo³, Eugenia Morselli², Patricia V. Burgos^{1,5}. ¹CEBICEM, Facultad de Medicina y Ciencia, USS, Santiago, Chile. ²Facultad de Medicina y Ciencia, USS, Santiago, Chile. ³Facultad de Odontología, Universidad de Chile, Santiago, Chile. ⁴Facultad de Ingeniería, Arquitectura y Diseño, USS, Santiago, Chile. ⁵Centro Ciencia & Vida, Fundación Ciencia & Vida, Santiago, Chile.
- 167 IDENTIFICATION OF THE STRUCTURAL COMPONENTS OF CANCER CELL VASCULOGENIC MIMICRY.** Babbitt N^{1,3}, Mingo G^{1,5}, Santander GN^{1,4}, Chaparro I¹, González P^{1,4}, F Nualart⁶, Ravasio A³, Bertocchi C^{1,3} & Owen G.I^{1,2,4}. ¹Faculty of Biological Sciences. ²Faculty of Medicina & ³IIBM, Pontificia Universidad Católica de Chile. ⁴Millennium Institute on Immunology and Immunotherapy. ⁵FONDAP-ACCDIS. ⁶Faculty of Biological Sciences, University of Concepcion. nababbitt@uc.cl
- 168 MITOCHONDRIAL CRISTAE ULTRASTRUCTURE ALTERATIONS IN THE AGING HEART.** Gonzalo Barrientos¹, Isidora Molina-Riquelme¹, Wileidy Gómez¹, Francisco Díaz-Castro², Andrea del Campo-Sefir², Luis Garrido³, Silke Morris⁴, Leonhard Breitspreche⁵, Katherina Psathaki⁵, Hugo Verdejo³, Karin Busch⁴, Verónica Eisner¹. ¹School of Biological Sciences. ²School of Chemistry. ³School of Medicine, Pontificia Universidad Católica de Chile, Santiago de Chile, Chile. ⁴Institute of Integrative Cell Biology and Physiology, Faculty of Biology, University of Münster, Münster, Germany. ⁵Center of Cellular Nanoanalytics, Integrated Bioimaging Facility, University of Osnabrück, Germany.
- 169 IMPAIRED REGENERATIONS OF THE NEUROMUSCULAR SYNAPSE UPON CANONICAL WNT PATHWAY ACTIVATION.** Francisca Bermedo-García¹, Jessica Mella¹, Viviana Pérez¹, Lucía Tabares², Juan Pablo Henríquez^{1*}. ¹Neuromuscular Studies Laboratory (NeSt Lab), GDeP, Facultad de Ciencias Biológicas, Universidad de Concepción, Concepción, Chile. ²Universidad de Sevilla, Sevilla, Spain. *jhenriquez@udec.cl
- 170 CHARACTERIZATIONS OF THE ROLE OF MITOCHONDRIA IN THE FORMATION AND FUNCTION OF THE B CELL IMMUNOLOGICAL SYNAPSE.** Juan Pablo Bozo, María-Isabel Yuseff. Laboratory of Immune Cell Biology, Department of Cellular and Molecular Biology, Faculty of Sciences, Pontificia Universidad Católica de Chile.
- 171 RESEARCH SUPPORT PLATFORMS AT THE PONTIFICIA UNIVERSIDAD CATÓLICA DE CHILE, THE FLOW CYTOMETRY UNIT: A SUCCESS CASE.** Sergio Bustos¹, Alex Cabrera². ¹Senior Professional Flow Cytometry Unit, Facultad de Ciencias Biológicas, Pontificia Universidad Católica de Chile, Santiago, Chile. ²Technical Director Flow Cytometry Unit, Facultad de Ciencias Biológicas, Pontificia Universidad Católica de Chile, Santiago, Chile. cytometry@bio.puc.cl
- 172 MATERNAL SUPRAPHYSIOLOGICAL HYPERCHOLESTEROLEMIA IS ASSOCIATED WITH PLACENTAL LYSOSOMAL AND MITOCHONDRIAL DYSFUNCTION.** Fabián Campos^{1,2}, Juan Castro³, Silvana Zanlungo³, Andrea Leiva¹, María José Yáñez¹. ¹Escuela de Tecnología Médica, Facultad de Medicina y Ciencia,

Universidad San Sebastián. ²Hospital Metropolitano, SSMO. ³Facultad de Medicina, Pontificia Universidad Católica de Chile.

- 173 NATURAL KILLER CELL-DERIVED EXOSOME MIMETICS AS ALTERNATIVE NANODRUG DELIVERY SYSTEM FOR MULTIDRUG-RESISTANT LUNG CANCER.** Javiera Carrasco-Rojas¹, Orlando Ramírez¹, Sebastián Aguayo², José Antonio Jara-Sandoval^{3,4}, Christina Schuh¹, Marcelo Ezquer^{1*}. ¹Centro de Medicina Regenerativa, Facultad de Medicina Clínica Alemana Universidad del Desarrollo. ²Faculty of Medicine, Dentistry School, Pontificia Universidad Católica de Chile. ³Institute for Research in Dental Sciences, Faculty of Dentistry, Universidad de Chile. ⁴Department of toxicological-pharmacological Chemistry, Faculty of Chemical and Pharmaceutical Sciences, Universidad de Chile.
- 174 EFFECTS OF TRANSPLANTATION OF MITOCHONDRIA-DERIVED FROM MESENCHYMAL STROMAL CELLS ON PULMONARY EPITHELIAL CELLS WITH A VIRAL ACTIVATED STATE.** Sebastián Castillo-Galán^{1,2}, Yessia Hidalgo^{1,2,3}, Francisca Alcayaga-Miranda^{1,2,3,4}, Maroun Khoury^{1,2,3,4}, Yildy Utreras¹, Jimena Cuenca^{1,2,3,4}. ¹Laboratory of Nano-Regenerative Medicine, Centro de Investigación e Innovación Biomédica (CIIB), Faculty of Medicine, Universidad de los Andes, Santiago, Chile. ²IMPACT, Center of Interventional Medicine for Precision and Advanced Cellular Therapy, Santiago, Chile. ³Cells for Cells, Santiago, Chile. ⁴Consortio Regenero, Chilean Consortium for Regenerative Medicine, Santiago, Chile.
- 175 ER DEGRADATION ENHANCING ALPHA-MANNOSIDASE LIKE PROTEIN 1 (EDEM1) MEDIATES TAMOXIFEN CELL SURVIVAL IN ER+ BREAST MCF7 AND T47D CANCER CELLS.** Viviana A. Cavieres¹, Ingrid P. Ehrenfeld², Patricia V. Burgos^{1,3}. ¹CEBICEM, Facultad de Medicina y Ciencia, USS, Santiago, Chile. ²Facultad de Medicina, Universidad Austral de Chile, Valdivia, Chile. ³Centro Ciencia & Vida, Fundación Ciencia & Vida, Santiago, Chile.
- 176 EFFECTS OF NORDIHYDROGUAIARETIC ACID (NDGA) ON THE VIABILITY AND PROLIFERATION OF NON-SMALL CELL LUNG CANCER (NSCLC) CELLS.** Carina Chipón¹, Pamela Esparza¹, Pamela Ehrenfeld², Rodrigo López³, Angara Zambrano¹. ¹Instituto de Bioquímica y Microbiología. ²Instituto de Anatomía, Histología y Patología. ³Instituto de Farmacología y Morfofisiología, Universidad Austral de Chile.
- 177 KNOCKDOWNS OF NEURONAL MONOCARBOXYLATE TRANSPORTER 2 IN THE RAT HYPOTHALAMUS LEADS TO LOSS OF FEEDING BEHAVIOR REGULATION.** Alanis Coca-Facenda, Patricio Órdenes-Constenla, Roberto Elizondo-Vega, María de los Ángeles García-Robles. Laboratorio de Biología Celular, Departamento de Biología Celular, Facultad de Ciencias Biológicas, Universidad de Concepción, Concepción, Chile.
- 178 ROLE OF THE ASD-ASSOCIATED GENE PTPRD IN THE DEVELOPMENT OF CORTICAL GLIA AND ITS IMPLICATIONS IN NEURODEVELOPMENTAL DISORDERS.** Francisca Cornejo Castillo^{*,1}, Macarena Moya¹, Gonzalo I. Cancino^{1,2}. ¹Center for Integrative Biology, Universidad Mayor. ²Facultad de Ciencias Biológicas, Pontificia Universidad Católica de Chile. *francisca.cornejo@umayor.cl
- 179 PHOSPHORYLATION OF THE UBIQUITIN-LIKE DOMAIN IN THE ER STRESS-HERPUD1 PROTEIN CONTROLS ITS STABILITY AND FUNCTION: POSSIBLE THERAPEUTIC TARGET IN TRIPLE-NEGATIVE BREAST**

CANCER. Omar Cortés^{1,2}, Laura Hernández-Torres¹, Viviana A. Cavierres¹, Rodrigo Maldonado³, María José Barrera⁴, Patricia V. Burgos^{1,2}. ¹CEBICEM, Facultad de Medicina y Ciencia, USS, Santiago, Chile. ²Centro Ciencia & Vida, Fundación Ciencia & Vida, Santiago, Chile. ³Instituto de Anatomía, Histología y Patología, Facultad Medicina, Universidad Austral de Chile, Valdivia, Chile. ⁴Facultad de Odontología, USS, Santiago, Chile.

- 180 HEPATOPROTECTIVE EFFECT MEDIATED BY SYSTEMIC ADMINISTRATION OF MESENCHYMAL STEM CELL SECRETOME IN A MURINE MODEL OF ACUTE ON CHRONIC LIVER FAILURE. Cuadra Bárbara**, Silva Verónica, Huang Ya-Lin, Vasquez Leonardo, Ezquer Fernando, Ezquer Marcelo. Centro de Medicina Regenerativa, ICIM, UDD.
- 181 IN SILICO ANALYSIS OF CTCF-PROMETASTATIC INTERACTOME SHOW POSSIBLE SPECIFIC TARGETING OF BIOMOLECULES INTO OVARIAN CANCER SECRETED EXTRACELLULAR VESICLES. Matías del Campo Smith¹**, Sebastián Urrejola¹, Eduardo Durán-Jara¹, Lorena Lobos-González^{1,2}. ¹Centro de Medicina Regenerativa, Facultad de Medicina, Universidad del Desarrollo. ²Centro Avanzado de Enfermedades Crónicas, ACCDiS.
- 182 PHARMACOLOGIC INDUCTIONS OF ENDOCYTTIC INTERNALIZATION OF PROGRAMMED DEATH LIGAND (PD-L1). Nicole Díaz¹**, Claudia Metz¹, Claudio Retamal¹ & Alfonso González^{1,2,3}. ¹Centro de Biología Celular y Biomedicina (CEBICEM), Facultad de Medicina y Ciencia, Universidad San Sebastián. ²Centro de Envejecimiento y Regeneración (CARE), P. Universidad Católica de Chile. ³Centro Ciencia y Vida, Fundación Ciencia y Vida.
- 183 MATERNAL MULTIPLE SCLEROSIS INDUCES NEURODEVELOPMENTAL IMPAIRMENTS IN THEIR OFFSPRING IN MICE. Daniela Elgueta¹**, Fernanda Manriquez-Peoz¹, María Agustina Roccatagliata¹, Gonzalo I. Cancino^{1,2}. ¹Center for Integrative Biology, Universidad Mayor, Santiago, Chile. ²Facultad de Ciencias Biológicas, Pontificia Universidad Católica de Chile, Santiago, Chile.
- 184 LPA–LPA1 INDUCES FAPs PROLIFERATION, DIFFERENTIATION, AND ECM DEPOSITION THROUGH FAK. Jennifer Faúndez-Contreras^{1,2}**, Meilyn Cruz-Soca^{1,2}, Adriana Córdova-Casanova^{1,2}, Felipe S. Gallardo^{1,2}, Alexia Bock^{1,2} and Enrique Brandan^{1,2}. ¹Laboratory of Cell Differentiation and Pathology. Pontificia Universidad Católica de Chile, Santiago, Chile. ²Centro Ciencia & Vida, Ñuñoa, Chile.
- 185 ROLE OF FRUCTOSE IN THE ACTIVATION OF THE EPITHELIAL-MESENCHYMAL TRANSITION PROGRAM IN PROSTATE CANCER CELLS. Emilia Flores¹, Catalina Ramírez¹**, Tino Meneses¹, Carolina E. Echeverría¹, Rosalba Escamilla², Viviana Montecinos², Bredford Kerr¹, and Alejandro S. Godoy^{1,3}. ¹Centro de Biología Celular y Biomedicina (CEBICEM), Facultad de Medicina y Ciencia, Universidad San Sebastián. ²Departamento de Hematología Oncología, Facultad de Medicina, Pontificia Universidad Católica de Chile. ³Department of Urology, Roswell Park Comprehensive Cancer Center, Buffalo NY, USA.
- 186 TRANSCRIPTIONAL RESPONSE OF THE GASTRIC CANCER CELL LINE AGS TO THE SILENCING OF THE LONG NON-CODING RNA MALAT-1. Sebastián Fuentes**, Daniela Nahuelquén, Cristopher Fierro, Martín Montecino, Rodrigo Aguilar. Institute of Biomedical Sciences, Universidad Andres Bello, Santiago, Chile.

- 187 HYPOXIA PROMOTES SECRETION OF ALS2-CONTAINING EXTRACELLULAR VESICLES THAT STIMULATE ENDOTHELIAL CELL MIGRATION AND ANGIOGENESIS VIA RAB5.** Belén Gaete-Ramirez¹, Patricio Silva^{2,3,4}, Nadia Hernandez^{2,3,4}, Daniela Herrera^{2,3,4}, Manuel Varas-Godoy^{1,3,5,*} and Vicente A. Torres^{2,3,4,*}. ¹Centro de Biología Celular y Biomedicina (CEBICEM), Facultad de Medicina y Ciencia, Universidad San Sebastián. ²Institute for Research in Dental Sciences, Faculty of Dentistry, Universidad de Chile. ³Advanced Center for Chronic Diseases (ACCDIS). ⁴Millennium Institute on Immunology and Immunotherapy (MIII). ⁵Centro Ciencia & Vida, Fundación Ciencia & Vida. mbelen.gaete@gmail.com *Co-corresponding autor.
- 188 POLYCYSTIN-2 FORMS A COMPLEX WITH BECLIN-1 AT THE PRIMARY CILIUM OF POMC NEURONS.** Camila García-Navarrete¹, Catalina Kretschmar², Daniel Peña-Oyarzún³, Eugenia Morselli⁴, Valentina Parra¹, Alfredo Criollo². ¹Department of Biochemistry and Molecular Biology, Faculty of Chemical and Pharmaceutical Sciences, University of Chile, Santiago-Chile. ²Faculty of Dentistry, Universidad de Chile. ³Physiology Department, Faculty of Biological Sciences, Pontificia Universidad Católica de Chile, Santiago-Chile. ⁴Department of Basic Sciences, Faculty of Medicine and Sciences, Universidad San Sebastián.
- 189 CHARACTERIZATIONS OF THE ZEBRAFISH HATCHING GLAND CELLS.** Priscila García-Castro¹, Susana Paredes-Zúñiga², Ricardo Fuentes¹, Miguel Allende², Javiera De la Paz¹. ¹Departament of Cell Biology, Faculty of Biological Sciences, Universidad de Concepción, Concepción, Chile. ²FONDAP Center for Genome Regulation, Faculty of Sciences, University of Chile, Santiago, Chile.
- 190 THE PKR-eIF2a AXIS IS INVOLVED IN AMYLOID-BETA-INDUCED SYNAPTOTOXICITY.** F.E. Gómez¹, N.W. Martínez^{1,2}, I. Alfaro³ and S. Matus^{1,2}. ¹Fundación Ciencia & Vida, Santiago, Chile. ²Facultad de Medicina y Ciencia, Universidad San Sebastián. ³Institute of Sciences and Innovation in Medicine, Faculty of Medicine, Clínica Alemana, Universidad del Desarrollo. fgomez@cienciavida.org
- 191 STUDYING AMYOTROPHIC LATERAL SCLEROSIS IN ZEBRAFISH: POTENTIAL ROLE OF TGF- β SIGNALING PATHWAY IN DISEASE PROGRESSION.** David Gonzalez^{1,2}, Adolfo Luna^{2,3}, Miguel L. Allende¹. ¹FONDAP Center for Genome Regulation, Facultad de Ciencias, Universidad de Chile, Santiago. ²Departamento de Ciencias Químicas y Biológicas, Facultad de Ciencias de la Salud, Universidad Bernardo O'Higgins, Santiago. ³Escuela de Kinesiología, Facultad de Ciencias de la Salud, Universidad Bernardo O'Higgins, Santiago.
- 192 STUDY OF FGF SIGNALING IN THE SUBCOMMISSURAL ORGAN OF GALLUS GALLUS DURING EMBRYONIC DEVELOPMENT.** Maryori Gonzalez¹, Jaime Aguayo¹, Felipe Maurelia¹, Vania Sepúlveda¹, Carlos Farkas², Teresa Caprile¹. ¹Departamento de Biología Celular, Universidad de Concepción, Chile. ²Universidad Católica de la Santísima Concepción.
- 193 EFFECTS OF CORTISOL ON GENE EXPRESSION ASSOCIATED WITH SKELETAL MUSCLE CONTRACTION IN RAINBOW TROUT (ONCORHYNCHUS MYKISS).** Gutiérrez D.^{1,2}, Aedo, J.E.^{1,2}, Aravena-Canales, D.^{1,2}, Molina, A.^{1,2} and Valdés, J.A.^{1,2}. ¹Laboratorio de Biotecnología Molecular, Facultad de Ciencias de la Vida, Universidad Andres Bello. ²Interdisciplinary Center for Aquaculture Research (INCAR), Universidad de Concepción.

- 194 ANTI-INFLAMMATORY iNKT CELLS ACTIVATION BY A NOVEL LIPOSOMAL FORMULATION INDUCES EXPANSION OF REGULATORY IMMUNE CELLS. Cristián Gutiérrez-Vera^{1,2}, Richard García-Betancourt^{1,2}, Pablo A. Palacios^{1,2}, Álvaro Santibañez^{1,2}, Leandro J. Carreño^{1,2}. ¹Programa de Inmunología, Instituto de Ciencias Biomédicas, Facultad de Medicina, Universidad de Chile. ²Millennium Institute on Immunology and Immunotherapy.**
- 195 ESTROGENS AND ERA REGULATE MITOCHONDRIAL-LYSOSOMAL DYNAMICS AND AUTOPHAGY IN HYPOTHALAMIC NEURONS. María Paz Hernández-Cáceres^{1,2}, Daniela Pinto², Alfredo Criollo¹, Eugenia Morselli². ¹Instituto de Investigación en Ciencias Odontológicas, Facultad de Odontología, Universidad de Chile, Santiago, Chile. ²Departamento de Ciencias Básicas, Facultad de Medicina y Ciencia, Universidad San Sebastián, Santiago, Chile.**
- 196 GALECTIN-8 INDUCES PRIMARY CILIA LOSS BY CALCIUM INFLUX AND Aurka/HDAC6 ACTIVATION IMPACTING ON LEPTIN SIGNALING IN POMC HYPOTHALAMIC CELL LINES. Cristian Herrera-Cid¹, Bredford Kerr¹, Andrea Soza^{1,2,3}, Alfonso González^{1,2,3}. ¹Centro de Biología Celular y Biomedicina (CEBICEM), Facultad de Medicina y Ciencia, Universidad San Sebastián. ²Centro de Envejecimiento y Regeneración (CARE), P. Universidad Católica de Chile. ³Fundación Ciencia y Vida.**
- 197 ROLE OF IGF2 IN THE MODULATION OF INFLAMMATORY RESPONSE IN PARKINSON DISEASE. Tomás J. Huerta^{1,2,3,4}, Bárbara J. Carrera^{1,2,3,4}, Felipe Grünenwald^{2,3,4}, Carolina Jerez^{2,3,4}, René L. Vidal^{2,3,4}. ¹Escuela de Tecnología Médica, Universidad Mayor, Santiago, Chile. ²Center for Integrative Biology, Universidad Mayor, Chile. ³Biomedical Neuroscience Institute, University of Chile, Santiago, Chile. ⁴Center for Geroscience, Brain Health and Metabolism, Santiago, Chile.**
- 198 SHAPE SEGMENTATION AND QUANTIFICATION OF CELL-CELL CONTACT BY PARAMETRIC CONTOUR MODELS IN FLUORESCENCE MICROSCOPY IMAGES. Jorge Jara-Wilde^{1,2}, Martín Cádiz^{1,2}, Carmen Lemus^{2,3}, Karina Palma^{1,2,3}, Francisca Valdés^{1,4}, Mauricio Cerda^{1,2,4}, Steffen Härtel^{1,2,4,5}. ¹SCIAN-Lab, Programa de Biología Integrativa (PIB), ICBM, F-Med, U-Chile. ²BNI, Chile. ³LEO, PIB, ICBM, F-Med, U-Chile. ⁴CIMT, F-Med, U-Chile. ⁵CENS.**
- 199 Gαi-2 REGULATES TRACTION FORCES DURING NEURAL CREST CELLS MIGRATION IN XENOPUS. Juan Ignacio Leal, Soraya Villaseca, Lina Mariana Tovar, Marcela Torrejón. Laboratory of Signaling and Development, Department of Biochemistry and Molecular Biology, University of Concepcion.**
- 200 AGE-RELATED CHANGES IN THE EXPRESSION CONTROL OF THE PROTEASE LONP-1 AND ITS EFFECTS ON THE ABNORMAL PROTEIN ACCUMULATION AND MITOCHONDRIAL FUNCTION. Jesús Llanquino^{1,3}, Claudia Jara¹, Angie Torres¹, Andreas Schüller⁴, Bredford Kerr³, Cheril Tapia-Rojas^{1,2}. ¹Neurobiology of Aging Lab, CEBICEM, USS, Chile. ²Centro Ciencia & Vida, Fundación Ciencia & Vida, Chile. ³Neuroendocrinology and Metabolism Lab, CEBICEM, USS, Chile. ⁴Institute for Biological and Medical Engineering, Schools of Engineering, PUC, Santiago, Chile.**
- 201 ROLE OF TANYCYTE-DERIVED LACTATE AS INTERCELLULAR POMC NEURON ACTIVATOR. Sergio López, Patricio Órdenes, Magdiel Salgado, Vinka Azócar, Roberto Elizondo-Vega, María de los Ángeles García-Robles. Laboratorio de**

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- 202 DEHYDROASCORBIC ACID ACCUMULATION AFFECTS NEURITE LENGTH, WHICH IS PARTIALLY PREVENTED BY RIPK1 INHIBITION. Rocío Magdalena¹, Luciano Ferrada^{1,2}, Francisco Nualart^{1,2}. ¹Laboratory of Neurobiology and Stem Cells, NeuroCellT. ²Center for Advanced Microscopy, CMA BIO BIO. Faculty of Biological Sciences, University of Concepción.**
- 203 THREE-DIMENSIONAL SINGLE-CELL ATLAS OF LIVER TISSUE ARCHITECTURE. Dilan Martínez^{1,2}, Cristian Perez^{1,2}, Valentina Maldonado^{1,2}, Valeria Candia^{1,2}, Hernán Morales-Navarrete³, Fabián Segovia-Miranda^{1,2}. ¹Department of Cell Biology, Faculty of Biological Sciences, Universidad de Concepción, Concepción, Chile. ²GDeP, Developmental Processes Group, Faculty of Biological Sciences, Universidad de Concepción, Chile. ³Department of Systems Biology of Development, University of Konstanz, Konstanz, Germany.**
- 204 IDENTIFICATION AND CHARACTERIZATION OF INTERACTORS FOR THE C-TERMINAL REGION OF SCO-SPONDIN DURING EMBRYO DEVELOPMENT. Felipe Maurelia¹, Vania Sepúlveda¹, Maryori Gonzalez¹, Jaime Aguayo¹, Carlos Farkas², Antonia Recabal¹, Teresa Caprile¹. ¹Departamento de Biología Celular, Facultad de Ciencias Biológicas, Universidad de Concepción, Chile. ²Universidad Católica de la Santísima Concepción.**
- 205 FUNCTION OF THE ONCOPROTEIN GOLPH3 AT THE GOLGI APPARATUS-MITOCHONDRIA INTERFACE. Catalina Meléndez-Polanco¹, V.A. Cavieres², C. Jara¹, MB. Gaete-Ramírez³, M. Varas-Godoy^{3,4}, P.V. Burgos^{2,4}, G.A. Mardones⁵ and C. Tapia-Rojas^{1,4}. ¹Neurobiology of Aging Lab, CEBICEM, USS, Chile. ²Organelle Phagy Lab in Health and Disease, CEBICEM, USS, Chile. ³Cancer Cell Biology Lab, CEBICEM, USS, Chile. ⁴Centro Ciencia & Vida, Fundación Ciencia & Vida, Chile. ⁵Department of Physiology, School of Medicine, Universidad Austral de Chile.**
- 206 REGULATING RUNX2 GENE TRANSCRIPTION DURING ASTROCYTE DIFFERENTIATION: IMPLICATIONS FOR AMYOTROPHIC LATERAL SCLEROSIS. Constanza Mercado, Bruno Soto, Estefanía Cardona, Víctor Pola, Cristopher Fierro, Elvis Acevedo, Brigitte van Zundert, Martín Montecino. Instituto Ciencias Biomédicas, Facultad de Medicina, Universidad Andrés Bello.**
- 207 THE SYNERGIC EFFECT OF CISPLATIN AND A CHEMOKINE RECEPTOR ANTAGONIST SENSITIZES DRUG RESISTANT GASTRIC CANCER CELLS AND INHIBITS TUMOROID FORMATION. Bárbara Mora-Lagos^{1*}, María Elena Reyes², Lorena Lobos-Gonzalez^{3,4}, Matías del Campo^{3,4}, Carmen Gloria Ili², Kurt Buchegger⁵, Yuselin Mora², Louise Zanella², Ismael Riquelme¹, Priscilla Brebi^{2*}. ¹Instituto de Ciencias Biomédicas, Facultad de Ciencias de la Salud, Universidad Autónoma de Chile. ²Millennium Institute on Immunology and Immunotherapy. Laboratory of Integrative Biology, CEMT-BIOREN, UFRO. ³Centro de Medicina Regenerativa, Facultad de Medicina-Clínica Alemana, Universidad del Desarrollo. ⁴Advanced Center for Chronic Diseases, ACCDiS ⁵Department of Basic Sciences, UFRO. *Corresponding authors.**
- 208 FRUCTOSE PROMOTES METABOLIC REPROGRAMING IN PROSTATE CANCER CELLS. Carolina E. Echeverría^{1,2,5,**}, Mauricio Mosquera^{1**}, Vanessa Oyarzún³, Emilia Flores¹, Claudia Jara¹, Cheril Tapia-Rojas^{1,4}, Dolores Busso², Jorge**

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- 209 IMPAIRED COMMUNICATIONS AT THE NEUROMOTOR AXIS DURING DEGENERATIVE CERVICAL MYELOPATHY.** Jorge Ojeda¹, Belén Heutger¹, Ariel Ávila², Pía M Vidal¹. ¹Neuroimmunology and Regeneration of the Central Nervous System Unit, ²Developmental Neurobiology Unit, Biomedical Science Research Laboratory, Basic Sciences Department, Faculty of Medicine, Universidad Católica de la Santísima Concepción, Concepción, Chile.
- 210 CONTRIBUTION OF TAU PROTEIN ON THE BRAIN MITOCHONDRIAL IMPAIRMENT OBSERVED DURING AGING.** Margrethe A. Olesen, Eugenia Pradenas, Rodrigo A. Quintanilla. Universidad Autónoma de Chile.
- 211 MUTANTS IN GoSAMTs EXHIBIT LOWER METHYLESTERIFICATION IN MUCILAGE AND ALTERATIONS IN POLYSACCHARIDE COMPOSITION.** Juan Pablo Parra-Rojas^{1,3}, Pablo Sepúlveda-Orellana³, Dayan Sanhueza³, Hernán Salinas-Grenet³, Henry Temple², Paul Dupree², Susana Sáez-Aguayo³, Ariel Orellana^{1,3}. ¹Millennium Institute Center for Genome Regulation (CGR). ²Department of Biochemistry, University of Cambridge, Cambridge, UK. ³Centro de Biotecnología Vegetal, Universidad Andrés Bello.
- 212 REELIN SIGNALING PATHWAY REGULATES LYSOSOME TRAFFIC AND LOCATION IN NEURONAL MODELS.** Aníbal Pacheco¹, Raffaella De Pace², Juan S. Bonifacino², María Paz Marzolo¹. ¹Facultad de Ciencias Biológicas, Pontificia Universidad Católica de Chile, Departamento de Biología Celular y Molecular. Santiago, Chile. ²Neurosciences and Cellular and Structural Biology Division, National Institute of Child Health and Human Development, National Institute of Health. Bethesda, Maryland, United States.
- 213 INCREASED LYSOSOME-MITOCHONDRIA MEMBRANE CONTACT SITES AND STARD3 CHOLESTEROL TRANSPORTER LEVELS IN GAUCHER DISEASE.** Claudia Parra-Ruiz^{1,2}, Carlos Enrich³, Laura Brito-Fernández², Alejandra R. Álvarez¹, Silvana Zanlungo². ¹Department of Cellular and Molecular Biology, Faculty of Biological Sciences and Millennium Institute on Immunology and Immunotherapy, Pontificia Universidad Católica de Chile, Chile. ²Department of Gastroenterology, Faculty of Medicine, Pontificia Universidad Católica de Chile, Chile. ³Departament de Biomedicina, Universitat de Barcelona, Spain. cparra2@uc.cl
- 214 IDENTIFICATIONS OF GPCR AT DIFFERENT STAGES DURING THE FORMATION AND MIGRATION OF THE NEURAL CREST IN XENOPUS.** Carlos Pérez-Yáñez¹, María-José. Ruiz¹, Gabriel Romero¹, Felipe Aguilera², Marcela Torrejón¹. ¹Laboratory of Signaling and Development, Department of Biochemistry and Molecular Biology, University of Concepción, Chile. ²Laboratory of Marine Genomics, Department of Biochemistry and Molecular Biology, Development and Evolution, University of Concepción, Chile.
- 215 IL-33 FAVORS FOXP3+ T REGULATORY CELLS AND THE PRODUCTION OF INTESTINAL METABOLITES LINKED TO IMMUNE REGULATION.** Camila

Pinto, Felipe Gálvez-Jirón, Ignacio Jérez, Javiera De Solminihac and Karina Pino-Lagos. Facultad de Medicina, Centro de Investigación e Innovación Biomédica, Universidad de los Andes, Santiago, Chile.

- 216 MOLECULAR MECHANISMS INVOLVED IN APOER2 TRAFFICKING. Pizarro HR**¹, Schulze M¹, Caracci MO¹, Mardones GA³, Bonifacino JS², Marzolo MP¹. ¹Fac. Ciencias Biológicas, Pontificia Universidad Católica de Chile. ²Cell Biology and Neurobiology Branch, NIH, Bethesda, United States. ³Dept Physiol, School of Medicine, Universidad Austral de Chile. hrpizarro@uc.cl
- 217 SARS-COV-2 SPIKE S1 PROTEIN INCREASES THE ACTIVITY OF CX43 HEMICHANNELS VIA ACE2. Juan Prieto-Villalobos**¹, Claudia M. Lucero², Gonzalo I. Gómez², Mauricio A. Retamal³ and Juan A. Orellana¹. ¹Departamento de Neurología, Escuela de Medicina and Centro Interdisciplinario de Neurociencias, Facultad de Medicina, Pontificia Universidad Católica de Chile. ²Instituto de Ciencias Biomédicas, Facultad de Ciencias de la Salud, Universidad Autónoma de Chile. ³Universidad del Desarrollo. Centro de Fisiología Celular e Integrativa. Facultad de Medicina Clínica Alemana.
- 218 EFFECT OF IL 22 ON INTESTINAL MICROBIOTA COMPOSITION AND MAINTENANCE OF INTESTINAL PERMEABILITY AT STEADY STATE AND DURING INFLAMMATION IN ZEBRAFISH. Keinis Quintero**¹, Pedro Hernandez², Jaime Alarcón³, Eduardo Castro-Nallar³, Mario Caruffo¹, Carmen G. Feijoo¹. ¹Fish Immunology laboratory, Life Science Faculty, Andres Bello University. ²Development and Homeostasis of Mucosal Tissues Team Genetics and Developmental Biology, Unit Institut Curie Research Center. ³University of Talca.
- 219 MITOCHONDRIAL PARAMETERS OF REGULATORY T LYMPHOCYTES FROM THE PROGENY GESTATED IN HYPOTHYROIDISM AND CHALLENGED WITH EAE. Rangel-Ramírez Ma. Andreina**^{1,2,3}, González-Madrid Enrique^{1,2}, Palazón Cristobal^{1,2}, Elorza Álvaro^{2,3}, Riedel Claudia A.^{1,2}. ¹Departamento de Ciencias Biológicas, Facultad de Ciencias de la Vida, Universidad Andrés Bello. Santiago, Chile. ²Instituto Milenio de Inmunología e Inmunoterapia. Santiago, Chile. ³Instituto de Ciencias Biomédicas Facultad de Medicina, Universidad Andrés Bello. Santiago, Chile. claudia.riedel@unab.cl
- 220 PARTICIPATIONS OF TRPM7 IN THE REGULATION OF DISSEMINATED INTRAVASCULAR COAGULATION IN AN ENDOTOXEMIC CONDITION IN ZEBRAFISH. Cristian Reyes Martínez**¹, Cristóbal García², Carmen G. Feijoo¹, Felipe Simon^{2,3,4}. ¹Fish Immunology Laboratory, Faculty of Life Science, Universidad Andres Bello, Chile. ²Laboratory of Integrative Physiopathology, Faculty of Life Science, Universidad Andres Bello, Chile. ³Millennium Institute on Immunology and Immunotherapy, Santiago, Chile. ⁴Millennium Nucleus of Ion Channel-Associated Diseases (MiNICAD), Santiago, Chile.
- 221 EARLY REDUCTION IN SYNAPTIC PLASTICITY IN THE NUCLEUS ACCUMBENS OF TRANSGENIC ALZHEIMER'S DISEASE MOUSE MODEL. N. Riffo-Lepe**¹, EJ. Fernández-Pérez¹, S. Gallegos¹, J. González-Sanmiguel¹, O. Santander², M. Fuenzalida² and L.G. Aguayo¹. ¹Laboratory of Neurophysiology, Department of Physiology, University of Concepcion, Chile. ²CNIP, Institute of Physiology, Faculty of Science, University of Valparaiso, Chile. nriffo@udec.cl

- 222 METAGENOMIC IDENTIFICATION OF CYTOTOXIC CYANOBACTERIA FROM LLANQUIHUE WETLANDS AND EFFECT OF CELL LYSATES ON SALMONID CELL LINE.** José Dellis Rocha^{1,2}, Catherine Opitz², Juan Pablo Póntigo^{1,2}, Daniel A. Medina^{1,2}. ¹Facultad de Ciencias de la Naturaleza, Escuela de Medicina Veterinaria, Universidad San Sebastián, Puerto Montt, Chile. ²Laboratorio Institucional Patagonia, Universidad San Sebastián, Puerto Montt, Chile.
- 223 Ric-8A/Galphaq SIGNALING REGULATES MESODERM FORMATION IN XENOPUS TROPICALIS.** María-José Ruiz¹, Felipe Aguilera², Marcela Torrejón¹. ¹Laboratorio de Señalización y Desarrollo, Departamento de Bioquímica y Biología Molecular, Universidad de Concepción. ²Laboratorio de Genética Marina, Desarrollo y Evolución, Departamento de Bioquímica y Biología Molecular, Universidad de Concepción.
- 224 Gα13 IS REQUIRED TO REGULATE FOCAL ADHESION FORMATION TO CONTROL A CORRECT CRANIAL NEURAL CREST CELL MIGRATION IN XENOPUS.** Jennifer Salazar, María-José Ruiz, Carla Castelli, Marcela Torrejón. Laboratory of Signaling and Development, Department of Biochemistry and Molecular Biology, University of Concepcion.
- 225 EXTRACELLULAR VESICLES CAN MEDIATE MATERNAL-TO-FETAL TRANSFER OF STRESS.** Sánchez-Rubio, M.¹, Del Valle, A.¹, Abarzúa-Catalán, L.¹, Monteiro L.J.^{1,2,3}, Pizarro, M.¹, Sandoval, S.¹, Romero, R.⁴, Wyneken, U.^{1,2,3}, Illanes, S.^{1,2,3}, Bátiz, L.F.^{1,2,3}. ¹Center for Biomedical Research and Innovation (CiB), Universidad de los Andes (UANDES), Chile. ²Faculty of Medicine, UANDES, Chile. ³IMPACT Center, Chile. ⁴Perinatology Research Branch, NICHD/NIH, USA.
- 226 EARLY CHANGES IN SIGNALING COMPONENTS IN THE HIPPOCAMPUS OF A MOUSE MODEL OF ALZHEIMER'S DISEASE.** Sebastián H. Santibanez¹, Daniela Valenzuela-Benzanilla¹, Sebastián B. Arredondo¹, Maximiliano C. Galassi¹, Gino Nardocci² and Lorena Varela-Nallar¹. ¹Instituto de Ciencias Biomédicas, Facultad de Medicina y Facultad de Ciencias de la Vida, Universidad Andrés Bello. ²Laboratorio de Biología Molecular y Bioinformática, Centro de Investigación e Innovación Biomédica, Facultad de Medicina, Universidad de los Andes.
- 227 SEARCHING FOR RADIORESISTANCE-PROMOTOR miRNAs IN BREAST CANCER.** Francisca Sepúlveda^{1,2}, Cristina Mayorga-Lobos^{1,2,3}, Robinson Arias⁴, Constanza Guzmán⁴, Sandra Marambio⁴, Eduardo Durán-Jara^{1,2*}, Lorena Lobos-González^{1,2*}. ¹Centro de Medicina Regenerativa, Facultad de Medicina, Universidad del Desarrollo-Clinica Alemana. ²Centro de enfermedades crónicas ACDDIS. ³Laboratorio de Nanobiotecnología y Nanotoxicología, Universidad de Chile. ⁴Escuela Tecnología Médica, Facultad de Medicina, Universidad del Desarrollo-Clinica Alemana. *Corresponding Authors.
- 228 CHARACTERIZATIONS OF THE REELIN PATHWAY AND ITS RECEPTOR APOER2 IN THE HUMAN PLACENTA.** Nicole Sommer¹, Aníbal Pacheco¹, Rodrigo Escalona³, Jorge Carvajal², Jaime Gutiérrez³, Andrea Leiva³ and María-Paz Marzolo¹. ¹Departamento de Biología Celular y Molecular, Fac. Ciencias Biológicas, PUC. ²Departamento de Obstetricia, Fac. Medicina, PUC. ³Fac. Medicina y Ciencia, USS.
- 229 COPING WITH ENVIRONMENTAL STRESS: AT THE INTERPHASE BETWEEN NEURONAL PROTEOSTASIS AND BRAIN PHYSIOLOGY.** Giovanni

Tamburini^{1,2,3}, Diego Arriagada^{1,2,3}, Felipe Godoy⁵, Carlos Rozas⁵, Carmen Sandy⁴, Claudio Hetz^{1,2,3,6} and Mei-Li Díaz-Hung^{1,2,3}. ¹Biomedical Neuroscience Institute, Santiago, Chile. ²Center for Geroscience, Brain Health and Metabolism, Santiago, Chile. ³Program of Cellular and Molecular Biology, Institute of Biomedical Sciences, University of Chile, Santiago, Chile. ⁴Brain Mind Institute. EPFL – Switzerland. ⁵University of Santiago de Chile. ⁶Buck Institute for Research on Aging, USA. meilidiazhung@gmail.com

- 230 IDENTIFIED DISTINCTIVE MIRNA PROFILE OF MENSTRUAL STEM CELLS-DERIVED SEV REPRESS ANGIOGENESIS-ASSOCIATED GENE EXPRESSION IN BREAST CANCER AND ENDOTHELIAL CELLS. Hugo E. Tobar**¹, Nicolas Georges^{1,2}, Leonie Rosenberger¹, Fernando Lillo-Vera¹, Mónica Kurte¹, Dario Donoso Meneses¹, Yessia Hidalgo^{1,2,3}, Aliosha I. Figueroa-Valdes^{1,2,3}, Francisca Alcayaga^{1,2,3}. ¹Laboratorio de Medicina Nano-regenerativa, CiiB, Universidad de los Andes, Santiago, Chile. ²IMPACT, Center of Interventional Medicine for Precision and Advanced Cellular Therapy, Chile. ³Cells for Cells, Chile.
- 231 DIFFERENTIAL SUSCEPTIBILITY TO WNT/B-CATENIN SIGNALING ACTIVATION IN AGING-PRONE AND DISTAL SKELETAL MUSCLES. Ian Torres-Sanhueza**, Jessica Mella, Juan Pablo Henríquez*. Neuromuscular Studies Laboratory (NeSt Lab), GDeP, Facultad de Ciencias Biológicas, Universidad de Concepción, Concepción, Chile. *jhenriquez@udec.cl
- 232 IN SILICO ANALYSIS OF TUMORIGENIC LACTADHERIN-RELATED PROTEOME LOADED ON EVS SECRETED BY BREAST CANCER CELL LINES. Cesar Trigo**¹, Lorena Lobos-González^{1,2}. ¹Centro de Medicina Regenerativa, Instituto de Ciencias e Innovación en Medicina, Clínica Alemana Universidad del Desarrollo. ²Advanced Center for Chronic Diseases, ACCDiS. (Sponsor: M. Ezquer).
- 233 c-Abi ROLE IN OLIGODENDROCYTE DIFFERENTIATION IN NIEMANN PICK TYPE C DISEASE. Daniela Urrutia**^{1,2}, Esteban Loyola¹, Silvana Zanlungo², Alejandra Álvarez¹. ¹Cell Signaling Laboratory. Department of Cellular and Molecular Biology, Faculty of Biological Sciences, Millennium Institute on Immunology and Immunotherapy, Pontificia Universidad Católica de Chile, Chile. ²Gastroenterology Department, Faculty of Medicine, Pontificia Universidad Católica de Chile.
- 234 HIGH GLUCOSE INCREASES THE ACTIVITY OF CONNEXIN HEMICHANNELS, PROMOTING THE ACQUISITION OF ADIPOGENIC COMMITMENT OF MYOBLASTS. Walter Vásquez**¹, Luis A. Cea², Juan C. Sáez³. ¹Pontificia Universidad Católica de Chile. ²Instituto de Ciencias biomédicas, Universidad Autónoma de Chile. ³Centro interdisciplinario de neurociencias de Valparaíso, Universidad de Valparaíso.
- 235 DISULFIDE STRESS: A NOVEL TYPE OF CELL DEATH CYSTINE/NADPH-DEPENDENT, AS A TREATMENT FOR CASTRATION-RESISTANT PROSTATE CANCER. Matías Vera**^{1,5}, María José Barahona^{1,2}, Iván González³, Francisco Nualart^{1,2}, Brent R. Stockwell⁴, Estefanía Nova-Lamperti⁵ and Luciano Ferrada¹. ¹CMA-BIOBIO, Facultad de Ciencias Biológicas. ²Laboratorio de Neurobiología y Células Madre, Neuro-CellT, Facultad de Ciencias Biológicas. ³Laboratorio de Biotecnología y Biofármacos, Facultad de Ciencias Biológicas. ⁴Department of Chemistry, Columbia University, New York, USA. ⁵Laboratorio de Inmunología Molecular & Translacional, Facultad de Farmacia. Universidad de Concepción, Chile.

- 236 lncRNA MNX1-AS1 IS POSITIVELY ASSOCIATED WITH RESPONSIVENESS TO CARBOPLATIN IN OVARIAN CANCER CELL LINES.** Tamara Viscarra^{1*}, Kurt Buchegger², Daniela León¹, Yuselin Mora¹, Ramón Silva³, Priscilla Brebi¹, Carmen Illi^{1*}. ¹Millennium Institute on Immunology and Immunotherapy. Laboratory of Integrative Biology, CEMT-BIOREN, Universidad de La Frontera. ²Departamento de Ciencias Básicas, Facultad de Medicina, Universidad de La Frontera. ³Instituto de Ciencias Biomédicas, Facultad de Ciencias de la Salud, Universidad Autónoma de Chile. *Corresponding authors.
- 237 MEMBRANE-INITIATED CORTISOL ACTION DIFFERENTIALLY REGULATE OSMOREGULATION-RELATED GENES IN GILLS AND SKELETAL MUSCLE OF RAINBOW TROUT (ONCORHYNCHUS MYKISS).** Rodrigo Zuloaga^{1,2}, Jorge Aedo^{1,2}, Daniela Aravena-Canales^{1,2}, Alfredo Molina^{1,2}, Juan Antonio Valdés^{1,2}. ¹Laboratorio de Biotecnología Molecular, Facultad de Ciencias de la Vida, Universidad Andres Bello. ²Interdisciplinary Center for Aquaculture Research (INCAR), Universidad de Concepción.
- 238 CDK5: A POSSIBLE MODULATOR OF GLYCINE RECEPTORS IN CHRONIC PAIN.** V. Pérez^{1,2}, G. Gonzalez^{1,2}, C.O. Lara^{1,2}, A. Sazo^{1,2}, O. Contreras^{1,2}, A.M. Marileo^{1,2}, V.P. San Martín^{1,2}, C.F. Burgos¹, F. Bustos³, E. Utreras⁴, G.E. Yévenes^{1,2}. ¹Department of Physiology, Universidad de Concepción, Chile. ²Millennium Nucleus for the Study of Pain (MiNuSPain), Chile. ³Institute of Biomedical Sciences, Andres Bello University, Chile. ⁴Faculty of Science, Universidad de Chile, Chile.

13:00 – 14:30 Lunch

14:45 – 16:00 YOUNG SCIENTIST AWARD - GRUPO BIOS AND SBCCH
Volcanes Room
Chair: Lorena Varela-Nallar, SBCCH President

TODAY'S SCIENCE FICTION/TOMORROW'S SCIENCE: MOVING FROM ENDOSYMBIOTIC THEORY TO MITOCHONDRIAL THERAPY. Maroun Khoury, Universidad de los Andes

16:00 – 17:30 POSTER VIEWING SESSION III (160-238)
Convention Center Foyer

17:30 – 18:30 TECHNICAL LECTURE IV: BECTON & DICKINSON
Volcanes Room

SINGLE CELL MULTIOMICS: DEL ANALISIS CELULAR AL ANALISIS GENÓMICO. Paz Alejandra Reyes, Especialista de Aplicaciones Clínicas, BD.

18:30 – 19:30 CLOSING PLENARY LECTURE “SOCIEDAD DE BIOLOGIA CELULAR DE CHILE”
Volcanes Room
Chair: Lorena Varela-Nallar, SBCCH President

TRAVESIA AL INFRAMUNDO: EXPLORANDO LA BIOLOGIA DE LA FOSA DE ATACAMA. Oswaldo Ulloa, Universidad de Concepción.

19:30 – 20.30 AWARDS CEREMONY
Volcanes Room
BEST IMAGES IN CELL BIOLOGY BY NIKON & LONCOTEC

BEST ORAL PRE AND POSTGRADUATE COMMUNICATIONS BY
GENEXPRESS

20:30 Dinner