

CHILEAN SOCIETY FOR CELL BIOLOGY

XXIX ANNUAL MEETING

October, 25 – 29, 2015

Puerto Varas, Chile

SPONSORS

FUNDACION CHILENA PARA BIOLOGIA CELULAR

FUNDACION CIENCIA & VIDA

ADVANCED CENTER FOR CHRONIC DISEASES

CENTRO DE REGULACION DEL GENOMA

INSTITUTO MILENIO BNI

MILLENNIUM NUCLEUS FOR REGENERATIVE BIOLOGY

NETWORK FOR METABOLIC STRESS SIGNALLING

P. UNIVERSIDAD CATOLICA DE CHILE

UNIVERSIDAD DE CONCEPCION

EXHIBITORS

ALATHEIA MEDICAL – ANDES IMPORT – ARQUIMED

BIOSCHILE – BIOSONDA – CIENTEC – FERMELO

GALENICA – GENEXPRESS – IB INMUNOBIOMEDICA

LABTEC – LIFE TECHNOLOGIES CHILE – LONCOTEC

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

**OCTOBER, 25-29, 2015
PUERTO VARAS**

P R O G R A M

SUNDAY, OCTOBER 25, 2015

09:00 – 13:30 Registration
Convention Center Foyer

11:30 – 12:30 Technical Lectures – Calbuco Room
Nanostring – Bioschile
Multiplexed Multiomics
Michael Rhodes, Director of Applications Development at Nanostring.

13:00 – 14:30 Lunch

14:30 – 16:00 Inauguration
Volcanes Room
Chair: Andres Couve, SBCCH President, Universidad de Chile

PLENARY LECTURE
“LUIS IZQUIERDO FERNANDEZ”
Language: Spanish
Chilean Society for Cell Biology
Chair: Agustin Martinez, Universidad de Valparaiso

CONNEXIN- AND PANNEXIN-BASED CHANNELS IN DIFFERENT BIOLOGICAL SYSTEMS: FROM FUNDAMENTAL TO APPLIED SCIENCE. Juan C. Saez. Departamento de Fisiología, Pontificia Universidad Católica de Chile, Santiago-Chile and Instituto Milenio, Centro Interdisciplinario de Neurociencias de Valparaíso, Valparaíso, Chile.

16:00 – 16:30 Coffee Break – Exhibitors
Convention Center Foyer

16:30 – 18:30 SYMPOSIUM “STEMNESS-RELATED SIGNALING PATHWAYS IN CANCER”
Calbuco Room
Chair: Veronica Palma, Universidad de Chile

INTERPLAY BETWEEN HEDGEHOG SIGNALING AND SOX2 IN MELANOMA STEM CELLS. Silvia Pietrobono, Barbara Stecca. Laboratory of Tumor Cell Biology, Core Research Laboratory - Istituto Toscano Tumori, Florence, Italy.

REGULATION OF CANCER STEM CELLS BY THE TUMOR MICROENVIRONMENT. Toshihiko Tanno, Qiuju Wang, Zeshaan Rasheed, and William Matsui. Sidney Kimmel Comprehensive Cancer Center, Johns Hopkins University School of Medicine, Baltimore, Maryland, USA.

MODELING PEDIATRIC NEURAL CANCERS IN HUMAN STEM CELLS. Huang M, McHenry LK, Miller M, Moriarity BS, Miyaoka Y, Taylor, MD, Conklin BR, Largaespada DA, Matthay KK, Weiss WA. University of California, San Francisco, CA, USA.

A DRUGGABLE GENOME SCREEN OF MEDULLOBLASTOMA PATIENTS IDENTIFIES NEW THERAPEUTIC TARGET. Laura Genovesi¹, Marc Remke², Michael Taylor², Nancy Jenkins³, Neal Copeland³, Michelle Sangar-Cook⁴, Jim Olson⁴ and **Brandon Wainwright**¹. ¹Institute for Molecular Bioscience, The University of Queensland, Brisbane, Australia. ²Department of Neurosurgery, The Hospital for Sick Children, Toronto, Canada. ³Houston Methodist Research Institute, Houston, Texas, USA. ⁴Fred Hutchinson Cancer Research Center, Seattle, Washington, USA.

SYMPOSIUM “VASCULAR DEVELOPMENT AND FUNCTION”

Tronador Room

Chair: Francisca Bronfman, P. Universidad Catolica de Chile

DECODING THE MOLECULAR CUES THAT REGULATE HSC SPECIFICATION. Isao Kobayashi, Albert D. Kim, Chase Melick, Raquel Espin Palazon, Wilson K. Clements, Jingjing Sun, and **David Traver**. Department of Cellular and Molecular Medicine, Section of Cell and Developmental Biology, University of California at San Diego, 9500 Gilman Dr., La Jolla, CA 92093-0380.

CHEMOKINE SIGNALING GUIDES ARTERIAL-VEIN NETWORK FORMATION DURING ZEBRAFISH TISSUE REGENERATION. Cong Xu¹, Sana S. Hasan¹, Inga Schmidt¹, Susana F. Rocha¹, Mara E. Pitulescu¹, Jeroen Bussmann², Dana Meyen³, Erez Raz³, Ralf H. Adams¹ and **Arndt F. Siekmann**¹. ¹MPI for Molecular Biomedicine, Münster, Germany. ²Faculty of Science, Leiden Institute of Chemistry, Leiden, Netherlands. ³Institute of Cell Biology, ZMBE, Münster, Germany.

ZEBRAFISH HEMATOGENESIS DEVELOPMENT AND FUNCTION. Grace S. L. Teo², Ricardo Figueroa³, Mehmet F. Yanik¹, Jeffrey M. Karp², and **Julio D. Amigo**^{1,3}. ¹Department of Electrical Engineering and Computer Science, MIT, Cambridge, USA. ²Harvard-MIT Health Sciences & Technologies. ³Fac. Biological Sciences, Department of Physiology, PUC, Santiago, Chile.

CONTROL OF NEUROVASCULAR COUPLING BY ASTROCYTIC NITRIC OXIDE (NO) PRODUCTION. Mariela Puebla, Manuel F. Muñoz and **Xavier F. Figueroa**. Departamento de Fisiología, Facultad de Ciencias Biológicas, Pontificia Universidad Católica de Chile, Santiago, Chile.

18:45 – 20:15 Oral Presentations I

Volcanes Room

Chairs: Andrés Couve, SBCCH President, Universidad de Chile

Marcela Torrejon, Universidad de Concepcion

18:45 Cell type-specific requirements for highly efficient and synchronous reprogramming to pluripotency. **Simon Vidal**, Bishma Amlani, Taotao Chen, Aristotelis Tsirigos and Matthias Stadtfeld. Skirball Institute, NYU School of Medicine, USA.

19:00 Arc protein and AMPA receptor change their expression and subcellular distribution under Herpes Simplex Virus type 1 neuronal infection. **Francisca**

Acuña-Hinrichsen¹, Mariela Muñoz¹, Luis Leyton¹, Patricia Burgos², Margarita Concha³, Carola Otth¹. ¹Instituto de Microbiología Clínica, ²Instituto de Fisiología and ³Instituto de Bioquímica y Microbiología, Universidad Austral de Chile.

19:15 Tcf4 transcription factor is down-regulated by TGF-β in progenitor mesenchymal cells. Osvaldo Contreras and Enrique Brandan. CARE Chile-UC, Department of Cell and Molecular Biology, Faculty of Biological Sciences, Pontificia Universidad Católica de Chile, Santiago, Chile.

19:30 Astrocytes and muscles expressing ALS-causing genes trigger motoneuron neurodegeneration through the release of a toxic factor(s). Pablo Martínez¹, Mónica Silva³, Sebastián Abarzúa¹, Florencia Tevy², Enrique Jaimovich³, Brigitte van Zundert¹. ¹Universidad Andrés Bello. ²Universidad Mayor. ³Universidad de Chile. martinezc.pabloa@gmail.com

19:45 Hypoxia activates Rab5 leading to migration, invasion and metastasis of tumor cells. Patricio Silva¹, Pablo Mendoza¹, Solange Rivas¹, Carolina Moraga¹, Jorge Díaz^{1,2}, Andrew F.G. Quest² and Vicente A. Torres^{1,2}. ¹Institute for Research in Dental Science, Faculty of Dentistry, Universidad de Chile. ²Advanced Center for Chronic Diseases (ACCDIS).

20:00 Ric-8A/Gα13 signaling pathway is required to proper cranial neural crest migration in *Xenopus*. Toro-Tapia G.^{1,2}, Rodríguez M.¹, Beyer A.¹, Villaseca S.¹, Marcellini S.¹, Mayor R.², Torrejón M.¹. ¹Departamento de Bioquímica y Biología Molecular, Universidad de Concepción, Chile. ²Department of Cell and Developmental Biology, University College London, UK.

20:15 Dinner

**22:00 – 23:30 PLENARY LECTURE
“FEDERICO LEIGHTON PUGA”**

Volcanes Room

Chair: Pablo Valenzuela, Fundacion Ciencia & Vida

FROM PROTEIN FOLDING TO COGNITION: THE SERENDIPITOUS PATH OF DISCOVERY. Peter Walter. University of California at San Francisco and Howard Hughes Medical Institute.

MONDAY, OCTOBER 26, 2015

08:00 Poster Mounting Session I: N° 1 to N° 87
Convention Center Foyer

09:00 – 10:30 Oral Presentations II
Volcanes Room

Chairs: Gareth Owen, P. Universidad Catolica de Chile
Alvaro Elorza, Universidad Andrés Bello

09:00 Role of selective autophagic pathways on tau clearance. **Caballero, B.** Diaz-Carretero, A. Wang, C. Gan, L. Cuervo, AM. Department of Developmental and Molecular Biology & Institute for Aging Research, Albert Einstein College of Medicine, NY, USA. Gladstone Institute of Neurological Disease, University of California, San Francisco, USA.

09:15 Downregulation of Neogenin-1 correlates with basal cell carcinoma aggressiveness and progression. **Casas B.**¹, Adolphe C.², Wainwright B.² & Palma V.¹. ¹CTYBD Laboratory, FONDAP CGR, University of Chile, Chile. ²IMB, The University of Queensland, Australia.

09:30 Standardization of an *in vitro* assay of vasculogenic mimicry. **Racordon, D.**^{1,4}, Erices, R.^{1,3}, Valdivia, A.^{1,4}, Corvalan AH^{2,3,4}, Sáez JC¹ & Owen GI I.^{1,3,4}. ¹Facultad de Ciencias Biológicas, ²Facultad de Medicina, ³Centro UC Investigacion en Oncología, Pontificia Universidad Católica de Chile & ⁴Advanced Center of Chronic Diseases (ACCDiS).

09:45 The p75NTR neurotrophin receptor regulates the maintenance of the neuromuscular junction. **Viviana Pérez**¹, Francisca Bronfman², Margarita Calvo², Felipe Court², Claudio Cabello-Verrugio³, Ariel Ionescu⁴, Eran Perlson⁴, Paulina Villegas⁵, Juan Pablo Henríquez¹. ¹Department of Cell Biology, ⁵Clinical Veterinary, ^{1,5}University of Concepcion; ²P. Catholic University; ^{1,2}MINREB; ³Universidad Andres Bello; ⁴Tel Aviv University, Israel.

10:00 D-propranolol inhibits autophagy flux, angiogenesis and tumoral growth of cervix cancerous (HeLa) cells overexpressing the EGFR. **Ronan Shaughnessy**^{1,2}, Javier Cerda³, Patricia Burgos⁴, Viviana Montecinos³, Alfonso González^{1,2}. Departamento de Inmunología Clínica y Reumatología¹, Departamento de Hematología-Oncología³, Facultad Medicina. Pontificia Universidad Católica de Chile. Departamento de Fisiología, Universidad Austral, Valdivia⁴.

10:15 Mitochondrial fission exacerbation disrupts terminal erythroid differentiation in human hematopoietic stem cells. **Alvaro M. Gonzalez**^{1,2}, German I. Pua^{1,2} and Alvaro A. Elorza^{1,2}. ¹Center for Biomedical Research, Universidad Andres Bello. ²Millennium Institute of Immunology and Immunotherapy, Santiago, Chile.

10:30 – 13:00 Schools and Science: Students from South of Chile
at the Chilean Society for Cell Biology
Maullin Room

10:30 – 12:30 Poster Viewing Session I: 1-87 Odd Numbers

Convention Center Foyer

Coordinators: Marcela Bravo, P. Universidad Catolica de Chile

Teresa Caprile, Universidad de Concepcion

Oliver Schmachtenberg, Universidad de Valparaiso

Rodolfo Paredes, Universidad Andres Bello

- 1. The angiotensin-(1-7)/Mas axis prevent the atrophic effect induced by TGF- β 1 in skeletal muscle cells.** Ábrigo, J.^{1,3}, Rivera, JC.^{1,3}, Simon, F.^{2,3}, Cabello-Verrugio, C.^{1,3}.
¹Laboratorio de Biología y Fisiopatología Molecular. ²Laboratorio de Fisiología Integrativa. Facultad de Ciencias Biológicas, Universidad Andrés Bello, Santiago, Chile. ³Millennium Institute on Immunology and Immunotherapy, Santiago, Chile. claudio.cabello@unab.cl
- 3. Low pH as trigger for Andes hantavirus fusion activation.** Rodrigo Acuña¹, Roberta Mancini², Piere Yves-Lozach³ and Nicole Tischler^{1,4}. ¹Laboratorio de Virología Molecular, Fundación Ciencia & Vida, ²Institute of Biochemistry, ETH Zurich, Switzerland, ³Department of Infectious Disease, Virologie, University Hospital Heidelberg, Germany, ⁴Facultad de Ciencias Biológicas, Universidad Andres Bello. ntischler@cienciavida.org
- 5. Identification and characteristics of nitric oxide synthesizing bipolar cells.** Adolfo Agurto, Alex Vielma, Oliver Schmachtenberg. Centro Interdisciplinario de Neurociencia de Valparaíso, Valparaíso, Chile.
- 7. Menstrual derived mesenchymal stem cells exosomes counter the pro-angiogenic effect of prostate cancer cells.** Francisca Alcayaga-Miranda^{1,2}, Paz Gonzalez^{1,2}, Alejandra Lopez-Verrilli² and Maroun Khoury^{1,2,3}. ¹Laboratory of Nano-Regenerative Medicine, Faculty of Medicine, Universidad de Los Andes, Santiago, Chile. ²Cells for Cells, Santiago, Chile. ³Consortio Regenero, Santiago, Chile. (Sponsor: U. Wyneken).
- 9. Cellular mechanisms of spinal cord regeneration in zebrafish larvae.** Consuelo Anguita, Mario Sánchez and Miguel L. Allende. FONDAP Center for Genome Regulation, Facultad de Ciencias, Universidad de Chile. c.anguitasalin@ gmail.com; allende@uchile.cl
- 11. Coagulation Factor Xa increases cancer growth and metastasis.** Arce M^{1,7}, Lange S¹, Erices R¹, Valenzuela R¹, Velasquez E^{1,3}, Oliva B¹, Ramirez C¹, Kalergis AM^{1,5}, Lobos L^{4,5}, Quest AF^{2,6,7}, Owen GI^{1,6,7}. ¹Facultad de Ciencias Biológicas, Pontificia Universidad Católica de Chile. ²Facultad de Medicina, Universidad de Chile. ³Comisión Chilena de Energía Nuclear, ⁴Fundacion Ciencia & Vida, ⁵Millennium Institute on Immunology and Immunotherapy. ⁶Centro UC Investigación en Oncología. ⁷Centro de Estudios Avanzados de Enfermedades Crónicas (ACCDIS). max.arce.arata@gmail.com
- 13. Identification of differential molecular features distinguishing asian from non-asian gastric tumors.** Rocío Artigas^{1,2}, Ignacio Wichmann^{1,2}, Alejandro Corvalán^{1,2}. ¹MicroRNA and Inflammation Core, Advanced Center for Chronic Diseases, ACCDis. ²Center of Investigative Oncology, Pontificia Universidad Católica de Chile.
- 15. Role of pro-inflammatory cytokines in the endoplasmic reticulum associated-protein degradation in Sjögren's syndrome patients.** Barrera MJ, Aguilera S, Castro I, Cortés J, Urzúa U, González S, Molina C, Leyton C and González MJ. ICBM-Facultad de Medicina-Universidad de Chile. mariajosebarrera@ug.uchile.cl
- 17. Discovery of novel anti-osteoclastogenic small molecules.** Belmar S, Stack K, Alfaro IE. ¹Fundacion Ciencia & Vida, Chile. alfobioq@gmail.com (Sponsor: P. Valenzuela).
- 19. Chromatin remodelers HELLS and UHRF1 mediate the epigenetic deregulation of genes that drive retinoblastoma tumor progression.** Claudia Benavente and Michael Dyer. University of California, Irvine and St Jude Children's Research Hospital. Claudia.benavente@uci.edu (Sponsor: P. Smith).
- 21. Fixing dipole moment: A new collective variable for MD simulations.** Alejandro Bernardin, Yerko Escalona, José A. Gárate and Tomas Perez-Acle. Computational Biology

Lab (Dlab), Fundación Ciencia & Vida. Centro Interdisciplinario de Neurociencia de Valparaíso, CINV, Universidad de Valparaíso. abernardin@dlab.cl (Sponsor: M. Roseblatt).

23. **The heterotrimeric G-protein GEF Ric-8A is involved in the migration of motoneuron-like cells and fibroblasts migration.** **Bever, A.**, Henríquez, J., Torrejón, M. Laboratory of Signaling and Development, Department of Biochemistry and Molecular Biology, Faculty of Biological Sciences, University of Concepción. abeyer@udec.cl
25. **In human mammary fibroblast long-term glucose exposure favors myo-differentiation and the expression of the IL-1 β receptor.** **Bidegain A.**, Molina J., Kallens V., Tobar N. and Martínez J. Laboratorio de Biología Celular, INTA, Universidad de Chile. abidegain@ug.uchile.cl
27. **Targeted inhibition of ASnc mtRNA promote apoptosis and inhibit tumorigenic properties in genitourinary cancer *in vitro* and *in vivo*.** Borgna, V¹., Lobos-Gonzalez, L¹., Silva, V¹., Araya, M¹., Rivas, A¹., Ávila, R¹., López, C¹., Socias, T¹., Burzio, V^{1,2}., Burzio, L.O^{1,2} and **Villegas, J**^{1,2}. ¹Andes Biotechnologies SpA.; Fundación Ciencia & Vida, Av. Zañartu 1482. ²Facultad de Ciencias Biológicas, Universidad Andrés Bello, República 252. jvillegas@bioschile.cl (Sponsor: P. Valenzuela).
29. **Personalizing patient drug response and metabolism in ovarian cancer.** **M.L. Bravo**^{1,8}, E. Cumsille^{1,8}, P. González^{1,9}, S. Kato^{1,8}, C. Ibañez¹, M. Garrido¹, J. Brañes¹, M.I. Barriga², E. Bustamante³, C. Alonso⁴, L. Muñoz⁴, E. Bravo⁴, J. Cartagena⁴, C. Arab⁵, N. Barrena³, P. Jimenez³, P. Gayan⁶, F. Gonzalez⁶, I. Chavez⁶, A. Aguilar⁷, J. Pinto⁷, M.A Cuello¹, G. I. Owen^{1,8}. ¹Pontificia Universidad Católica de Chile, Hospitales: ²Sotero del Rio, ³Fundación Arturo López Pérez, ⁴Gustavo Fricke, ⁵Luis Tisné, ⁶Instituto Nacional del Cáncer, ⁷Oncosalud AUNA, Perú, & ⁸Biomedical Research Consortium of Chile. mlbravo@uc.cl
31. **BDNF increases RyR2 expression through Ca²⁺ and ROS signaling and induces Nrf2 translocation in hippocampal neurons.** **Bruna B.**, ¹Galáz JL, ¹Lobos P, ^{1,2}Hidalgo C, ^{1,3}Paula-Lima AC & ¹Adasme T. ¹BNI, ²CEMC and ICBM, F. Medicina, ³ICOD, F. Odontología, Universidad de Chile.
33. **Autophagy disruption accumulates amyloidogenic carboxy-terminal fragment β (CTF β): a reinterpretation of the phenotype observed by depletion of TSG101.** González A.¹, Cavieres V.¹, Muñoz V.¹, González I.¹, Yefi C.¹, Bustamante H.¹, Cornejo V.², Hetz C.², DaSilva L.³, Rojas-Fernandez A.⁴, Mardones G.A.¹ and **Burgos P.V.**¹. ¹Laboratory of Cell and Molecular Biology, Faculty of Medicine, Universidad Austral de Chile; ²Department of Cell and Molecular Biology, Ribeirão Preto Medical School, University of São Paulo; ³Faculty of Medicine, Universidad de Chile; ⁴University of Dundee, United Kingdom. alexisgonzalez003@gmail.com
35. ***Ex vivo* and *in vivo* analysis of Nedd4 expression, a new regulator of adult myogenesis.** **Felipe Cabezas M.** and Hugo Olgúin. Depto. Biología Celular y Molecular, Facultad de Ciencias Biológicas, Pontificia Universidad Católica de Chile. holguin@bio.puc.cl
37. **Differential changes in NOX2 distribution among different muscles during aging in mouse.** **Cristian Campos**, Andrea del Campo, Enrique Jaimovich and Alejandra Espinosa. Laboratorio de Fisiología Celular de Músculo, Centro de Estudios Moleculares de la Célula y Departamento de Tecnología Médica, Facultad de Medicina, Universidad de Chile.
39. **The role of PTPRD in neural stem cells during neural development.** **Cancino GI**, Tomita H, Woodard CL, Miller FD, Kaplan DR. Hospital for Sick Children/University of Toronto, Canada.gonzalo.cancino@sickkids.ca (Sponsor: A. Alvarez).
41. **Identification of Atlastin-interacting genes in a *Drosophila melanogaster* model of hereditary spastic paraplegia.** ^{1,3}**Noemi Candia**, ^{1,3}Gerardo Ortiz, ^{1,3}Andrés Ibacache, ^{2,3}Jimena Sierralta, ^{2,3}Andrés Couve and ^{1,3}Patricio Olgúin*. ¹Program of Human Genetics, ICBM, Faculty of Medicine, Universidad de Chile; ²Program of Physiology and Biophysics,

ICBM and ³Biomedical Neuroscience Institute (BNI), Faculty of Medicine, Universidad de Chile. *patricioolguin@med.uchile.cl

43. **Determination of the epigenetic patterns on CRT2 targets genes involve in lymphomagenesis.** Constanza Cárcamo, Ingrid Lagos, David León and Angara Zambrano. Instituto de Bioquímica y Microbiología, Universidad Austral de Chile. Valdivia. constanza.carcamoz@gmail.com
45. **Role of fructose in prostate cancer.** Daniela Carreño¹, Pedro Cisternas², Daniel Silva¹, Edson Reyes¹, Verónica Torres¹, Paula Sotomayor⁴, Viviana Montecinos³, Nivaldo C Inestrosa² and Alejandro S. Godoy^{1,5}. Departments of Physiology¹, Cell Biology², and Hematology-Oncology³, Pontificia Universidad Católica de Chile; CIMIS⁴, Universidad Andrés Bello; Department of Urology⁵, Roswell Park Cancer Institute. dvcarren@uc.cl
47. **Tetrahydropiperin (IDN5706) inhibits mTORC1 by AMPK/Raptor activation.** Juan Caster, Daniela Parada, Carolina Villanueva, Nivaldo C. Inestrosa, Carlos B. Gonzalez. Department of Physiology, Universidad Austral de Chile, Valdivia and Department of Cell and Molecular Biology, CARE Biomedical Research Center Pontificia Universidad Católica de Chile, Santiago. jcaster@alumnos.uach.cl
49. **Functional role of the disulfide isomerase ERp57 in axonal regeneration.** Castillo, V.¹, Oñate, M.^{1,3}, Woehlbier, U.¹ Rozas, P.¹, Mercado, G., Vidal R., Court F.A.^{2,3} and Hetz, C.^{1,2}. ¹Biomedical Neuroscience Institute, Faculty of Medicine, and Center for Molecular Studies of the Cell, University of Chile, ²Neurounion Biomedical Foundation, ³Millennium Nucleus for Regenerative Biology, Faculty of Biology, PUC, Santiago, Chile. chetz@hsph.harvard.edu
51. **A cytokinesis-like process in Schwann cells assists axonal degeneration.** Catenaccio A.¹, Diaz P.¹ and Court, F.A.^{1,2}. ¹Millennium Nucleus in Regenerative Biology, (MINREB), Catholic University of Chile and ²Neurounion Biomedical Foundation. alecatenaccio@gmail.com, fcourt@bio.puc.cl
53. **Survivin and Reprimo expression are mutually exclusive in gastric cancer.** Cerda Paulina, Wichmann Ignacio, Rodríguez Andrés, Fry Jacqueline, Roldán Nicole, Quest Andrew*, Corvalán Alejandro. Oncology Laboratory, ACCDiS, Catholic University of Chile, Santiago, Chile. *Laboratory of Cellular Communication, ACCDiS, University of Chile, Santiago, Chile. paulina.cerda.opazo@gmail.com
55. **Origin of hypothalamic GnRH neurons in adult zebrafish.** Ceriani R and Whitlock K.E. Centro Interdisciplinario de Neurociencia de Valparaíso. CINV. Universidad de Valparaíso. ricardo_ceriani@hotmail.com
57. **Fructose consumption reduces hippocampal synaptic plasticity underlying cognitive performance.** Pedro Cisternas, Paulina Salazar, Carmen Silva-Álvarez and Nivaldo C. Inestrosa. Centro de Envejecimiento y Regeneración (CARE), Facultad de Ciencias Biológicas, P. Universidad Católica de Chile, Santiago, Chile. pcisternas@bio.puc.cl
59. **Expression of a dopamine receptor favors Th1 and Th17 immunity by avoiding Th2 differentiation and impairing regulatory function.** Francisco Contreras, Carolina Prado, Hugo González, Dafne Franz, Francisco Osorio-Barrios, Daniela Elgueta, Alicia Figueroa, Fabiola Osorio, Rodrigo Pacheco. Laboratorio de Neuroinmunología, Fundación Ciencia & Vida, Santiago. crenovich@gmail.com
61. **c-Abl inhibition induces TFEB translocation to the nucleus ameliorating cholesterol accumulation in Niemann-Pick C disease.** Contreras P.S.^{1,2,3}, González-Hódar L.³, Dulcey A.⁴, Marugan J.⁴, Alvarez A.R.^{1,2}, Zanlungo S.³. ¹Laboratorio Señalización Celular, ²CARE-Chile-UC, ³Escuela de Medicina, Pontificia Universidad Católica de Chile, ⁴NCGC, National Institutes of Health, Rockville, USA. prcontre@uc.cl
63. **Effect of Synaptotagmin-I overexpression and TNF- α on exocytic events and Ca²⁺ signaling in 3D-acini.** J. Cortés, J. Hidalgo, S. Aguilera, V. Bahamondes, H. Urra, M.J.

- Barrera, I. Castro, S. González, C. Molina, C. Leyton, U. Urzúa and M.J. González. ICBM-Facultad de Medicina-Universidad de Chile. cortesjf@ciq.uchile.cl
65. **Identifying how *BiP1* mRNA is uniquely stabilized after losing its polyA tail by Ire1 cleavage in *S. pombe*.** Kelly J. Crotty¹, Clarence Yu Cheng², Wipapat Kladwang², Rhiju Das², Peter Walter¹. ¹University of California, San Francisco; ²Stanford University, Stanford.Kelly@walterlab.ucsf.edu
 67. **MicroRNA profiling of B cell subsets from systemic lupus erythematosus patients reveals promising novel biomarkers.** Jimena Cuenca^{1,2,4}, Isabelle Duroux-Richard³, Clara Ponsolles^{1,2}, Fernando Figueroa¹, Florence Apparailly³, Maroun Khoury^{1,2,4}. ¹Laboratory of Nano-Regenerative Medicine, Faculty of Medicine, Universidad de Los Andes, Santiago, Chile. ²Cells for Cells, Santiago, Chile. ³INSERM, U1183, Institute of Regenerative Medicine and Biotherapy, University Hospital Saint Eloi, Montpellier 34295, France. ⁴Consortio Regenero, Santiago, Chile. (Sponsor: U. Wyneken).
 69. **Discovery of neuroprotective small molecules that induce alpha-synuclein degradation and activate lysosomal-dependent degradation.** Delgado L¹, De la Cruz J¹, Olivares F¹, Stack K¹, Cerda C¹, Díaz-Carretero J², Cuervo AM², Alfaro IE¹. ¹Fundacion Ciencia & Vida, Chile; ²Albert Einstein Col. of Med., New York, NY. ialfaro@medivation.cl (Sponsor: P. Valenzuela).
 71. **Trafficking of voltage-gated sodium channels in peripheral injured axons.** Macarena Díaz-Ubilla^{1,2}, Carolina González^{1,2}, Jorge Toledo^{1,2}, José Cánovas^{1,2}, Tomás Aguirre^{1,2}, Felipe Court³ and Andrés Couve^{1,2}. ¹Physiology and Biophysics, ICBM and ²Biomedical Neuroscience Institute (BNI), Faculty of Medicine, Universidad de Chile. ³Faculty of Biological Sciences, Pontificia Universidad Católica de Chile. macadu@ug.uchile.com
 73. **Development of methodology for establishing the embryonic cerebrospinal fluid dynamics.** Recabal A., Saldivia N., Montecinos H., Caprile T. Laboratory of Axon Guidance, Department of Cellular Biology, Faculty of Biological Sciences, University of Concepción. antorecabal@udec.cl
 75. **Lipopolysaccharide-induces epithelial-mesenchymal transition in urothelial bladder cells.** Cesar Echeverría^{1,2}, Valentina Romero¹, Alfredo Sagredo², Eduardo Sagredo², Ignacio Montorfano¹, Felipe Simon³ and Ricardo Armisen^{2,4,5}. ¹Universidad Bernardo O'Higgins, Laboratorio de Bionanotecnología, General Gana 1780, Santiago, Chile, ²Centro de Investigación y Tratamiento del Cancer, Facultad de Medicina, Universidad de Chile, Chile, ³Laboratorio de Fisiopatología Integrativa, Departamento de Ciencias Biológicas, Facultad de Ciencias Biológicas and Facultad de Medicina, Universidad Andres Bello, Santiago, Chile. cesar.echeverria@ubo.cl
 77. **β -arrestin functions independent of its activating GPCR to 'arrest' endocytosis and drive MAP kinase signaling.** K. Eichel¹, D. Jullié² and M. von Zastrow^{2,3}. ¹Program in Biochemistry and Molecular Biology, ²Department of Psychiatry, ³Department of Cellular & Molecular Pharmacology, University of California, San Francisco CA 94158. kelsie.eichel@ucsf.edu
 79. **Metformin inhibit the effect of platelets on promotion of ovarian cancer cells.** Erices R^{1,2}, Cubillos S¹, Ramírez C¹, González P¹, Bravo M.L¹, Kato S², Cuello M.A², Owen G.I^{1,3}. ¹Facultad de Ciencias Biológicas, ²Facultad de Medicina & ³Centro UC: Investigacion en Oncología, Pontificia Universidad Católica de Chile. raerices@uc.cl
 81. **Lymphatic-associated obesity in *Prox1* heterozygous mice is rescued by *Prox1* gain of function.** Noelia Escobedo¹, Steven Proulx², Sinem Karaman², Miriam Dillard¹, Nicole Johnson¹, Michael Detmar² and Guillermo Oliver¹. ¹Department of Genetics, St. Jude Children's Research Hospital, Memphis, USA; ²Institute of Pharmaceutical Sciences, Swiss Federal Institute of Technology-ETH Zurich, Switzerland. noeliaescobedo@gmail.com (Sponsor: C. Cabello).

83. **Neuronal surface P antigen: A potential ubiquitin ligase that regulates NMDAR function.** S. Espinoza^{1,2}, F. Segovia-Miranda^{1,2}, F. Serrano², M. Bravo-Zehnder^{1,2}, L. Massardo¹, N. Inestrosa², A. González^{1,2}. ¹Departamento de Inmunología Clínica y Reumatología, Facultad de Medicina. ²Centro de Envejecimiento y Regeneración (CARE), Facultad Ciencias Biológicas, Pontificia Universidad Católica de Chile, Santiago, Chile. csespino@gmail.com
85. **The stem cell factor Lin28 regulates the metamorphosis of *Xenopus*.** Faunes, F., Guzmán, D., Bruno, R., Larraín, J. Center for Aging and Regeneration, Millennium Nucleus in Regenerative Biology, Faculty of Biological Sciences, P. Universidad Católica de Chile, Santiago, Chile. ffaunes@bio.puc.cl
87. **Vasopressin activates mammalian target of Rapamycin (mTOR) by ERK phosphorylation in A-10 cells cultured in high glucose.** Nicole Flores-Ponce, Carolina I. Villanueva, Tamara Sotelo and Carlos B. González. Department of Physiology, Faculty of Medicine, Universidad Austral de Chile, Valdivia. n.floresponce@gmail.com

12:45 – 14:15 Lunch

14:15 – 16:15 **SYMPOSIUM “MICROBES AND CANCER”**

Calbuco Room

Chair: Andrew Quest, Universidad de Chile

GASTRIC MICROBIOME IN HUMAN POPULATIONS COLONIZED OR NOT WITH *Helicobacter pylori*. Perez Perez GI. New York University Langone Medical Center, Department of Microbiology, New York, USA.

***Helicobacter pylori* INDUCED LOSS OF SURVIVIN AND GASTRIC CELL VIABILITY IS LINKED TO BACTERIAL SECRETION OF GAMMA GLUTAMYL TRANSPEPTIDASE.** Valenzuela M¹, Bravo D^{1,4}, Canales J¹, Corvalan, A², Toledo H³, Quest AFG¹. ¹Center for Molecular Studies of the Cell (CEMC), Advanced Center for Chronic Diseases (ACCDiS), Facultad de Medicina, Universidad de Chile. ²Advanced Center for Chronic Diseases (ACCDiS), Facultad de Medicina Pontificia Universidad Católica de Chile. ³Laboratorio de Microbiología Molecular, Programa de Biología Celular y Molecular, Instituto de Ciencias Biomédicas, Facultad de Medicina, Universidad de Chile. ⁴Laboratorio de Microbiología Oral, Departamento de Patología, Facultad de Odontología, Universidad de Chile.

HUMAN PAPILLOMAVIRUS INFECTION IN HEAD AND NECK CARCINOGENESIS: INTERACTION WITH TOBACCO SMOKE. Aguayo F. Tumor viruses Laboratory, Virology program, Faculty of Medicine, University of Chile.

EPIGENETICS OF HOST PATHOGEN INTERACTIONS IN GASTRIC CANCER. Alejandro H. Corvalan. Oncology Laboratory, Medical Research Center (CIM), Pontificia Universidad Católica de Chile, Santiago, Chile; Advanced Center for Chronic Disease (ACCDiS); UC Center of Investigational Oncology (CITO).

SYMPOSIUM “CELLULAR MECHANISMS FOR IMMUNE RESPONSE”

Tronador Room

Chair: Alvaro Glavic, Universidad de Chile

Ana María Lennon, Instituto Pasteur, France

LYSOSOMES AS A SIGNALING ORGANELLE IN THE CONTROL OF CELL MIGRATION. M. Bretou, M. Maurin, P. Pierobon, D. Lankar, P. Saez, C. Spampanato, E. Terriac, M. Piel, A. Ballabio, P. Vargas, A. Lennon-Duménil. Institut Curie/U932 Inserm 12, rue Lhomond 75005, Paris, France.

CUES AND CLUES GUIDING LEUKOCYTES TO THE INTESTINE. Eduardo J. Villablanca, Karolinska Institutet, Sweden.

IMAGING INFLAMMATION *IN VIVO*: IMPLICATIONS TO HUMAN DISEASE. Anna Huttenlocher, Department of Medical Microbiology and Immunology, University of Wisconsin-Madison, USA.

FISHING FOR INFLAMMATION. Carmen Gloria Feijóo, Laboratorio de Inmunología en Peces, Facultad de Ciencias Biológicas, Universidad Andrés Bello, Santiago, Chile. Interdisciplinary Center for Aquaculture Research (INCAR).

TRANSIENT RECEPTOR POTENTIAL MUCOLIPIN IS INVOLVED IN HEMOCYTE MIGRATION AND PHAGOCYTOSIS IN *Drosophila melanogaster*. Sandra Edwards, Ana-María Lennon¹, Álvaro Glavic. Developmental Biology Laboratory, Centre for Genome Regulation, Faculty of Sciences, Universidad de Chile. ¹Institut Curie, Paris, France.

**16:30 – 17:30 PLENARY LECTURE
“SOCIEDAD DE BIOLOGIA CELULAR DE CHILE”**

Volcanes Room

Chair: Gonzalo Olivares, Universidad de Chile

A CELL-TYPE SPECIFIC TRANSCRIPTIONAL REPRESSOR BLOCKS A PROMISCUOUS ACTIVATOR TO DIRECT SELECTIVE GENE ACTIVATION IN AN ADULT STEM CELL LINEAGE. Margaret T. Fuller, Jongmin Kim, and Shrividhya Srinivasan. Stanford University School of Medicine, USA.

**17:00 – 19:30 Schools and Science: Students from South of Chile
at the Chilean Society for Cell Biology**

Maullin Room

17:30 – 19:30 Poster Viewing Session I: 1-87 Even Numbers

Convention Center Foyer

Coordinators: Marcela Bravo, P. Universidad Católica de Chile

Teresa Caprile, Universidad de Concepción

Oliver Schmachtenberg, Universidad de Valparaíso

Rodolfo Paredes, Universidad Andrés Bello

2. **LSP1 deficient mice have an impaired cytotoxic response after antigen exposure.** Rachel Acland and Gabriel Morón. CIBICI-CONICET, Universidad Nacional de Córdoba, Argentina. rachelacland@yahoo.com.ar
4. **Restoration of vascular connectivity after localized blood vessel damage in larval zebrafish.** Geraldine Aedo¹, Jose T. Egaña², Myra N. Chávez^{1,2} Miguel L. Allende¹. ¹FONDAP Center for Genome Regulation, Facultad de Ciencias, Universidad de Chile, Santiago, Chile. ²Dept. of Plastic and Hand Surgery, University Hospital rechts der Isar, Faculty of Medicine, Technische Universität München, Munich, Germany. allende@uchile.cl; geaedo1988@gmail.com
6. **The histone demethylase LSD1 and the viral protein HBx cooperate to establish an active hepatitis B viral chromatin state.** Valentina Alarcón¹, Francisca Muñoz¹, Francisca Alvarez¹, Yvo Flores¹, Sergio Hernández², Giancarlo De Ferrari², Rodrigo Villanueva², and Alejandra Loyola¹. ¹Fundación Ciencia & Vida, ²Universidad Andrés Bello, Santiago, Chile. valealarcontreras@gmail.com
8. **miRNAs in prostate cancer exosomes modify normal fibroblasts and osteoblasts to favor tumor spread and metastasis.** Eliana Andahur¹, Rodrigo Valenzuela², Enrique Castellón², Christian Ramos¹, Juan Fulla¹, Catherine Sánchez¹. ¹Urology Department, Clínica Las Condes, Chile. ²Faculty of Medicine, University of Chile, Chile. csanchezn@clc.cl (Sponsor: V. Palma).
10. **Leptin induces ovarian cancer cell exosome release that promote a M2 polarization in THP-1-derived macrophages.** Arancibia, C., Abarzúa-Catalán, L., Kato, S., Liberona, F., Cuello, MA. Division Obstetrics and Gynecology, Faculty of Medicine, Pontificia Universidad Católica de Chile, Santiago, Chile. c.arancibia.nunez@gmail.com
12. **Netrin-4/Neogenin-1 signaling complex mediates survival and motility in human neuroblastoma.** Andrea Arros Villanueva, Natalie Espinoza, Luis Solano & Verónica Palma. CTYBD Laboratory, FONDAP Center for Genome Regulation, Universidad de Chile, Chile. andrea.arros.v@gmail.com
14. **In vivo GLUT2 inhibition affects feeding behavior.** Barahona MJ, Llanos P, Elizondo-Vega R, García-Robles MA. Laboratorio de Biología Celular. Facultad de Ciencias Biológicas, Universidad of Concepción, Concepción, Chile. Mariajobarahona@udec.cl
16. **Role of Cx43-hemichannels in electrical alteration induced by *Trypanosoma cruzi* infection.** Iván Barria¹, Yubitza Estay¹, Claudio Silvestre¹, Jorge González², Juan C. Sáez³, and José L. Vega¹. ¹Laboratorio de Fisiología Experimental (EP_{hy}L), ²Departamento de Tecnología Médica, Universidad de Antofagasta, Antofagasta, Chile and ³Departamento de Fisiología, Pontificia Universidad Católica de Chile, Santiago, Chile. ivan.barria.o@gmail.com
18. **Bci a new player involved in SOD1 aggregation.** Beltrán S¹, Nassif M¹, Vicencio E¹, Hetz C², Manque P¹, Woehlbier U¹. ¹Center of Genomics and Bioinformatics, Faculty of Science, Universidad Mayor, Chile. ²Biomedical Neuroscience Institute, University of Chile, Santiago, Chile. patricio.manque@umayor.cl; uwoehlbier@yahoo.de
20. ***Xenopus* as a model system to study the development, maturation and regeneration of the neuromuscular junction.** Francisca Bermedo¹, Jorge Ojeda¹, Emilio Mendez², Gastón Otarola³, Sylvain Marcellini³, Juan Larraín² and Juan Pablo Henríquez^{1*}. ^{1,3}Department of Cell Biology, University of Concepcion, Concepcion; ²Department of Cell and Molecular Biology, P. Catholic University of Chile, Santiago; ^{1,2}MINREB; Chile. *jhenriquez@udec.cl
22. **DLGS97 protein is fundamental for the acquisition of learning in *Drosophila melanogaster*.** Francisca Bertin, Jimena Sierralta. Program of Physiology and Biophysics, ICBM and Biomedical Neuroscience Institute, Faculty of Medicine, Universidad de Chile. panchibertin@gmail.com
24. **Withdraw.**

26. **Cytoskeletal elements function together to move larval P-cell nuclei through constricted spaces.** Courtney R. Bone*, Yu-Tai Chang, Natalie Cain, Shaun Murphy, and Daniel A. Starr. Department of Molecular and Cellular Biology, University of California Davis, Davis, CA 95616. *crbone@ucdavis.edu
28. **Role of Cxcr2 and Gscfr receptors in neutrophil migration in zebrafish.** Bravo-Tello K.; Zúñiga-Traslaviña C., and Feijoo CG. Fish Immunology Laboratory, ¹Facultad Ciencias Biológicas, Universidad Andrés Bello. ²Interdisciplinary Center for Aquaculture Research (INCAR). cfeijoo@unab.cl
30. **Molecular sites for the modulation of the glycine receptor $\alpha 3$ by 2,6-di-tert-butylphenol.** ¹Carlos F. Burgos, ¹Cesar O. Lara, ¹Braulio Muñoz, ²Gustavo Moraga-Cid, ²Pierre-Jean Corringer, ¹Gonzalo E. Yévenes. ¹Department of Physiology, U. Concepción, Chile, ²Institute Pasteur, France. caburgos@udec.cl
32. **Conformation-specific modulation of synaptic $\alpha 3$ -containing glycine receptors alleviates chronic inflammatory pain.** Gonzalo E. Yévenes¹, Mario Acuña², Cesar O. Lara¹, William Ralvenius², Alessandra Di Lio², Hanns U. Zeilhofer². ¹Department of Physiology, University of Concepción, Chile, ²Institute of Pharmacology and Toxicology, University of Zurich, Switzerland. gyevenes@udec.cl
34. **Rab5 activity is required for p75 apoptotic signaling in response to BDNF.** Carolina Cabeza¹, Claudia Escudero¹, Bruce D. Carter², Francisca C Bronfman¹. ¹Faculty of Biological Sciences, Physiology Department, Pontificia Universidad Católica, Santiago, Chile. ²Department of Biochemistry and Vanderbilt Brain Institute, Vanderbilt University Medical School, Nashville, USA. cncabeza@uc.cl
36. **TLR-4 dependent conformations of MD2 of free energy calculations.** Javier Cáceres-Delpiano¹, Tomás Pérez-Acle^{1,2}, José Antonio Garate¹. ¹Computational BiologyLab, Fundación Ciencia y Vida, Santiago, Chile. ²Centro Interdisciplinario de Neurociencias de Valparaíso. Universidad de Valparaíso. Playa Ancha, Valparaíso, Chile. jcaceres@dlab.cl (Sponsor: M. Roseblatt).
38. ***Helicobacter pylori* promotes transient HIF-1 α induction through a PI3K-AKT-mTOR pathway.** Canales J¹, Valenzuela M¹, Bravo D², Toledo H³, Quest AFG¹. ¹Laboratorio de Comunicaciones Celulares, Centro de Estudios Moleculares de la Célula (CEMC), Centro de Estudios Avanzados en Enfermedades Crónicas (ACCDiS), Programa de Biología Celular y Molecular, Instituto de Ciencias Biomédicas (ICBM), Facultad de Medicina, Universidad de Chile. ²Laboratorio de Microbiología Oral, Departamento de Patología y Medicina Oral, Facultad de Odontología, Universidad de Chile. ³Laboratorio de Microbiología Molecular, Programa de Biología Celular y Molecular, Instituto de Ciencias Biomédicas, Facultad de Medicina, Universidad de Chile. jcanales@ciq.uchile.cl
40. **Role of Golgi-based KDEL receptor-dependent signaling on lysosome biogenesis and function.** Jorge Cancino. Departamento de Ciencias Biológicas, Facultad de Ciencias Biológicas, Universidad Andrés Bello, Viña del Mar, Chile. jorge.cancino@unab.cl (Sponsor: G. Arriagada).
42. **Expression of truncated tau affects synaptic function in cultured neurons.** Claudia Jara O¹, Juan A. Godoy², Nibaldo C. Inestrosa², Gail V.W. Johnson³, and Rodrigo A. Quintanilla¹. ¹Centro de Investigación Biomédica, Universidad Autónoma de Chile, Santiago, Chile. ²CARE, Biomedical Center. Facultad de Ciencias Biológicas, P. Universidad Católica de Chile, Santiago, Chile. ³Department of Anesthesiology, University of Rochester, NY, USA. cjcjarao@gmail.com
44. **Focal adhesion assembly/disassembly in astrocytes is regulated by neuronal Thy-1 through FAK-phosphorylation.** Cárdenas A.^{1,2,3}, Maldonado H.^{1,2,3}, Valdivia A.^{1,3}, Kong M.^{1,3}, Quest AFG.^{1,3}, Leyton L.^{1,2,3}. ¹Cellular Communication Laboratory, Advanced Center for Chronic Diseases (ACCDiS) and ²Biomedical Neuroscience Institute (BNI), ³Institute of

Biomedical Sciences (ICBM), Faculty of Medicine, Universidad de Chile. arelicardenas0@gmail.com

46. **Evaluation of immunostimulant potential of proteoliposomes derived from *Vibrio anguillarum* administered by immersion in zebrafish (*Danio rerio*).** Caruffo M¹, Navarrete P², Feijoo CG³, Sáenz L¹. ¹Laboratorio de Vacunas Veterinarias, Facultad de Ciencias Veterinarias, Universidad de Chile. ²Laboratorio de Microbiología y Probióticos, INTA-Universidad de Chile. ³Laboratorio de Biología del Desarrollo, Facultad de Ciencias Biológicas, Universidad Andrés Bello. mcaruffo@veterinaria.uchile.cl
48. **Reduced HIF1 α transcriptional activity in hypoxia due to Caveolin-1 expression in cancer cells linked to decreased HIF S-nitrosylation.** J. Castillo¹, C. Sanhueza¹, Y. Avalos¹, P. Silva¹, M. I. Diaz¹, A. F. G. Quest¹. ¹Laboratory of Cellular Communication, Center for Molecular Studies of the Cell (CEMC), Advanced Center for Chronic Diseases (ACCDiS), ICBM, Faculty of Medicine, University of Chile. jimencastillo@gmail.com
50. **Altered traffic of Giantin, a resident protein of the Golgi apparatus, in salivary acinar cells of Sjögren's syndrome patients.** I. Castro, S. Aguilera, M.J. Barrera, J. Cortés, S. González, C. Molina, S. Indo, U. Urzúa, C. Leyton, G. Mardones and M.J. González. ICBM-Facultad de Medicina, Universidad de Chile. iv_castro@med.uchile.cl
52. **Role of extracellular lactate on metabolic genes expression in adult skeletal muscle.** Cerda-Kohler H¹, Henríquez-Olguín C.¹, Casas M and Jaimovich E.¹. ¹Centro de Estudios Moleculares de la Célula, Facultad de Medicina, Universidad de Chile, Independencia 1027, Santiago, Chile. hugorck@gmail.com
54. **Role of cancer-associated fibroblasts in the acquisition of metastatic traits of prostate cancer cells.** Javier Cerda-Infante^{1,2}, Camila Brizuela¹, Marianela Sánchez¹, Enrique Brandan² and Viviana P. Montecinos¹. Departments of ¹Hematology-Oncology & ²Cellular and Molecular Biology, Pontificia Universidad Católica de Chile, Santiago, Chile. (Sponsor: F. Nualart).
56. **c-Abl participates in the BDNF/TrkB signaling pathway, regulating the availability of the TrkB receptor in the surface and promoting dendritic arborization in hippocampal neurons.** Chandía-Cristi A^{1,3}, Bronfman F.^{2,3}, Álvarez A.R.^{1,3}. ¹Cell Signaling Lab, Cellular & Molecular Biology, Biological Sciences Faculty, ²Neuronal Cell Biology and Regeneration Lab, Physiological Sciences Faculty, ³CARE Chile-UC, Pontificia Universidad Católica de Chile, Santiago, Chile.
58. **Role of intracellular calcium channels in mitochondrial Ca²⁺ uptake after muscle fiber depolarization: Excitation-metabolism coupling.** Alexis Díaz¹, Alex Cordova^{1,4}, Giovanni Rosales¹, Paola Llanos^{1,3}, Cecilia Hidalgo^{1,2,4}, Manuel Arias¹, Mariana Casas^{1,2}, Enrique Jaimovich^{1,2}, Ariel Contreras-Ferrat^{1,3}. ¹CEMC and ²ICBM, F. Medicina, Universidad de Chile; ³Institute for Research in Dental Science, F. Odontología, Universidad de Chile. ⁴BNI, F. Medicina, Universidad de Chile, Santiago Chile. acontreras@med.uchile.cl
60. **Mitochondrial fusion increases in skeletal muscle fibers from aged-mice.** Ignacio Contreras, Andrea del Campo, Yildy Utreras, Cristian Campos, Mariana Casas, Enrique Jaimovich. Center for Molecular Studies of the Cell, ICBM, Faculty of Medicine, Universidad de Chile, Santiago, Chile. ignacio.contreras.h@gmail.com
62. **A network based method to analyze non-covalent interactions in proteins.** J. Sebastián Contreras-Riquelme¹, Alberto J.M. Martín^{1,2}, Ignacio Fuenzalida¹, Tomas Pérez-Acle^{1,2}. ¹Computational Biology Lab, Fundación Ciencia & Vida. Avda. Zañartu 1482, Ñuñoa, Santiago, Chile. ²Centro Interdisciplinario de Neurociencias de Valparaíso. Universidad de Valparaíso. Playa Ancha, Valparaíso, Chile. scontreras@dlab.cl (Sponsor: M. Roseblatt).
64. **Global analysis of translation at the endoplasmic reticulum in mammalian cells using proximity specific ribosome profiling.** Elizabeth A. Costa, Calvin H. Jan, Jonathan S. Weissman. University of California, San Francisco. Elizabeth. costa@ucsf.edu

66. **Xenotransplantation assays with tumor cell lines in zebrafish.** Carlos Muñoz, Margarita Parada, Salomé Muñoz, Andrea Arros, Verónica Palma, Miguel L Allende. FONDAP Center for Genome Regulation. Universidad de Chile. carlos.eds31@gmail.com
68. **New downstream target genes candidates for the transcription factor *zerknüllt* (*zen*) in the early *D. melanogaster* embryo.** Hanna P., Gutiérrez R., Aravena P., González M. and Cambiazo V. Laboratorio de Bioinformática y Expresión Génica, INTA - Universidad de Chile & Fondap Center for Genome Regulation (CGR). patricia.hanna@gmail.com
70. **Studying brain metabolism in *Drosophila*: Insights through a novel monocarboxylic acid transporter (Chaski) expressed in central nervous system.** María Graciela Delgado^{1,2}, Estefanía López¹, Carlos Oliva¹, Omar Ramírez¹, L. Felipe Barros² and Jimena Sierralta¹. ¹Program of Physiology and Biophysics, ICBM and Biomedical Neuroscience Institute, Faculty of Medicine, Universidad de Chile. ²Centro de Estudios Científicos, Valdivia, Chile. mgdelgado@med.uchile.cl
72. **The selective jumonji H3K27 demethylase inhibitor J4 limits inflammation through dendritic cell modulation.** Cristian Doñas, ¹Macarena Fritz, ¹Macarena Carrasco, ¹Carolina Prado, ²Gabriela Tejón, ²Valeria Manríquez, ¹Rodrigo Pacheco, ²María Rosa Bono, ¹Alejandra Loyola and ¹Mario Roseblatt. ¹Laboratorio de Epigenética y Cromatina, Fundación Ciencia & Vida, Santiago, Chile. ²Departamento de Biología, Facultad de Ciencias, Universidad de Chile. c.donas@gmail.com
74. **The unfolded protein response regulates the accumulation of amyloid beta deposits in experimental model of Alzheimer's disease.** Claudia Duran-Aniotz^{1,2}, Sandra Espinoza^{1,2}, Andrew Foley^{1,2}, Víctor-Hugo Cornejo^{1,2}, Claudio Soto³, Adrian Palacios⁴, Alvaro Ardiles⁴ and Claudio Hetz^{1,2,5}. ¹Biomedical Neuroscience Institute, Faculty of Medicine, University of Chile, ²Center for Molecular Studies of the Cell, Institute of Biomedical Sciences, Faculty of Medicine, University of Chile. ³University of Texas, USA. ⁴University of Valparaiso, Chile, ⁵Neurounion Biomedical Foundation. duran.aniotz@gmail.com and chetz@hsph.harvard.edu
76. **PCC1/PIG-P is required for correct protein translation and development in *Drosophila*.** Cristian Eggers and Alvaro Glavic. Center FONDAP for Genome Regulation, Faculty of Sciences, Universidad de Chile. ceggars@gmail.com
78. **3D high-throughput quantitative phenotyping of zebrafish larvae.** Peter Eimon¹, Carlos Pardo-Martin¹, Amin Allalou¹, Yuelong Wu¹, Mostafa Rezaie¹, Carolina Whälby¹, Julio Amigo^{1,2}, Mehmet Fatih Yanik¹. ¹Department of Electrical Engineering and Computer Science, MIT, Cambridge, USA. ²Fac. Biological Sciences, Department of Physiology, PUC, Santiago, Chile.
80. **Oxidation of vitamin C by oxidative stress induces neuronal death and redistribution of GLUT1 and SVCT2.** Luciano Ferrada, Katterine Salazar, Francisco Nualart. Centro de Microscopía Avanzada, CMA BIOBIO, Laboratorio de Neurobiología y Células Madres, Universidad de Concepción, Concepción, Chile. luferrada@udec.cl
82. **Consequences of four microRNA allele variants associated with the genetic susceptibility to cancer in differential microRNA expression.** Ignasi Torruella-Loran¹, Alicia Gallego¹, Ingrid Balcells¹, Eva García-Ramallo¹, Yolanda Espinosa-Parrilla^{1,2}. ¹IBE, Institute of Evolutionary Biology (Universitat Pompeu Fabra-CSIC), Department of Experimental and Health Sciences, Barcelona, Catalonia, Spain. ²School of Medicine, University of Magallanes, Punta Arenas, Chile. yolespinosa@gmail.com (Sponsor: E.O. Campos).
84. **The transcription factor ZEB1 represses the Syndecan-1 gene expression in prostate epithelial cells.** Farfán N¹, Orellana O¹, Chrzanowsky D¹, Castellón EA¹, de Herreros AG², Contreras HR¹. ¹Laboratorio de Andrología Celular y Molecular. Programa de Fisiología y Biofísica. Facultad de Medicina. Universidad de Chile. Santiago. Chile. ²Institut Hospital del Mar d'Investigacions Mèdiques. Universitat Pompeu Fabra. Barcelona. España. nafarfant@ug.uchile.cl (Sponsor: A. Couve).

86. **miR26a from putative astrocytic origin regulates GABAergic activity in hippocampal neurons.** Anllely Fernández, Alejandro Luarte, Ursula Wyneken, Carlos Lafourcade. Laboratorio de Neurociencias, Universidad de los Andes.

19:30 – 20:30 PLENARY LECTURE

“CENTRO DE REGULACION DEL GENOMA, UNIV. DE CHILE”

Volcanes Room

Chair: Veronica Palma, Universidad de Chile

MOLECULAR MECHANISMS IN TRANSDUCTION OF THE HEDGEHOG DEVELOPMENTAL SIGNAL. Matthew P. Scott¹, Ljiljana Milenkovic¹, Xuecai Ge¹, Jer-Yen Yang², Melanie Gephart¹, Lucien Weiss⁴, W.E. Moerner⁴. Departments of Developmental Biology¹, Genetics¹, and Chemistry⁴, Stanford University, Stanford, California, 94305. ¹Present address: Carnegie Institution for Science, 1530 P Street NW, Washington, D.C. 20005, USA. ²Present address: Department of Biology, Purdue University, USA.

20:30 Dinner

22:00 – 23:00 BEST THESES AWARDS

“FUNDACION CHILENA PARA BIOLOGIA CELULAR”

Volcanes Room – *Language: Spanish*

Chairs: Arturo Yudelevich, Fundacion Chilena para Biologia Celular

Andrés Couve, SBCCH President, Universidad de Chile

Undergraduate

Mauricio Campos Mora

Ingeniero en Biotecnología Molecular, Universidad de Chile

“Estudio de la expresión de Neuropilina-1 en linfocitos T CD4+ durante el rechazo de aloinjerto”

Director: Karina Pino Lagos, Fac. de Medicina, Universidad de Chile

Graduate

Diego Rojas Benítez

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

“Una modificación post-transcripcional de RNAs de transferencia determina el potencial de crecimiento en *Drosophila melanogaster*”.

Director: Alvaro Glavic Maurer, Fac. de Ciencias, Universidad de Chile

TUESDAY, OCTOBER 27 2015

08:00 **Poster Mounting Session I: N° 88 to N° 173**
Convention Center Foyer

09:00 – 10:30 **Oral Presentations III**
Volcanes Room
Chairs: María de los Angeles García, Universidad de Concepcion
Patricia Burgos, Universidad Austral de Chile

09:00 **ER stress-independent activation of unfolded protein response kinases by a small molecule ATP-mimic. Aaron S. Mendez^{1†}**, Jennifer Alfaro^{2†}, Marisol A. Morales Soto^{2†}, Arvin C. Dar¹, Emma McCullagh², Katja Gotthardt¹, Han Li¹, Diego Acosta-Alvear¹, Carmela Sidrauski¹, Alexei V. Korennykh¹, Sebastian Bernales², Kevan M. Shokat¹, Peter Walter¹. ¹Howard Hughes Medical Institute and University of California, San Francisco, ²Fundación Ciencia & Vida, Santiago, [†]Co-first Authors.

09:15 **Role of transcription factor C/EBP β 1 in osteoblast differentiation. M. Carrasco-Jeldres^{1,2}**, G. Nardocci^{1,2} and M. Montecino^{1,2}. ¹Center for Biomedical Research and ²FONDAP Center for Genome Regulation, Universidad Andrés Bello, Santiago, Chile.

09:30 **The ER stress pathway IRE1 α /XBP1 controls a cluster of Alzheimer's disease-related genes and impacts APP metabolism. Víctor Hugo Cornejo¹**, Claudia Duran¹, Sandra Espinoza¹, Alexis González³, Patricia Burgos³ and Claudio Hetz^{1,2}. ¹Biomedical Neuroscience Institute, Center for Molecular Studies of the Cell, ICBM, Faculty of Medicine, University of Chile. ²Neurounion Biomedical Foundation, Santiago. ³Universidad Austral, Valdivia, Chile.

09:45 **The Yin & Yang role of GFAP+ cells during spinal cord injury in *Xenopus laevis*. Gabriela Edwards-Faret**, Arantxa Cebrian-Silla, Emilio Méndez-Olivos, José Manuel García-Verdugo, Juan Larraín. CARE, MINREB, Pontificia Universidad Católica de Chile. gaedwards@uc.cl

10:00 **Knock-down of MCT1 and MCT4 expression in tanycytes by adenovirus-mediated siRNA affects the brain glucose sensing mechanism. Elizondo-Vega RE**, Cortés-Campos CC, Barahona MJ, Carril CA, García-Robles MA. Department of Cell Biology, Laboratory of Cell Biology, University of Concepcion.

10:15 **Inhibition of ER-associated degradation pathway favors TFEB-dependent lysosomal biogenesis. Claudia Yefi¹**, Alexis González¹, Viviana Cavieres¹, José Martina², Rosa Puertollano², Rojas-Fernandez A.³, Gonzalo A. Mardones¹ and Patricia V. Burgos¹. ¹Faculty of Medicine, Universidad Austral de Chile, Valdivia, Chile, ²Laboratory of Cell Biology, National Heart, Lung, and Blood Institute, National Institutes of Health, Bethesda, USA and ³Centre for Gene Regulation and Expression, College of Life Sciences, University of Dundee, United Kingdom.

**10:30 – 13:00 Schools and Science: Students from South of Chile
at the Chilean Society for Cell Biology
Maullin Room**

**10:30 – 12:30 Poster Viewing Session II: 88-173 Odd Numbers
Convention Center Foyer**

**Coordinators: Nelson Osses, P. Universidad Catolica de Valparaiso
Carola Otth, Universidad Austral de Chile
Omar Porras, Universidad de Chile
Vicente Torres, Universidad de Chile**

- 89. Unconventional ATP homeostasis revealed by FRET.** ^{1,2}**Ignacio Fernández-Moncada**,
¹L. Felipe Barros. ¹Centro de Estudios Científicos (CECs), ²Universidad Austral de Chile.
ifernandez@cecs.cl
- 91. CD73-mediated adenosine production induces Wnt signaling in Tc17 cells.** **Felipe Flores-Santibáñez**^{1,4}, Dominique Fernández¹, Daniel Meza¹, Gabriela Tejón¹, Leonardo Vargas¹, Lorena Varela-Nallar², Sebastián Arredondo², Victoria Guixé¹, Mario Rosemblatt^{1,2,3}, María Rosa Bono¹, Daniela Sauma¹. ¹Departamento de Biología, Facultad de Ciencias, Universidad de Chile, ²Facultad de Ciencias Biológicas, Universidad Andres Bello, ³Fundacion Ciencia & Vida. felipeflores.uchile@gmail.com
- 93. Down-regulation of TFPI-2 in the progression of ovarian cancer.** **J. Fry**^{1,3}, S. Kato², L. Abarzua², P. González¹, C. Ramírez¹, E. Cumsille¹, J.C. Roa², M.A. Cuello², G.I. Owen¹, M.L. Bravo^{1,3}. ¹Facultad de Ciencias Biológicas, ²Facultad de Medicina, ³Instituto Milenio en Inmunología e Inmunoterapia (IMI) P09/016-F, Pontificia Universidad Católica de Chile. j.fry.kattan@gmail.com
- 95. Role of androgens in human endothelial cell homeostasis.** **Patricia Fuenzalida**¹, Catalina Garay¹, Jaime Lizama¹, Verónica Torres-Estay¹, Daniela Carreño¹, Viviana P. Montecinos¹, Loreto Véliz¹, Paula Sotomayor², and Alejandro S. Godoy^{1,3}. Pontificia Universidad Católica de Chile¹ and Center for Integrative Medicine and Innovative Science², Universidad Andrés Bello, Santiago, Chile; Roswell Park Cancer Institute³, Buffalo, NY. pfuenzalida@bio.puc.cl (Sponsor: R. Moreno).
- 97. Modeling multiscale complex biological systems using PISKa.** **Ignacio Fuenzalida**¹, Alberto J.M. Martín¹, Tomas Perez-Acle^{1,2}. ¹Computational Biology Lab (Dlab), Fundación Ciencia y Vida. ²Centro Interdisciplinario de Neurociencia de Valparaíso, Universidad de Valparaíso. ifuenzalida@dlab.cl (Sponsor: M. Rosemblatt).
- 99. In vivo distribution of candidate receptors for Andes hantavirus entry into susceptible cells.** **María Pía García**¹, Amelina Albornoz¹, Maruquel Salamin², Paula Padula³, Carola Otth² and Nicole Tischler^{1,4}. ¹Molecular Virology Laboratory, Fundación Ciencia & Vida, ²Instituto de Microbiología Clínica, Universidad Austral de Chile, ³Departamento de Virología, Instituto Nacional de Enfermedades Infecciosas, A.N.L.I.S. “Dr. C.G. Malbrán”, Buenos Aires, Argentina, ⁴Facultad de Ciencias Biológicas, Universidad Andres Bello, Santiago, Chile. ntischler@cienciavida.org
- 101. Mechanism of homeostatic control of mitochondrial DNA copy number.** **Aylin Goke**, Christof Osman, Peter Walter. University of California, San Francisco, Howard Hughes Medical Institute. aylin@walterlab.ucsf.edu
- 103. BDNF requires the activity of Rab5-Rab11 GTPases to induce changes through the MAPK pathway in dendritic branching, CREB activation and immediate-early gene (IEGs) expression in hippocampal neurons.** **Andrés González**, Anibal Cáceres and Francisca Bronfman. Neuronal Cell Biology and Regeneration Lab, Pontificia Universidad Católica de Chile. gonzalezg.andres@gmail.com

105. **Gold nanoparticle labeling of B16F10 melanomas for cell tracking in metastasis.** Simon Guerrero^a, Victor Díaz^a, Pablo Lara^{a,b}, Fanny Guzman^c, Marcelo Kogan^b, Andrew FG Quest^a. ^aLaboratorio de Comunicaciones Celulares and ^bLaboratorio de Nanobiotecnología, ACCDiS, Universidad de Chile. ^cNBC, Universidad Católica de Valparaíso. simon.daiblogt@gmail.com
107. **MSRA-1 participates in a feed-back loop that regulates the Daf-2/IGF pathway during *C. elegans* lifespan.** Izabook Gutierrez¹, Alicia N. Minniti² and Rebeca Aldunate^{1,2}. ¹Escuela de Biotecnología, Universidad Santo Tomás; ²Facultad de Ciencias Biológicas, Pontificia Universidad Católica de Chile. raldunate@santotomas.cl
109. **Axonal degeneration by diverse stimuli proceeds by necroptosis in both central and peripheral neurons.** Diaz, P., Catenaccio, A., Barrientos, S., Martinez, F., Hernandez, D., Court, F.A.^{1,2}. ¹Millennium Nucleus in Regenerative Biology, (MINREB), P. Catholic University of Chile and ²Neurounion Biomedical Foundation. pau.diazc@hotmail.com, fcourt@bio.puc.cl
111. **NOX2-derived reactive oxygen species mediate intracellular signaling induced by exercise in skeletal muscle.** Carlos Henríquez-Olguín^{1,2}, Denise Valladares¹, Alexis Díaz-Vegas¹, Hugo Cerda^{1,2}, Yildy Utreras-Mendoza¹, Cristian Campos¹, Paola Llanos¹, Ariel Contreras-Ferrat¹, Alejandra Espinosa¹, and Enrique Jaimovich¹. ¹Muscle Cell Physiology Lab, Center for Molecular Studies of the Cell, ICBM, Faculty of Medicine, Universidad de Chile. Santiago, Chile. ²Integrative Exercise Physiology Group, Laboratory of Exercise Sciences, Clínica MEDS. Carlos.henriquez@ug.uchile.cl
113. **Methylglyoxal induces cell death and stimulates TIMP-1 protein levels in gingival fibroblasts.** Hernández R., Retamal IN, González-Rivas C, Zapata P, Cáceres M, Arancibia R, Martínez J, Martínez C, Romero A, Smith PC. Laboratory of Periodontal Biology and Regeneration, Dentistry, Faculty of Medicine, Pontificia Universidad Católica de Chile (PUC). rmhernas@puc.cl
115. **Genome-scale control of gene repression and activation.** Max A Horlbeck, Luke A Gilbert, Chong Y Park, Jacqueline E Villalta, Hao Shao, Jason E Gestwicki, Jonathan S Weissman. Howard Hughes Medical Institute; University of California, San Francisco. max.horlbeck@ucsf.edu
117. **Depletion of GOLPH3 in different tumor cell lines produces distinct effects in protein glycosylation and cell migration.** Viviana Cavieres¹, Cecilia Arriagada¹, Alexis González¹, Breyan H. Ross¹, Marcelo Aguilar¹, Hugo Folch², Pamela Ehrenfeld³, Patricia V. Burgos¹, and Gonzalo A. Mardones¹. ¹Instituto de Fisiología, ²Instituto de Inmunología y Parasitología, ³Instituto de Anatomía, Histología y Patología, Facultad de Medicina, Universidad Austral Chile, Valdivia. cavieres.viviana@gmail.com
119. **Effect of Resveratrol on human B-cell lymphoma viability. Possible molecular mechanisms.** Paola Jara, David León, Gabriela Vargas, Mónica Salas and Angara Zambrano. Instituto de Bioquímica y Microbiología. Universidad Austral de Chile. Valdivia. paolad2864@gmail.com
121. **Predicted functions and evolution of single-exon genes in mammalian genomes.** Jorquera R., Ortiz R. and Holmes D.S. Center for Bioinformatics and Genome Biology, Fundacion Ciencia & Vida and Facultad de Ciencias Biologicas, Universidad Andres Bello, Santiago, Chile. roddy.jorquera@gmail.com (Sponsor: P. Valenzuela).
123. **Investigating the fate of damaged eukaryotic ribosomes stalled during translation.** Kamena Kostova, Jonathan Weissman. University of California, San Francisco. Kamena.Kostova@ucsf.edu
125. **Towards reconstituting the ER stress sensing mechanism of IRE1.** Mable Lam, Peter Walter. UCSF, HHMI. mable@walterlab.ucsf.edu
127. **The diterpenes Ferruginol, Jatrophone and Junicedric acid as neuroprotective agents against A β oligomers-induced damage.** Carolina B. Lindsay¹, Cristina Theoduloz²,

- Guillermo Schmeda-Hirschmann² and Nivaldo C. Inestrosa¹. ¹Centro de Envejecimiento y Regeneración (CARE), Pontificia Universidad Católica de Chile. ²Laboratorio de Cultivo Celular y Laboratorio de Química de Productos Naturales, Universidad de Talca. carolina.lindsay.brain@gmail.com
- 129. Astaxanthin protects primary hippocampal neurons against noxious effects of A β -oligomers.** Lobos P.¹, Cordova A,¹ Bruna B,¹ Barattini P,¹ Galáz JL,¹ Adasme T,^{1,2} Hidalgo C,⁴ Muñoz P,^{1,3} Paula-Lima AC.¹ BNI,² CEMC & ICBM, F. Medicine and ³ICOD, F. Odontología, Universidad de Chile,⁴ F. Medicine, Universidad de Valparaíso, Chile.
- 131. Purinergic pathway at the masticatory system: putative role of extracellular ATP as a muscle-bone signaling molecule.** John López¹, Paola Llanos¹, Mariana Casas², and Sonja Buvinic¹. ¹ICOD, Facultad de Odontología; ²ICBM, Facultad de Medicina, Universidad de Chile, Santiago, Chile. biojohn.lopez@gmail.com
- 133. Discrimination of taxa-specific genomes of soil bacteria through analysis of abundance changes between two natural environmental conditions.** J. Maldonado^{1,2}, D. Mandakovic², M. Latorre², P. Cabrera², V. Cambiazo² and M. González². ¹Doctorado en Ciencias, mención Biología Molecular, Celular y Neurociencias, Facultad de Ciencias, Universidad de Chile. ²Laboratorio de Bioinformática y Expresión Génica, INTA, Universidad de Chile. jomaldon@gmail.com
- 135. Physical model of collective cell migration in zebrafish gastrulation.** Susana Márquez¹, Rodrigo Soto¹, Eduardo Pulgar^{3,4}, Felipe Santibañez^{2,3}, Miguel Concha^{3,4}, Steffen Härtel^{2,3}. ¹Departamento de Física, FCFM, ²SCIAN-Lab, ³Biomedical Neuroscience Institute (BNI), ⁴Laboratory of Experimental Ontogeny (LEO-Lab), F-Med, Universidad de Chile. susanamarros@gmail.com
- 137. Inhibition of glial cell connexin hemichannels prevents PTZ-induced epilepsy.** Maturana Carola^{1,2}, Aravena Camila¹, Lagos Carlos F³, Sáez Juan C^{1,2}. ¹Departamento de Fisiología, Pontificia Universidad Católica de Chile (PUCCh), Santiago, Chile. ²Instituto Milenio, Centro Interdisciplinario de Neurociencias de Valparaíso, Valparaíso, Chile. ³Departamento de Endocrinología, PUCCh, Santiago, Chile. jcsaez@gmail.com
- 139. Human RIC-8B gene expression is downregulated by PKA activation and cell differentiation through CREB and C/EBP β transcription factors.** Maureira A.^{1,2}, Sanchez R.¹, Hinrichs M. V.¹, Olate J.¹, Gutiérrez L.², Torrejón M.¹. ¹Laboratorio de Señalización y Desarrollo, Departamento de Bioquímica y Biología Molecular, Universidad de Concepción, Chile. ²Laboratorio de Regulación Transcripcional, Departamento de Bioquímica y Biología Molecular, Universidad de Concepción, Chile. amaureira@udec.cl
- 141. Proliferation of U87 glioblastoma cells depends on Galectin-8 expression.** Claudia Metz, Remziye Döger, Elizabeth Riquelme, Ronan Shaughnessy, Andrea Soza and Alfonso González. Departamento de Inmunología Clínica y Reumatología, Facultad de Medicina; Centro de Envejecimiento y Regeneración, Facultad de Ciencias Biológicas. Pontificia Universidad Católica de Chile, Santiago, Chile. cmetz@med.puc.cl
- 143. Mutagenesis of *mcoln1.1* by CRISPR/Cas9 and characterization of its role in leukocyte migration in zebrafish.** Emiliano Molina, Sandra Edwards, Mario Sánchez, Rodrigo Morales, Ana María Lennon-Duménil¹, Alvaro Glavic, Miguel Allende. FONDAPE Center for Genome Regulation, Universidad de Chile. INSERM, Institut Curie, France¹. emolinareyes@gmail.com
- 145. Dopamine receptor type 5 knockout mice (D5RKO) show memory impairments but normal affective behavior.** Rodrigo Moraga-Amaro¹, Hugo González², Juan Donoso-Ramos¹, Valentina Ugalde², Patricio Rojas³, Rodrigo Pacheco^{2,4}, Jimmy Stehberg¹. ¹Laboratorio de Neurobiología, Centro de Investigaciones Biomédicas, Universidad Andrés Bello, Santiago, Chile. ²Laboratorio de Neuroinmunología, Fundación Ciencia & Vida, Ñuñoa, Santiago, Chile. ³Laboratorio de Neurociencias. Departamento de Biología, Facultad de Química y Biología. Universidad de Santiago de Chile. ⁴Laboratorio de

- Neuroinmunología, Departamento de Ciencias Biológicas, Facultad de Ciencias Biológicas, Universidad Andrés Bello, Santiago, Chile.
147. **BDNF increases the mRNA, protein levels, activity and movement of Rab5 in hippocampal neurons.** Guillermo Moya, Andrés González, Francisca Bronfman. Neuronal Cell Biology and Regeneration (NEUCREA). Department of Physiology. Facultad de Ciencias Biológicas. Catholic University of Chile. Millennium Nucleus of Regenerative Biology (MINREB). Center of Aging and Regeneration (Care-Chile).
 149. **A functional genomic approach identifies osteoblast-specific enhancers and reveals a highly modular architecture for the collagen 1a1 gene.** Muñoz D.¹, Hanna P.¹, Godoy F.¹, Buisine N.², Sach L.² and Marcellini S.¹. Faculty of Biological Sciences, University of Concepcion, Chile¹ and CNRS, Paris, France². bio.dnmuñoz10@gmail.com
 151. **Transmembrane BMP receptor type II generates a C-terminal fragment that localizes to the nucleus and associates to DNA in motor neuron-like cells.** Estefani Saint-Jour¹, Diego Zelada¹, Juan Pablo Henríquez² and Nelson Osses¹. ¹BMP Research Group, Institute of Chemistry, Pontificia Universidad Católica de Valparaíso. ²Laboratory of Developmental Neurobiology, Department of Cell Biology, Faculty of Biological Sciences, Universidad de Concepción. e.saintjour.c@gmail.com
 153. **BCI as a new protein for the autophagy pathway.** M. Nassif¹, E. Vicencio¹, C. Muñoz-Bergmann¹, S. Beltrán¹, C. Hetz², U. Woehlbier¹, and P. Manque¹. ¹Center for Genomics and Bioinformatics, Faculty of Science, Universidad Mayor, Santiago, Chile. ²Biomedical Neuroscience Institute, University of Chile, Santiago, Chile. patricio.manque@umayor.cl
 155. **Characterization of human thymic B cells and their antibody-producing function.** Sarah Nuñez^{1,2}, Carolina Moore³, María Rosa Bono¹, Mario Roseblatt⁴ and Emmanuel Zorn². ¹Departamento de Biología, Facultad de Ciencias, Universidad de Chile, ²Columbia Center for Translational Immunology, New York NY, ³Massachusetts General Hospital, Boston MA, ⁴Fundación Ciencia & Vida, Santiago, Chile. sarah.nunez.c@gmail.com
 157. **Analysis of signaling pathways associated with liver damage using *in vitro* and *in vivo* models of Niemann-Pick disease.** Ovarzún J.E., Acuña M., Castro J., Arrese M., Zanlungo S. Departamento de Gastroenterología, Facultad de Medicina, Pontificia Universidad Católica de Chile. jeoyarzu@uc.cl
 159. **The protein Reticulon-4B stabilizes tubular endoplasmic reticulum structures in HeLa cells.** Rodríguez-Peña, M.^{1*}; Díaz, A.¹; Pennanen, C.¹; Bravo-Sagua, R.¹; Quest, A.F.G.²; Lavandero, S.¹. ¹Laboratory of Molecular Signal Transduction, Advanced Center for Chronic Diseases (ACCDiS), Faculty of Chemical and Pharmaceutical Sciences, University of Chile. ²Laboratory of Cellular Communication, ACCDiS, Faculty of Medicine, University of Chile. chelorodriguez@gmail.com
 161. **The exocyst complex regulates polarized lysosome fusion at the immune synapse.** Juan José Sáez^{1,2}, Juan Pablo Bozo², María Rosa Bono¹ and María-Isabel Yuseff². Universidad de Chile¹. Pontificia Universidad Católica de Chile². juan.j.saez.p@gmail.com
 163. **Expression pattern of ephrin-a2 at early stages of posterior commissure formation.** Saldivia N., Stanic K., Recabal A., Montecinos H., Caprile T. Laboratory of Axon Guidance, Department of Cellular Biology, Faculty of Biological Sciences, University of Concepción. nasaldivia@udec.cl
 165. **Role of insular cortex in anxiety.** Jimmy Stehberg, Rodrigo Moraga-Amaro, Raul Diaz-Galarce, Sebastián Rojas, Daisy Quintana. Laboratorio de Neurobiología, Centro de Investigaciones Biomédicas, Universidad Andrés Bello, Santiago, Chile.
 167. **Abnormal adipogenic differentiation in *Apat2*^{-/-} mice results in postnatal brown adipose tissue loss.** Pablo Tapia, Marta Fernández-Galilea and Víctor Cortés. Department of Nutrition, Diabetes and Metabolism, Pontificia Universidad Católica de Chile. pjtapia@uc.cl
 169. **Targeted overexpression of TNF- α increases Cdk5 activity and TRPV1-dependent Ca²⁺ influx in trigeminal neurons.** Pablo Rozas, Pablo Lazcano, Ricardo Piña, Andrew Cho,

Anita Terse, Rodolfo Madrid, Christian Gonzalez-Billault, Ashok B. Kulkarni, **Elias Utreras**. Laboratory of Cellular and Molecular Mechanisms of Pain, Department of Biology, Faculty of Science, Universidad de Chile. elias.utreras@uchile.cl

- 171. Evaluation of expression levels of orexin receptor 1 (OX1R) in different stages of colorectal cancer (CRC).** **Cynthia Villarroel**¹, Ana María Wielandt¹, Kento Inada², Hiroshi Kawachi², Daniela Simian¹, Maria Teresa Vial¹, Marcela Figueroa¹, Magdalena Castro¹, Udo Kronberg¹, Francisco López-Kostner¹, Clínica Las Condes¹, Tokyo Medical and Dental University². awielandt@clc.cl (Sponsor: C. Metz).
- 173. Repression of AKAP genes downstream to Wnt/Tcf is required for eye specification in zebrafish.** **Rodrigo Young**, Thomas Hawkins, Florencia Cavodeassi, and Stephen Wilson. Department of Cell and Developmental Biology, UCL, London. rodrigo.young@ucl.ac.uk

12:45 – 14:15 Lunch

14:15 –16:15 SYMPOSIUM “MECHANISMS UNDERLYING THE DIFFERENTIAL NEURONAL VULNERABILITY IN BRAIN DISEASES”

Calbuco Room

Chair: Felipe Court, P. Universidad Catolica de Chile

GENE THERAPY FOR AMYOTROPHIC LATERAL SCLEROSIS: THE IMPORTANCE OF NON-CELL AUTONOMOUS DISEASE MECHANISMS. **B. Schneider**, J. Aebischer, C. Rochat, N. Bernard-Marissal, E. Dirren, P. Aebischer. Brain Mind Institute, Ecole Polytechnique Fédérale de Lausanne, Switzerland.

GENETICS AND GENOMICS OF AMYOTROPHIC LATERAL SCLEROSIS. **Hemali Phatnani**. Center for Genomics of Neurodegenerative Disease, New York Genome Center, USA.

ER PROTEOSTASIS DISTURBANCES IN NEURODEGENERATIVE DISEASES. **Claudio Hetz**. Biomedical Neuroscience Institute (BNI), Faculty of Medicine, University of Chile and Harvard School of Public Health, Boston, USA.

EXOSOME TRANSFER FROM SCHWANN CELL TO AXONS ENHANCE REGENERATION. **F.A. Court**^{1,2}. ¹Millennium Nucleus for Regenerative Biology, Faculty of Biology, Pontificia Universidad Católica de Chile, Santiago, Chile. ²Neurounion Biomedical Foundation, Santiago, Chile.

SYMPOSIUM “CIENCIA & VIDA-UCSF SYMPOSIUM ON BIOMEDICAL RESEARCH”

Tronador Room

Chair: Carolina Torrealba, Fundacion Ciencia & Vida

MOLECULAR BASIS OF MITOCHONDRIAL BEHAVIOR. **Jodi Nunnari**. University of California, Davis, USA.

THE DOPAMINERGIC REGULATION OF T-CELL MEDIATED IMMUNITY AND ITS INVOLVEMENT IN INFLAMMATORY DISORDERS. **Rodrigo Pacheco**. Laboratory of Neuroimmunology, Universidad Andrés Bello and Fundación Ciencia & Vida, Santiago, Chile.

MERITS, OPPORTUNITIES AND CHALLENGES IN EARLY PHASE CLINICAL TRIALS. Pamela N Munster, MD. Hellen Diller Cancer Center, University of California, San Francisco, USA.

16:30 – 17:30 PLENARY LECTURE
“FUNDACION CIENCIA & VIDA”
Volcanes Room
Chair: Andrés Couve, SBCCH President, Universidad de Chile

MONITORING TRANSLATION IN SPACE AND TIME WITH RIBOSOME PROFILING. Jonathan Weissman, PhD. University of California-San Francisco/Howard Hughes Medical Institute, USA.

17:00 – 19:30 Schools and Science: Students from South of Chile
at the Chilean Society for Cell Biology
Maulin Room

17:30 – 19:30 Poster Viewing Session II: 88-173 Even Numbers
Convention Center Foyer
Coordinators: Nelson Osses, P. Universidad Catolica de Valparaiso
Carola Otth, Universidad Austral de Chile
Omar Porras, Universidad de Chile
Vicente Torres, Universidad de Chile

- 88. Function of Ric-8A during mesodermal tissue formation in *Xenopus tropicalis*.** Fernández A., Rodriguez M., Torrejón M. Laboratory of Signaling and Development, Department of Biochemistry and Molecular Biology, University of Concepcion. ayleenfernandez@udec.cl
- 90. Exploring the membrane potential of simple dual-membrane systems as models for Gap-junction channels.** Yerko Escalona, Jose A Garate, Tomas Perez-Acle. Laboratorio de Biología Computacional (DLab), Fundación Ciencia & Vida, Santiago, Chile. Centro Interdisciplinario de Neurociencias de Valparaíso (CINV), Universidad de Valparaíso, Valparaíso, Chile. yescalona@ug.uchile.cl
- 92. Distribution of the Glucose transporter, GLUT2, in normal and kidney senescence-accelerated epithelial cells.** Katherine Forman^{1,2}, Fernando Martínez¹, Manuel Cifuentes³, Francisco Nualart¹. ¹Centro de Microscopía Avanzada, CMA BIO BIO and ²Departamento de Nutrición y Dietética, Universidad de Concepción, Chile. ³Departamento de Biología Celular, Genética y Fisiología, Universidad de Málaga. España. kforman@udec.cl
- 94. Antimicrobial and vasorelaxant effects of methanolic extract from halotolerant yeast isolated from Salar de Huasco.** Fuentes G.^{1,2,3}; Cifuentes F.³; Vega J.L.³; Dorador C.^{1,2}. ¹Microbial Complexity and Functional Ecology Laboratory, ²Centre for Biotechnology and Bioengineering (CeBiB), ³Experimental Physiology Laboratory (EP_{hy}L), Antofagasta Institute, Universidad de Antofagasta. gonzalo.biotech@gmail.com
- 96. Intradermal vaccination generates skin-resident memory CD8 T cells with enhanced effector properties.** Felipe Gálvez-Cancino, Camila Flores, Nicole Rojas-Colonelli, Diana Gaete, Paola Murgas, Cesar Oyarce, Alvaro Lladser. Laboratory of Gene Immunotherapy, Fundación Ciencia y Vida. figalvez88@gmail.com
- 98. Dual effects of astaxanthin in neuroprotection and NMDA-mediated mitochondrial superoxide in neuronal cell.** García, F., ²Ardiles, A., ³Muñoz, P. ¹Carrera de Bioquímica,

Pontificia Universidad Católica de Valparaíso; ²CINV, Universidad de Valparaíso; ³Escuela de Medicina, Facultad de Medicina, Universidad de Valparaíso.

100. **Role of insulin growth factor 2 (IGF2) in the neuroprotection observed by XBP1 deficiency.** García-Huerta, Paula¹; Vidal, Rene^{1,2}; Troncoso, Paulina¹; Logo, Ken³; and Hetz, Claudio¹. ¹Biomedical Neuroscience Institute, Center for Molecular Studies of the Cell, ICBM, Faculty of Medicine, University of Chile, ²Neurounion Biomedical Foundation, Santiago, Chile; ³Proteostasis Therapeutics, Cambridge, MA, USA. chetz@hsph.harvard.edu
102. **The tyrosine kinase c-Abl loss in the CNS increases synaptic genes expression improving learning and memory.** Adrián González, Marcelo Gonzalez, Lina Vargas and Alejandra Álvarez. Cell Signaling Lab, Department of Cell and Molecular Biology and Centre for Aging and Regeneration (CARE), Pontificia Universidad Católica de Chile, Santiago de Chile, Chile. agonza11@uc.cl
104. **TGF- β and CTGF pro-fibrotic factors are up-regulated in transgenic ALS model and denervated muscles.** David González, ¹Daniela Rebolledo, ²Brigitte van Zundert and ¹Enrique Brandan. ¹Pontificia Universidad Católica de Chile, ²Universidad Andrés Bello.
106. **Peripheral nerve target specificity during development and after damage.** Daniela Gutiérrez, María Laura Ceci, Miguel L. Allende. FONDAP Center for Genome Regulation, Facultad de Ciencias, Universidad de Chile. allende@uchile.cl
108. **Single Nucleotide Polymorphisms (SNPs) variations related to estrogen metabolism in healthy volunteers and ovarian cancer patients.** E. Cumsille^{1,9}, M.L. Bravo^{1,9}, P. González^{1,7}, S. Kato^{2,9}, C. Ibañez², M. Garrido², J. Brañes², M.I. Barriga³, E. Bustamante⁴, C. Alonso⁵, L. Muñoz⁵, E. Bravo⁵, J. Cartagena⁵, C. Arab⁶, N. Barrena⁴, P. Jimenez⁴, P. Gayan⁷, F. Gonzalez⁷, I. Chavez⁷, A. Aguilar⁸, J. Pinto⁸, M.A Cuello², G. I. Owen^{1,9}. ¹Facultad de Ciencias Biológicas, ²Facultad de Medicina, Pontificia Universidad Católica de Chile, Hospitales; ³Sotero del Rio, ⁴Fundación Arturo López Pérez, ⁵Gustavo Fricke, ⁶Luis Tisné, ⁷Instituto Nacional del Cáncer, ⁸Oncosalud AUNA, Perú. ⁹Biomedical Research Consortium of Chile. ecumsille@uc.cl
110. **Characterization of Polycomb Group Proteins (PcG) and senescence-associated genes in aged hippocampal neurons.** Matías Morales^{1*}, Sirley Leal^{1*}, Mary Carmen Vázquez¹, Brigitte van Zundert², Lilian Reyes¹, Berta Henríquez¹. ¹Faculty of Science. San Sebastian University. ²CIB, Andres Bello University. berta.henriquez@uss.cl
112. **Localization of phosphorylated forms of β -catenin in models of amyotrophic lateral sclerosis (ALS).** Cristina Pinto¹, Brigitte van Zundert², Alejandra Álvarez³, Juan Pablo Henríquez¹. ¹Department of Cell Biology, Universidad de Concepción; MINREB; ²UNAB; ³PUC; Chile. jhenriquez@udec.cl
114. **T cells control inflammatory responses through interplay with dendritic cell signaling.** Andrés A. Herrada¹, Gonghua Huang^{1, 2} and Hongbo Chi¹. ¹Department of Genetics, St. Jude Children's Research Hospital, Memphis, USA; ²Shanghai Institute of Immunology, Shanghai JiaoTong University School of Medicine, China. andresherradah@gmail.com (Sponsor: R. Pacheco).
116. **Yorkie/YAP: The transcription factor effector of Hippo pathway unveils a novel function as an activator of growth during insect oogenesis.** Paula Irlés^{1,2} and M. Dolors Piulachs². ¹Pontificia Universidad Católica de Chile, ²Institut de Biologia Evolutiva, CSIC-UPF. pirlés@uc.cl
118. **Down expression of Panx1 interferes with excitation transcription coupling after electrical stimulation with little effect in Cav1.1 charge movement in adult muscle fibers.** Jaque-Fernández F., Troc-Gajardo Jennifer L.; Utreras-Mendoza Yildy. Jorquera, G., Hidalgo J., Buvinic S., Jaimovich E., Jacquemond V. and Casas M. Laboratory of Cellular Physiology of Muscle. ICBM. Faculty of Medicine. Universidad de Chile. Centre de Génétiqueet de Physiologie Moléculaire et Cellulaire UMR CNRS 5534 - Université Lyon 1. francisco.jaque@gmail.com

120. **Proteomic analysis of secreted proteins of osteosarcoma cell lines.** Sofia Jerez^{1,2}, Andre van Wijnen³, Mario Galindo^{1,3}. ¹Millennium Institute on Immunology and Immunotherapy, ²Programa de Biología Celular y Molecular, ICBM, Facultad de Medicina, Universidad de Chile. ³Departments of Orthopedic Surgery & Biochemistry and Molecular Biology, Mayo Clinic.
122. **Targeted epigenetic editing to control PSD95 gene expression and to regulate neuronal refinement.** Nur Jury¹, Fernando Bustos^{1,2}, Estibaliz Ampuero¹, Rodrigo Aguilar^{1,2}, Lorena Varela-Nallar¹, Fahimeh Falahi³, Jorge Toledo⁴, Juan Ahumada⁵, Berta Henríquez¹, Miguel Guerra¹, Jimmy Stehberg¹, Rachael Neve⁶, Marco Fuenzalida⁵, Steffen Härtel⁴, Marianne Rots^{3*}, Martín Montecino^{1,2*}, Brigitte van Zundert^{1*}. ¹CIB-UNAB, Chile, ²FONDAP-CRG, ³UMCG, The Netherlands, ⁴SCIAN-Lab U. Chile, Chile, ⁵U. Valparaíso, Chile, ⁶MIT, USA. nur.cjg@gmail.com
124. **Thy-1-induced migration requires β 3-Integrin expression in astrocytes.** Raúl Lagos-Cabré, Álvaro Álvarez, Milene Kong, Francesca Burgos, Jorge Toledo, Steffen Härtel, Andrew F.G. Quest, Lisette Leyton. Laboratorio de Comunicaciones Celulares, Centro de Estudios Moleculares de la Célula. Instituto de Neurociencias Biomédicas (BNI). ICBM-Facultad de Medicina, Universidad de Chile. rclagos@uc.cl
126. *Withdraw.*
128. **ABCA1 expression is decreased in skeletal muscle from insulin resistant mice.** Hugo Cerda-Kohler, Manuel Arias-Calderón, Cristián Campos, Ariel Contreras, Cecilia Hidalgo, Enrique Jaimovich, Paola Llanos. Institute for Research in Dental Sciences, Facultad de Odontología and Center for CEMC and NEMESIS Ring, Facultad de Medicina, Universidad de Chile. pllanos@odontologia.uchile.cl
130. **OX40 signaling confers resistance to lactic acid in T cells transduced with chimeric antigen receptors.** Ernesto López, Eduardo Durán, Elizabeth Torres, Paola Murgas, Alvaro Lladser. Laboratory of Gene Immunotherapy, Fundación Ciencia & Vida, Santiago, Chile. alladser@cienciavida.org
132. **Alhuc promotes apoptosis by activating the TNF α /Eiger signaling pathway.** Fernanda Lourido and Álvaro Glavic. Center for Genome Regulation, Department of Biology, Faculty of Sciences, Universidad de Chile. fernanda.lourido@gmail.com
134. **The X-box binding protein 1 (XBP1) synergizes with CREB in the induction of brain-derived neurotrophic factor (BDNF) activity-dependent transcription.** Pablo Mardones, René Vidal, Gabriela Martínez, Claudio Hetz. Biomedical Neuroscience Institute, Center for Molecular Studies of the Cell, ICBM, Faculty of Medicine, University of Chile, and Neurounion Biomedical Foundation, Santiago, Chile. p.mardones.hiche@gmail.com, chetz@hsph.harvard.edu
136. **Regulation of memory formation by the transcription factor XBP1.** G. Martínez, R.L. Vidal, P. Mardones, F.G. Serrano, A.O. Ardiles, C. Molina, P. Valdés, B. Schneider, B. Kerr, A.G. Palacios, J.L. Valdés, N.C. Inestrosa L.H. Glimcher, and C. Hetz. Biomedical Neuroscience Institute, Center for Molecular Studies of the Cell, ICBM, Faculty of Medicine, University of Chile, and Neurounion Biomedical Foundation, Santiago, Chile. gabriela.martinezbravo@gmail.com and chetz@hsph.harvard.edu
138. **Aberrant methylation in potential P53 binding site in the promoter region of Reprimo in advanced gastric cancer patients.** Maturana MJ^{1,2}, Fry Jacqueline^{1,2}, Roldán Nicole^{1,2}, Olivares W^{1,2}, Corvalán AH^{1,2}. ¹Center for Investigational Oncology (CITO), Pontificia Universidad Católica de Chile. ²Advanced Center for Chronic Disease (ACCDiS), Pontificia Universidad Católica de Chile.
140. **A role for acetylcholine (ACh)/Cyclin-dependent kinase 5 (Cdk5) signaling on the maturation of the neuromuscular junction.** Jessica Mella¹, Jorge Ojeda¹, Francisca Bermedo¹, Juan Diaz², Daniel Hertzberg², and Juan Pablo Henríquez¹. Departments of ¹Cell

- Biology, MINREB, ²Clinical Sciences, Clinical Veterinary, University of Concepción, Concepción, Chile. jhenriquez@udec.cl
142. **Dynamics of the anaphase promoting complex activator subunits during mitosis.** Arda Mizrak and David Morgan. University of California, San Francisco. Arda.mizrak@ucsf.edu
144. **Activation of FAK promotes Rab5-GTP loading.** Carolina Moraga¹, Pablo Mendoza¹ and Vicente A. Torres^{1,2}. ¹Institute for Research in Dental Sciences, Faculty of Dentistry, Universidad de Chile, Sergio Livingstone 943, Santiago, Chile. ²Advanced Center for Chronic Diseases (ACCDiS). moragaponce.carolina@gmail.com
146. **Gene-specific blockade of macrophage recruitment after tissue damage in zebrafish and its consequences in regeneration.** Rodrigo A. Morales, Mario Sánchez, Salomé Muñoz, Emiliano Molina, Miguel L. Allende. FONDAPE Center for Genome Regulation, Facultad de Ciencias, Universidad de Chile. rodmorales@ug.uchile.cl
148. **Alternative diagnostic method for the detection of different *Vibrio ordalii* strains isolated from Atlantic salmon farmed in Chile.** Muñoz D¹, Stoores C¹, Hidalgo C¹, Poblete M²⁻³, Irgang, R²⁻³, Avendaño-Herrera R²⁻³, Paredes R¹. ¹Escuela de Medicina Veterinaria, Facultad de Ecología y Recursos Naturales, Universidad Andrés Bello, Chile. ²Laboratorio de Patología de Organismos Acuáticos y Biotecnología Acuicola, Facultad de Ciencias Biológicas, Universidad Andrés Bello, Chile. ³Interdisciplinary Center for Aquaculture Research (INCAR), Concepción, Chile. daniela.munoz.abarca@gmail.com
150. **Contribution of NMDA receptors to the acquisition of hippocampal neuronal polarity.** Muñoz, Ernesto; Wilson, Carlos and González-Billault, Christian. Laboratorio de Dinámica Celular y Neuronal, Facultad de Ciencias, Universidad de Chile. ernesto.fmp@gmail.com; carloswr@gmail.com; chrgronza@uchile.cl
152. **Ltcl1 is a conserved sterol transfer protein and a component of ER-mitochondria and ER-vacuoles contacts in yeast.** Andrew Murley^{1*}, Reta D. Sarsam¹, Alexandre Toulmay², Justin Yamada¹, William A. Prinz², Jodi Nunnari¹. ¹Dept. of Molecular and Cellular Biology, University of California - Davis, Davis, CA, USA, ²National Institutes of Diabetes and Digestive and Kidney Diseases, National Institutes of Health, Bethesda, MD, USA. *acmurley@ucdavis.edu
154. **A selective H3K27 demethylase inhibitor ameliorates experimental acute colitis.** Jocelyn C. Neira¹, Dominique Fernández², Paz Reyes¹, Daniela Sauma², Alejandra Loyola¹, María Rosa Bono² and, Mario Roseblatt^{1,2,3}. ¹Fundación Ciencia & Vida, ²Laboratorio de Inmunología, Facultad de Ciencias, Universidad de Chile and ³Facultad de Ciencias Biológicas, Universidad Andrés Bello. jocelyn.neira@gmail.com
156. **Characteristics and synchrony of neural oscillations in the olfactory system of the rainbow trout.** Jesús Olivares, Rubén Herzog, Patricio Orio and Oliver Schmachtenberg. Centro Interdisciplinario de Neurociencias de Valparaíso, Facultad de Ciencias, Universidad de Valparaíso. jesus.olivares@cinv.cl
158. **Real time recording of antioxidant capacity in living cells.** ¹Alejandra V. Parra, ¹Helen Hernández, ²Diego Varela & ¹Omar Porras. PDCBM. Laboratorio Biología Celular, ¹INTA-Universidad de Chile. ²ICBM-Facultad de Medicina, Universidad de Chile. parrap.alejandra@gmail.com
160. **Critical role of evolutionarily conserved glycosylation at Asn211 in the intracellular trafficking and activity of sialyltransferase ST3Gal-II.** Fernando M. Ruggiero^{*}, Aldo A. Vilcaes^{*}, Ramiro Iglesias-Bartolomé[†] and José L. Daniotti^{*}. ^{*}Centro de Investigaciones en Química Biológica de Córdoba (CIQUIBIC, UNC-CONICET), Departamento de Química Biológica, Facultad de Ciencias Químicas, Universidad Nacional de Córdoba, Córdoba, Argentina. [†]National Institutes of Health, Bethesda, MD, USA. fruggiero@fcq.unc.edu.ar
162. **Development of viral vectors to express the glutamate transporter EAAT3.** Tomás Schwenke^{1,3}, Pablo R. Moya^{2,3} and Gloria Arriagada^{1,3}. ¹Facultad de Ciencias Biológicas,

- Universidad Andrés Bello. ²Facultad de Ciencias, Universidad de Valparaíso. ³Núcleo Milenio Biología de Enfermedades Neurosiquiátricas NuMind. tomas.schwenke@gmail.com
- 164. Histone H3K27 methylation: Epigenetic control mechanisms during hippocampal neuron maturation. Sáez-Venegas MA^{1,2}, Aguilar R^{1,2}, van Zundert B¹, Montecino M^{1,2}.** ¹Center for Biomedical Research, Universidad Andrés Bello. ²FONDAP Center for Genome Regulation. mauricio.saez.venegas@gmail.com
- 166. IL-4 and IFN- γ serological and *in situ* determination of bovine cystic echinococcosis with concomitant *Fasciola hepatica* infections. Stoore, C;** Jiménez, E; Corrêa, F; Strull, K; Méndez, P; Hidalgo, C; Paredes, R. Escuela de Medicina Veterinaria, Facultad de Ecología y Recursos Naturales, Universidad Andrés Bello, Chile. cstoorep@gmail.com
- 168. Production and transport of stromal lactate, a mediator of epithelial malignancy. Tobar N.,** Molina J., Porras O. and Martínez J. Laboratorio de Biología Celular, INTA, Universidad de Chile. nicolastobar@gmail.com
- 170. Identification of possible mechanotransductory complexes of Jitterbug/Filamin in *Drosophila melanogaster*. Mauricio Valdivia,** Miguel Maureira, Ariel Toledo and Patricio Olgún. Programa de Genética Humana, ICBM, Facultad de Medicina, Universidad de Chile. m.valdivia.delgado@gmail.com, patricioolgún@med.uchile.cl
- 172. Knockdown of the mitochondrial antisense ncRNAs induces complete inhibition of murine melanoma tumor growth and metastasis.** Lorena Lobos-González¹, Verónica Silva¹, Mariela Araya¹, Luciana Oliveira-Cruz¹, Christopher Fitzpatrick¹, Macarena Briones¹, **Jaime Villegas^{1,2}**, Claudio Villota^{1,2}, Soledad Vidaurre^{1,3}, Vincenzo Borgna¹, Constanza Lopez¹, Teresa Socías¹, Luis O. Burzio^{1,2} and Verónica A. Burzio¹. ¹Andes Biotechnologies SpA.; Fundación Ciencia & Vida, Av. Zañartu 1482; ²Facultad de Ciencias Biológicas, Universidad Andrés Bello, República 252; ³Facultad de Salud, Deporte y Recreación, Universidad Bernardo O'Higgins, Gral. Gana 1702. vburzio@gmail.com (Sponsor: P. Valenzuela).

19:30 – 20:30 WORKSHOP

“SOCIEDAD DE BIOLOGIA CELULAR DE CHILE – FUNDACION CIENCIA & VIDA”

Volcanes Room - Language: Spanish

Chair: Eliseo O. Campos, P. Universidad Católica de Chile

TALLER DE ENSEÑANZA Y APRENDIZAJE. Patricia S. Caldera, Science and Health Education Partnership, University of California, San Francisco, USA.

19:30 Society Members Meeting

21:00 Dinner

WEDNESDAY, OCTOBER 28, 2015

08:00 **Poster Mounting Session I: N° 174 to N° 259**
Convention Center Foyer

09:00 – 10:30 **Oral Presentations IV**
Volcanes Room
Chairs: Francisca Bronfman, P. Universidad Catolica de Chile
Soledad Matus, Universidad de Chile

09:00 **Effects of complement C1q and C3a on neural stem cells: Molecular mechanisms.** **Francisca Benavente**, Katja M. Piltti, Jason Bahremand, Ara A. Salibian, Brian J. Cummings, and Aileen J. Anderson. Sue & Bill Gross Stem Cell Research Center, University of California Irvine.

09:15 **Deubiquitinase Usp7 is necessary in the differentiation of muscle precursor cells.** **Eduardo de la Vega**, and Hugo Olgún. Molecular and Cell Biology Department, Faculty of Biological Sciences, P. Universidad Católica de Chile, Santiago, Chile.

09:30 **Pathological parameters are altered in glioblastoma multiforme induced in scorbutic guinea pig brain.** **Nery Jara**, Fernando Martínez and Francisco Nualart. Center for Advanced Microscopy CMA BIOBIO, Department of Cell Biology, University of Concepcion.

09:45 **BDNF increases axonal PPAR γ expression via the mTOR signaling pathway. Role in axonal growth.** **Lezana JP** and Bronfman FC., Department of Physiology, MINREB and CARE Center. Pontificia Universidad Católica de Chile.

10:00 **Pannexin-1, DHPR and P2Y₂ receptor assemble a multiprotein complex involved in excitation-transcription coupling in skeletal muscle.** **Manuel Arias-Calderón**¹, Gonzalo Almarza¹, Ariel Contreras-Ferrat^{1,2}, Alexis Diaz-Vegas¹, Enrique Jaimovich¹ and Sonja Buvinic². ¹Center for Molecular Studies of the Cell, ICBM, Faculty of Medicine, and ²Institute for Research in Dental Science, Faculty of Dentistry; Universidad de Chile, Santiago, Chile.

10:15 **Metformin inhibits Oxaliplatin chemotherapy induced sensory impairment.** **NW Martínez**^{1,2,3,5}, M Calvo¹, R Broekhuizen⁴, B Nervi⁴, LF Barros⁵, FA Court^{1,2,3}. ¹P. Catholic University of Chile, ²Millennium Nucleus in Regenerative-Biology (MINREB), ³Neurounion Biomedical Foundation, ⁴Departamento de Hematología y Oncología, Facultad de Medicina, P. Universidad Catolica de Chile and ⁵Center for Scientific Studies (CECs), Valdivia. wnmartin@uc.cl

10:30 – 13:00 **Schools and Science: Students from South of Chile**
at the Chilean Society for Cell Biology
Maulin Room

10:30 – 12:30 Poster Viewing Session III: 174-259 Odd Numbers

Convention Center Foyer

**Coordinators: Angara Zambrano, Universidad Austral de Chile
Katherine Salazar, Universidad de Concepcion
Veronica Eisner, P. Universidad Catolica de Chile
Lorena Varela, Universidad Andres Bello**

- 175. A local method for the evaluation of gene regulatory network inference based on three nodes graphlets.** AJM Martin & T Perez-Acle. Computational Biology Lab Fundacion Ciencia & Vida and Centro Interdisciplinario de Neurociencia de Valparaíso. ajmm@dlab.cl (Sponsor: M. Roseblatt).
- 177. Metformin reduces platelet-increased angiogenesis.** Márquez-Gutiérrez M.¹, Erices R.^{1,2}, Aravena R.^{1,3}, Cuello M. A.², Owen G. I.^{1,4}. ¹Facultad de Ciencias Biológicas, Pontificia Universidad Católica de Chile (PUC), ²Facultad de Medicina, PUC, ³Universidad Santo Tomas & ⁴Centro UC Investigacion en Oncologia.
- 179. Caveolin-1 enables dendritic cells to generate tumor-protective cytotoxic CD8 T cell responses by promoting migration and antigen cross-presentation.** Sebastián Cruz¹, Cesar Oyarce¹, Felipe Gálvez-Cancino¹, Jorge Díaz², Natalia Díaz², Andrew F.G. Quest² and Alvaro Lladser¹. ¹Laboratory of Gene Immunotherapy, Fundación Ciencia & Vida, Chile. ²Laboratory of Cellular Communication, Advanced Center for Chronic Diseases (ACCDiS), Facultad de Medicina, Universidad de Chile, Chile. alladser@cienciavida.org
- 181. Activation of the Wnt/ β -catenin pathway during ascorbic acid-induced myogenesis.** Nicolás Moreno¹, Jorge Ojeda¹, Francisco Nualart², Juan Pablo Henríquez¹. ^{1,2}Department of Cell Biology, Faculty of Biological Sciences, University of Concepcion, ¹MINREB, Concepcion, Chile. jhenriquez@udec.cl
- 183. Kinetics of membrane potential depolarization induced by extracellular ATP in skeletal muscle isolated fibers.** Camilo Morales, Jorge Hidalgo, Paola Llanos, Enrique Jaimovich and Mariana Casas. Centro de Estudios Moleculares de la Célula, ICBM, Facultad de Medicina, Universidad de Chile.
- 185. Developing a zebrafish model for non-regenerative peripheral nerve damage.** Cristina Muñoz, Maria Laura Ceci and Miguel L. Allende. FONDAPE Center for Genome Regulation. Facultad de Ciencias, Universidad de Chile, Santiago, Chile. allende@uchile.cl; cmunozrehbein@gmail.com
- 187. Optimization of a laser microdissection protocol for qRT-PCR analysis of renal tubular cells.** Fernando Martínez, Romina Bertinat, Katherine Forman and Francisco Nualart. Center for Advanced Microscopy CMA BIOBIO, University of Concepcion. femartin@udec.cl
- 189. Endoplasmic reticulum stress triggers disulfide-dependent aggregation of wild-type SOD1.** Medinas DB^{1,2}, Rozas P^{1,2}, Woehlbier U^{1,2}, Hetz C^{1,2,3}. ¹Biomedical Neuroscience Institute, ²Center for Molecular Studies of the Cell, ICBM, Faculty of Medicine, University of Chile, ³Neurounion Biomedical Foundation, Chile. chetz@hsph.harvard.edu
- 191. Involvement of mast cells, microglia and astrocytes on oligodendrocyte inflammasome activation under prenatal stress.** Maturana Carola^{1,2}, Aguirre Adam¹, Escamilla Rosalba^{1,2}, De Maio Antonio³ and Sáez Juan C^{1,2}. ¹Departamento de Fisiología, Pontificia Universidad Católica de Chile (PUCC), Santiago, Chile. ²Instituto Milenio, Centro Interdisciplinario de Neurociencias de Valparaíso, Valparaíso, Chile. ³Departments of Surgery and Neurosciences, University of California San Diego, La Jolla, CA, USA. jcsaez@gmail.com
- 193. New targets for the study of the regenerative potential of supporting cells in neonatal mouse cochlea.** Cantellano Silvia¹, Silva Sebastián¹, Sierralta Jimena^{2,3}, Maass Juan Cristóbal^{1,2,4,5}. ¹Audition and Cognition Center (AUCOG), ²ICBM, Faculty of Medicine,

- Universidad de Chile. ³Biomedical Neuroscience Institute, ⁴Department of Otolaryngology, Hospital Clínico Universidad de Chile, ⁵Department of Otolaryngology, Clínica Alemana de Santiago-Universidad del Desarrollo. silvicantellano@gmail.com
- 195. 3'UTR shortening at the switch from proliferation to differentiation in an adult stem cell lineage.** Gonzalo H. Olivares^{1,3}, Cameron W. Berry¹, Gokul Ramaswami², Alvaro Glavic³, Jin B. Li², Margaret T. Fuller^{1,2}. ¹Department of Developmental Biology, ²Department of Genetics Stanford University, USA. ³Center for Genome Regulation, Department of Biology Faculty of Sciences Universidad de Chile. golivarh@stanford.edu
- 197. Circadian expression of GK, GKR and GLUT2 in hepatocytes.** Órdenes P*, Llanos P*, Salgado M, Palma A, Carril C, García-Robles MA, Millán C*. Departamento de Biología Celular, Universidad de Concepción, Chile. *Facultad de Artes Liberales-Facultad de Ingeniería y Ciencias, Universidad Adolfo Ibañez. FONDECYT-1121518 and 1140677. paordenes@udec.cl
- 199. Gal-8 is required for proteasomal activity in splenocytes.** Felipe Padilla, Fabian Montecino, Alfonso González, and Andrea Soza. Centro de Envejecimiento y Regeneración (CARE), Facultad Ciencias Biológicas, Departamento de Inmunología Clínica y Reumatología, Facultad Medicina. Pontificia Universidad Católica de Chile. fipadill@uc.cl
- 201. Coarse-grained molecular models to study structure-function relationship in connexin-based channels.** Claudia Pareja-Barrueto¹, Javier Caceres-Delpiano¹, Tomas Perez-Acle^{1,2}. ¹Computational Biology Lab, Fundación Ciencia & Vida, Chile. ²Centro Interdisciplinario de Neurociencias de Valparaíso, Universidad de Valparaíso, Chile. cpareja@dlab.cl (Sponsor: M. Roseblatt).
- 203. Analysis of the early transcriptional program deployed after injury in spinal cord in *Xenopus laevis*.** Peñailillo J.¹, Muñoz R.¹, Mendez, E.¹, Faunoz, F.¹, De Domenico, E.², Patrushev, I.², Gilchrist, M.², Larrain, J.¹. ¹CARE, MINREB, Faculty of Biological Sciences, Pontificia Universidad Católica de Chile, Santiago, Chile. ²The Francis Crick Institute, London, United Kingdom. jfpenailillo@uc.cl
- 205. Role of FAM162A in mitophagy.** Germán I. Púas^{1,2}, Álvaro M. González^{1,2}, Rodrigo I. Bustos¹ and Alvaro A. Elorza^{1,2}. ¹Center for Biomedical Research, Universidad Andres Bello. ²Millennium Institute of Immunology and Immunotherapy, Santiago, Chile. gpuas.biotec@gmail.com
- 207. Methylglyoxal modified collagen stimulates fibronectin remodeling in human gingival fibroblasts.** Retamal IN, Zapata P, Martínez C, Smith PC. Laboratory of Periodontal Biology and Regeneration, Dentistry, School of Medicine, Pontificia Universidad Católica de Chile (PUC). iretamalf@uc.cl
- 209. Dissection of frequency decomposed neuronal network activity pattern in zebrafish larva using high temporal-spatial calcium imaging.** Mostafa Rezaie¹, Peter M. Eimon¹, Julio D. Amigo^{1,2}, Fatih M. Yanik¹. ¹Massachusetts Institute of Technology (MIT), Cambridge, USA. ²Pontificia Universidad Católica, Santiago, Chile.
- 211. Changes in extracellular matrix composition and its interaction with myoblasts modifies the expression of CTGF/CCN2.** Camilo Riquelme-Guzmán and Enrique Brandan. Laboratorio de Diferenciación Celular y Patología, Pontificia Universidad Católica de Chile. crguzman@ug.uchile.cl
- 213. DNp73 and RPRM as potential marker in precursor lesions of gastric cancer.** Rodríguez A^{1,2}, Pino C¹, Olivares W^{1,2}, Maturana MJ^{1,2}, Corvalán AH^{1,2}. ¹Center for Investigational Oncology (CITO), P. Universidad Católica de Chile. ²Advanced Center for Chronic Disease (ACCDiS), P. Universidad Católica de Chile.
- 215. SENP6: The nuclear SUMO chain breaker.** Alejandro Rojas Fernández^{1,2}, Michael H. Tatham¹, Neil Hattersley¹ and Ronald T. Hay¹. ¹GRE, College of Life Sciences, University of Dundee, Dundee, Scotland DD1 5EH, UK. ²Department of Physiology, School of Medicine

- and Centre for Interdisciplinary Studies on the Nervous System (CISNe), Universidad Austral de Chile, Valdivia, Chile. a.a.rojasfernandez@dundee.ac.uk (Sponsor: P. Burgos).
217. **Astrocytes derived from human induced pluripotent stem cells (iPSCs) recapitulate the toxic effects observed in murine models of Amyotrophic Lateral Sclerosis (ALS).** **Fabiola Rojas**¹, Rodrigo Aguilar^{1,2}, Sebastián Abarzua¹, Lorena Varela-Nallar¹, Fen-Biao Gao³, Martin Montecino^{1,2}, Brigitte van Zundert¹. ¹Center for Biomedical Research, Universidad Andres Bello, ²FONDAP-CRG, and ³University of Massachusetts Medical School, Worcester, USA. bvanzundert@unab.cl
219. **Defining the IRE1 interactome: novel regulators of the UPR.** **Rojas-Rivera D**, Sepulveda D, Rodriguez D, Köhler A, Urrea H, Carreras A, Groenendyk J, Michalak M, Chevet E, Vaisar T, Sierralta J, Hetz C. Biomedical Neuroscience Institute, Center for Molecular Studies of the Cell, ICBM, Faculty of Medicine, University of Chile; University of Alberta, Canada; University of Rennes, France; and Neurounion Biomedical Foundation, Santiago, Chile. drojasr@med.uchile.cl, chetz@hsph.harvard.edu
221. **SETDB1 associates to ribosomes and methylates ribosome-bound lysine 9 of histone H3.** Carlos Rivera¹, **Francisco Saavedra**¹, Francisca Alvarez¹, César Díaz-Celis¹, Valentina Ugalde¹, Jianhua Li², Ignasi Forné², Zachary A. Gurard-Levin^{3,4,5,6,7}, Geneviève Almouzni^{3,4,5,6,7}, Axel Imhof², and Alejandra Loyola¹. ¹Fundación Ciencia & Vida, Santiago, Chile. ²Munich Center of Integrated Protein Science and Adolf-Butenandt Institute, Munchen, Germany. ³Institut Curie, Centre de Recherche, Paris, France. ⁴CNRS, Paris, France. ⁵Equipe Labellisee Liguecontre le Cancer, Paris, France. ⁶UPMC, Paris, France. ⁷Sorbonne University, PSL. fco.saavedra.uchile@gmail.com
223. **SIM super-resolution microscopy to define the localization of SVCT2 and its relationship with synaptic proteins in cortical neurons.** **Katterine Salazar**, Gustavo Cerda, Fernando Martínez, Francisca Espinoza, Francisco Nualart. ¹Department of Cell Biology and Center for Advanced Microscopy CMA BIOBIO, University of Concepcion, Chile.
225. **Susceptibility to oxidative death of lymphocytes as a potential plasma biomarker of mild cognitive impairment.** **San Martín CD**²; Ponce DP²; Salech F^{1,2,3}; Quetz AFG^{3,4}; Behrens MI^{1,2,3,5}. ¹Departamento Neurología y Neurocirugía, HCUCH, ²BNI, ³CEMC, Facultad de Medicina, ⁴ACCDiS, UCH, and ⁵Clínica Alemana de Santiago, Chile. dazilsanmartin@gmail.com
227. **Structural insight into cargo transport by the molecular motor dynein.** **Courtney M. Schroeder**, Jonathan M.I. Ostrem, Nicholas T. Hertz, Ronald D. Vale. Department of Cellular and Molecular Pharmacology, Howard Hughes Medical Institute, University of California, San Francisco. Courtney.Schroeder@ucsf.edu, vale@cmp.ucsf.edu
229. **Altered myelinated axons in dental pulp of teeth with chronic periodontitis.** **Sepúlveda M** (3), Lovera M (4), Suzuki K (4), Donoso B (3), Schmachtenberg O (2-3), and Couve E (1-3). Instituto de Biología (1); Centro Interdisciplinario de Neurociencia de Valparaíso (CINV) (2), Facultad de Ciencias (3); Facultad de Odontología (4), Universidad de Valparaíso, Valparaíso, Chile. eduardo.couve@uv.cl
231. **The non-canonical Wnt signaling modulates mitochondrial fusion in hippocampal neurons.** **Silva-Alvarez C**^{1,2}, Eisner V² and Inestrosa NC^{1,2,3}. ¹Center for Aging and Regeneration (CARE), ²Department of Cellular and Molecular Biology, Faculty of Biological Sciences, P. Catholic University of Chile, Chile. ³Center of Excellence in Biomedicine of Magallanes (CEBIMA), University of Magallanes, Punta Arenas, Chile. csilva@bio.puc.cl
233. **Effect of DNA damage on synaptic plasticity genes.** **Johana Spies**, Adriana Covarrubias, Maite Castro and Angara Zambrano. Instituto de Bioquímica y Microbiología. Universidad Austral de Chile, Valdivia. johana.spies@gmail.com
235. **Structural dynamics of the endoplasmic reticulum mediated by cytoskeleton modifies luminal protein transport.** **Jorge Toledo**^{1,2,3}, Felix Urrea⁴, Claudia Reyes^{1,2,3}, Daniela

- Flores^{2,3}, Javiera Bruna^{2,3}, Mauricio Cerda^{2,3}, Felipe Santibáñez^{2,3}, Julio Cesar Cárdenas⁴, Steffen Härtel^{2,3}, Andrés Couve^{1,3}. ¹Program of Physiology and Biophysics, and ²Program of Anatomy and Developmental Biology, Institute of Biomedical Sciences, ³Biomedical Neuroscience Institute (BNI), ⁴Program of Cell and Molecular Biology, Institute of Biomedical Sciences, Faculty of Medicine, Universidad de Chile. jorgetoledoh@gmail.com
- 237. Endothelial cells promote aggressiveness of castration-resistant prostate cancer epithelial cells through an angiocrine mechanism. Verónica Torres-Estay¹, Daniela Carreño¹, Patricia Fuenzalida¹, Loreto Véliz¹, Viviana P. Montecinos¹, and Alejandro S. Godoy^{1,2}. ¹Departamento de Fisiología, Pontificia Universidad Católica de Chile, Santiago, Chile. ²Department of Urology, Roswell Park Cancer Institute, Buffalo, NY. vtorrese@uc.cl (Sponsor: G. Owen).**
- 239. Down expression of Panx1 interferes with sarcoplasmic calcium release and excitation transcription coupling in after depolarization in voltage clamped adult muscle fibres. Troc-Gajardo J.L., Jaque-Fernández F., Utreras-Mendoza Y., Arias M., Hidalgo J., Buvinic S., Jaimovich E., Jacquemond V. and Casas M. Laboratory of Cellular Physiology of Muscle. ICBM. School of Medicine. University of Chile. Centre de Génétique et de Physiologie Moléculaire et Cellulaire UMR CNRS 5534 - Université Lyon 1. jltroc@yahoo.es**
- 241. Pharmacological dimerization and activation of the exchange factor eIF2B antagonizes the integrated stress response. *Jordan C. Tsai^{1,2}, *Carmela Sidrauski^{1,2}, Martin Kampmann^{2,3}, Brian Hearn⁴, Punitha Vedantham⁴, Priyadarshini Jaishankar⁴, Masaaki Sokabe⁵, Aaron Mendez^{1,2}, Billy Newton⁶, Edward Tang^{6,7}, Erik Verschueren⁶, Jeffrey Johnson^{6,7}, Nevan J. Krogan^{6,7}, Christopher S. Fraser⁵, Jonathan S. Weissman^{2,3}, Adam R. Renslo⁴, and Peter Walter^{1,2}. ¹Department of Biochemistry and Biophysics, UCSF. ²Howard Hughes Medical Institute, UCSF. ³Department of Cellular and Molecular Pharmacology, UCSF. ⁴Department of Pharmaceutical Chemistry and the Small Molecule Discovery Center, UCSF. ⁵Department of Molecular and Cellular Biology, College of Biological Sciences, UC Davis. ⁶QB3, California Institute for Quantitative Biosciences, UCSF. ⁷Gladstone Institutes, San Francisco. Jordan@walterlab.ucsf.edu *Both authors contributed equally.**
- 243. Anti-ribosomal P and anti-NMDAR antibodies from patients with neuropsychiatric lupus collaboratively increase apoptosis in HT-22 hippocampal cell line. Daniela Valenzuela¹ Marcela Bravo-Zehnder^{2,3}, Loreto Massardo², Alfonso González^{2,3,4}. Universidad Santo Tomás¹, Departamento de Inmunología Clínica y Reumatología, Facultad Medicina². Centro de Envejecimiento y Regeneración³, Facultad Ciencias Biológicas⁴, Pontificia Universidad Católica de Chile, Chile. Danielavbezanilla@gmail.com**
- 245. Decorin inhibits the PDGF-AA signaling in fibroblast. Relevance to skeletal muscle fibrosis. Roger Valle and Enrique Brandan. Facultad de Ciencias Biológicas, Pontificia Universidad Católica de Chile. rcvalle@uc.cl**
- 247. *Drosophila* Rho-Kinase is required in tendon cells for myotendinous junction formation and muscle morphogenesis. Franco Vega, Catalina Manieu and Patricio Olguín. Programa de Genética Humana, ICBM, Facultad de Medicina, Universidad de Chile. Franco.vega.2714@gmail.com, patricioolguin@med.uchile.cl**
- 249. Mitochondrial communication in Duchene Muscular Dystrophy adult skeletal muscle. Vial J., Castro M., Paz M., Brandan E., Eisner, V. Departamento Biología Celular y Molecular, Facultad de Ciencias Biológicas, Pontificia Universidad Católica de Chile. veisner@bio.puc.cl**
- 251. Cranial neural crest cell migration is regulated by Ric-8A, through Gai2 signaling in *Xenopus tropicalis*. Villaseca S., Toro-Tapia G., Torrejón, M. Laboratory of Signaling and Development, Department of Biochemistry and Molecular Biology, University of Concepcion. sorayavillaseca@udec.cl**

253. **Autophagy regulation by the TOR complex 2 (TORC2) - mitochondria signaling axis.** Ariadne Vlahakis¹, Nerea L. Muniozguren, Ted Powers². University of California, Davis. avlahakis@ucdavis.edu, tpowers@ucdavis.edu
255. **Survival probability of the water solvation sphere around ions: Structure and dynamics.** Carlos Yañez¹, Yerko Escalona¹, Alejandro Bernardin¹, Jose Antonio Garate¹, Tomas Perez-Acle^{1,2}. ¹Computational BiologyLab (Dlab), Fundación Ciencia & Vida. ²Centro Interdisciplinario de Neurociencias de Valparaíso, Universidad de Valparaíso. cyanez@dlab.cl (Sponsor: M. Roseblatt).
257. **Melanocytes derivation from mesenchymal stem cells (MSC).** Zavala, G^{1,2,3}, Contreras, R^{1,2}, Gubelin, W², Khoury, M^{1,2,3}. ¹Laboratory of Nano-Regenerative Medicine, Faculty of Medicine, Universidad de Los Andes, Chile. ²Cells for Cells, ³Consortio Regenero, Santiago, Chile. gzavala@regenero.cl
259. **Epigenetic modulation of Runx2 expression in hippocampal cells and consequences of forced expression.** Rodrigo Aguilar^{1,2}, Fernando Bustos¹, Gino Nardocci^{1,2}, Elvis Acevedo^{1,2}, Brigitte van Zundert¹, Martin Montecino^{1,2}. ¹Center for Biomedical Research and ²FONDAP Center for Genome Regulation, Universidad Andrés Bello, Santiago, Chile. mmontecino@unab.cl

12:45 – 14:15 Lunch

14:15 – 16:15 **SYMPOSIUM “AUSTRAL CELL BIOLOGY”**

Calbuco Room

Chair: Patricia Burgos, Universidad Austral de Chile

ROLE OF CRT2 CONTROLLING GENE EXPRESSION DURING DNA DAMAGE ASSOCIATED WITH B CELL DIFFERENTIATION. Angara Zambrano. Instituto de Bioquímica y Microbiología, Facultad de Ciencias, Universidad Austral de Chile, Valdivia.

EVALUATING THE ELECTRICAL ACTIVITY OF INTACT ORGANELLES BY USING AN HYBRID FRET PAIR REPORTING FLUCTUATIONS IN THE MEMBRANE POTENTIAL. Sebastián Brauchi. Department of Physiology, School of Medicine, Universidad Austral de Chile, Valdivia.

THE GOLGI APPARATUS IN CANCER CELLS: UNVEILING THE ROLE OF GOLGI PHOSPHOPROTEIN 3. Gonzalo A. Mardones. Department of Physiology, School of Medicine, Universidad Austral de Chile, Valdivia.

ALPHA-SNAP: A LINK BETWEEN MEMBRANE TRAFFICKING, ADHERENS JUNCTIONS AND NEURAL STEM CELLS BIOLOGY. Federico Bátiz. Developmental Neuropathology & Membrane Trafficking, School of Medicine, Universidad Austral de Chile, Valdivia.

MIRROR-SYMMETRIC MICROTUBULE ASSEMBLY AND CELL INTERACTIONS DRIVE LUMEN FORMATION IN THE ZEBRAFISH NEURAL ROD. Claudio Araya. Instituto de Ciencias Marinas & Limnológicas, Facultad de Ciencias, Universidad Austral de Chile, Valdivia.

**SYMPOSIUM “RECENT ADVANCES ON THE ROLE OF MEMBRANE
PROTEINS ON NORMAL PHYSIOLOGY AND DISEASE”**

Tronador Room

Chairs: Luis Aguayo and Gonzalo Yevenes, Universidad de Concepcion

GLYCINERGIC TRANSMISSION IN HEALTH AND DISEASE. Robert J Harvey, Department of Pharmacology, UCL School of Pharmacy, 29-39 Brunswick Square, London WC1N 1AX, United Kingdom.

UNEXPECTED EXPRESSION OF ETHANOL SENSITIVE NON-SYNAPTIC GLYCINE RECEPTORS IN THE MAMMALIAN BRAIN. Luis G. Aguayo, Braulio Muñoz, Trinidad Mariqueo, Benjamin Forstera. Department of Physiology, University of Concepcion, Chile.

PENTAMERIC LIGAND-GATED ION CHANNELS FUNCTIONING AT THE ATOMIC RESOLUTION. P.J. Corringer. Pasteur Institute, Channel-receptor Unit, CNRS UMR 3571, 25 rue du Docteur Roux, 75015 Paris, France.

MEMBRANE PROTEINS AND LIVING CELLS: INSIGHTS FROM FORCE AND MASS SPECTROMETRY. Nelson P. Barrera, Department of Physiology, Faculty of Biological Sciences, Pontificia Universidad Católica de Chile.

16:30 – 17:30 PLENARY LECTURE

“FAC. DE MEDICINA – P. UNIVERSIDAD CATOLICA DE CHILE”

Volcanes Room

Chair: Silvana Zanlungo, P. Universidad Catolica de Chile

SIMPLE SPHINGOLIPIDS, COMPLEX FUNCTIONS. Tony Futerman, Department of Biological Chemistry, Weizmann Institute of Science, Rehovot, Israel.

17:00 – 19:30 Schools and Science: Students from South of Chile

at the Chilean Society for Cell Biology

Maulin Room

17:30 – 19:30 Poster Viewing Session III: 174-259 Even Numbers

Convention Center Foyer

Coordinators: Angara Zambrano, Universidad Austral de Chile

Katherine Salazar, Universidad de Concepcion

Veronica Eisner, P. Universidad Catolica de Chile

Lorena Varela, Universidad Andres Bello

174. Unfolding of a knotted protein. Sebastian E. Gutierrez-Maldonado^{1,2}, Jose Antonio Garate¹, Maira Rivera³, Andres Bustamante³, Mauricio Baez³, Tomas Perez-Acle^{1,2}. ¹Computational Biology Lab, Fundación Ciencia & Vida, Santiago, Chile. ²Centro Interdisciplinario de Neurociencias de Valparaíso. Universidad de Valparaíso, Valparaíso, Chile. ³Laboratorio de Bioquímica, Facultad de Ciencias Químicas y Farmacéuticas, Universidad de Chile, Santiago, Chile. sebastian@dlab.cl (Sponsor: P. Valenzuela).

176. Effect of Docosahexaenoic Acid (DHA) or/and hypoxia in the invasion and migration of trophoblastic cells *in vitro*. Liberona, F., Delpiano, AM., Valdés G., Cuello, MA., Carvajal,

- JA. División de Obstetricia y Ginecología. Facultad de Medicina. Pontificia Universidad Católica de Chile. mflibero@uc.cl
178. **Low pH protection in the exocytic pathway: a role of the hantavirus Gn glycoprotein in the fusion activity of Gc? Vicente Muñoz Walther** and Nicole Tischler. Molecular Virology Laboratory, Fundación Ciencia & Vida. tente.munoz@gmail.com
180. **Differential expression of Olfactomedin4 in neutrophils depends on inflammatory signals. Salomé Muñoz**¹, Margarita Parada¹, Carlos Muñoz¹, Luis Solano¹, Pablo Maturana², Ricardo Cabrera², Miguel L Allende¹. ¹FONDAP Center for Genome Regulation. Universidad de Chile. ²Biochemistry and Molecular Biology Laboratory. Universidad de Chile. sdmunoz@ug.uchile.cl
182. **Retrograde regulation of insulin-dependent glucose uptake by mitochondria Ca²⁺ handling in skeletal muscle fibers. Ariel Contreras-Ferrat**^{1,2}, Alexis Díaz¹, Cristián Campos¹, Yildy Utreras¹, Denisse Valladares¹, Giovanni Rosales¹, Paola Llanos^{1,2}, Manuel Arias¹, **Enrique Jaimovich**¹. ¹Center for Molecular Studies of the Cell, Facultad de Medicina, Universidad de Chile, Santiago, Chile. ²Institute for Research in Dental Science, Facultad de Odontología, Universidad de Chile, Santiago Chile. acontreras@med.uchile.cl
184. **Cell transplantation in spinal cord regeneration in *Xenopus laevis*. Emilio Méndez-Olivos**^{1,2}, Juan Larraín^{1,2}. ¹Center for Aging and Regeneration, Pontificia Universidad Católica de Chile. ²Millennium Nucleus for Regenerative Biology, Pontificia Universidad Católica de Chile. eemendez@uc.cl
186. **Frizzled-1 knockdown impairs differentiation and migration of newborn neurons in the adult mouse hippocampus. Muriel D. Mardones**¹, Manuel Varas-Godoy², Nibaldo C. Inestrosa³, Lorena Varela-Nallar¹. ¹Centro de Investigaciones Biomédicas (CIB), Facultad de Ciencias Biológicas y Facultad de Medicina, Universidad Andrés Bello; ²Centro de Investigación Biomédica, Facultad de Medicina, Universidad de los Andes; ³Centro de Envejecimiento y Regeneración (CARE), Facultad de Ciencias Biológicas, P. Universidad Católica de Chile. mu.mardones@uandresbello.edu
188. **Role of ERp57 in TDP43 misfolding in an experimental model of ALS. Bargsted L.**^{1,2,3}, Medinas D.^{1,2,3}, Rozas P.^{1,2,3}, Muñoz N.^{1,2}, Hetz C.^{1,2,3} and Matus S.^{1,2}. ¹Neurounion Biomedical Foundation, Santiago, Chile, ²Biomedical Neuroscience Institute. Faculty of Medicine, University of Chile. ³Center for Molecular Studies of the Cell, ICBM, University of Chile, Santiago, Chile.
190. **Targeting the ER stress sensor PERK in models of Parkinson's disease. Castillo V.**¹, Soto P.¹, Axten J.³, Sidrauski C.⁴, Walter P.⁴, Hetz C.^{1,2}, and **Mercado G.**¹. ¹Biomedical Neuroscience Institute, ICBM, Faculty of Medicine, University of Chile. ²Neurounion Biomedical Foundation, Santiago, Chile. ³GSK Oncology, Glaxo Smith Kline, Pennsylvania, USA. ⁴Department of Biochemistry and Biophysics, University of California, San Francisco, USA. mariamercado@med.uchile.cl
192. **Purification of Ga13 by co-expression of Ric-8A. Leal, J.**, Maureira, A., Torrejón, M. Laboratory of Signaling and Development, Department of Biochemistry and Molecular Biology, University of Concepcion. juanileal@udec.cl
194. **Characterization of the function of the Slit/Robo signaling pathway in the morphogenesis of the optic lobe of *Drosophila melanogaster*. Carlos Oliva** and Jimena Sierralta. BNI, Facultad de Medicina, Universidad de Chile. caoliva@uc.cl, jimena@neuro.med.uchile.cl
196. **Epigenetic and genetic inactivation of the E-cadherin gene in sporadic diffuse-type gastric carcinoma. Olivares W**^{1,2}, Bernal C¹, Maturana MJ^{1,2}, Escobar C¹, Guzmán L³, Corvalán AH^{1,2}. ¹Center for Investigational Oncology (CITO), Pontificia Universidad Católica de Chile. ²Advanced Center for Chronic Disease (ACCDiS), Pontificia Universidad Católica de Chile. ³Laboratory of Biological Chemistry, Pontificia Universidad Católica de Valparaíso.

198. ***In vitro* biocompatibility studies of polymer blends for skeletal muscle regeneration.** Padilla, C.¹, Ramos, A.¹, Olgúin, H.², Valenzuela, L.M.¹. ¹Chemical and Bioprocess Engineering, Pontificia Universidad Católica de Chile. ²Dep. Cellular and Molecular Biology, Fac. Biological Sciences, Pontificia Universidad Católica de Chile. lvalenzr@ing.puc.cl
200. **Development of the functional properties of tectal neurons in zebrafish larvae.** Susana Paredes-Zúñiga¹, Arturo Torres-Herraez², Jonathan Boulanger-Weill^{2*}, Adrien Jouary², German Sumbre^{2*}, Miguel L. Allende¹. ¹FONDAP Center for Genome Regulation, Facultad de Ciencias, Universidad de Chile, Santiago-Chile. ²Institut de Biologie de l'École Normale Supérieure (IBENS), ENS-Paris, Inserm: U1024, CNRS: UMR8197, École des Neurosciences de Paris Ile-de-France. sparedesz@ug.uchile.cl
202. **Regulation of cardiac G-protein coupled receptors from endosomes.** Grace E. Peng¹ and Mark von Zastrow^{1,2}. ¹Program in Cell Biology, ²Departments of Psychiatry and Cellular and Molecular Pharmacology. University of California, San Francisco. San Francisco, CA 94158 USA. grace.peng@ucsf.edu
204. **Evaluation of mitochondrial function in Alzheimer's disease fibroblasts.** María José Pérez¹, Daniela P. Ponce⁴, Cesar Osorio-Fuentealba³, Alvaro Elorza², Maria I. Behrens⁴, and Rodrigo A. Quintanilla¹. ¹Centro de Investigación Biomédica, Universidad Autónoma de Chile, ²Center for Biomedical Research, U. Andres Bello, ³UMCE, ⁴Instituto de Ciencias Biomédicas, U. de Chile, Santiago, Chile. maria.perez@uautonoma.cl
206. **Molecular and cellular characterization of *P. salmonis* infection.** Pulgar R., Zúñiga A., Travisany D., Maass A., González M., Cambiazo V. Laboratorio de Bioinformática y Expresión Génica, INTA-Universidad de Chile. Center for Genome Regulation (CGR). Blue Genomics, Av. San Francisco 328, Puerto Varas, Chile. Laboratorio de Bioinformática y Matemática del Genoma FCFM-Universidad de Chile. rpulgar@inta.uchile.cl
208. **A virtual microscope for school education: the *MicroMundo* project.** Claudia Reyes, Camilo Allende-Castro, Daniela Flores, Macarena Díaz, Francisca Valdés, Patricio Nuñez*, Alejandro Frutos#, Eugenia Díaz, Alejandra García, Jorge Toledo, Steffen Härtel. Program of Anatomy and Developmental Biology, CPDAI, SCIAN-Lab, BNI, ICBM, F-Med, U-Chile, Colegio Almendral*, Instituto Luis Campino#. jorgetoledoh@gmail.cl; shartel@med.uchile.cl; micromundo.microscopiavirtual.cl
210. **Wnt-3a mimics metformin and rapamycin activity in the AMPK-mTOR pathway in hippocampal neurons.** Juvenal A. Ríos and Nivaldo C. Inestrosa. Laboratorio de Neurobiología Molecular, Departamento de Biología Celular y Molecular, Facultad de Ciencias Biológicas, Centro de Envejecimiento y Regeneración, Pontificia Universidad Católica de Chile, Alameda 340, Santiago, Chile. jriosleal@gmail.com
212. **PP32 and SET regulates the establishment of H4 acetylation on newly synthesized histones.** Carlos Rivera¹, Paola Merino¹, Elizabeth Rivas¹, Axel Imhof², Alejandra Loyola¹. ¹Epigenetics & Chromatin, Fundación Ciencia & Vida. ²LMU-University of Munich, Munich, Germany. criveraal@gmail.com
214. **Characterization of RIPK3-mediated phosphorylation of the activation loop of MLKL during necroptotic cell death.** Diego A. Rodriguez¹, Ricardo Weinlich, Scott Brown, Cliff Guy, Patrick Fitzgerald, Christopher P. Dillon¹, Andrew Oberst, Giovanni Quarato, Jonathan Low, James G. Cripps, Taosheng Chen, and Douglas R. Green¹. ¹Dept. of Immunology, St. Jude Children's Research Hospital, Memphis, TN, 38105, USA.
216. **Regulation of the antioxidant enzymes catalase and glutathione peroxidase 1 by kinase c-Abl in neuronal models of Niemann-Pick C disease.** Consuelo Rojas¹, Tamara Marín¹, Juan Castro¹, Pablo Contreras^{1,2}, Alejandra Alvarez², Silvana Zanlungo¹. ¹School of Medicine and ²Biological Sciences Faculty, Pontificia Universidad Católica de Chile, Santiago, Chile. carojas10@uc.cl
218. **Adrenergic transmission in the modulation of arousal-induced reluctance to try novel tastes by the insula in the rat.** Rojas S., Diaz-Galarce R, Jerez-Baraona JM, Quintana-

- Donoso D, Moraga-Amaro R and Jimmy Stehberg. Laboratorio de Neurobiología, Centro de Investigaciones Biomédicas, Universidad Andrés Bello, Santiago, Chile.
220. **Protein disulfide isomerase ERp57 regulates prion protein levels by an ER stress-independent mechanism.** Pablo Rozas^{1,2}, Mauricio Torres^{1,2}, Danilo B. Medinas^{1,2}, Ute Woehlbier^{1,2}, Víctor Hugo Cornejo^{1,2}, Catherine Andreu^{1,2}, and Claudio Hetz^{1,2}. ¹Biomedical Neuroscience Institute, ²Center for Molecular Studies of the Cell, ICBM, Faculty of Medicine, Universidad de Chile. chetz@hsph.harvard.edu
222. **Alteration in the ERAD machinery for herpes simplex virus type 1 in human neuroglioma cells.** Marukel Salamin¹, Paula Salazar¹, Patricia Burgos², Margarita Concha³, Carola Otth¹. ¹Instituto de Microbiología Clínica, ²Instituto de Fisiología and ³Instituto de Bioquímica y Microbiología, Universidad Austral de Chile. Institute of Clinical Microbiology, Faculty of Medicine, Universidad Austral de Chile. lic.salamin81@hotmail.com
224. **The induction of hypothyroidism in early stages triggers a decrease in the cognitive performance and hippocampus plasticity.** Paulina Salazar, Pedro Cisternas, Carmen Silva-Álvarez, Juan Francisco Codocedo and Nibaldo C. Inestrosa. Centro de Envejecimiento y Regeneración (CARE), Facultad de Ciencias Biológicas, P. Universidad Católica de Chile, Santiago, Chile. pisalazar@uc.cl
226. **Development of a new medical device based on porcine acellular extracellular matrix for the surgical treatment of female stress urinary incontinence.** Santander L¹, Hidalgo C¹, Stoore C¹, Corrêa F¹, Saldías D¹, González C¹, Landerer E², Paredes R¹. ¹Escuela de Medicina Veterinaria, Facultad de Ecología y Recursos Naturales, Universidad Andres Bello, Santiago, Chile. ²Escuela de Medicina, Facultad de Medicina, Universidad Andres Bello, Santiago, Chile. lorraine.santander.kuborn@gmail.com
228. **A molecular interplay between complexes mediating DNA demethylation, chromatin remodeling and histone modifications activate Osterix gene expression during osteoblast differentiation.** Hugo Sepúlveda, Valentina Fernández and Martín Montecino. Center for Biomedical Research and FONDAPE Center for Genome Regulation, Andres Bello University. hugosepulvedainostroza@gmail.com
230. **ALS-linked mutant ERp57 causes motor impairment and neuromuscular alterations in transgenic mice.** Sepulveda M^{1,2}, Medinas DB^{1,2}, Martinez F^{1,2}, Woehlbier U^{1,2}, Ojeda J⁴, Pinto C⁴, Campero M⁵, Kerr B⁶, Henriquez JP⁴, Hetz C^{1,2,3}. ¹Biomedical Neuroscience Institute, ²Center for Molecular Studies of the Cell, ICBM, Faculty of Medicine, University of Chile, ³Neurounion Biomedical Foundation, Chile, ⁴MINREB, University of Concepcion, ⁵Clinica Las Condes, ⁶CECs, Valdivia, Chile. chetz@hsph.harvard.edu
232. **Zebrafish on nutritional immunity: A new approach on aquaculture industry.** Solís CJ^{1,2}, Ulloa PE^{1,2}, Navarrete P³ and Feijóo CG^{1,2}. ¹Facultad de Ciencias Biológicas, Universidad Andrés Bello. ²Interdisciplinary Center for Aquaculture Research, Concepción. ³INTA, Universidad de Chile. cfeijoo@unab.cl
234. **Interactions between adrenergic activity and glucocorticoids in the insular cortex modulate anxiety.** Stehberg J., Rojas S., Diaz-Galarce R., Quintana-Donoso D., Moraga-Amaro R., Jerez-Baraona JM. Laboratorio de Neurobiología. Centro de Investigaciones Biomédicas. Universidad Andrés Bello. Santiago. Chile.
236. **Identification of the ATF6 activation and trafficking machinery.** Sandra Torres, Martin Kampmann, Jonathan Weissman and Peter Walter. University of California, San Francisco, Howard Hughes Medical Institute. storres@ucsf.edu
238. **An unstructured linker is required for human IRE1 α activation during the unfolded protein response.** Ngoc-Han Tran^{1,2,3}, Diego Acosta-Alvear^{1,2}, Jirka Peschek^{1,2}, Aaron Mendez^{1,2}, Gülsün Elif Karagöz^{1,2}, Shawn Douglas³ and Peter Walter^{1,2}. ¹Department of Biochemistry and Biophysics, UCSF. ²Howard Hughes Medical Institute, UCSF. ³Department of Cellular and Molecular Pharmacology, UCSF. Han@walterlab.ucsf.edu

240. **Mutate outer mitochondrial fusion protein Mfn2 hinder human mitochondrial dynamics.** Troncoso D.¹, Paz M.¹, Reza M.², Horvath R.², Eisner V.¹. ¹Departamento Biología Celular y Molecular, Facultad de Ciencias Biológicas, Pontificia Universidad Católica de Chile. ²Wellcome trust Center for Mitochondrial Research, Newcastle University, UK. veisner@bio.puc.cl
242. **Characterization of vasculogenic mimicry in cultured ovarian and gastrointestinal cancers.** Valdivia, A^{1,4}, Racordon, D^{1,4}, Bravo ML^{1,3}, Cuello M, ²Kato S, Gonzalez P^{1,3}, Corvalan AH^{2,3,4} & Owen GI^{1,3,4}. ¹Facultad de Ciencias Biológicas, ²Facultad de Medicina, ³Centro UC: Investigación en Oncología, Pontificia Universidad Católica de Chile & ⁴Advanced Center of Chronic Diseases (ACCDIS). aevaldiv@uc.cl
244. **Delivery of AAVs to express XBP1s in central nervous system prolongs lifespan and reduces SOD1 aggregation of an ALS mouse model.** Valenzuela Vicente^{1,2}, Matus Soledad^{1,2,3}, Armentano Donna⁴, Parsons Geoffrey⁴ and Hetz Claudio^{1,2,3}. ¹Biomedical Neuroscience Institute and ²Center for Molecular Studies of the Cell, Faculty of Medicine, University of Chile, Santiago, Chile. ³Neurounion Biomedical Foundation, Santiago, Chile. ⁴Genzyme Corp, Boston, Massachusetts, USA. vicentevalenzuela@med.uchile.cl
246. **Effect of DNA damage on metabolic genes expression.** Gabriela Vargas, Constanza Cárcamo, David León and Angara Zambrano. Instituto de Bioquímica y Microbiología, Universidad Austral de Chile. Valdivia. gabs.vargas@gmail.com
248. **Pathological forms of tau affects mitochondrial dynamics in Alzheimer's disease.** Katiana Vergara and Rodrigo A. Quintanilla. Centro de Investigación Biomédica, Universidad Autónoma de Chile, Santiago, Chile. kat.vergara.p@gmail.com
250. **Novel gene therapy to target the proteostasis network in Parkinson Disease.** Vidal, R.^{1,2}, Jerez, C.^{1,2,3}, Gonzalez, M.^{1,2,3}, and Hetz, C.^{1,2,3}. ¹Neurounion Biomedical Foundation, ²Biomedical Neuroscience Institute and ³Center for Molecular Studies of the Cell, University of Chile Santiago, Chile. rene.vidal@neurounion.com
252. **Protective properties derived from oligodendrocyte-neuron interaction via myelin-associated glycoprotein (MAG): Role against glutamate-mediated oxidative stress.** Vivinetto A¹, Falcon C², Palandri A¹, Rozes-Salvador V¹, Monferran C², López PHH^{1,3}. ¹Inimec, Conicet, UNC. ²Facultad de Ciencias Químicas, UNC. ³Facultad de Psicología, UNC, Argentina. avivinetto@immf.uncor.edu
254. **Functional characterization of mural cells during zebrafish fin regeneration.** Laura Wisniewski¹, Ann Grosse², Nathan D. Lawson², Jeroen Bussmann³, and Arndt F. Siekmann¹. ¹MPI for Molecular Biomedicine, Münster, Germany. ²University of Massachusetts Medical School, Boston, USA. ³Faculty of Science, Leiden Institute of Chemistry, Leiden, Netherlands.
256. *Withdraw.*
258. **C-terminal tail of BMP receptor type II translocates to the nucleus and inhibits morphological differentiation of motor neuron cells.** Diego Zelada¹, Cristina Pinto², Teresa Caprile³, Juan Pablo Henríquez² and Nelson Osses¹. ¹BMP Research Group, Institute of Chemistry, Pontificia Universidad Católica de Valparaíso. ²Laboratory of Developmental Neurobiology and ³Axon Guidance Laboratory, Department of Cell Biology, Faculty of Biological Sciences, Universidad de Concepción. d.z.varas@gmail.com

19:30 – 20:30 PLENARY LECTURE
“SOCIEDAD DE BIOLOGIA CELULAR DE CHILE”
Volcanes Room - *Language: Spanish*
Chair: Andrés Couve, SBCCH President, Universidad de Chile

ORIGENES DE LA DESIGUALDAD EN CHILE. Dante Contreras, Director
Centro de Estudios de Cohesión y Conflicto Social, Facultad de Economía y
Negocios, Universidad Chile.

20:45 AWARDS CEREMONY
Volcanes Room

Nikon - Loncotec: Best Images in Cell Biology
Genexpress: Best Presentations in Oral and Poster Communications

21:30 Dinner