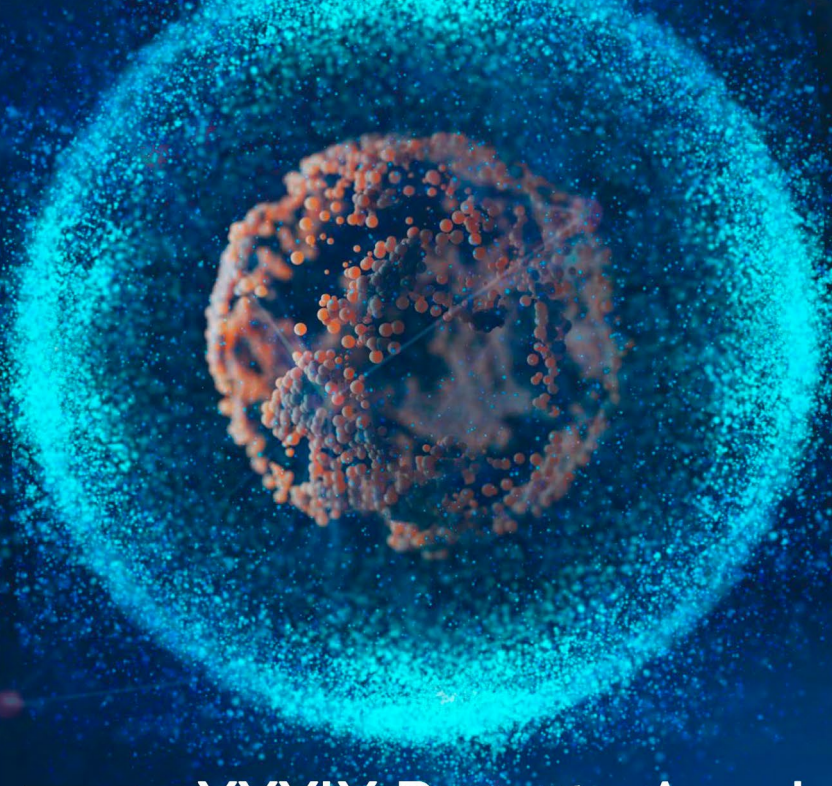

XXXIX Reunión Anual
Sociedad de Bioquímica y Biología Molecular de Chile

27-30 DE SEPTIEMBRE DE 2016

HOTEL PATAGÓNICO - PUERTO VARAS

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XXXIX Reunión Anual de la Sociedad de Bioquímica y Biología Molecular de Chile

September 27-30, 2016
Puerto Varas, Chile

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PROGRAM

Tuesday, September 27

10:30-13:00 **Registration**

13:00-14:30 **Lunch Break**

14:45-16:30 **Oral Sessions 1 and 2**

Oral Session 1
Protein Structure and Function

Chair: Victoria Guixe
Co-Chair: Amparo Uribe
Salón: Volcán Osorno B

14:45-15:00

Structure and function of Allophycocyanin.
Bunster M[1], Dagnino-Leone J[2], Figueroa M[1], Martínez-Oyanedel J[2], Bunster M[2], [1]Depto. Bioquímica y Biología Molecular, Facultad de Ciencias Biológicas, Universidad de Concepción.[2]Lab. Biofísica Molecular, Depto. Bioquímica y Biología Molecular, Facultad de Ciencias Biológicas, Universidad de Concepción.

15:00-15:15

Characterization of Thy-1 and $\alpha_v\beta_3$ integrin interactions in crude extracts at the single molecule level using Optical Tweezers

Burgos-Bravo F[1,4], Wilson C A M[2], Figueroa N[3], Quest A[1,4], Leyton L[1,4], [1]Laboratory of Cellular Communication, Facultad de Medicina, Universidad de Chile.[2]Biochemistry and Molecular Biology, Faculty of Chemistry and Pharmaceutical Sciences, Universidad de Chile.[3]Department of Physics, Faculty of Physics, Pontificia Universidad Católica de Chile.[4]Advanced Center for Chronic Diseases (ACCDiS) Universidad de Chile. (Sponsored by Acknowledgements: FONDECYT 1150744 (LL), 1130250 (AFGQ); CONICYT-FONDAP 15130011 (AFGQ-LL); FONDECYT 11130263 (CAMW); CONICYT Student Fellowship (FB).)

15:15-15:30

Energy transfer pathways in Phycobilsome from *Gracilaria chilensis*, a time resolved fluorescence study

Martinez-Oyanedel J[1], Vasquez A[1], Dagnino-Leone J[1], Vorphal M[1], Bunster M[1], Raut S[2], Gryczynski Z[2], [1]Bioquimica y Biologia Molecular, Ciencias Biologicas, Universidad de Concepción.[2]Department of Physics and Astronomy Texas Christian University. (Sponsored by Fondecyt 113.0256)

15:30-15:45

Biophysical and evolutionary aspects of structural metamorphism in FoxP and RfaH transcription factors

Reyes J[3], Medina E[1], Carvajal A[1], Villalobos P[1], Galaz P[3,2], Babul J[1], **Ramírez-Sarmiento C A[3]**, [1]Departamento de Biología, Facultad de Ciencias, Universidad de Chile.[2]Departamento de Bioquímica y Biología Molecular, Facultad de Ciencias Químicas y Farmacéuticas, Universidad de Chile.[3]Institute for Biological and Medical Engineering, Schools of Engineering, Medicine and Biological Sciences, Pontificia Universidad Católica de Chile. (Sponsored by Funded by FONDECYT 11140601 & 1130510)

15:45-16:00

FLUORESCENCE-BASED APPROACH TO DETERMINE THE ROLE OF LIPIDS IN MEMBRANE PROTEIN FOLDING

Vargas-Uribe M[1,2], Ladokhin A[2], Reyes A[1], [1]Biochemistry and Microbiology Universidad Austral de Chile.[2]Biochemistry and Molecular Biology the University of Kansas Medical Center. (Sponsored by Fondecyt 3160734 (MV-U), Fondecyt 1130386 (AMR) And NIH GM-069783 (ASL))

16:00-16:15

Cold-adapted sugar kinase from archaea: biophysical and evolutionary study of its flexibility.

Zamora R[1], Castro-Fernández V[1], Ramírez-Sarmiento C[1], Villalobos P[1], Komives E[2], Guixe V[2], [1]Departamento de Biologia, Facultad de Ciencias, Universidad de Chile.[2]Department of Chemistry and Biochemistry University of California San Diego. (Sponsored by FONDECYT 1150460)

ORAL SESSION 2

Gene Expression

Chair: Jose Leonardo Gutierrez
CoChair: Alejandra Loyola
Salón: Volcán Calbuco

14:45-15:00

Physical and functional interaction between Hmo1 and the ATP-dependent chromatin remodeling complex SWI/SNF

Amigo R[1], Hepp M[1], Gidi C[1], Arriagada A[1], Gutiérrez J[1], [1]Departamento Bioquímica y Biología Molecular, Facultad de Ciencias Biológicas, Universidad de Concepción. (Sponsored by CONICYT, FONDECYT/Regular 1130818)

15:00-15:15

Insights into glucose sensing and its role in circadian clocks mechanisms in Neurospora.

Díaz R[1], Larrondo L[1], [1]Millennium Nucleus for Fungal Integrative and Synthetic Biology MNFISB, Departamento de Genética Molecular y Microbiología, Facultad de Ciencias Biológicas, Pontificia Universidad Católica de Chile. (Sponsored by Funding: MN-FISB 120043 And FONDECYT 1131030)

15:15-15:30

Participates in the early processing of cytosolic histone H3

Saavedra F[1], Gurard-Levin Z[2], Hormazabal J[1], Pérez De Arce F[1], Alfaro I[3], Almouzni G[2], Loyola A[1], [1]Laboratorio de Cromatina y Epigenética Fundación Ciencia & Vida.[2]Chromatin Dynamics Institut Curie.[3]Ciencias Naturales y Exactas Universidad de Playa Ancha de Ciencias de La Educación. (Sponsored by Funded by FONDECYT 1160480, Basal Project PFB16, Doctoral Fellowship CONICYT 21140346.

15:30-15:45

A synthetic blue-light switch to control gene expression in yeast.

Salinas F[1], Rojas V[1], Delgado V[1], Agosin E[2], Larrondo L[1], [1]Departamento de Genética Molecular y Microbiología, Facultad de Ciencias Biológicas, Pontificia Universidad Católica de Chile.[2]Departamento de Ingeniería Química y Bioprocesos, Facultad de Ingeniería, Pontificia Universidad Católica de Chile. (Sponsored by Funding MN-FISB NC120043, CONICYT/FONDECYT 3150156, 1130822 And 1131030.)

15:45-16:00

Expression analysis of anti- and pro- apoptotic genes in Chilean red sea urchin (*Loxechinus albus*) coelomocytes in response to hypoxia

Valenzuela C[1], Boltaña S[2], Molina A[1,3], Valdés J[1,3], [1]Lab. de Biotecnologia Molecular. Interdisciplinary Center for Aquaculture Research (INCAR), Ciencias Biológicas, Universidad Andrés Bello.[2]Laboratory of Biotechnology and Aquatic Genomics. Interdisciplinary Center for Aquaculture Research (INCAR) Universidad De Concepción.[3]Centro de Investigacion Marina de Quintay (CIMARQ) Universidad Andrés Bello. (Sponsored by Supported by FONDAP 15110027 And FONDECYT 1130545)

16:30-17:00 **Coffee Break**

17:00-19:00 **Symposia 1 and 2**

Symposium 1

Structural and Functional Characterization of Macromolecular Complexes

Chair: Nelson Barrera, Pontificia Universidad Católica de Chile

Salón: Volcán Osorno B

17:00-17:30

Visualizing activation-induced structural changes in ionotropic glutamate receptors using fast-scan AFM

Edwardson J. M. Department of Pharmacology, University of Cambridge, U.K. (jme1000@cam.ac.uk)

17:30-18:00

Modulating TRPV1's gating with genetically encoded cross linkers.

C.K. Colenso[1], D. Cabezas[1], Juan C. Opazo[2], D. Granata[3], V. Carnevale[3], C.A. Ahern[4] and **S. Brauchi**[1] (sbrauchi@uach.cl) 1. Instituto de Fisiologia and Center for Interdisciplinary Studies on Nervous system (CISNe), Universidad Austral de Chile. 2. Instituto de Instituto de Ciencias Ambientales y Evolutivas, Universidad Austral de Chile. 3. Institute for Computational Molecular Science, Temple University. 4. Molecular Physiology and Biophysics, University of Iowa.

18:00-18:30

Dynamic protein structure: from protein disorder to membrane pores

Sobott, F, Biomolecular & Analytical Mass Spectrometry Department of Chemistry & Center for Proteomics Groenenborgerlaan 171, 2020 Antwerp, Belgium. (frank.sobott@uantwerpen.be)

18:30-19:00

Single molecule pharmacology of P2X receptors

Barrera, N.P, Department of Physiology, Faculty of Biological Sciences, Pontificia Universidad Católica de Chile, Chile. (nbarrera@bio.puc.cl)

Symposium 2

Functional Genomics of *P. salmonis*: *Unraveling the pathogenicity traits in the P. salmonis genome*

Chair: Alejandro Yáñez, Universidad Austral de Chile

Salón: Volcán Calbuco

17:00-17:30

Discovering and comparing pathogenic mechanisms present in the P. salmonis strains genomes and proteomes.

Yáñez Cárcamo[1],[2] A.J., Oliver, C. Haro, R., Sánchez, P. Cortes, M. Sandoval, R., Albornoz, R., Romero, A., Cárcamo, J.G., Enríquez, R., Avendaño-Herrera, R., Figueroa..[1] J. Instituto de Bioquímica y Microbiología, Facultad de Ciencias, Universidad Austral de Chile, Valdivia, Chile[2]; Interdisciplinary Center for Aquaculture Research (INCAR), Concepción, Chile; [3]Universidad Andres Bello, Viña del Mar, Chile

17:30-18:00

Dissecting the pathogenesis of Piscirickettsia salmonis by mutational analysis

Mancilla, M., Saavedra, J. & Hernandez, N. Laboratorio de Investigación y Desarrollo, ADL Diagnostic Chile Ltda, Puerto Montt, Chile.

18:00-18:30

The landscape of non-coding RNAs in Piscirickettsia salmonis

Maracaja V. Laboratory of Integrative Bioinformatics, Universidad Mayor, Chile

18:30-19:00

Research on Iron acquisition of Piscirickettsia salmonis

Cristopher Segovia[1] and Javier Santander[1,2]
[1]Universidad Mayor, Center for Genomis and Bioinformatics, Huechuraba, Chile
[2]Memorial University of Newfoundland, Department of Ocean Sciences, St John´s, Canada

19:15-19:30 Opening Ceremony

19:30-20:45 Opening Lecture

Chair: Ramirez-Sarmiento, C.
Salon Plenario: Volcán Calbuco-Tronador

From structure to function: the convergence of structure based models and co-evolutionary information

Onuchic, J, N[1]., [1]Center for Theoretical Biological Physics and Departments of Physics and Astronomy, Chemistry and Biosciences, Rice University.

20:45-21:00 DataBlitz Session 1

21:00-22:30 Welcome Cocktail

Wednesday September 28

9:00-10:45 **Oral Sessions 3 and 4**

Oral Session 3 - Biomedicine

Chair: Andrew Quest
CoChair: Gloria Arriagada
Salón: Volcán Osorno B

9:00-9:15

Using of metal nanoparticles functionalized for detection of biomarkers in Gastric Cancer.

Marchant M[1], Guerrero A[2], Corvalán A[3], Guzmán L[4], Kogan M[2], [1]Instituto de Química, Facultad de Ciencias, Pontificia Universidad Católica de Valparaíso.[2]Departamento de Química Farmacológica y Toxicológica, Facultad de Ciencias Químicas y Farmacéuticas, Universidad de Chile.[3]Centro de Investigación en Oncología (CITO), Facultad de Medicina, Pontificia Universidad Católica de Chile.[4]Química, Facultad de Ciencias, Pontificia Universidad Católica de Valparaíso. (Sponsored by Acknowledgments: MM Acknowledges to CONICYT Doctoral Fellowship 21130616. MK Acknowledges to Fondecyt 1130425, ARG Acknowledges to Postdoctoral Fondecyt 3150360, AHC Acknowledges to Fondecyt 1151411 And All Authors Acknowledge CONICYT-FONDAP 15130011.)

9:15-9:30

Enhancing the cellular uptake of chlorotoxin

Ojeda P[1,2], Henriques S[2], Wang C[2], Craik D[2], [1]Center for Bioinformatics and Molecular Simulations (CBSM) Universidad de Talca.[2]Division of Chemistry and Structural Biology, Institute for Molecular Bioscience, University of Queensland. (Sponsored by This Work Was Supported by The National Health and Medical Research Council, Australia (NHMRC; APP1010552) And The Comisión Nacional de Investigación Científica y Tecnológica, Chile (FONDECYT 3160140)

9:30-9:45

The Down syndrome critical region gene 1, RCAN1, regulates mitochondrial dynamics and metabolism in cardiomyocytes and Down syndrome induced pluripotent stem cells

Parra V[1], Altamirano F[2], Kyrychenko V[2], Rotter D[2], Hill J[2], Lavandero S[1], Schneider J[2], Rothermel B[2], [1]Advanced Center for Chronic Diseases (ACCDiS), Facultad de Ciencias Químicas y Farmacéuticas, Universidad de Chile.[2]Department of Internal Medicine/ Cardiology University of Texas Southwestern Medical Center. (Sponsored by FONDECYT De Iniciación 11150282 (VP), American Heart Association (AHA) Postdoctoral Fellowship 13POST16520009 (VP), Jump Start Award PCBC/NIH PCBC_JS_2014/3_01 (VP), FONDAP 15130011 (SL), National Institute of Health HL-097768 (BAR).)

9:45-10:00

Maternal age effect and severe germ-line bottleneck in the inheritance of human mitochondrial DNA

Rebolledo B1, Su M S2, Stoler N1, McElhoe J1, Dickins B3, Blankenberg D1, Korneliussen T4, Chiaromonte F5, Nielsen R6, Holland M1, Paul I7, Nekrutenko A1, Makova K2, 1Biochemistry and Molecular Biology Pennsylvania State University.2Biology Pennsylvania State University.3School of Science & Technology Nottingham Trent University.4Natural History Museum of Denmark University of Copenhagen.5Statistics Pennsylvania State University.6Integrative Biology University of California Berkeley.7College of Medicine Pennsylvania State University. (Sponsored by.)

10:00-10:15

Death induced by inhibition of CK2 in colon cancer cells: Vacuolization or autophagy?

Villar P[1], López De Armentia M[3], Carrasco V[1], Verdugo C[1], Silva E[1], Castro A[2], Colombo M[3], Tapia J[1], [1]Departamento de Oncología Básica y Clínica, Facultad de Medicina, Universidad de Chile.[2]Laboratorio de Transducción de Señales y Cáncer, Facultad de Ciencias Biológicas, Universidad de Concepción.[3]Instituto de Histología y Embriología, Facultad de Ciencias Médicas, Universidad Nacional de Cuyo.

10:15-10:30

Decreased lipogenic markers in prevention of hepatic steatosis by dietary Rosehip oil supplementation in high fat diet-fed mice.

González-Mañán D[1], Cadagan C[1], Silva D[1], Tapia G[1], [1]Programa de Farmacología Molecular y Clínica, ICBM, Facultad de Medicina, Universidad de Chile. (Sponsored by FONDECYT 1140547)

Oral Session 4 - Immunology

Chair: Alvaro Elorza
CoChair: Claudia Quezada
Salón: Volcán Calbuco

9:00-9:15

Chemokines expressed in colorectal cancer are important in tumor-associated macrophages (TAMs) profile.

De La Fuente M[1,2], Parada D[2], Simian D[3], Martínez M[3], López-K F[4], Krongberg U[4], Álvarez K[4], López S[5], Sanguinetti A[5], Abedrapo M[5], Quera R[1], Hermoso M[2], [1]Servicio Gastroenterología Clínica Las Condes .[2]Laboratorio de Inmunidad Innata, Facultad de Medicina, Universidad De Chile.[3]Subdirección de investigación. Dirección Académica Clínica Las Condes.[4]Unidad de Coloproctología Clínica Las Condes.[5]Servicio de Cirugía Coloproctológica Hospital Clínico Universidad de Chile. (Sponsored by Fondecyt Postdoctorado N°3150328)

9:15-9:30

MICRORNA 378a-3P, A NEW MOLECULAR MECHANISM OF IL-33 REGULATION IN ULCERATIVE COLITIS

Dubois K[1], Díaz-Jiménez D[1], Quera R[2], Simian D[3], Martínez M[3], Torres-Riquelme A[1], De La Fuente M[1], Olivares-Morales M[1], Cidlowski J[4], Hermoso M[1], [1]Laboratorio de Inmunidad Innata, Programa de Inmunología, Instituto de Ciencias Biomédicas, Facultad de Medicina, Universidad de Chile.[2]Departamento de Gastroenterología Clínica las Condes.[3]Dirección Académica, Subdirección de Investigación, Clínica Las Condes.[4]Laboratory of Signal Transduction National Institute of Environmental Health Sciences, National Institute of Health, Department of Health and Human Services. (Sponsored by DA-CLC PI: 2013-B002; Fondecyt 1110381; NIEHS 1012-1013; Mecesup UCH 0714; Mecesup UCH 1304.)

9:30-9:45

Adipose cell NLRP3 inflammasome upregulation through calcium sensing receptor activation

D´Espessailles A[1], Rocha G[1], Cifuentes M[1], [1]Instituto de Nutrición y Tecnología de los Alimentos Universidad de Chile. (Sponsored by Funded by FONDECYT N° 1150651)

9:45-10:00

Simvastatin decreases inflammation and fibrosis on a murine model of chronic Chagas´s cardiopathy through 15-epi-lipoxin A_4 production

González-Herrera F[1], Machado F[2], Liempi A[3], Castillo C[3], Guzmán-Rivera D[1], Kemmerling U[3], Maya J D[1], [1]Programa de Farmacología Molecular y Clínica, Facultad de Medicina, Universidad de Chile.[2]Department of Biochemistry and Immunology, Institute of Biological Science, Universidad Federal de Minas Gerais.[3]Programa de Anatomía y Biología del Desarrollo, Facultad de Medicina, Universidad de Chile. (Sponsored by PROYECTO FONDECYT N° 1130189)

10:00-10:15

Interleukin 33, a potential candidate for epithelial mesenchymal transition activation in colorectal cancer.

Landskron G[1], De La Fuente M[1,2], Diaz-Jimenez D[1], Dubois K[1], Simian D[3], Martínez M, López-K F[4], Kronberg U, Álvarez K, López S[5], Sanguinetti A[5], Abedrapo M[5], Quera R, Díaz G[6], Peña C[7], Hermoso M[1], [1]Laboratorio de Inmunidad Innata, Programa de Inmunología, ICBM, Facultad de Medicina, Universidad de Chile. [2]Servicio de Gastroenterología Clínica Las Condes. [3]Subdirección de Investigación, Dirección Académica, Clínica las Condes.[4]Unidad de Coloproctología Clínica Las Condes.[5]Servicio de Cirugía Coloproctologica Hospital Clínico Universidad de Chile.[6]Laboratorio de Farmacología Molecular, Facultad de Ciencias Químicas y Farmacéuticas, Universidad de Chile.[7]Laboratorio de Oncología Medica Hospital Universitario Ramón y Cajal. (Sponsored by MECESUP UCH 1304, CONICYT BECA 21140837, FONDECYT 1110381, S2010/BMD- 2344 COLOMICS 2; CP09/00294; PI12/02037; RD12/0036/0041)

10:15-10:30

Glucocorticoids impair phagocytosis and inflammatory response on macrophages infected with a Crohn´s Disease-associated pathogenic bacteria

Olivares-Morales M[1], Gutiérrez R[1], Chahúan I[1], Torres-Riquelme A[1], Dubois K[1], De La Fuente M[1], Xu X[2], Quera R[3], Figueroa C[3], Cidlowski J[4], Vidal R[5], Hermoso M[1], [1]Laboratorio de Inmunidad Innata, Programa de Inmunología, Instituto de Ciencias Biomédicas, Facultad de Medicina, Universidad de Chile.[2]Laboratory of Integrative Bioinformatics National Institutes of Environmental Health Sciences, National Institutes of Health, Department of Health and Human Services.[3]Departamento de Gastroenterología Clínica las Condes.[4]Laboratory of Signal Transduction National Institute of Environmental Health Sciences, National Institutes of Health, Department of Health and Human Services.[5]Laboratorio de Enteropatógenos, Programa de Microbiología y Micología, Instituto de Ciencias Biomédicas, Facultad de Medicina, Universidad de Chile. (Sponsored by Fondecyt 1120577; MECESUP Uch1304; CLC PI: 2012-DA015; Conicyt 21120682; NIEHS 915.)

10:45-11:15 **Coffee Break**

11:15-13:15 **Symposia 3 and 4**

Symposium 3

Molecular basis of Alzheimer's disease

Chair: Victor Bustos, Rockefeller University, USA

Salón: Volcán Osorno B

11:15-11:45

Wnt-5a signaling and Alzheimer´s disease.

Codocedo J.F Centro de Envejecimiento y regeneración (CARE UC). Pontificia Universidad Católica de Chile [1]Biologia Celular y Molecular, Ciencias Biológicas, Pontificia Universidad Católica de Chile.

11:45-12:15

Autophagosomes cooperate in the degradation of intracellular C-terminal fragments of the Amyloid Precursor Protein via the MVB/lysosomal pathway: Dysregulation of amphisome biogenesis in Alzheimer's disease?

Burgos. P[1], [1]Department of Physiology, School of Medicine, Universidad Austral de Chile. (Sponsored by Supported by FONDECYT #1130929 And Fondo Newton-Picarte DPI20140068)

12:15-12:45

Role of glutamatergic synaptic transmission in Alzheimer's disease.

Cerpa W[1], Carvajal F[1], Inestrosa N[1], Bonansco C[2], Barría A[3], [1]Departamento de Biología Celular y Molecular, Facultad de Ciencias Biológicas, Pontificia Universidad Católica de Chile.[2]Departamento de Fisiología Universidad de Valparaíso.[3]Department of Physiology and Biophysics University of Washington. (Sponsored by Fondecyt N° 11121206 And Proyecto Asociativo CONICYT (anillo ACT1411))

12:45-13:15

Brain extrasynaptic NMDA receptors may play a prominent and triggering role during early and presymptomatic stages of Alzheimer´s disease.

Bustos G[1], [1]Departamento de Biologia Celular y Molecular, Pontificia Universidad Católica de Chile.

Symposium 4

Effect of force in Biology: from enzymes to signaling in the cell

Chairs: **Lisette Leyton** and **Christian A.M. Wilson**,
Salón: Volcán Calbuco

11:15-11:45

DNA springs and the deformability of enzymes

Zocchi G[1], [1]Physics and Astronomy UCLA

11:45-12:15

Mechanical and functional studies of biomolecules at single molecule level

Wilson, C A M[1], [1]Departamento de Bioquímica y Biología Molecular, Facultad de Ciencias Químicas y Farmacéuticas, Universidad de Chile. (Sponsored by FONDECYT 11130263 and PCI PII20150073)

12:15-12:45

The proteoglycan Syndecan-4 potentiates integrin-induced cell contraction.

Leyton L[1], Burgos-Bravo F[1], Wilson C A M[2], Quest A[1], [1]Programa de Biología Celular y Molecular, Facultad de Medicina, Universidad de Chile.[2]Laboratorio de Bioquímica, Facultad de Ciencias Químicas y Farmacéuticas, Universidad de Chile. (Sponsored by FONDECYT 1150744 (LL), 1130250 (AFGQ); FONDAP 15130011 (AFGQ-LL); FONDECYT 11130263 (CAMW); CONICYT Student Fellowship (FB).)

12:45-13:15

Cells feel the force… then they don't

Barker TH[1], [1]Department of Biomedical Engineering, School of Engineering and Applied Sciences and School of Medicine University of Virginia, Charlottesville, VA 22908 USA.

13:15-15:00 **Lunch Time**

15:30-17:35 **New Members Session** 1

Chair: Luis Larrondo
Co-Chair: Marcelo López-lastra
Salón: Volcán Osorno B

15:30-15:55 Lorena Lobos

Exosomes from metastatic breast cancer cells post-interference of ncmtRNAs decreased metastasis in a model of carcinomatosis intraperitoneally

Lobos-González L[1], Bustos R[2], Campos A V[3], Silva V[1], Carrasco M[1], Guevara [F2], Varas-Godoy M[4], Oliveira L[1], Burzio V[5],[6], Burzio L[1], [1]Andes Biotechnologies Fundación Ciencia y Vida.[2]Facultad de Ciencias Biológicas Universidad Andrés Bello.[3]Quimica y Farmacia, Ciencias Químicas y Farmacéuticas, Universidad de Chile.[46]Laboratorio Biología de la Reproducción, Centro de Investigación Biomédica, , Facultad de Medicina, Universidad de Los Andes.[5]Universidad Andrés Bello, Facultad de Ciencias Biológicas, Fundación Ciencia y Vida - Andes Biotechnologies.[6]Biotecnologia Universidad Andrés Bello. (Sponsored by FONDECYT 11140204 (LLG), BASAL PFB-16.)

15:55-16:20 Jorge Vera-Otarola

Transcriptome-wide identification of RNA binding sites of LINE-1 retrotransposon ORF1 protein in human carcinoma cell lines by CLIP-seq

Vera-Otarola J[1,2], Mir A[1], Cristofari G[1], [1]Retrotransposons & Genome Plasticity Lab, Faculty of Medicine, University of Nice - Sophia-Antipolis, Institute for Research on Cancer and Aging of Nice (IRCAN).[2]Departamento de Enfermedades Infecciosas e Inmunología Pediátrica, Escuela de Medicina, Pontificia Universidad Católica de Chile. (Sponsored by G.C. Lab Is Supported

16:20-16:45 Ignacia Fuentes

Determining the genetic basis of epidermolysis bullosa symptoms through genotype-phenotype associations and ngs

Fuentes I[1,2], Morandé P[2], Fuentes C[2], Yubero M J[2,3], Mc Nab M E[2], Repetto G[1], Krämer S[4], Kantor A[5], Mellado F[5], Klausegger A[6], Bauer J[6], Palisson F[2,3], [1]Centro de Genética y Genómica, Facultad de Medicina, Universidad Del Desarrollo.[2]DEBRA Chile Fundación.[3]Facultad de Medicina Universidad del Desarrollo Clínica Alemana.[4]Facultad de Odontología Universidad de Chile.[5]Oftalmológica Los Andes Fundación.[6]Department of Dermatology, EBHouse Austria Paracelsus Medical University. (Sponsored by (1) Fundación DEBRA Chile And (2) Fondo Nacional De Desarrollo Científico Y Tecnológico (FONDECYT #11140440).)

16:45-17:10 Jenniffer Angulo

LOOP IIId of the HCV IRES is essential for the structural rearrangement of the 40S-HCV IRES complex.

Angulo J[1], Ulryck N[2], Deforges J[2], Chamond N[2], López-Lastra M[1], Masquida B[3], Sargueil B[2], [1]Laboratorio de Virología Molecular, Centro de Investigaciones Médicas, Escuela de Medicina, Pontificia Universidad Católica de Chile.[2]Laboratoire de cristallographie et RMN Biologiques, CNRS UMR 8015, Faculté de Pharmacie, Université Paris Descartes.[3]Génétique Moléculaire Génomique Microbiologie, CNRS UMR 7156 Université de Strasbourg

17:10-17:35 Exequiel Medina

Detailed biophysical characterization of the unusual three-state folding and domain swapping of the forkhead domain of human FoxP1

Medina E[1], Cordova C[1], Reyes J[1], Komives E A[2], Ramírez-Sarmiento C A[3,1], Babul J[1], [1]Departamento de Biología, Facultad de Ciencias, Universidad de Chile.[2]Department of Chemistry and Biochemistry University of California.[3]Institute for Biological and Medical Engineering , Schools of Engineering, Medicine and Biological Sciences , Pontificia Universidad Católica de Chile. (Sponsored by FONDECYT 1130510, 11140601 & CONICYT Doctoral Fellowship 21130478)

New Members Session 2

Chair: Sergio Lavandero
Co-Chair: Ilona Concha
Salón: Volcán Calbuco

15:30-15:55 Javier Canales

Deciphering gene regulatory networks involved in the crosstalk between sulfur and nitrogen metabolism in *Arabidopsis thaliana.*

Canales J[1], Henríquez-Valencia C[1], Gutiérrez R[2], [1]Instituto de Bioquímica y Microbiología, Facultad de Ciencias, Universidad Austral de Chile.[2]Genética Molecular y Microbiología, Facultad de Ciencias Biológicas, Pontificia Universidad Católica de Chile. (Sponsored by FONDECYT Nº 11150070)

15:55-16:20 Maximiliano Figueroa

The unexpected structure of the designed protein Octarellin V.1 forms a challenge for protein structure prediction tools

Figueroa M[1], [1]Bioquímica y Biología Molecular, Facultad de Ciencias Biológicas, Universidad de Concepción.

16:20-16:45 Berta Henriquez

Epigenetic regulation of Senescence-associated genes in hippocampal neurons

Morales M[1], Leal S[1], Martinez G[1], Leiva L[1], Vazquez M C[1], Reyes L[1], Montecino M[2], **Henriquez B**[1], [1]Faculty of Science Universidad San Sebastián.[2]Center for Biomedical Research Universidad Andrés Bello. (Sponsored by Acknowledgements: FONDECYT 11130584 (B.H), FONDECYT 11130667 (MC.V), FONDAP 15090007 (M.M) And FONDECYT 1130706 (M.M))

16:45-17:10 Juan Valdés

Cortisol-mediated non-genomic signaling in the stress response of teleost

Aedo J[2], Espinoza M[2], Molina A[2,1], **Valdés J[2,1]**, [1]Centro de Investigación Marina de Quintay (CIMARQ) Universidad Andrés Bello.[2]Lab. de Biotecnología Molecular. Interdisciplinary Center for Aquaculture Research (INCAR), Ciencias Biológicas, Universidad Andrés Bello. (Sponsored by Supported by FONDAP 15110027, FONDECYT 1130545 And UNAB DI-1277-16/R

17:10-17:35 Victor Bustos

Dual regulation of Abeta levels by Presenilin 1

Bustos V[1], Pulina M[1], Kelahmetoglu Y[1], Bispo A[1], Lam A[1], Greengard P[1], [1]New York THE ROCKEFELLER UNIVERSITY.

17:35-19:30

Poster Session and Coffee Break
Posters I
2-134 Even numbers

19:30-20:45

Osvaldo Cori Lecture
Chair: Sergio Lavandero
Salón: Plenario (Volcán Calbuco-Tronador)

Hidalgo C., **Universidad de Chile**
Redox control of calcium signaling mediated by ryanodine receptor channels: its effects in health, aging and disease

20:45-21:00 **DataBlitz Session 2**

Thursday, September 29

9:00-10:45 **Oral Sessions 5 and 6**

Oral Session 5

Molecular cell biology and Plant biology
Chair: Lorena Norambuena
CoChair: Leda Guzmán
Salón: Volcán Osorno B

9:00-9:15

Caveolin-1 in exosomes from metastatic breast cancer cells enhances metastasis in a novel model of intraperitoneal carcinomatosis

Campos A[1,2,4], Bustos R[2], Díaz N[1], Carrasco M[2], Guevara F[2], Lobos González L[1,2,3], Quest A[1,4], [1]Laboratorio de Comunicaciones Celulares, Facultad de Medicina, Universidad de Chile.[2]Andes Biotechnologies SA Fundación Ciencia & Vida.[3]Advanced Center for Chronic Diseases (ACCDiS) Universidad de Chile.[4]Advanced Center for Chronic Diceases (ACCDiS) Universidad de Chile. (Sponsored by FONDECYT 11140204 (LLG), BASAL PFB-16 (LLG); CONICYT Student Fellowship (AC); CONICYT-FONDAP 15130011 And FONDECYT 1130250 (AFGQ).)

9:15-9:30

Adenosine A3 Receptor Elicits Chemoresistance Mediated by the Multiple Resistance-associated Protein-1 in Human Glioblastoma Stem-like Cells

Torres A1, Jaramillo C1, Uribe D1, Erices J1, Niechi I1, Quezada C1, 1Instituto de Bioquímica y Microbiología, Ciencias, Universidad Austral de Chile. (Sponsored by FONDECYT #1060777 (C.Q.) And CONICYT Ph.D. Fellowship # 21131009 (A.T.))

9:30-9:45

Activation of Angiotensin II type 1 receptor l i n - duces autophagy in vascular smooth muscle cells

Mondaca-Ruff D[1], García-Miguel M[1], Norambuena-Soto I[1], Sanhueza-Olivares F[1], Núñez-Soto C[1], Riquelme J[1], Lavandero S[1], Chiong M[1], [1]ACCDiS, Departamento de Bioquímica y Biología Molecular, Facultad de Ciencias Químicas y Farmacéuticas, Universidad de Chile. (Sponsored by Fondecyt 1140329, FONDAP 15130011)

9:45-10:00

The antisense non-coding mitochondrial RNAs as therapeutic targets in cervical and ovarian cancer
Vidaurre S[1,2], Ávila R[2], Villota K[1], Villegas J[2,3], Owen G[4], Burzio V[2,3], [1]Departamento de Ciencias Químicas y Biológicas, Facultad de Salud, Universidad Bernardo O`higgins.[2]Andes Biotechnologies Fundación Ciencia y Vida.[3]Ciencias Biológicas Universidad Andrés Bello.[4]Ciencias Fisiológicas Pontificia Universidad Católica de Chile. (Sponsored by Fondecyt 1140345, Conicyt, Chile)

10:00-10:15

***In-silico* analysis of the structure and binding site features of FcEXPA2 an α-expansin protein involved in ripening of *Fragaria chiloensis* fruit**
Valenzuela-Riffo F[1], Gaete-Eastman C[1], Herrera R[1], Moya-León M[1], **Morales-Quintana L[1]**, [1]Laboratorio de Fisiología Vegetal y Genética Molecular, Instituto de Ciencias Biológicas, Universidad de Talca. (Sponsored by This Work Has Been Supported By CONICYT Anillo ACT-1110 Project, PAI/Academia N° 79140027 And Initiation FONDECYT Grant N° 11150543.)

10:15-10:30

CRISPR/Cas9 as a cleavage system for marker genes in plants.
Quiroz L[1], Stange C[1], [1]Departamento de Biología, Facultad de Ciencias, Universidad de Chile. (Sponsored by Acknowledgments to CONICYT Doctoral Fellowship to LFQ.)

Oral Session 6

Computational Biology and Bioinformatics and Enzymes and Metabolism

Chair: Francisco Melo
CoChair: Wendy González
Salón: Volcán Calbuco

9:00-9:15

Structure-based identification and preliminary pharmacological characterization of CHB013, a novel selective connexin hemichannel blocker.

Lagos C F[1,2], Vargas A[3], Cisternas B[3], Maturana C[3], Aravena C[3], Fernández P[3], Pérez-Acle T[4,5], Sáez J C[3,5], [1]Department of Endocrinology, School of Medicine, Pontificia Universidad Católica de Chile.[2]Facultad de Ciencia Universidad San Sebastián.[3]Department of Physiology, Faculty of Biological Sciences, Pontificia Universidad Católica de Chile.[4]Computational Biology Lab (DLab) Fundación Ciencia y Vida.[5]Instituto Milenio Centro Interdisciplinario de Neurociencia de Valparaíso (CINV). (Sponsored by Acknowledgments: FONDECYT Projects 1150291& 1130652, Programa de Financiamiento Basal PFB16 and ICM09-022-P Grants, Open Eye Scientific Software and ChemAxon for Providing Academic License of Their Software.)

9:15-9:30

Vibrational energy propagation in protein structures: implications for allosteric communication.

Miño G[1,2], González-Nilo F[2], Latorre R[2], [1]Centro Interdisciplinario de Neurociencias de Valparaíso, Facultad de Ciencias, Universidad de Valparaíso.[2]Centro de Bioinformática y Biología Integrativa, Biología, Universidad Andrés Bello. (Sponsored by Thanks to US Army Project W911NF 15 1 0632(G.M.G & F.G.N), Fondecyt 1131003 (F.D.N) &1150273 (R.L.) And to Millennium Initiative P09-022-F.)

9:30-9:45

Coarse-grained simulations show secondary structure content and phase separation dependence in the adsorption of the cold regulate protein COR15A of *Arabidopsis thaliana*

Navarro-Retamal C[1], Ingólfsson H[2], Thalhammer A[3], Hincha D[4], Alzate-Morales J[1], González W[1], [1]Centro de Bioinformática y Simulación Molecular, Facultad de Ingeniería, Universidad de Talca.[2]Molecular Dynamics, Groningen Biomolecular Sciences and Biotechnology Institute & Zernike Institute for Advanced Materials, University of Groningen.[3]Physikalische Biochemie University of Potsdam.[4]für Molekulare Pflanzenphysiologie Max-Planck-Institut. (Sponsored by CNR Thanks the Government of Chile for A PhD Fellowship Awarded Through CONICYT and The Fondecyt Grant 1140624)

9:45-10:00

Towards an accurate prediction of active DNA transposable elements: HMMs perform better than Repeatmasker

Valdebenito B[1], Riadi G[1], [1]Centro de Bioinformática y Simulación Molecular, Facultad de Ingeniería, Universidad de Talca.

10:00-10:15

DYRK family in seminiferous epithelium and its potential role in the regulation of glycogen metabolism.

Vander Stelt K[1], Arató K[2], Slebe J[1], De La Luna S[2], Concha I[1], [1]Instituto de Bioquímica y Microbiología, Ciencias, Universidad Austral de Chile.[2]Gene Regulation, Stem Cells and Cancer Programme Centre for Genomic Regulation. (Sponsored by FONDECYT 1141033 (JCS), DID UACh, Beca CONICYT KV, MECESUP AUS 1203 KV)

10:15-10:30

Mollusk hemocyanins interacts with the C-type lectin receptors; Mannose Receptor (MR) and Dendritic Cell-Specific Intercellular adhesion molecule-3-Grabbing Non-integrin (DC-SIGN), on antigen presenting cells

Villar J[1], Del Campo M[1], Jiménez J[1], Mitchell D[2], Martínez-Pomares L[3], Becker M [I4,1,] [1]Departamento Investigación y Desarrollo Fundación Ciencia y Tecnología para el Desarrollo .[2]Clinical Sciences Research Institute, Warwick Medical School, University of Warwick.[3]School of Life Science, Faculty of Medicine and Health Sciences, University of Nottingham.4BIOSONDA S.A. (Sponsored y FONDECYT 1151337)

10:45-11:15 **Coffee Break**

11:15-13:15 **Symposia 5 and 6**

Symposium 5

Photobiology: from gene expression to optogenetics

Chairs: Claudia Stange

Salón: Volcán Osorno B

11:15-11:45

Colors in the shade: molecular regulation of carotenoid biosynthesis by phytochrome-dependent pathways

Rodriguez-Concepcion M[1], [1]Program of Plant Metabolism and Metabolic Engineering Center for Research in Agricultural Genomics (CRAG).

11:45-12:15

Light affects plastid differentiation, carotenoid composition and gene profile in carrot roots

Stange C[1], [1]Departamento de Biología, Facultad de Ciencias, Universidad de Chile. (Sponsored by Acknowledgements to Regular Fondecyt 1130245)

12:15-12:45

Molecular responses to vegetation proximity or how to deal with competing neighbors

Martinez-Garcia J F[1,2], [1]Plant Development and Signaling Centre for Research in Agricultural Genomics (CRAG).[2]- ICREA. (Sponsored by Work Was Supported by Grants from MINECO - FEDER to JFM-G (BIO2011-23489 And BIO2014-59895-P).)

12:45-13:15

A Fungal-based Optogenetic Switch for Synthetic Biology and Art

Larrondo L[1], [1]Genetica Molecular y Microbiología, Ciencias Biológicas, Pontificia Universidad Católica de Chile.

Symposium 6

Advanced molecular modeling methods to study biochemical systems

Chairs: Julio Caballero and **Jans Alzate**
Salón: Volcán Calbuco

11:15-11:45

Structural modeling using distance restraints derived from chemical cross-linking

Martinez, L University of Campinas, Brazil

11:45-12:15

Bioinformatics for drug discovery in pathogens

Turjanski, A. Full professor, Departamento de Química Biológica, Facultad de Ciencias Exactas y Naturales, Universidad de Buenos Aires, Argentina

12:15-12:45

Protein Adsorption to Synthetic Materials and Its Effect on Protein Structure

Comer, J. Assistant Professor, Department of Anatomy and Physiology, Institute of Computational Comparative Medicine, Nanotechnology Innovation Center of Kansas State, Kansas State University, USA

12:45-13:15

Design of a universal FRET-tag reveals cAMP nano-domains at β-adrenergic cascades

Pantano, S. The Institut Pasteur de Montevideo, Uruguay

13:15-15:00 **Lunch**

15:00-16:00 **SBBMCh Members Meeting**

16:00-17:15 **Severo Ochoa Lecture**

Chair: Marcelo López-Lastra

Salón: Plenario(Volcán Calbuco-Tronador)

Valcarcel,J. ICREA and Center for Genomic Regulation (CRG), Barcelona

Networks of alternative splicing regulation in cancer

17:15-19:15

Poster Session II and Coffee Break

Posters 1-133 odd numbers

19:30-20:45

PABMB Lecture

Chair: Ilona Concha

Salón: Plenario (Volcán Calbuco-Tronador)

Bocco, J,L. Centro de Investigaciones en Bioquímica Clínica e Inmunología CIBICI-CONICET, Dpto. de Bioquímica Clínica. Facultad de Ciencias Químicas, Universidad Nacional de Córdoba. Córdoba – Argentina

Dangerous relationships of an old Oncogene: Ras, with a South American Tumor Suppressor Gene: KLF6 Who is the winner ?

21:30 Gala Dinner and Party

Friday, September 30

10:00-12:00 **Symposia 7 and 8**

Symposium 7

Involvement of innate immune receptors in physiological, pathological, and therapeutic immune response

Chair: María Inés Becker
Salón: Volcán Osorno B

10:00-10:30

Non-canonical pattern recognition through immune lectin receptors
Martinez-Pomares L[1], [1]School of Molecular Medical Sciences University of Nottingham, United Kingdom.

10:30-11:00

Signaling pathway of alarmin IL33/ST2 during mucosa inflammation
Hermoso M A[1], [1]Laboratory of Innate Immunity, Disciplinary Program of Immunology, Institute of Biomedical Sciences, Faculty of Medicine, Universidad de Chile.

11:00-11:30

The role C-type lectins in modulating the TLR4-IDO axis in allergy
Salazar F[1], Hall L[1], Negm O[1], Awuah D[1], Tighe P[1], Shakib F[1], Ghaemmaghami A[1], [1]Immunology, Allergy and Tissue Modelling Research Group, Division of Immunology, School of Life Sciences University of Nottingham, United Kingdom.

11:30-12:00

C-type lectins involved in the immunomodulatory effects of mollusk hemocyanins
Becker, M I[1,2], [1]Investigación y Desarrollo, Santiago. Chile, Fundación Ciencia y Tecnología para el Desarrollo (FUCITED).[2]BIOSONDA S.A., Santiago. Chile, Research and Development Laboratory.

Symposium 8
Plant Biology Brazil-Chile

Chair: Raúl Herrera
Salón: Volcán Calbuco

10:00-10:30
Unveiling the Glycomic Code of plant cell walls to increase enzymatic hydrolysis efficiency for the production of 2G ethanol
Buckeridge, M. Laboratory of Plant Physiological Ecology (LAFIECO), Biomass Synthetic and Systems Biology Center, Institute of Biosciences, University of São Paulo

10:30-11:00
Efforts to understand the ripening of *Fragaria chiloensis* fruit and its softening
Moya, M.A. , and **Herrera, R.** Instituto de Ciencias Biológicas, Universidad de Talca.

11:00-11:30
Molecular analysis of sugarcane responses to drought stress
Menossi, **M**. Functional Genomics Laboratory, Department of Genetics, Evolution and Bioagents, Institute of Biology, University of Campinas, Campinas, Brazil

11:30-12.00
Plant Cell Wall Biosynthesis: The Role of Nucleotide Sugar Transporters.
Saez-Aguayo, S. ,Temple, H. , Reyes, F. , Parra, J., Celiz, J., Miquel, A. and **Orellana, A.**

12:00-13:00 Awards

2) DIFFERENTIAL EXPRESSION OF METABOLISM-RELATED GENES IN LIVER AND SKELETAL MUSCLE OF FINE FLOUNDER (*PARALICHTHYS ADSPERSUS)* UNDER CHRONIC STRESS.

Aedo J[1,2], Zuloaga R[1,2], Valenzuela C[1,2], Valdés J[1,2], Molina A[1,2], [1]Ciencias Biológicas Universidad Andrés Bello.[2]Interdisciplinary Center for Aquaculture Research (INCAR) Universidad Andrés Bello. (Sponsored by Supported by FONDAP 15110027 And FONDECYT 1130545)

4) INVOLVEMENT OF VPG PROTEIN DURING THE TRANSLATION OF MRNAS FROM INFECTIOUS PANCREATIC NECROSIS VIRUS (IPNV)

Aleite-González P[1], González-Catrilelbún S[1,2], Candia-Estévez P[1], Oyarzun A[3], Vargas D[3], Sandino A M[3], Rivas-Aravena A[1], [1]Laboratorio de Radiobiología Celular y Molecular, Departamento de Aplicaciones Nucleares, Comisión Chilena de Energía Nuclear.[2]Departamento de Biología, Facultad de Química y Biología, Universidad de Santiago de Chile.[3]Laboratorio de Virología, ICTIO Biotechnologies, Centro de Biotecnología Acuícola, Facultad de Química y Biología, Universidad de Santiago de Chile. (Sponsored by Proyecto Fondecyt Nº 1150901; Bruno Sargueil, Lab. de Cristallographie Et RMN Biologiques, Faculte De Pharmacie, Universidad Paris Descartes; Doctorado de Microbiología, Universidad de Santiago de Chile. Becas de Arancel Postgrado, Vicerrectoría Académica)

6) ACTIVATION OF MUSCULAR ATROPHY SIGNALING PATHWAYS IN THE FINE FLOUNDER (*PARALICHTHYS ADSPERSUS*) AFTER A *V. ORDALII* INFECTION.

Valenzuela C[1], Zuloaga R[1], **Almarza O[1]**, Avendaño-Herrera R[2], Valdés J[1,3], Molina A[1,3], [1]Lab. de Biotecnología Molecular. Interdisciplinary Center for Aquaculture Research (INCAR), Ciencias Biológicas, Universidad Andrés Bello.[2]Laboratorio de Patología de Organismos Acuáticos y Biotecnología Acuícola, Ciencias Biológicas, Universidad Andrés Bello.[3]Centro de Investigación Marina de Quintay (CIMARQ) Universidad Andrés Bello. (Sponsored by Supported by FONDAP 15110027 And FONDECYT 1130545)

8) DIFFERENTIAL MIRNAS EXPRESSION ASSOCIATED TO HYPER-RADIOSENSITIVITY TO LOW DOSES OF IONIZING RADIATION IN DLD-1 CELLS.

Andaur R[1], Armisen R[2], Moreno J[3], Soto L[3], Tapia J[4], Marcelain K[5], [1]Laboratorio de patología Molecular y Genómica del cáncer, Medicina Norte, Universidad De Chile.[2]Centro de Medicina de Precisión Pfizer.[3]Plasma Termonuclear Comisión Chilena de Energía Nuclear.[4]Laboratorio de Transformación Celular Universidad de Chile.[5]Instituto de Ciencias Biomédicas & Centro de Investigación y Tratamiento del Cáncer Universidad de Chile. (Sponsored by Supported by Anillo ACT115, FONDECYT 1151435 And National Doctoral Fellowship 21130246, CONICYT)

10) *TESMIN/TSO1-LIKE CXC 5* AFFECTS SHOOT DEVELOPMENT AND IS A DIRECT TARGET OF GCN5 IN ARABIDOPSIS.

Aquea F[1], Moraga F[1], [1]Laboratorio de Bioingeniería, Facultad de Ingeniería y Ciencias, Universidad Adolfo Ibáñez. (Sponsored by This Work Was Supported by CONICYT-Chile (FONDECYT Nº 11130567), The Center for Applied Ecology and Sustainability (CAPES FB-002-2014) And The Millennium Nucleus Center for Plant Systems and Synthetic Biology (NC130030))

12) FUNCTIONAL GENOMICS AND MOLECULAR STUDIES OF NON-CAROTENOGENIC GENES INVOLVED IN SYNTHESIS AND ACCUMULATION OF CAROTENOIDS IN *DAUCUS CAROTA* UNDER DARK/LIGHT CONDITIONS

Arias D[1], Maldonado J[2], Silva H[2], Stange C[1], [1]Centro Biología Molecular Vegetal, Facultad de Ciencias, Universidad de Chile.[2]Laboratorio de Genómica Funcional & Bioinformática, Facultad de Ciencias Agronómicas, Universidad de Chile. (Sponsored by CONICYT, FONDECYT/Regular Nº 1130245)

14) ADAR1 PROMOTES ACTIVATION OF THE WNT/β-CATENIN PATHWAY IN BREAST CANCER.

Morales F[3,1,2], Sagredo A[3], Tapia J[1,2], Marcelain K[1], Armisen R[3], [1]ICBM, Facultad de Medicina, Universidad de Chile.[2]Cell Transformation Laboratory, Program of Cellular and Molecular Biology, Faculty of Medicine, Universidad of Chile.[3]Pfizer Chile Center of Excellence in Precision Medicine . (Sponsored by Supported by CONCIYT Graduated Student Scholarship (F.M.) And FONDECYT Grants 1151446 (R.A.), 1151435 (K.M.), 1120132 (J.T.) And CORFO 13CEE2-21602 (R.A.).)

16) TRANSCRIPTOME ANALYSIS OF TUMOR CELLS TREATED WITH OLIGONUCLEOTIDES TARGETED TO THE ANTISENSE NONCODING MITOCHONDRIAL RNA.

Bendek M[1,2], Fitzpatrick C[1,2], Oliveira-Cruz L[2], Briones M[2], Burzio L[1,2], Burzio V[1,2], [1]Departamento de Ciencias Biológicas Universidad Andrés Bello.[2]Andes Biotechnologies Fundación Ciencia & Vida. (Sponsored by Fondecyt 1110835, 1140345, Conicyt-Chile)

18) HIGH CONTENT SCREEN IDENTIFIES THE PSMD14 DEUBIQUITINATING ENZYME AS A NOVEL REGULATOR OF AMYLOID PRECURSOR PROTEIN (APP) METABOLISM

Bustamante H[1], Cheuquemilla Y[1], Valenzuela G[2], Rojas-Fernández A[3], Hay R[4], Burgos P[1], [1]Instituto de Fisiología, Facultad de Medicina, Universidad Austral de Chile.[2]Instituto de Bioquímica y Microbiología, Facultad de Ciencias, Universidad Austral de Chile.[3]Centro Interdisciplinario de Estudios del Sistema Nervioso (CISNe) Universidad Austral De Chile.[4]Centre for Gene Regulation and Expression, College of Life Sciences University of Dundee. (Sponsored by CONICYT #21130315, MECESUP AUS1203, DID D-2015-02, FONDECYT #1130929 And DPI20140068)

20) A_COMPARATIVE STUDY OF BINDING SITES FOR NITRATE AND AUXIN IN NRT1.1

Bustos Guajardo D[1], Gutiérrez R[2], González Díaz W[1], [1]Center for Bioinformatics and Molecular Simulations, Ingeniería, Universidad de Talca.[2]Molecular Genetics & Microbiology Pontificia Universidad Católica de Chile. (Sponsored by Programa de Doctorado en Ciencias Aplicadas)

22) CAP-INDEPENDENT TRANSLATION INITIATION DRIVEN BY THE HIV-1, HTLV-1, AND MMTV MRNAS IS DEPENDENT ON HYPUSINE-EIF5A.

Cáceres C J[1,2], Angulo J[1], Contreras N[1,2], Pino K[1], Vera-Otárola J[1], López-Lastra M[1], [1]Laboratorio de Virología Molecular, Instituto Milenio de Inmunología e Inmunoterapia, Centro de Investigaciones Médicas, Departamento de Infectología e Inmunología Pediátrica, Escuela de medicina, Pontificia Universidad Católica de Chile.[2]Programa de Doctorado en Ciencias mención Microbiología Universidad de Chile/ Universidad de Santiago de Chile. (Sponsored by Work Supported By FONDECYT 1130270 And P09/016-F de La Iniciativa Científica Milenio del Ministerio de Economía, Fomento y Turismo de Chile. CJC and NC Are Supported by CONICYT Doctoral Fellowships.)

24) ATLANTIC SALMON AND COHO SALMON RESPOND DIFFERENTIALLY TO INFESTATION BY *CALIGUS ROGERCRESSEYI*

Barrientos C[1], Cumillaf J P[1], Mancilla A[1], **Cárcamo J G[2]**, [1]Instituto de Bioquímica y Microbiología, Interdisciplinary Center for Aquaculture Research (INCAR) Universidad Austral de Chile.[2]Instituto de Bioquímica y Microbiología, Interdisciplinary Center for Aquaculture Research (INCAR), Ciencias, Universidad Austral de Chile. (Sponsored by Fondecyt 1150934, Innova Corfo 14IDL2-30112 And Fondap 15110027.)

26) CHARACTERIZATION OF LIGAND BINDING BETWEEN P2X2 RECEPTOR AND γ-[2-AZIDOETHYL]-ATP ANALOGUE BY SINGLE MOLECULE ATOMIC FORCE SPECTROSCOPY AND PATCH-CLAMP

Cárdenas C[1], Navarrete C[2], Fuentes C[1], Cordero J[1], Lafourcade M[1], Barrera N P[1], [1]Fisiología, Ciencias Biológicas, Pontificia Universidad Católica de Chile.[2]Fisiología Pontificia Universidad Católica de Chile.

28) MILD-TRAUMATIC BRAIN INJURY ALTERS NMDA RECEPTOR DISTRIBUTION AND ASSOCIATED SIGNALING

Carvajal F[1], Cerpa W[2], [1]Biologia Celular y Molecular, Ciencias Biológicas, Pontificia Universidad Católica de Chile.[2]Bilogia celular y molecular, Ciencias Biológicas, Pontificia Universidad Católica de Chile. (Sponsored by This Work Was Supported by FONDECYT N° 11121206 And Research Team Project in Science and Technology (ACT1411) To WC, And by A Pre-Doctoral Fellowship from CONICYT to FJC.)

30) HYPOXIA INDUCED CAVEOLIN-1 EXPRESSION PROMOTES MIGRATION OF CANCER CELLS

Castillo Bennett J[1], Silva P[2], Torres V[2], Quest A[2], [1]Laboratory of Cellular Communication, Center for Molecular Studies of the Cell (CEMC), Advanced Center for Chronic Diseases (ACCDiS), Faculty of Medicine, Universidad de Chile.[2]Institute for Research in Dental Sciences, Faculty of Dentistry, Universidad de Chile. (Sponsored by FONDECYT #3140446 (JC); FONDECYT #1130250, ANILLO ACT1111, FONDAP-ACCDIS #15130011 (AFGQ), FONDECYT #1140907 (VAT); PhD CONICYT (PS))

32) STRUCTURAL ANALYSIS OF ADP-DEPENDENT KINASES FROM HALOPHILIC ORGANISMS OF THE ORDER *METHANOSARCINALES*

Cea P[1], González-Ordenes F[1], Castro-Fernández V[1], Guixé V[1], [1]Departamento de Biología, Facultad de Ciencias, Universidad de Chile. (Sponsored by Fondecyt 1150460)

34) CARACTERIZATION OF A RETROTRANSPOSON IN *MYTILUS CHILENSIS.*

Curotto D[1], Valdes J[1,2], Alvarez M[1,2], Arriagada G[1,3], [1]Ciencias Biologicas Universidad Andrés Bello.[2]INCAR Interdisciplinary Center for Aquaculture Research .[3]Nu-MIND Millenium Nucleus Biology of Neuropsiquiatric disorders.

36) PROSTATIC ACID PHOSPHATASE PROMOTES EPITHELIAL-MESENCHYMAL TRANSITION AND CELL MIGRATION/INVASION IN GLIOBLASTOMA STEM-LIKE CELLS THROUGH LOW-AFFINITY ADENOSINE RECEPTORS ACTIVATION UNDER HYPOXIA

Erices J[1], Torres A[1], Muñoz M[1], Oyarzun C[1], San Martín R[1], Quezada C[1], [1]Instituto Bioquímica y Microbiología, Facultad de Ciencias, Universidad Austral de Chile. (Sponsored by FONDECYT #1160777 (C.Q.) And CONICYT Ph.D. Fellowship # 21131009 (A.T.))

38) KNOCKDOWN OF ANTISENSE NON-CODING MITOCHONDRIAL RNAS UPREGULATES MIRNAS INVOLVED IN CELL CYCLE REGULATION IN HUMAN BREAST CANCER CELLS

Fitzpatrick C[1,2], Bendek M[1], Briones M[1], Nardocci G[2], Montecinos M[2], Burzio L[1,2], Burzio V[2,1], [1]Andes Biotechnologies Lab Fundación Ciencia y Vida.[2]Ciencias Biológicas Universidad Andrés Bello. (Sponsored by Grants: PhD Scholarship, And Fondecyt 1140345, CONICYT)

40) HMMTEACHER1.0: A TEACHING RESOURCE FOR UNDERSTANDING HIDDEN MARKOV MODEL SOLUTIONS THROUGH PRACTICE.

Fuentes M[1], De Los Ángeles Rojas C[1], Riadi G[1], [1]Escuela de Bioinformática, Ing. en Bioinformática, Universidad de Talca.

42) ATOMISTIC STRETCHING AT EXPERIMENTAL PULLING SPEEDS THROUGH STRUCTURE-BASED COMPUTATIONAL TWEEZERS

Galaz P[1,2], Wilson C A M[1], Ramírez-Sarmiento C[2], [1]Departamento de Bioquímica y Biología Molecular, Facultad de Ciencias Químicas y Farmacéuticas, Universidad de Chile.[2]Institute for Biological and Medical Engineering, Schools of Engineering, Medicine and Biological Sciences, Pontificia Universidad Católica de Chile. (Sponsored by Funded by FONDECYT, N° 11140601)

44) BLOCKADE OF ADENOSINE A_3 RECEPTOR PREVENTS IL-1β AND IL-18 PRODUCTION AND RENAL FIBROSIS IN DIABETIC RATS.

Garrido W[2,1], Alarcón S[2,1], Oyarzun C[2,1], Suarez R[2], San Martín R[2,1], [1]Patología Molecular, Ciencias, Universidad Austral de Chile.[2]Instituto de Bioquímica y Microbiología, Ciencias, Universidad Austral de Chile. (Sponsored by N° 1130414 And N° 3150548 From FONDECYT-Chile)

46) CHARACTERIZATION OF THE SUBCELLULAR LOCALIZATION OF THE PROTEIN X (HBX) ISOFORMS OF HEPATITIS B VIRUS (HBV)

Garrido N. D[1], Hernández S[1], Loyola A[1], Villanueva R[2], [1]Laboratorio de Epigenetica y Cromatina Fundación Ciencia y Vida.[2]Laboratorio de Virus Hepatitis Universidad Andrés Bello. (Sponsored by Proyecto ANILLOS ACT 1119, Proyecto BASAL PFB-16, FONDECYT 1160480, Beca CONICYT 21140956 (Sergio Hernández, 2014))

48) ANTI-ANGIOGENIC ACTIVITY OF PLA2 LYS49 BNSP-7 ISOLATED FROM BOTHROPS PAULOENSIS VENOM

Moura E[1], **Gimenes S[1]**, Meireles M[1], Rodrigues R[1], Yoneyama K[1], Lopes D[1], Rodrigues V[1], [1]Institute of Biochemistry and Genetics Federal University of Uberlandia. (Sponsored by CAPES, CNPq, FAPEMIG, UFU)

50) MOLECULAR CHARACTERIZATION OF COREST-HDAC2 COMPLEX.

Gómez A[1], Barrera N[1], [1]Department of Physiology, Faculty of Biological Sciences, Pontificia Universidad Católica de Chile. (Sponsored by Fondecyt Postdoctorado Nº 3140475)

52) TESTING THE PERFORMANCE OF DIFFERENT GPU BASED WORKSTATIONS RUNNING NAMD MOLECULAR DYNAMIC SIMULATIONS

González F[1], Caballero J[1], Poblete H[2], [1]Centro de Bioinformática y Simulación Molecular, Facultad de Ingeniería, Universidad de Talca.[2]Department of Anatomy and Physiology Kansas State University.

54) DETERMINATION OF STRUCTURAL CHARACTERISTICS OF 5´END OF MRNA OF INFECTIOUS PANCREATIC NECROSIS VIRUS (IPNV)

González-Catrilelbún S[1,2], Aleite-González P[1], Candia-Estévez P[1], Rivas-Aravena A[1], [1]Laboratorio de Radiobiología Molecular y Celular, Departamento de Aplicaciones Nucleares, Comisión Chilena de Energía Nuclear.[2]Departamento de Biología, Facultad de Química y Biología, Universidad de Santiago de Chile. (Sponsored by Proyecto Fondecyt N° 1150901; Doctorado de Microbiología, Universidad de Santiago de Chile. Becas de Arancel Postgrado, Vicerrectoría Académica)

56) TESTING THE HALOPHILIC CHARACTER OF THE ADP-DEPENDENT KINASES FROM THE *METHANOSARCINALES* GROUP OF ARCHAEA AND ITS EVOLUTIVE HISTORY

González-Ordenes F[1], Herrera-Morande A[1], Zamora R[1], Castro-Fernández V[1], Guixe V[1], [1]Departamento de Biología, Facultad de Ciencias, Universidad de Chile. (Sponsored by Fondecyt 1150460)

58) EVIDENCE OF THE PROTECTIVE EFFECT OF ANTIOXIDANT COMPOUNDS FROM PLANTS EXTRACTS IN A CELLULAR MODEL OF INFECTION BY *HELICOBACTER PYLORI.*

Guzmán L[1], Saavedra C[1], Marchant M[1], Corvalán A[2], [1]Instituto de Química, Facultad de Ciencias, Pontificia Universidad Católica de Valparaíso.[2]Laboratorio de Oncología, Facultad de Medicina, Pontificia Universidad Católica de Chile. (Sponsored by Acknowledgements: This Work Was Funded by Grant; DIE037-728.)

60) STRUCTURAL DOMAINS WITHIN THE 5'LEADER OF THE HIV-1 FULL LENGTH MRNA AND THE RIBOSOMAL PROTEIN S25 INFLUENCE CAP-INDEPENDENT TRANSLATION INITIATION

Carvajal F.[1,#,*], Vallejos M.[1,#], Walters B.A.[2], Contreras N.[1] , Hertz M.I.[2], Olivares E.[1], Cáceres C.J.[1], Pino K.[1], Letelier A.[1], Thompson S.R.[2], and López-Lastra M.[1].
[1]Laboratorio de Virología Molecular, Instituto Milenio de Inmunología e Inmunoterapia, Departamento de Infectología e Inmunología Pediátrica, Escuela de Medicina, Pontificia Universidad Católica de Chile, Marcoleta 391, Santiago, Chile. [2]Department of Microbiology, University of Alabama at Birmingham, Birmingham AL, USA. [#] Equal contribution.

62) KINETIC AND BIOCHEMICAL CHARACTERIZATION OF HUMAN ADP DEPENDENT GLUCOKINASE

Herrera-Morandé A[1], Castro-Fernández V[1], Guixé V[1], [1]Laboratorio Bioquímica y Biología Molecular, Facultad Ciencias, Universidad de Chile. (Sponsored by Fondecyt Regular 1150460 And Fondecyt Postdoctorado 3160373)

64) COMPUTER-AIDED IDENTIFICATION OF NOVEL NON-STEROIDAL MINERALOCORTICOID RECEPTOR MODULATORS

Lagos C F[1,2,3], Vecchiola A[1,3], Fuentes C A[1], Gonzalez-Gómez L M[1], Allende F[4], Solari S[4], Campino C[1,3], Carvajal C A[1,3], Baudrand R[1], Fardella C E[1,3], [1]Department of Endocrinology, School of Medicine, Pontificia Universidad Católica de Chile.[2]Facultad de Ciencia Universidad San Sebastián.[3]Millennium Institute on Immunology and Immunotherapy (IMII).[4]Department of Clinical Laboratories, School of Medicine, Pontificia Universidad Catolica de Chile. (Sponsored by Supported by CORFO 13CTI-21526-P1, FONDECYT 1150437, 1160695, 1160836 & IMII P09/016-F Grants. OpenEye Scientific Software and Inte:Ligand GmbH for Academic Licenses. DTP/NCI for Providing the Compounds Used in This Study.)

66) DIFFERENTIAL AGE-RELATED EXPRESSION OF TOLL-LIKE RECEPTORS IN *HELICOBACTER PYLORI*-INFECTED PATIENTS

Leon M[1], Hernández C[1], Vera M[1], Palma C[1], Harris P[1], Serrano C[1], [1]Departamento de Gastroenterología y Nutrición Pediatrica, Facultad de Medicina, Pontificia Universidad Católica de Chile. (Sponsored by Acknowledgments: We Thank FONDECYT Inicio #11140232 For Funding Support.)

68) ACTION OF γCDCPLI, A PHOSPHOLIPASE A_2 INHIBITOR FROM *CROTALUS DURISSUS COLLILINEATUS* SNAKE SERUM ON *LEISHMANIA (LEISHMANIA) AMAZONENSIS* PROMASTIGOTES

Lopes D[1], Gimenes S[1], Azevedo F[1], Teixeira S[2], Teixeira T[2], Vieira C[2], Rodrigues R[1], Yoneyama K[1], Rodrigues V[1], [1]Instituto de Genética e Bioquímica Universidade Federal de Uberlândia.[2]Instituto de Ciências Biomédicas Universidade Federal de Uberlândia. (Sponsored by The Authors Gratefully Acknowledge The Support By Fundação De Amparo à Pesquisa do Estado de Minas Gerais (FAPEMIG); Conselho Nacional de Desenvolvimento Científico E Tecnológico (CNPq); Universidade Federal de Uberlândia (UFU) And CAPES

70) DIFFERENTIAL RESPONSE OF TWO PUTATIVE WNT/β-CATENIN TARGET GENES, CX43 AND DAX1 IN 42GPA9 (MOUSE ADULT SERTOLI) CELL LINE.

Lopez, C[1], Aguilar R[2], Cereceda K[1], Montecino M[1], Meisterernst M[3], Slebe J[1], Concha I[1], [1]Bioquimica y Microbiología, Ciencias, Universidad Austral de Chile.[2]Centro de Investigaciones Biomédicas Universidad Andrés Bello.[3]Institute for Molecular Tumor Biology University of Muenster. (Sponsored by FONDECYT 1110508 (IC), 1141033 (JCS). CL: CONICYT and MECESUP AUS 1203 Fellowship.)

72) DESIGN OF NEW NANO-CARRIERS BASED ON BIOINFORMATICS ANALYSIS OF PROTEIN-DNA INTERACTIONS. MOLECULAR DYNAMICS AND EXPERIMENTAL VALIDATION.

Marquez-Miranda V[1], Araya-Durán I[1], Camarada M B[2], Otero M C[3], González-Nilo F[1], [1]Centro de Bioinformática y Biologia Integrativa, Facultad de Ciencias Biológicas, Universidad Andrés Bello.[2]Laboratorio de Bionanotecnología Universidad Bernardo O`higgins.[3]Center for Integrative Medicine and Innovative Science, Medicine, Universidad Andrés Bello. (Sponsored by V.M.M. Thanks CONICYT Doctoral Fellowship. This Work Was Supported by Fraunhofer Chile Research, Innova-Chile CORFO (FCR-CSB 09CEII-6991), CONICYT + PAI/ CONCURSO NACIONAL TESIS DE DOCTORADO EN LA EMPRESA N. 781413007 And RED CYTED 214RT0482.)

74) BOX B IS NOT CRITICAL FOR HIGH AFFINITY BINDING OF ROB PROTEIN WITH *MAR* AND *MICF* DUPLEX DNA

Geoffroy C[1], **Melo F**[1], [1]Genética Molecular y Microbiología, Ciencias Biológicas, Pontificia Universidad Católica de Chile. (Sponsored by This Work Was Funded by Grants FONDECYT REGULAR 1141172 And CONICYT-PIA Anillo1408)

76) PULLING ON SUPER PARAMAGNETIC BEADS WITH MICRO CANTILEVERS: SINGLE MOLECULE MECHANICAL ASSAY APPLICATION

Muñoz R[1], Aguilar Sandoval F[1], Wilson C A M[2], Melo F[1], [1]Departamento de Física, Facultad de Ciencia, Universidad de Santiago de Chile.[2]Departamento de Bioquímica y Biología Molecular, Facultad de Ciencias Químicas y Farmacéuticas, Universidad de Chile. (Sponsored by Fondecyt Grant No. 1130922, Beca De Doctorado Nacional No. 21100761.)

78) IDENTIFICATION OF NEW LNCRNAS DURING OSTEOGENESIS

Nardocci G[2,1], Carrasco-Jeldres M[2,1], Acevedo E[1,2], Meneses C[1,3], Montecino M[2,1], [1]FONDAP Center for Genome Regulation.[2]Center for Biomedical Research Universidad Andrés Bello.[3]Center of Plant Biotechnology Universidad Andrés Bello. (Sponsored by FONDAP-15090007; FONDECYT-1130706; FONDECYT-3140414.)

80) DETERMINATION OF THE MOLECULAR ARCHITECTURE OF HETEROMERIC CONNEXIN30/26 HEMICHANNELS.

Naulin P[1], Barrera N[1], Contreras J[2], Liu Y[2], Harris A[2], [1]Deparment of Physiology, Faculty of Bilogical Sciences, P. Universidad Católica de Chile.[2]Department of Pharmacology & Physiology, New Jersey Medical School, Rutgers University. (Sponsored by Fondecyt Postdoctorado N°3160568)

82) ADENOSINE PROMOTES CHEMORESISTANCE BY REGULATING MRP1 AND MRP3 EXPRESSION IN NORMOXIA AND HYPOXIA CONDITIONS

Niechi I[1], Delgado J[1], Toro M[1], Erices J[1], Torres A[1], Uribe D[1], Jaramillo C[1], Rocha D[1], San Martín R[1], Quezada C[1], [1]Instituto de Bioquímica y Microbiología, Facultad de Ciencias, Universidad Austral de Chile. (Sponsored by Funded by Fondecyt 1160777 (C.Q))

84) REGULATION OF AUTOPHAGY BY GLUCAGON-LIKE PEPTIDE I IN VASCULAR SMOOTH MUSCLE CELLS

Núñez-Soto C[1], Norambuena-Soto I[1], Sanhueza-Olivares F[1], García-Miguel M[1], Mondaca-Ruff D[1], Riquelme J[1], Chiong M[1], [1]ACCDiS, Departamento de Bioquímica y Biología Molecular, Facultad de Ciencias Químicas y Farmacéuticas, Universidad de Chile. (Sponsored by Fondecyt 1140329, FONDAP 15130011)

86) ALTERED ADENOSINE SIGNALING AFFECTS RENIN-ANGIOTENSIN SYSTEM PEPTIDES REPERTORY IN DIABETIC NEPHROPATHY.

Ojeda A[1,2], Alarcón S[1,2], Garcia J[1,2], San Martín R[1,2], [1]Institute of Biochemistry and Microbiology, Science Faculty, Universidad Austral de Chile.[2]Patología Molecular, Ciencias, Universidad Austral de Chile. (Sponsored by FONDECYT N° 1130414)

88) THE TRANSCRIPTION FACTOR ZEB1 PROMOTES TUMOR PROGRESSION AND CHEMORESISTANCE IN PROSTATE CANCER CELL LINES

Orellana-Serradell O[1], Herrera D[1], Castellón E[1], Contreras H[1], [1]Departamento de Fisiología, Facultad de Medicina, Universidad de Chile. (Sponsored by Fondecyt Projects 1110269 And 1151214 (HC) And 1140417 (EC). Conicyt Grants (OOS).)

90) URINARY EXOSOMES EVIDENCE ALTERATIONS ON ADENOSINE METABOLISM DURING DIABETIC NEPHROPATHY.

Oyarzún C[1], Huentelicán S[1], Garrido W[1], Moreira M[1], Podestá M L[2], Flores C[3], San Martín R[1], [1]Instituto de Bioquímica y Microbiología, Facultad de Ciencias, Universidad Austral de Chile.[2]Centro de Docencia de Atención Integral Ambulatoria CENAIA, Facultad de Medicina, Universidad Austral de Chile.[3]Instituto de Medicina, Facultad de Medicina, Universidad Austral de Chile. (Sponsored by Financed by Grants FONDECYT N°1130414 And DID-UACH S-2016-04.)

92) EFFECT OF NITROGEN DEFICIENCY IN THE PHENYLALANINE AMMONIA-LYASE (PAL) ACTIVITY AND IN THE CONTENT OF PHENOLIC COMPOUNDS IN *COLOBANTHUS QUITENSIS* (KUNTH) BARTL.

Peña N[1], Pizarro M[1], Sobarzo F[1], Ulloa V[1], Zúñiga G E[1], Contreras R A[1], [1]Laboratorio de Fisiología y Biotecnología Vegetal, Departamento de Biología, Facultad de Química y Biología, Universidad de Santiago de Chile. (Sponsored by Funded by Fondecyt Grant 3160274)

94) ABSCISIC ACID MEDIATES THE DESICCATION TOLERANCE IN THE ANTARCTIC MOSS *SANIONIA UNCINATA*

Pizarro M[1], Contreras R[2], Zúñiga G[2], [1]Biología, Facultad de Química y Biología, Universidad de Santiago de Chile.[2]Biología, Facultad Química y Biología, Universidad de Santiago de Chile. (Sponsored by Financiado Por INACH Y CONICYT)

96) EFFECT OF THE FORCES INVOLVED IN THE CONFORMATIONAL CHANGES ASSOCIATED TO THE LIGAND BINDING AND CATALYSIS IN ADENYLATE KINASE.

Quiroga-Roger D[1], Wilson C A M[1], Zocchi G[2], [1]Bioquimica, Facultad de Ciencias Quimicas y Farmaceuticas, Universidad de Chile.[2]Physics, UCLA Physics and Astronomy Building, University of California, Los Angeles (UCLA). (Sponsored by FONDECYT 3160645)

98) GROWTH RESPONSE TO ALTERED NAD(P)H PRODUCTION BY THE PENTOSE PHOSPHATE PATHWAY IN ANAEROBIC CULTURES OF ESCHERICHIA COLI

Retamal F[1], González M[1], Cabrera R[1], [1]Departamento de Biología, Facultad de Ciencias, Universidad de Chile. (Sponsored by PAIFAC 2016. Fac Cs. (RC))

100) F26 AND F379 ARE IMPORTANT FOR SUGAR BINDING IN THE HGLUT1 HEXOSE TRANSPORTER

Reyes A[1], Coronado M[1], Pérez A[1], Toledo M[1], Lagos I[1], Cuevas A[1], Ojeda L[1], [1]Instituto de Bioquímica y Microbiología, Facultad de Ciencias, Universidad Austral de Chile. (Sponsored by FONDEF D11I1131, FONDECYT 1130386)

102) IDENTIFICATION OF RESIDUES CONFORMING THE EXTRACELLULAR GATE OF THE HGLUT2 HEXOSE TRANSPORTER

Toledo M[1], Hidalgo S[1], Lagos I[1], Ojeda L[1], Cuevas A[1], Reyes A[1], [1]Instituto de Bioquímica y Microbiología, Facultad de Ciencias, Universidad Austral de Chile. (Sponsored by FONDEF D11I1131, FONDECYT 1130386)

104) SIPP-POT: A NEW TOOL FOR CREATING AND EVALUATING DYNAMIC AND FULLY USER CONFIGURABLE STATISTICAL POTENTIALS BASED ON ATOM DISTANCES, BURIED AND ACCESSIBLE SOLVENT SURFACE AREAS FOR PROTEINS, NUCLEIC ACIDS, PROTEIN COMPLEXES AND PROTEIN-DNA COMPLEXES.

Ribeiro J[1], Schüller A[1], Melo F[1], [1]Departamento de Genética Molecular y Microbiología Pontificia Universidad Católica de Chile.

106) A NEW MODEL FOR PREDICTING DNA FLEXIBILITY FROM A NUCLEOTIDE SEQUENCE

Rodríguez-Muxica N[1], Cares J[1], Rodríguez F[1], Ibarra I[1], Melo F[1], [1]Genética Molecular, Ciencias Biológicas, Pontificia Universidad Católica de Chile. (Sponsored by This Work Was Funded by A Grant from FONDECYT REGULAR (#1141172).)

108) HMMTEACHER1.0: A TEACHING RESOURCE FOR UNDERSTANDING HIDDEN MARKOV MODEL SOLUTIONS THROUGH PRACTICE.

Rojas C[1], Fuentes M[1], [1]Ingeniería en Bioinformática, Ingeniería, Universidad de Talca.

110) NHE1 REGULATES INTRACELLULAR PH AND CELL PROLIFERATION IN HUMAN OVARIAN CANCER CELLS

Sanhueza C[1], Araos J[1], Sobrevia L[1,2,3], [1]Cellular and Molecular Physiology Laboratory (CMPL), Division of Obstetrics and Gynaecology, School of Medicine, Faculty of Medicine, Pontificia Universidad Católica de Chile.[2]Department of Physiology, Faculty of Pharmacy, Universidad de Sevilla, Seville E-41012, Spain.[3]University of Queensland Centre for Clinical Research (UQCCR), Faculty of Medicine and Biomedical Sciences, University of Queensland, Herston, QLD 4029, Queensland, Australia. (Sponsored by FONDECYT 3140516, 1150377.)

112) ML9 INDUCED-AUTOPHAGY CONTRIBUTES TO APOPTOSIS IN CULTURED CARDIOMYOCYTES

Shaikh S[1], Troncoso R[2], Chiong M[3], Lavandero L[4], [1]ACCDiS, Ciencias Químicas y Farmacéticas, Universidad de Chile.[2]Advanced Center for Chronic Disease (ACCDiS) & Center for Molecular Studies of the Cell (CEMC), Facultad de Ciencias Químicas y Farmacéuticas & Facultad de Medicina, Universidad de Chile.[3]Advanced Center for Chronic Disease (ACCDiS) & Center for Molecular Studies of the Cell (CEMC), Facultad de Ciencias Químicas y Farmacéuticas & Facultad de Medicina,, Universidad de Chile.[4]Advanced Center for Chronic Disease (ACCDiS) & Center for Molecular Studies of the Cell (CEMC) & Department of Internal Medicine (Cardiology Division), Facultad de Ciencias Químicas y Farmacéuticas & Facultad de Medicina & Southwestern Medical Center,, Universidad de Chile & University of Texas . (Sponsored by FONDECYT 3150545 & FONDAP 15130011)

114) ACTIVIDAD ANTIOXIDANTE DE DIFERENTES EXTRACTOS OBTENIDOS DESDE ESPECIES MICROALGALES.

Soto J[1], Ulloa P[2], Vidal J[2], Rojas M V[1], [1]Unidad de Biología Celular. Laboratorio de Genética e Inmunología Molecular. Instituto de Biología., Ciencias, Pontificia Universidad Católica de Valparaíso.[2]Escuela de Alimentos., Ciencias Agronómicas y de los Alimentos. , Pontificia Universidad Católica de Valparaíso. (Sponsored by Financiamiento: Proyecto DIE-PUCV 037-698/2015 Y PIA-PUCV 039-325/2016.)

116) COMPARATIVE TRANSCRIPTOMIC ANALYSIS OF THE DISTINCT PANCREATIC CELL TYPES AMONG DISTANT VERTEBRATE SPECIES

Tarifeno-Saldivia E[1,2], Lavergne A[1], Bernard A[1], Voz M[1], Manfroid I[1], Peers B[1], [1]GIGA-R University of Liège.[2]Bioquímica y Biología Molecular Universidad de Concepción.

118) CHARACTERIZATION OF A MITOFUSIN-2 KNOCKDOWN SERTOLI CELL LINE.

Cereceda K[3], Muñoz J[1,4,2], **Torres D[3]**, Zorzano A[1,4,2], Slebe J[3], Concha I[3], [1]Complex metabolic diseases and mitochondria Institute for Research in Biomedicine (IRB Barcelona).[2]CIBER de Diabetes y Enfermedades Metabólicas Asociadas (CIBERDEM) Instituto de Salud Carlos III.[3]Bioquímica y Microbiología, Ciencias, Universidad Austral de Chile.[4]Departament de Bioquímica i Biomedicina Molecular, Facultat de Biologia, Universitat de Barcelona. (Sponsored by FONDECYT 1141033 (JCS). KC: CONICYT and MECESUP AUS 1203 Fellowship)

120) DIFFERENTIAL CIS-REGULATORY ELEMENT IN PROMOTER OF DUPLICATED SOMATOLACTIN GENES IS RELATED TO ESTROGEN RESPONSE OF *SLβ* IN *CYPRINUS CARPIO*.

Valenzuela G[1], Stolzenbach M[1], Vega M[1], Figueroa J[1], Muller M[2], Kausel G[1], [1]Instituto de Bioquímica y Microbiología, Ciencias, Universidad Austral de Chile.[2]Giga Center, Laboratory for Organogenesis and Regeneration Liege University. (Sponsored by Acknowledgement: FNC 1070724, MECESUP Aus1203, Conicyt 21999 (GV), DAE-UACh, DID-UACh, Fermelo S.A)

122) TRANSCRIPTIONAL DYNAMICS IN THE CHILEAN FLOUNDER *PARALICHTHYS ADSPERSUS*, UNDER FASTING AND REFEEDING PROCESS.

Varas D[1], Zuloaga R[2], Méndez K[2], Salazar M[1], Molina A[2], Álvarez M[1,3], [1]LBCM, Departamento de Ciencias Biológicas, Universidad Andrés Bello.[2]Departamento Ciencias Biológicas Universidad Andrés Bello.[3]INCAR Interdisciplinary Center for Aquaculture Research. (Sponsored by FONDAP-INCAR 15110027, DI?1280-16/RG)

124) AUTOPHAGY ACTIVATION IN THE HEAD KIDNEY OF THE FINE FLOUNDER (*PARALICHTHYS ADSPERSUS*) UNDER CONFINEMENT STRESS

Vera T[1], Valenzuela C[1], Zuloaga R[1], Escobar S[2], Valdés J[1,3], Molina A[1,3], [1]Lab. de Biotecnología Molecular. Interdisciplinary Center for Aquaculture Research (INCAR), Ciencias Biológicas, Universidad Andrés Bello.[2]Laboratorio de Biotecnología Molecular Universidad Andrés Bello.[3]Centro de Investigación Marina de Quintay (CIMARQ) Universidad Andrés Bello. (Sponsored by Supported by FONDAP 15110027 And FONDECYT 1130545)

126) EVOLUTIONARY CONSTRAINTS DETERMINE THE THREE-DIMENSIONAL DOMAIN SWAPPING OF THE FORKHEAD DOMAIN OF FOXP TRANSCRIPTION FACTORS

Villalobos P[1], Babul J[1], Ramírez-Sarmiento C[2], [1]Departamento de Biología, Facultad de Ciencias, Universidad de Chile.[2]Institute for Biological and Medical Engineering, Schools of Engineering, Medicine and Biological Sciences, Pontificia Universidad Católica de Chile. (Sponsored by FONDECYT 11140601, 1130510 & CONICYT 21151101)

128) NEW MICRORNAS IDENTIFIED THROUGH MICROARRAY AS REGULATORS OF BRCA1 EXPRESSION IN BREAST CANCER.

Zavala V[1], Gajardo P[1], Faundez P[1], Fernández W[2], Álvarez C[1], Carvallo P[1], [1]Departamento de Biología Celular y Molecular, Facultad de Ciencias Biológicas, Pontificia Universidad Católica de Chile.[2]Unidad de Anatomía Patológica Hospital San Borja Arriarán. (Sponsored by FONDECYT 1120200, CONICYT 21120269)

130) REGULATION OF AUTOPHAGY BY POLYCYSTIN-2/BECLIN 1 COMPLEX

Peña-Oyarzun D[1], Lavandero S[2], Criollo A[1], [1]Instituto de Ciencias Odontológicas, Facultad de Odontología, Universidad de Chile.[2]Departamento de Bioquímica y Biología Molecular, Ciencias Químicas y Farmacéuticas, Universidad de Chile.

132) EGGSHELL MEMBRANE AS A SUPPORT FOR ENZYME IMMOBILIZATION

Kessi E[1], Castro Fernández V[2], Arias J L[1], [1]Departamento de Ciencias Biológicas Animales, Facultad de Ciencias Veterinarias y Pecuarias, Universidad de Chile.[2]Departamento de Biología, Facultad de Ciencias, Universidad de Chile.

134) OXLDL/LOX1 PATHWAY ACTIVATION: EFFECT ON CARDIAC MYOFIBROBLAST AUTOPHAGY AND DIFFERENTIATION

Parra E[2], Diaz H[2], Villa M[2], Diaz G[2], Toledo J[1], **Garcia L[2]**, [1]Faculty of Biological Sciences, Concepcion/ Chile University of Concepcion.[2]Advanced Center for Chronic Diseases (ACCDiS), Santiago/Chile, Faculty of Chemical & Pharmaceutical Sciences, University of Chile.

Posters Thursday, September 29

1) MONOMER-DIMER SWITCHING: PSYCHROPHILIC ADP-DEPENDENT KINASE DIMERIZATION AS AN ENERGY SENSOR IN GLYCOLYTIC PATHWAY OF ARCHAEA

Zamora R[1], Abarca M J[1], Ramirez-Sarmiento C[1], Herrera-Morandé A[1], Castro-Fernández V[1], Guixe V[1], [1]Departamento de Biología, Ciencias, Universidad de Chile. (Sponsored by FONDECYT 1150460)

3) EQUILIBRATIVE NUCLEOSIDE TRANSPORTER 2 IS A TARGET OF INSULIN/PI3K/AKT SIGNALING AND DYSREGULATED IN DIABETIC GLOMERULOPATHY.

Alarcón S[1,2], Ojeda A[2,1], Moreira M[2], Garrido W[1,2], Suárez R[1], Quezada C[2,1], San Martín R[1], [1]Bioquímica y Microbiología, Ciencias, Universidad Austral de Chile.[2]Patología Molecular, Ciencias, Universidad Austral de Chile. (Sponsored by FONDECYT N° 1130414 And FONDEF VIU15P0054)

5) NEW METHOD FOR MICROSOMES PRODUCTION FROM *SACCHAROMYCES CEREVISIAE* FOR THE STUDY OF THE MECHANOCHEMICAL MECHANISM OF BIP

Alfaro-Valdés H M[1], Ramírez C[1], Wilson C A M[1], [1]Departamento de Bioquímica y Biología Molecular, Facultad de Ciencias Químicas y Farmacéuticas, Universidad de Chile. (Sponsored by FONDECYT 11130263 And U-inicia (U. Chile).)

7) ROLE OF S6K1 ON INSULIN-DEPENDENT MITOCHONDRIAL MORPHOLOGY AND FUNCTION IN CARDIOMYOCYTES

Alonso C[1], Garcia I[1], Parra V[1], Lavandero S[1,2], [1]Advanced Center for Chronic Diseases (ACCDiS) and Center for Molecular Studies of the Cell (CEMC)., Faculty of Chemical and Pharmaceutical Sciences & Faculty of Medicine, Universidad De Chile.[2]Department of Internal Medicine University of Texas Southwestern Medical Center, Dallas. (Sponsored by FONDAP 15130011 (SL), FONDECYT 1161156 (SL). IG Hold A PhD Fellowship From CONICYT.)

9) *DE NOVO* ASSEMBLY AND CHARACTERIZATION OF THE CHILEAN RED SEA URCHIN (*LOXECHINUS ALBUS*) TRANSCRIPTOME USING NEXT GENERATION SEQUENCING

Antiqueo P[1], Bastias M[2], Meneses C[2], Molina A[1,3], Valdés J[1,3], [1]Lab. de Biotecnología Molecular. Interdisciplinary Center for Aquaculture Research (INCAR), Ciencias Biológicas, Universidad Andrés Bello.[2]Centro de Biotecnología Vegetal, Ciencias Biológicas, Universidad Andrés Bello.[3]Centro de Investigación Marina de Quintay (CIMARQ) Universidad Andrés Bello. (Sponsored by Supported by FONDAP 15110027 And FONDECYT 1130545)

11) IDENTIFICATION AND CHARACTERISATION OF TWO PUTATIVE LIPOYL SYNTHASES (LIP1) IN SOLANUM LYCOPERSICUM (TOMATO)

Araya J[1], Miranda S[1], Handford M[1], [1]Biologia, Ciencias, Universidad de Chile.

13) ACTIVIDAD CITOTÓXICA Y PRO-APOPTÓTICA DE EXTRACTOS MICROALGALES SOBRE LA LÍNEA CELULAR LNCAP DE CÁNCER DE PRÓSTATA HUMANO.

Arias E[1], Osses N[2], Ojeda C[3], Guzmán F[3], Rojas M V[1], [1]Unidad de Biología Celular, Laboratorio de Genética e Inmunología Molecular. Instituto de Biología, Ciencias, Pontificia Universidad Católica de Valparaíso.[2]Laboratorio de Química Biológica. Instituto de Química, Ciencias, Pontificia Universidad Católica de Valparaíso.[3]Núcleo de Biotecnología de Curauma Pontificia Universidad Católica de Valparaíso. (Sponsored by Financiamiento: Proyectos DIE-PUCV 037.698/2013 Y DI 039.342/2016)

15) IDENTIFICATION OF PROTEIN SUPERFAMILIES SIGNIFICANTLY MUTATED IN CANCER

Bascur J[1], Alegría M[2], Araya-Duran I[1], Almonacid D[1], [1]CBIB Universidad Andrés Bello.[2]CINV Universidad de Valparaíso.

17) I*N SILICO* PREDICTION OF BIOLOGICAL TARGETS OF SMALL MOLECULES BY A MOLECULAR FINGERPRINT APPROACH

Bosshard M[1], Schüller A[1], [1]Laboratorio de Diseño Molecular, Departamento de Genética Molecular y Microbiología, Facultad de Ciencias Biológicas, Pontificia Universidad Católica de Chile. (Sponsored by Acknowledgements: FONDECYT Nº 1161798)

19) EXOSOMES RELEASED UPON KNOCKDOWN OF THE ANTISENSE NON-CODING MITOCHONDRIAL RNAS MODULATE TUMORIGENIC PROPERTIES OF THE HUMAN BREAST CANCER CELL LINE MDA-MB-231.

Bustos R[1,2], Campos A[1,3], Varas-Godoy M[4], Carrasco M[1], Guevara F[1,2], Villegas J[1,2], Burzio V[2], Burzio L[1,2], Lobos-González L[1,3], [1]Andes Biotecnologías SpA Fundación Ciencia & Vida.[2]Departamento de Ciencias Biológicas Universidad Andrés Bello.[3]Laboratorio de Comunicaciones Celulares, Facultad de Medicina, Universidad de Chile.[4]Laboratorio Biología de la Reproducción, Facultad de Medicina, Universidad De Los Andes. (Sponsored by Fondecyt 11140204, Basal PFB-16.)

21) RATIONAL DISCOVERY OF BETA-2-MICROGLOBULIN AGGREGATION INHIBITORS AS NOVEL THERAPEUTIC AGENTS FOR CANCER TREATMENT

Cáceres J[1], Soto J[2], Almonacid D[2], [1]Center for Bioinformatics and Integrative Biology, Facultad de Ciencias Biológicas, Universidad Andrés Bello.[2]Center for Bioinformatics and Integrative Biology (CBIB), Facultad de Ciencias Biológicas, Universidad Andrés Bello

23) TRANSCRIPTIONAL CHARACTERIZATION OF PROTEINS RELATED TO DETOXIFICATION SYSTEMS AND DRUG RESISTANCE MECHANISMS IN *CALIGUS ROGERCRESSEYI*.

Mancilla A[1], Molina C[2], Espinoza D[2], **Cárcamo J G[3]**, [1]Instituto de Bioquímica y Microbiología, Interdisciplinary Center for Aquaculture Research (INCAR) Universidad Austral de Chile.[2]Instituto de Bioquímica y Microbiología Universidad Austral de Chile.[3]Instituto de Bioquímica y Microbiología, Interdisciplinary Center for Aquaculture Research (INCAR), Ciencias, Universidad Austral de Chile. (Sponsored by Fondecyt 1150934, Innova Corfo 14IDL2-30112 And Fondap 15110027

25) NEURONAL THY-1 INDUCED FOCAL ADHESION DISASSEMBLY IN ASTROCYTES REQUIRES PAR3 AND SYNDECAN-4.

Cárdenas A, Kong M[1], Álvarez Á[2], Valdivia A[2], Quest A[2], Leyton L[2], [1]Cellular Communication Laboratory, Advanced Center for Chronic Diseases (ACCDiS), Institute of Biomedical Sciences (ICBM), Faculty of Medicina, Universidad de Chile.[2]Cellular Communication Laboratory, Advanced Center for Chronic Diseases (ACCDiS), Institute of Biomedical Sciences (ICBM), Faculty of Medicine, Universidad de Chile. (Sponsored by FONDECYT 3140471 (AC); FONDECYT 1150744 (LL); CONICYT #24001198 (AA); FONDECYT 1130250, CONICYT-FONDAP 15130011 (AFGQ).)

27) STABILITY OF ECE-1C AND ITS ROLE IN PROLIFERATION AND MIGRATION ARE ENHANCED BY PROTEIN KINASE CK2 IN COLON CANCER CELLS.

Carrasco V[1], Niechi I[1], Villar P[1], Verdugo C[1], Ramirez-Sagredo A[1], Tapia J[1], [1]Departamento de Oncología Básica y Clínica, Facultad de Medicina, Universidad de Chile. (Sponsored by Acknowledgement: This Work Was Funded by Fondecyt Regular Grants #1120132 And #1160889 To JCT.)

29) UNUSUAL DIMERIZATION OF A *BC*CSP MUTANT *VIA* ITS NUCLEIC ACID-BINDING SURFACE LEADS TO ALLOSTERIC CONFORMATIONAL DYNAMICS

Carvajal A I[1], Komives E A[2], Castro-Fernández V[1], Ramírez-Sarmiento C A[3], Babul J[1], [1]Laboratorio de Bioquímica y Biología Molecular, Facultad de Ciencias, Universidad de Chile.[2]Department of Chemistry & Biochemistry University of California San Diego.[3]Institute for Biological and Medical Engineering, Schools of Engineering, Medicine and Biological Sciences, Pontificia Universidad Católica de Chile. (Sponsored by FONDECYT 1130510 (JB), NIH 1S10OD016234-01 (EAK), BECA MAGÍSTER EN CHILE 2013 CONCURSO COMPLEMENTARIO 221320447 (AIC).)

31) THERMAL STABILITY OF HUMAN ADENOSINE KINASE

Kern-Mikkelsen M[1], Cea P[1], Abarca M J[1], **Castro-Fernández V[1]**, [1]Laboratorio de Bioquímica y Biología Molecular, Departamento de Biología, Facultad de Ciencias, Universidad de Chile. (Sponsored by FONDECYT Regular 1130510 And FONDECYT Postdoctorado 3160332.)

33) EFFECT OF METHYL-JASMONATE ON FLAVONOID ACCUMULATION IN ANTARCTIC *COLOBANTHUS QUITENSIS* (KUNTH) BARTL.

Contreras R A[1], Avilés J[1], Landaeta N[1], Cortés-Antíquera R[1], Mendoza L[2], Zúñiga G E[1], [1]Laboratorio de Fisiología y Biotecnología Vegetal, Departamento de Biología, Facultad de Química y Biología, Universidad de Santiago de Chile.[2]Laboratorio de Micología, Departamento de Química de los Materiales, Facultad de Química y Biología, Universidad de Santiago de Chile. (Sponsored by Funded by Fondecyt Grant 3160274)

35) CHARACTERIZATION OF STRESS-ASSOCIATED MICRORNAS IN *PARALICHTHYS ADSPERSUS* SKELETAL MUSCLE USING SMALL-RNA DEEP SEQUENCING

Farlora R[1], **Donoso J[1]**, Visozo P[2], Valdés J[1,3], Molina A[1,3], [1]Lab. de Biotecnología Molecular. Interdisciplinary Center for Aquaculture Research (INCAR), Ciencias Biológicas, Universidad Andrés Bello.[2]Centro de Biotecnología Vegetal, Ciencias Biológicas, Universidad Andrés Bello.[3]Centro de Investigación Marina de Quintay (CIMARQ) Universidad Andrés Bello. (Sponsored by Supported by FONDAP 15110027 And FONDECYT 1130545

37) MISFOLDED NEWLY SYNTHESIZED HISTONE H3 IS DEGRADED BY THE UBIQUITIN-PROTEASOME SYSTEM

Espinoza Arratia C[1], Loyola A[1], [1]Laboratorio de Epigenética y Cromatina Fundación Ciencia & Vida

39) EFFECT OF GLUCOCORTICOID-INDUCED STRESS ON THE GROWTH PATHWAY AND MUSCLE ATROPHY IN THE FINE FLOUNDER (*PARALICHTHYS ADSPERSUS*)

Fuentes M[1], Valenzuela C[1], Zuloaga R[1], Valdés J[1,2], Molina A[1,2], [1]Lab. de Biotecnología Molecular. Interdisciplinary Center for Aquaculture Research (INCAR), Ciencias Biológicas, Universidad Andrés Bello.[2]Centro de Investigación Marina de Quintay (CIMARQ) Universidad Andrés Bello. (Sponsored by Supported by FONDAP 15110027 And FONDECYT 1130545

41) UNDERSTANDING THE BINDING DETERMINANTS OF VERATRYL ALCOHOL AT SURFACE OF LIGNIN PEROXIDASE FROM *P. CHRYSOSPORIUM*: A MOLECULAR DYNAMICS AND MM-GBSA BASED STUDY

Recabarren R, **Fuenzalida-Valdivia I[1]**, Alzate-Morales J[1], [1]Centre for Bioinformatics and Molecular Simulation, School of Bioinformatics Engineering, Universidad de Talca. (Sponsored by J.A.M. And I.F. Thank Financial Support Through Project FONDECYT No. 1140618)

43) PREDICTING THE EFFECT OF P294A VARIANT ON MICA PROTEIN IN GASTRIC ADENOCARCINOMA.

Gárate V[1], Morales M[1], González P[2], Armisen R[3,4], Molina M C[1], [1]Departamento de Inmunología, Facultad de Medicina, Universidad de Chile.[2]Programa de Genética Humana, Facultad de Medicina, Universidad de Chile.[3]Centro de Excelencia en Medicina de Precisión, CEMP Pfizer Chile.[4]Laboratorio de Patología Molecular del Cáncer, Centro de Investigación y Tratamiento del Cáncer, Facultad de Medicina, Universidad de Chile. (Sponsored by This Work Was Supported by Fondecyt No 1130330 Of The Chilean Government.)

45) GDF11 EXERTS ANTI-HYPERTROPHIC AND METABOLIC ACTIONS ON CULTURED CARDIAC MYOCYTES

Garrido V[1], Ibarra C[2], Lavadero S[1,3], [1]Advanced Center for Chronic Diseases (ACCDiS), Faculty of Chemical and Pharmaceutical Sciences & Faculty of Medicine, University of Chile.[2]Bioscience Department Astrazeneca R&D.[3]Department of Internal Medicine, Southwestern Medical Center, University of Texas. (Sponsored by FONDECYT 1161156 (SL), FONDAP 15130011 (SL), CONICYT PhD Fellowship (VG))

47) γCDCPLI, A PLA$_2$ INHIBITOR FROM *CROTALUS DURISSUS COLLILINEATUS* SERUM, INDUCES APOPTOSIS ON BREAST CANCER BY PI3K/AKT AND P53 PATHWAY MODULATION

Gimenes S[1], Lopes D[1], Azevedo F[1], Vecchi L[1], Goulart L R[1], Alves P[1], Rodrigues T[1], Teixeira T[1], Silva C[1], Dias M[2], Rodrigues R[1], Yoneyama K[1], Rodrigues V[1], [1]Institute of Biochemistry and Genetics Federal University of Uberlandia.[2]Butantan Institute Butantan Institute. (Sponsored by UFU, CAPES, FAPEMIG, CNPq, FAPESP)

49) GENERATING A SYNTHETIC HYBRID OSCILLATOR THROUGH TRANSCRIPTIONAL REWIRING

Goity A[1], Jennifer L[2], Jay D[3], Luis L[1], [1]Millennium Nucleus for Fungal Integrative and Synthetic Biology and Departamento Genética Molecular y Microbiología, Ciencias Biológicas, Pontificia Universidad Católica de Chile.[2]Department of Biochemistry, Geisel School of Medicine, Geisel School of Medicine at Dartmouth.[3]Department of Genetics Geisel School of Medicine at Dartmouth. (Sponsored by FONDECYT 1131030 MN-FISB NC120043

51) ROLE OF THE FENESTRATIONS FOR THE BINDING OF A1899 TO TASK-1 POTASSIUM CHANNEL

Ramirez D[3], Arévalo B[3], Martínez G[3], Rinné S[1], Sepúlveda F[2], Decher N[1], **Gonzalez W[3]**, [1]Vegetative Physiology Group, Institute for Physiology and Pathophysiology, University of Marburg.[2]Laboratorio de Biología Centro de Estudios Científicos.[3]Center for Bioinformatics and Molecular Simulations University of Talca. (Sponsored by Fondecyt 1140624)

53) CLONING AND FUNCTIONAL CHARACTERIZATION OF MOUSE AGMATINASE

González A[1], Romero N[1], Benítez J[1], García D[1], Reyes M B[1], Arancibia B[1], Mella K[1], Uribe E[1], [1]Bioquímica y Biología Molecular, Ciencias Biológicas, Universidad de Concepción.

55) MITOCHONDRIAL DYNAMICS MODULATES CELL EXPANSION AND DIFFERENTIATION IN HUMAN HEMATOPOIETIC STEM CELLS.

González A[1,3], Puas G[1,3], Ruiz L[2], Elorza A[1,3], [1]Center for Biomedical Research Universidad Andrés Bello.[2]Centro de Investigación Biomédica Universidad Autónoma de Chile.[3]Millennium Institute of Immunology and Immunotherapy Universidad Andrés Bello. (Sponsored by FONDECYT 1100995 (AAE) And 11130192 (LMR), IMII_P09-016-F (AAE), Conicyt Scholarship 21120552 (AMG), Nucleo-UNAB DI-741-15/N (AAE))

57) POST-TRANSCRIPTIONAL CONTROL OF CRITICAL REGULATORS OF GENE EXPRESSION DURING HIPPOCAMPAL MATURATION

Guajardo L[1,3], Aguilar R[1,3], Bustos F[1,3], Gutierrez R[2,3], Van Zundert B[1], Montecino M[3], [1]Center for Biomedical Research, Ciencias Biológicas y Medicina, Universidad Andrés Bello.[2]Biochemistry and Molecular Genetics, Faculty of Biological Sciences, P. Universidad Católica de Chile.[3]FONDAP Center for Genome Regulation Universidad Andrés Bello. (Sponsored by FONDECYT 1130706; FONDAP 15090007; FONDECYT 3140418; FONDECYT 1140301)

59) MOLECULAR CHARACTERIZATION AND BIOLOGICAL ACTIVITY OF DIFFERENT ECOTYPES OF *CURCUMA LONGA* OBTAINED IN EASTER ISLAND.

Balada C[1], Fassio C[2], Mónica C[2], Eltit P[2], Guzmán L[1], [1]Química, Facultad de Ciencias, Pontificia Universidad Católica de Valparaíso.[2]Laboratorio de Propagación, Facultad de Agronomía, Pontificia Universidad Católica de Valparaíso. (Sponsored by Acknowledgements: This Study Was Funded by Grant FONDEF ID15I10031, DIE: 037.698-33 And DIE 037.728-44)

61) THE TRANSCRIPTION FACTOR ZEB1 PROMOTES TUMORAL MALIGNANCY BY INDUCING THE EPITELIAL-MESENCHYMAL TRANSITION PROGRAM AND DOWNREGULATING THE ANDROGEN SYNTHESIS PATHWAY

Herrera D[1], Orellana-Serradell O[1], Contreras H[1], Castellón E[1], [1]Fisiología Facultad de Medicina, Universidad de Chile. (Sponsored by Fondecyt Projects 1110269 And 1151214 (HC) And 1140417 (EC).)

63) INTERACTION OF C-TYPE LECTIN RECEPTOR DECTIN-2 WITH MOLLUSK HEMOCYANINS

Jiménez J M[1], Villar J[1], Del Campo M[1], Manubens A[2], Becker M I[1,2], [1]Investigación y Desarrollo Fundación Ciencia y Tecnología para el Desarrollo.[2]Biosonda S.A. (Sponsored by Fondecyt 1151337; CONICYT-PCHA/ Doctorado Nacional/2013-21130683)

65a) TARGETING POLYPHOSPHATE KINASE 1 (PPK1) IN *PSEUDOMONAS AERUGINOSA* PAO1: TOWARDS NOVEL ANTIVIRULENCE COMPOUNDS

Lagos C F[1,2], Campos F[3], Álvarez J A[3], Muñoz R[3], Varas M[3], Ortíz-Severín J[3], Cabrera R[4], Chávez F P[3], [1]Department of Endocrinology, School of Medicine, Pontificia Universidad Católica de Chile.[2]Facultad de Ciencia Universidad San Sebastián.[3]Systems Microbiology Laboratory, Faculty of Sciences, Universidad de Chile.[4]Laboratorio de Bioquímica y Biología Molecular, Facultad de Ciencias, Universidad de Chile. (Sponsored by Acknowledgments: OpenEye Scientific Software for Academic Licenses. DTP/NCI for Providing the Compounds Used in This Study.Powered@NLHPC: This Research Was Partially Supported by The Supercomputing Infrastructure of The NLHPC (ECM-02))

65b) ROLE OF INSULIN-LIKE SYSTEM IN THE REGULATION OF SOMATIC GROWTH OF THE CHILEAN MUSSEL (*MYTILUS CHILENSIS*) DURING NUTRITIONAL RESTRICTION

Lara H[1], Gallardo-Escarate C[2], Molina A[1,3], Valdés J[1,3], [1]Lab. de Biotecnología Molecular. Interdisciplinary Center for Aquaculture Research (INCAR), Ciencias Biologicas, Universidad Andres Bello.[2]Laboratory of Biotechnology and Aquatic Genomics. Interdisciplinary Center for Aquaculture Research (INCAR) Universidad de Concepción.[3]Centro de Investigación Marina de Quintay (CIMARQ) Universidad Andrés Bello. (Sponsored by Supported by FONDAP 15110027 And FONDECYT 1130545)

67) TRANSCRIPTIONAL AND PROTEIN EXPRESSION IN SUB-CUTANEOUS FAT FROM CHILOTA AND SUFFOLK DOWN LAMBS GRAZING CALAFATAL

Gallardo M[1], Arias L[2], Fuentes D[2], Mancilla A[2], Hernandez S[2], Manriquez R[2], Vera T[2], Cárcamo J G[2], [1]Bioquimica, Ciencias, UACh.[2]Bioquimica Universidad Austral De Chile. (Sponsored by InnovaChile 14IDL2-30112. Fondecyt 1150934 And Fondecyt 3160059

69) PROTEOMIC ANALYSIS OF *BOTHROPS PAULOENSIS* VENOM: STRUCTURAL INSIGHTS OF A PII SVMP

Lopes D[1], Achê D[1], Nascimento R[1], Gomes M[1], Amaral L[1], Azevedo F[1], Yoneyama K[1], Rodrigues R[1], Rogrigues V[1], [1]Instituto de Genética e Bioquímica Universidade Federal de Uberlândia. (Sponsored by The Authors Gratefully Acknowledge The Support By Fundação de Amparo à Pesquisa do Estado de Minas Gerais (FAPEMIG); Conselho Nacional de Desenvolvimento Científico e Tecnológico (CNPq); Universidade Federal de Uberlândia (UFU) And CAPES)

71) DOXYCYCLINE INDUCES THE MITOCHONDRIAL UPR AND INCREASES MITOCHONDRIAL METABOLISM IN HELA CELLS

Lopez-Crisosto C[1], Lavandero S[2,1], [1]Advanced Center for Chronic Diseases (ACCDiS), Facultad de Ciencias Químicas y Farmacéuticas & Facultad de Medicina, Universidad de Chile.[2]Department of Internal Medicine (Cardiology) University of Texas Southwestern Medical Center. (Sponsored by FONDECYT-1161156; FONDAP-15130011; PhD CONICYT Fellowship-21130200)

73) EVOLUTIONARY HISTORY AND COMPLETE REVERSAL OF COFACTOR SPECIFICITY OF MEMBERS OF THE 6-PHOSPHOGLUCONATE DEHYDROGENASE FAMILY

Maturana P[1], Tobar-Calfucoy E[1], Fuentealba M[1], Cid-Hidalgo D[1], Cabrera R[1], [1]Departamento de Biología, Facultad de Ciencias, Universidad de Chile. (Sponsored by PCHA-CONICYT, PAIFAC Fac. Ciencias UCH, AUGM SCALA Program, Structural Biology Group IFSC-USP)

75) COTREATMENT WITH OLEIC AND LINOLEIC UNSATURATED FATTY ACIDS REGULATE MITOCHONDRIAL CONTENT IN SKELETAL MUSCLE: POSSIBLE ROLE OF AUTOPHAGY

Morales P[1], Szabadkai G[2], Espinosa A[3], Lavandero S[1,4], [1]Advance Center for Chronic Diseases (ACCDiS), Facultad de Ciencias Químicas y Farmacéuticas, Universidad de Chile.[2]Department of Cell & Developmental Biology University College London.[3]Escuela de Tecnología Médica Universidad de Chile.[4]Department of Internal Medicine University of Texas Southwestern Medical Center. (Sponsored by FONDECYT 1161156 (SL); FONDAP 15130011 (SL); PhD CONICYT Fellowship (21140457. P.E.M.))

77) UNRAVELING THE CATALYTIC MECHANISM OF PHOSPHOFRUCTOKINASE-2 FROM *E. COLI*: A QM/MM THEORETICAL STUDY

Murillo-López J A[1], Zinovjev K[3], Recabarren R[1], Alzate-Morales J[1], Caballero-Ruiz J[1], Cabrera R[2], Tuñon I[3], [1]Departamento de Ingeniería Civil en Bioinformática, Ingeniería, Universidad de Talca.[2]Departamento de Biología Universidad de Chile.[3]Departamento de Química Física Universitat de Valéncia. (Sponsored by The Authors Want to Acknowledge the Financial Support from CONICYT - Proyecto Fondecyt Postdoctorado-2015 No. 3150041 And Proyecto Regular FONDECYT No. 1140618)

79) GROWTH INHIBITION OF PLANT PATHOGENIC FUNGI BY *ASPERGILLUS FOETIDUS* MEDIATED SYNTHESIZED CDS NANOPARTICLE: A POSSIBLE MECHANISTIC INSIGHT.

Nasrin T[1], Das T[1], [1]Biochemistry and Biophysics, Science, University of Kalyani. (Sponsored by MANF Scheme, UGC, India.)

81) PHOSPHATASE CALCINEURIN REGULATES INSULIN/AKT-DEPENDENT GLUCOSE UPTAKE IN SKELETAL MUSCLE CELLS

Navarro-Márquez M[1,2], Rivera-Mejías P[1,2], Vásquez-Trincado C[1,2], Morales P[1,2], Jaimovich E[2], Lavandero S[1,2,3], [1]Advanced Center for Chronic Disease (AACDiS), Facultad de Ciencias Químicas y Farmacéuticas & Facultad de Medicina, Universidad de Chile.[2]Center for Molecular Studies of the Cell (CEMC), Facultad de Medicina, Universidad de Chile.[3]Department of Internal Medicine (Cardiology Division) University of Texas Southwestern Medical Center. (Sponsored by FONDECYT 1161156 (SL); FONDAP 15130011 (SL), CONICYT PhD Fellowship (MN))

83) TNF-α MEDIATED AUTOPHAGY REGULATES VASCULAR SMOOTH MUSCLE CELL PHENOTYPE SWITCHING

García-Miguel M[1], **Norambuena-Soto I[1]**, Mondaca-Ruff D[1], Cartes-Saavedra B[1], Morales P[1], Núñez-Soto C[1], Sanhueza-Olivares F[1], Riquelme J[1], Mellado R[2], Chiong M[1], [1]ACCDiS, Departamento de Bioquímica y Biología Molecular, Facultad de Ciencias Químicas y Farmacéuticas, Universidad de Chile.[2]Departamento de Farmacia, Facultad de Química, Pontificia Universidad Católica de Chile. (Sponsored by Fondecyt 1140329, FONDAP 15130011)

85) GENETIC CHARACTERIZATION OF *TRYPANOSOMA CRUZI* IN CHRONIC CHAGASIC PATIENTS TREATED WITH NIFURTIMOX

Franco F[1], Zulantay I[1], Maldonado E[1], Vega I[1], Apt W[1], Donoso F[1], Mantilla B[2], Silber A[2], Saavedra M[1], Martínez G[1], [1]Laboratório de Parasitología Básico-Clínico, Programa de Biología Celular y Molecular, Instituto de Ciencias Biomédicas, Facultad de Medicina, Universidad De Chile.[2]LaBTryps (Laboratory of Biochemistry of Tryps), Departamento de Parasitologia, Instituto de Ciências Biomédicas, Universidade de Sao Paulo. (Sponsored by Financial Support: FONDECYT 1161485)

87) COMPUTATIONAL STUDY OF THE ADSORPTION MECHANISM OF IGG1 ON A KAOLINITE SOLID SURFACE USING ALL-ATOM MOLECULAR DYNAMICS TECHNIQUES

Olguín G[1,2], [1]Departamento de Fisiología, Facultad de Ciencias Biológicas, Pontificia Universidad Católica

de Chile.[2]Department of Physics, Faculty of Sciences, Universidad de Chile.

89) DIFFERENTIAL EXPRESSION OF EPITHELIAL TO MESENCHYMAL TRANSITION TRANSCRIPTION FACTORS IN BREAST CANCER

Ortega-Hernández V[1], Gajardo-Meneses P[1], Fernández W[2], Carvallo P[1], [1]Departamento de Biología Celular y Molecular, Facultad de Ciencias Biológicas, Pontificia Universidad Católica de Chile.[2]Unidad de Anatomía Patológica Hospital San Borja Arriarán. (Sponsored by FONDECYT 1120200)

91) NEW DNA STAINING IN GELS WITH TETRAZOLIUM SALTS IMPROVES INTEGRITY OF RECOVERED DNA

Paredes A[1], Naranjo-Palma T[1], Alfaro-Valdés H M[1], Barriga A[2], Babul J[3], Wilson C A M[1], [1]Departamento de Bioquímica y Biología Molecular, Facultad de Ciencias Químicas y Farmacéuticas, Universidad de Chile.[2]Unidad de Espectrometría de Masas-CEPEDEQ, Facultad de Ciencias Químicas y Farmacéuticas, Universidad de Chile.[3]Departamento de Biología, Facultad de Ciencias, Universidad de Chile. (Sponsored by FONDECYT 11130263, U-inicia de La Vicerrectoría de La Universidad de Chile (CAMW) FONDECYT 1090336 (JB))

93) VIMENTIN AND E-CADHERIN EXPRESSION IN RELATION TO LYMPH NODE METASTASIS, IN BREAST CANCER TUMORS EXPRESSING MICRORNAS TARGETING TRANSCRIPTION FACTORS INVOLVED IN EPITHELIAL-MESENCHYMAL TRANSITION

Pérez-Moreno E[1], Valarezo G[1], Zavala V[1], Gajardo-Meneses P[1], Fernández W[2], Carvallo P[1], [1]Departamento de Biología Celular y Molecular, Facultad de Ciencias Biológicas, Pontificia Universidad Católica de Chile.[2]Unidad de Anatomía Patológica Hospital San Borja Arriarán. (Sponsored by CONICYT 21151349)

95) FAM162A: A NEW MITOCHONDRIAL PROTEIN RELATED TO MITOPHAGY IN MAMMALS

Púas G[1], González A[1], Elorza A[1,2], [1]Centro de Investigaciones Biomédicas, Ciencias Biológicas, Universidad Andrés Bello.[2]Instituto Milenio en Inmunología e Inmunoterapia Pontificia Universidad Católica De Chile. (This Work Is Funded By IMII P09-016-F; Nucleo-UNAB DI-741-15/N; FONDECYT 1100995)

97) METABOLIC ENGINEERING OF SWEET PROTEINS THAUMATIN AND BRAZZEIN IN KIWI (*ACTINIDIA DELICIOSA* VAR. HAYWARD) AND TOMATO (*SOLANUM LYCOPERSICUM* VAR. MICROTOM*)* FRUITS.

Quiroz L[1], Colomer L[1], Barraza H[1], Simpson K[1], Rosas C[1], Stange C[1], [1]Departamento de Biología, Facultad de Ciencias, Universidad de Chile. (Sponsored by Acknowledgments to Grant FONDEF-VIU140049.)

99) MODULATION OF MURINE DENDRITIC CELL FUNCTION BY A HERPES SIMPLEX VIRUS 2 DELETED FOR GLYCOPROTEIN D.

Retamal A[1], Tognarelli E[2], Farías M[2], Kalergis A[2], González P[2], [1]Genetica Molecular y Microbiología, Facultad de Ciencias Biológicas, Pontificia Universidad Católica de Chile.[2]Genética Molecular y Microbiología, Ciencias Biológicas, Pontificia Universidad Católica de Chile. (Sponsored by FONDECYT 1140011, Instituto Milenio en Inmunología e Inmunoterapia P09/016-F)

101) IDENTIFICATION OF CRUCIAL RESIDUES FOR EXTERNAL GATE CLOSURE ON THE HGLUT1 HEXOSE TRANSPORTER

Hidalgo S[1], Toledo M[1], Castillo B[1], Lagos I[1], Ojeda L[1], Pérez A[1], Cuevas A[1], Reyes A[1], [1]Instituto de Bioquímica y Microbiología, Facultad de Ciencias, Universidad Austral de Chile. (Sponsored by FONDECYT 1130386, FONDEF D11I1131)

103) PURIFICATION AND BIOPHYSICAL CHARACTERIZATION OF THE DNA-BINDING DOMAINS OF YEAST FORKHEAD BOX TRANSCRIPTION FACTORS

Reyes J[1], Carvajal A[2], Vallejos G[2], Babul J[2], Ramírez-Sarmiento C[1], [1]Institute for Biological and Medical Engineering, Schools of Engineering, Medicine and Biological Sciences, Pontificia Universidad Católica de Chile.[2]Departamento de Biologia, Facultad de Ciencias, Universidad de Chile. (Sponsored by FONDECYT 11140601 & 1130510)

105) CATHEPSIN L IS NECESSARY FOR SURVIVAL OF COLORECTAL CANCER CELLS UNDER METABOLIC STRESS

Rivas B[1], Riquelme O[2], Bustamante S[2], Gutiérrez S[2], Castro A[2], Morin V[2], [1]Bioquímica y Biología Celular, Ciencias Biológicas, Universidad de Concepción.[2]Bioquímica y Biología Molecular, Ciencias Biológicas, Universidad de Concepción. (Sponsored by FONDECYT 1120923, VRDI-Enlace 214.037.018-1.0)

107) FLOCCULATION MEDIATED BY LIGHT: OPTOGENETIC CONTROL OF GENE EXPRESSION IN YEAST

Rojas V[1], Salinas F[1], Delgado V[1], Agosin E[2], Larrondo L[1], [1]Departamento de Genética Molecular y Microbiología, Facultad de Ciencias Biológicas, Pontificia Universidad Católica de Chile.[2]Departamento de Ingeniería Química y Bioprocesos, Facultad de Ingeniería, Pontificia Universidad Católica de Chile. (Sponsored by Funding MN-FISB120043, CONICYT/FONDECYT 3150156, 1130822 And 1131030.)

109) SUPPLEMENTATION WITH VEGETABLE OIL DECREASES OXIDATIVE STRESS PARAMETERS AND INFLAMMATION IN VISCERAL ADIPOSE TISSUE AND LIVER OF HIGH FAT DIET FED ANIMALS

San Martín M[1], González-Mañán D[1], Dossi C[1], D´Espessailles A[1], **Tapia G[1]**, [1]Farmacología Molecular y Clínica, Medicina, Universidad de Chile.

111) PDGF-BB INDUCES CHANGES IN MITOCHONDRIAL MASS AND FUNCTION ASSOCIATED WITH VSMC PHENOTYPIC SWITCHING

Sanhueza-Olivares F[1], Norambuena-Soto I[1], García-Miguel M[1], Mondaca-Ruff D[1], Núñez-Soto C[1], Riquelme J[1], Chiong M[1], [1]ACCDiS. Departamento de Bioquímica y Biología Molecular, Facultad de Ciencias Químicas y Farmacéuticas, Universidad de Chile. (Sponsored by Fondecyt 1140329, FONDAP 15130011)

113) ASSESSING THE EFFECT OF CALCIUM AND MAGNESIUM IONS IN THE STRUCTURAL STABILITY OF THE PROTEIN KINASE A THROUGH MOLECULAR DYNAMICS SIMULATIONS

Solorza J[1], Recabarren R[1], Alzate-Morales J[1], [1]Centro de Bioinformática y Simulación Molecular, Facultad de Ingeniería, Universidad de Talca. (Sponsored by J.A.M. and J. C. Acknowledge The Financial Support from

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115) STUDYING THE EFFECT OF CANCER MUTATIONS IN AGGREGATION-PRONE SUPERFAMILIES OF PROTEINS: AGGREGATION AS A PLAUSIBLE NEW MECHANISM OF ACTION FOR MUTATIONS IN CANCER

Soto-Lambert J[1], Almonacid Coronado D[1], [1]Bioinformatica, Ciencias Biológicas, Universidad Nacional Andrés Bello. (Sponsored by This Work Is Supported by FONDECYT de Iniciación Nº 11130578, Awarded to Daniel Almonacid)

117) CHANGE IN E*NGRAULIS RINGENS* HATCHING ENZYME EXPRESSION TOWARDS SALINITY VARIATIONS.

Tiznado O[1], Fernández F[2], Bustos P[3], Morín V[4], Castro L[5], [1]Programa Financiamiento Basal COPAS Sur-Austral, Fac. Cs. Naturales y Oceanográficas y Fac. Cs. Biológicas, Universidad de Concepción.[2]Bioquímica y Biología Molecular, Fac.Cs Biológicas, Universidad de Concepción.[3]Bioquímica Clínica, Fac. Farmacia, Universidad de Concepción.[4]Bioquímica y Biología Molecular, Fac. Cs. Biológicas, Universidad de Concepción.[5]Programa Financiamiento Basal COPAS Sur-Austral, Fac. Cs. Naturales y Oceanográficas, Universidad de Concepción. (Sponsored by VRDI-Enlace 214.037.018-1.0)

119) ROLE OF A3 ADENOSINE RECEPTOR ON THE STEMNESS OF GLIOBLASTOMA STEM-LIKE CELLS UNDER HYPOXIC CONDITIONS

Uribe D[1], Niechi I[1], Muñoz M[1], Jaramillo C[1], Quezada C[1], [1]Laboratorio de Patología Molecular, Facultad de Ciencias, Instituto de Bioquímica, Universidad Austral de Chile. (Sponsored by Funded by Fondecyt 1160777 (C.Q))

121) REGULATION BY AMP IN BIFUNCTIONAL ADP-DEPENDENT SUGAR KINASE FROM *METHANOCOCCUS MARIPALUDIS*: KINETIC AND EVOLUTIONARY BASIS.

Vallejos G[1], Castro-Fernández V[1], Guixé V[1], [1]Laboratorio de Bioquímica y Biología Molecular, Departamento de Biología, Facultad de Ciencias, Universidad de Chile. (Sponsored by Fondecyt 1150460)

123) LIPOTOXIC STRESS-DEPENDENT E3 LIGASE MUL1 REGULATES CARDIAC MITOCHONDRIAL DYNAMICS AND INSULIN SIGNALING

Vásquez-Trincado C[1], Navarro-Márquez M[1], Westermeier F[1], Rivera-Mejías P[1], Espinosa A[2], Lavandero S[1,3], [1]Advanced Center for Chronic Diseases (ACCDiS), Faculty of Chemical and Pharmaceutical Sciences & Faculty of Medicine, Universidad de Chile. [2]Medical Technology Department, Faculty of Medicine, Universidad de Chile.[3]Department of Internal Medicine University of Texas Southwestern Medical Center, Dallas, Texas, USA. (Sponsored by FONDECYT 1161156 (SL), FONDAP 15130011 (SL), CONICYT PhD Fellowship (CVT, P-RV, M-NM).)

125) LOX-1 RECEPTOR IS ESSENTIAL IN DIFFERENTIATION AND PRESERVATION OF PRO-FIBROTIC PHENOTYPE OF CARDIAC MYOFIBROBLASTS

Villa M[1], Diaz H[1], Diaz G[1], Quest A[2], Garcia-Naning L[1], [1]Advanced Center for Chronic Diseases (ACCDiS), Faculty of Chemical and Pharmaceutical Sciences, Universidad de Chile.[2]Advanced Center for Chronic Diseases (ACCDiS), Faculty of Medicine, Universidad de Chile. (Sponsored by FONDECYT 1140713 (LG), FONDAP 15130011 (AQ, GD, LG) And CONICYT PhD Fellowship 21140144 (MV))

127) A_1 ANTAGONIST DPCPX BLOCKS INSULIN-INDUCED GLUCOSE UPTAKE INDEPENDENT OF INSULIN RECEPTOR ACTIVATION IN ADULT CARDIOMYOCYTES

Westermeier F[1], Riquelme J[1], Utreras-Mendoza Y[2], Díaz-Vegas A[2], Sánchez G[2], Lavandero S[1,2,3], [1]Advanced Center for Chronic Diseases (ACCDiS), Facultad Ciencias Químicas y Farmacéuticas & Facultad de Medicina, Universidad de Chile, Santiago, Chile. Universidad de Chile.[2]Instituto de Ciencias Biomédicas, Facultad de Medicina Universidad de Chile.[3]University of Texas Southwestern Medical Center Universidad de Chile. (Sponsored by FONDAP 15130011 (SL), FONDECYT 1161156 (SL), FONDECYT 1130407 (GS), FONDECYT 3140532 (FW), FONDECYT 3160298 (JR))

129) HANDLING STRESS STIMULATES TELEOST MITOCHONDRIAL BIOGENESIS SPECIFICALLY IN SKELETAL MUSCLE

Zuloaga R[1], Pozo F[1], Molina A[1,2], Valdés J[1,2], [1]Lab. de Biotecnología Molecular. Interdisciplinary Center for Aquaculture Research (INCAR), Ciencias Biológicas, Universidad Andrés Bello.[2]Centro de Investigación Marina de Quintay (CIMARQ) Universidad Andrés Bello. (Sponsored by Supported by FONDAP 15110027 And FONDECYT 1130545)

131) EFFECT OF HIGH STOCKING DENSITY STRESS ON mRNA LEVELS OF MARKER GENES FOR GROWTH AND HEALTH IN *SALMO SALAR*

Vega M[1], Vidal G[2], Valenzuela-Nieto G[1], Stolzenbach M[1], Figueroa J[1], Romero A[3], Kausel G[1], [1]Instituto de Bioquímica y Microbiología, Ciencias, Universidad Austral de Chile.[2]Instituto de Bioquímica y Microbiología, Facultad de Ciencias, Universidad Austral De Chile e IFOP Instituto Fomento Pesquero.[3]Laboratorio de Biotecnología y Patología Acuática, Facultad de Ciencias Veterinarias, Universidad Austral De Chile. (Sponsored by Fondecyt 1141006, DID-UACh-SE2015-02; MecesupAUS1104, MINECON)

133) HYDROGEN PEROXIDE OR LEPTIN PRIMING INDUCES TRANSCRIPTIONAL MEMORY AT HMOX-1 GENE IN ENDOTHELIAL AND EA.HY926 CELLS.

Carrasco-Wong I[1], Porras O[2], Krause B[1], Längst G[3], Casanello P[4,5], [1]División de Pediatría, Escuela de Medicina, Pontificia Universidad Católica de Chile.[2]INTA Universidad de Chile.[3]Institut für Biochemie, Genetik und Mikrobiologie University of Regensburg.[4]División de Pediatría, División de Ginecología y Obstetricia, Escuela de Medicina, Pontificia Universidad Católica de Chile.[5]División de Obstetricia y Ginecología, Escuela de Medicina, Pontificia Universidad Católica de Chile. (Sponsored by FONDECYT 1130801; ICW Holds A CONICYT PhD Scholarship.)

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