SAIB

54th Annual Meeting Agentine Society for Biochemistry and Molecular Biology

LIV Reunion Anual Sociedad Argentina de Investigación en Bioquímica y Biología Molecular

CONICET

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FONDO PARA LA INVESTIGACIÓN CIENTÍFICA Y TECNOLÓGICA

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Universidad Nacional de Córdoba

Lipids

Hugo Gramajo
Facultad de CienciasBioquimicas y Farmaceuticas
Universidad Nacional Rosario
IBR-CONICET

Plants

Paula Casati
Facultad de Ciencias Bioquimicas y Farmaceuticas
Universidad Nacional Rosario
CEFOBI-CONICET

Microbiology

Monica Delgado
Instituto Superior de Investigaciones Biológicas - Instituto de Química Biológica “Dr. Bernabé Bloj”
Universidad Nacional de Tucumán

Signal Transduction

Mario Rossi
IBIOBA-CONICET

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1978-1978	FEDERICO CUMAR
1977-1977	ANTONIO BLANCO
1976-1976	HÉCTOR BARRA
1975-1975	RAÚL TRUCCO
1973-1974	ALEJANDRO PALADINI
1972-1972	HORACIO PONTIS
1971-1971	ANDRES STOPPANI
1970-1970	RODOLFO BRENNER
1969-1969	RANWEL CAPUTTO
1965-1968	LUIS F. LELOIR

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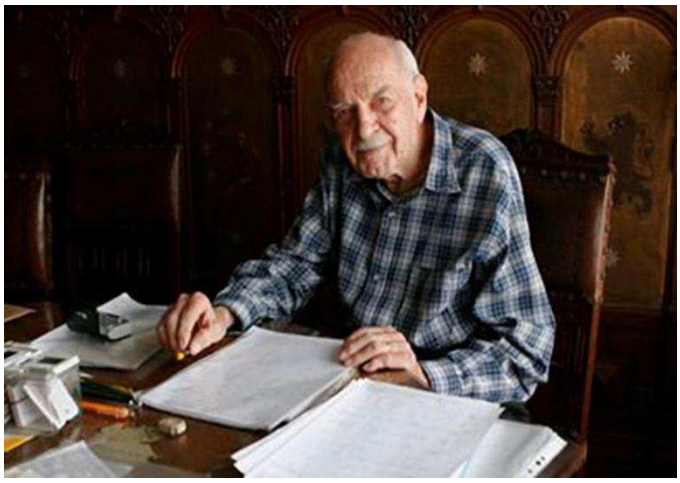
IN MEMORIAM OF RODOLFO R. BRENNER



Rodolfo R. Brenner, professor emeritus at the National University of La Plata and founding director of the Institute for Biochemical Research of La Plata, died on 3rd July 2018. He was an illustrious scientist and teacher of many generations of biochemists, with a distinguished career for his important discoveries in the field of lipid biochemistry.

He was born on 17th July 1922 in Banfield, Province of Buenos Aires, Argentina. As an outstanding student, he graduated at the Colegio Nacional de Buenos Aires in 1940 winning three gold medals due to his academic achievements. In 1946 he graduated as Doctor in Chemistry at the School of Exact, Physical and Natural Sciences (FCEFyN), of the University of Buenos Aires (UBA), obtaining another gold medal as best graduate. He had his first contact with lipids by means of his doctoral thesis 'Chemical composition of Argentinian olive oils', directed by Prof. Dr. Pedro Cattaneo.

During 1946 and 1954 he worked for the Department of Bromatology and Industrial Analysis of FCEFyN, first as a Graduate Assistant and then as an authorized Professor. At the same time, he was in charge of the Section of Industrial Toxicology at the Institute of Medical-Technological Investigations and at the Institute of Public Health. In this first period he studied the composition of lipids of several freshwater fish, a subject in which he directed five doctoral theses and published a dozen of original papers, mainly in the *Annals of the Argentine Chemical Association* and in *Industry & Chemist*.

In 1954 he obtained a postdoctoral fellowship of the British Council to work on 'Chemistry and Biochemistry of Lipids' with Professor John A. Lovern at the Torry Research Institute of Aberdeen in Scotland. Upon his return, he obtained by competitive examination the post of Head Professor of the Department of Biochemistry of the School of Medical Sciences until the year 1988. Almost from scratch, he created a research group in this Department which in the mid 1960s reached wide international renown, in special because of his works on biosynthesis of polyunsaturated fatty acids. In 1961, when the career of scientific investigator of the National Scientific and Technical Research Council (CONICET) was created, Dr. Brenner was accepted as Independent Investigator, and after subsequent promotions he became Superior Investigator in 1973. Being a prolific investigator, he directed 45 doctoral theses. He was the author of over 300 scientific works published in national and international journals, as well as many other communications presented at different conferences and scientific meetings. He lectured over 150 conferences in different countries of America, Europe and Asia.

In recognition of his work and career, he received more than 30 awards, among which we can highlight: Award of FundaciónCampomar in 1972; Herrero Ducloux Award of the National Academy of Exact, Physical and Natural Sciences in 1974, Konex Prize granted to the best 5 biochemists of Argentina in 1983; Gold Medal "G. Burns and Von Euler" granted in London in 1985; Awards "Alfredo Sordelli" in 1985 and "JJ Kyle" in 1990 of the Argentine Chemical Association; Supelco AOCS Research Award of the American Oil Chemists' Society in Baltimore in 1990; TWAS 2001 Award in Basic Medical Sciences of the Academy of Sciences of the Third World in New Delhi, India, 2002; 2009 Houssay Career Award in the area of Chemistry, Biochemistry and Molecular Biology in Buenos Aires, 2010; and the Distinguished Investigator of Argentine Nation, also in 2010. He was honorary member of the Society of Biology of Tucumán from 1987, of the Argentine Society of Biochemical Investigations (SAIB) from 1990, and of the Argentine Society of Biophysics (SAB) also in 1990.

He was Senior Investigator Emeritus of CONICET and Head Professor Emeritus of UNLP. He held the position of Established Academic of the National Academy of Exact, Physical and Natural Sciences, of the National Academy of Sciences of Buenos Aires, and of the National Academy of Pharmacy and Biochemistry, as well as the Medicine Academy of Córdoba, Argentina.

It is worth mentioning his productive role in the management and promotion of science and university teaching. In 1965, together with Drs. Luis F. Leloir, Andrés Stoppani and Federico Cumar created the Argentine Society of Biochemical Research (SAIB), being its President in the period 1971-72. He was Counselling Director of CONICET, Adviser and Substitute Dean of the School of Medical Sciences, UNLP, and member of several scientific and academic committees of CONICET, UNLP, UBA and the Committee of Scientific Research (CIC) of the Province of Buenos Aires, Argentina. He was the South American representative at the Steering Committee of the International Conferences on the Bioscience of Lipids (ICBL). Among his achievements and works, one of the most important ones was the creation (1982) and subsequent consolidation of the Institute of Biochemical Research of La Plata (INIBIOLP), of which he was the Director until 2003. Since 2015, this institution is called "Prof. Dr. Rodolfo R. Brenner" in recognition of his career.

He will remain for ever in the memory of all of us who had the privilege of knowing him and receiving his teaching.

Horacio A. Garda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Schedule	Monday November 5	Tuesday November 6	Wednesday November 7	Thursday November 8
9:00- 11:00 hs		**Oral Communications *** **Room 1** ***Plants*** (PL-C01 to PL-C09) ***Biotechnology*** (BT-C01) **Room 2** ***Microbiology*** (MI-C01 to MI-C08) ***Enzymology*** (EN-C01 and EN-C02) **Room3** ***Lipids*** (LI-C01 to LI-C10)	**Oral Communications *** **Room 1** ***Cell Biology***(BC-C01 to BC--C10) **Room 3** ***Microbiology***(MI-C09 to MI-C16) ***Biotechnology***(BT-C02and BT-C03)	**Oral Communications *** **Room 1** ***Plants*** (PL-C10 to PL-C19) **Room 3** ***Signal Transduction*** (ST-C01 to ST-C10)
11:00-11:30 hs		**COFFEE-BREAK**		
11:30-12:30 hs		Conference ** **Andrés Aguilera** **Room A**	"HectorTorres" Conference **Sebastian Kadener** **Room A**	Conference **Miguel Ballicora** **Room A**
12.30- 14:30 hs		**LUNCH TIME**		
14:30-16:30 hs	**Congress Accreditation**	**Symposia** ***Microbiology**** **Room A** ***Protein Kinases**** **Room 1** ***Plant Biotechnology**** **Room 3**	**Symposia** ***Plant***** **Room A** ***Cell Biology***** **Room 3** ***Young investigators**** **Room 1**	**Symposia** ***Signal Transduction**** **Room 1** ***Applied Microbiology**** **Room A** ***Lipids***** **Room 3**
16:30-17:30 hs		PL-P01 to PL-P15 BC-P01 to BC-P15 Mi-P01 to Mi-P20	**POSTERS** **COFFEE –BREAK** LI-P01 to LI-P07 SB-P01 to SB-P03 EN-P01 to EN-P13 ST-P01 to ST-P07 BT-P01 to BT-P16	PL-P16 to PL-P32 BC-P16 to BC-P30 NS-P01 to NS-P03 MI-P21 to MI-P39
17:30-18:30 hs	**Opening Ceremony** *In memoriam* of **Rodolfo Brenner**			
18:30-19:30 hs	"Alberto Sols" Conference ** **Crisanto Gutierrez** **Room A**	"Ranwel Caputto" Conference **Claudio Fernández** **Room A**	Conference ** **SeongWook Yan** **Room A**	Closing Lecture Conference** **Pedro Aramendia** **Room A**
19:30 hs				**Closing Ceremony** **Room A**
	Cocktail 20 hs		**SAIB Assembly 19:45 hs**	**Pizza Party 21:30 hs**

*spanish ** english

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SAIB 2018

MONDAY, November 5, 2018

14:30-17:30 *REGISTRATION*

17:30-18:00 *OPENING CEREMONY*

Silvia Moreno

SAIB President

Room A

18:00-18:30 *IN MEMORIAM OF RODOLFO BRENNER*

Horacio Garda

INIBIOLP
Universidad Nacional de La Plata

Chairperson: Hugo Gramajo

Room A

18:30-19:30 *PLENARY LECTURE ALBERTO SOLS*

Crisanto Gutierrez

Factors linking genome replication, cell proliferation and chromatin dynamics

Centro de Biología Molecular Severo Ochoa (CSIC-UAM).
Madrid, España

Chairperson: Paula Casati

Room A

20:00 *WELCOMECOCKTAIL*

TUESDAY, November 6, 2018

09:00-11:00 *ORAL COMMUNICATIONS*

Room 1: **Plants** (PL-C01 to PL-C09); **Biotechnology** (BT-C01)
Room 2: **Microbiology** (MI-C01 to MI-C08) **Enzymology** (EN-C01 and EN-C02)
Room 3: **Lipids** (LI-C01 to LI-C10)

ROOM1

Chairpersons: *Maria Elena Alvarez and Maria Lorena Falcone Ferreyra*

9:00-9:12
PL-C01
ROLE OF THE MIR394 PATHWAY IN THE REGULATION OF FLOWERING TIME IN *Arabidopsis* AND MAIZE
Bernardi Y; Ponso A; Medrano F; Vegetti A; Dotto M, Laboratorio de Biología Evolutiva y Molecular de Plantas, Facultad de Ciencias Agrarias, UNL, e-mail: mdotto@fca.unl.edu.ar

9:12-9:24
PL-C02
ROLES OF THE SUBUNIT 17 OF MEDIATOR COMPLEX IN THE UV-B INDUCED DNA DAMAGE RESPONSE
Giustozzi M; Jaskolowski A; Cerdán P; Casati P, Centro de Estudios Fotosintéticos y Bioquímicos (CONICET-UNR). Fundación Instituto Leloir, e-mail: gisutozzi@cefobi-conicet.gov.ar

9:24-9:36
PL-C03
FINE TUNING OF ARGONAUTE 1 STABILITY IS REGULATED BY CURLY LEAF
Re DA; Cambiagno DA; Arce AL; Tomassi AH; Manavella PA, Instituto de Agrobiotecnología del Litoral, UNL – CONICET. e-mail: delfina.re@santafe-conicet.gov.ar

9:36-9:48
PL-C04
DIVERGENT ROLES FOR AN ANCESTRAL HDZIP-I GENE OF *Marchantiapolymorpha*
Romani F[1]; Florent S[2]; Bowman JL[2]; Moreno JE[1], [1] Inst. Agrobiotecnología del Litoral (UNL-CONICET). Santa Fe-ARG. [2]Monash University. Australia .e-mail: javier.moreno@santafe-conicet.gov.ar.

9:48-10:00
PL-C05
PHENOTYPIC CHARACTERIZATION OF ATMSH7 DEFICIENT PLANTS
Chirinos Arias MC; Spampinato CP, Centro de Estudios Fotosintéticos y Bioquímicos (CEFOBI, CONICET-UNR), Suipacha 570, 2000 Rosario, e-mail: chirinos@cefobi-conicet.gov.ar

10:00-10:12
PL-C06
EPIDERMIS SPECIFIC EPIGENETIC MODIFICATIONS IN THE *Arabidopsis thaliana* ROOT UNDER SALT STRESS CONDITIONS
Beyrne CC; González RM; Iusem ND, IFIByNE – CONICET and FCEN – UBA, e-mail: cebeyrne@fbmc.fcen.uba.ar

10:12-10:24
PL-C07
SALICYLIC ACID HYDROXYLATION IN MAIZE
RighiniAramburu S; Falcone Ferreyra ML; Casati P .Centro de Estudios Fotosintéticos y Bioquímicos (CONICET-Universidad Nacional de Rosario, e-mail: righini@cefobi.gov.ar

10:24-10:36
PL-C08
OVEREXPRESSION OF AN ASPARTIC PROTEASE INCREASES DROUGHT TOLERANCE IN *Arabidopsis thaliana*
DIppolito S; Guevara MG; Frey ME; Tonon CV., Instituto de Investigaciones Biologicas, e-mail: dippolit@mdp.edu.ar

10:36-10:48
PL-C09
INSIGHTS INTO THE CHLOROPLASTIC UNFOLDED PROTEIN RESPONSE
Cantoia A; Ceccarelli EA; Rosano GL, Instituto de Biología Molecular y Celular de Rosario (IBR-CONICET-UNR) – Rosario, Argentina, e-mail: cantoia@ibr-conicet.gov.ar

10:48-11:00
BT-C01
ENHANCED DROUGHT RESISTANCE OF *Nicotiana tabacum* BY COMPARTMENTALIZED MAIZE MALIC ENZYME EXPRESSION
Oitaven P; Müller G; Lara MV; Drincovich MF, Centro de Estudios Fotosintéticos y Bioquímicos (CEFOBI; CONICET-UNR). Rosario. Argentina, e-mail: oitaven@cefobi-conicet.gov.ar

ROOM2
Chairpersons: Claudia Studdert and Andrea Smania

9:00-9:12
MI-C01
IDENTIFICATION OF A *Streptomyces* NATURAL PRODUCT WITH POTENTIAL ANTI-VIRULENCE PROPERTIES
Bercovich BA; Bruna RE; Carabajal MA; Gramajo H; Rodríguez EJ; García Véscovi E, Instituto de Biología Molecular y Celular de Rosario (CONICET-UNR), e-mail: bercovich@ibr-conicet.gov.ar

9:12-9:24
MI-C02
***Salmonella*-SPECIFIC TRANSCRIPTION REGULATOR AFFECTING BIOFILM FORMATION AND VIRULENCE**
Vitor-Horen L; Echarren ML; Figueroa NR; Soncini FC, Instituto de Biología Molecular y Celular de Rosario, e-mail: luisinavitorh@gmail.com

9:24-9:36
MI-C03
ROLE OF RadA FACTOR IN THE GENETIC RECOMBINATION OF *Pseudomonas aeruginosa*
Moro C; Borgono VM; Monti MR; Argaraña CE, CIQUIBIC-CONICET, Dpto de Química Biológica, R Caputto. Fac de Cs Químicas, UNC. Córdoba, Argentina, e-mail: cmlmoro@gmail.com
9:36-9:48
MI-C04
BIOCHEMICAL CHARACTERIZATION OFCYCLOPHILINS IN*Brucella*
Muruaga EJ; Buffa GN; Briones G; Roset MS, Instituto de Investigaciones Biotecnológicas Dr. Rodolfo Ugalde; Universidad Nacional de San Martín, e-mail: emuruaga@iibintech.com.ar

9:48-10:00
MI-C05
***Bordetellabronchiseptica*BdcA REGULATES BIOFILM FORMATION IN A BrtA-DEPENDENT MANNER**
Ambrosis N; Fernandez J; Sisti F, IBBM, CCT La Plata CONICET, Dto. Cs. Biológicas. FCE. UNLP. La Plata, Buenos Aires, e-mail: nambrosis@hotmail.com

10:00-10:12
MI-C06
CHARACTERIZATION OF THE FIRST HOMOMERIC MULTIDOMAIN ACETYL-COA CARBOXYLASE FROM *Saccharopolyspora erythraea*
Livieri AL; Navone L; Gramajo H; Rodriguez E, IBR- Conicet. Facultad de Ciencias Bioquímicas y Farmacéuticas. UNR, e-mail: livieri@ibr-conicet.gov.ar

10:12-10:24
MI-C07
CATALASE ACTIVITY OF *Acinetobacter* sp. VER3 IS ESSENTIAL FOR PROTECTION AGAINST PEROXIDE AND UV
Sartorio MG; Steimbrüch B; Cortez N, IBR, Instituto de Biología Molecular y Celular de Rosario, FCByF, UNR & CONICET, e-mail: sartorio@ibr-conicet.gov.ar

10:24-10:36
MI-C08
A *Salmonella*-SPECIFIC TRANSCRIPTION FACTOR MODULATES BIOFILM FORMATION IN THE ENVIRONMENT
Tulin G; Soncini F, Instituto de Biología Molecular y Celular de Rosario, CONICET-UNR, Rosario, AR, e-mail: tulin@ibr-conicet.gov.ar

10:36-10:48
EN-P01
FUNCTIONAL CHARACTERIZATION OF ATYPICAL THIOREDOXINS FROM ENTAMOEBA HISTOLYTICA
Arias DG; Birocco F; Sasoni N; Guerrero SA; Iglesias AALaboratorio de Enzimología Molecular- IAL-UNL-CONICET, Santa Fe.E-mail: darias@fbcb.unl.edu.ar

10:48-11:00
EN-C02
BIOCHEMICAL AND GENETIC CHARACTERIZATION OF PYRUVATE DECARBOXYLASE FROM THE YEAST *CANDIDA ZEMPLININA*
Conti F; Raymond Eder ML; Rosa AL, IRNASUS–CONICET, Facultad de Ciencias Químicas, Universidad Católica de Córdoba. Argentina. E-mail: panchoconti@gmail.com

ROOM 3
Chairpersons: Gabriela Salvador and Maria Corvi

9:00-9:12
LI- C01
THE NUCLEAR-LIPID-DROPLET PROTEOME
Lagrutta LC[1]; Layerenza JP[1]; Trejo S[23]; Ves Losada A1[4], [1]INIBIOLP-CCT-La Plata-CONICET-UNLP; [2]UAB, Spain; [3]Y–TEC, Beriso; [4]Cs Biol. FCE, UNLP, Argentina, e-mail: lucialagrutta@hotmail.com

9:12-9:24
LI-C02
NITRO FATTY ACIDS: NOVEL CD36 LIGANDS WHICH MODULATE FATTY ACIDS METABOLISM
Vazquez MM; Gutierrez MV; Actis Dato V; Chiabrando GA; Bonacci, GCIBICI-CONICET. Dpto Bioquímica Clínica. Fac. Ciencias Químicas. UNC, e-mail: mvazquez@fcq.unc.edu.ar

9:24-9:36
LI-C03
PTEN ACTIVITY REGULATES TARGETING OF GP135 AND CELL DIFFERENTIATION IN MDCK CELLS
Pescio LG; Santacreu BJ; Romero DJ; Francisco MN; Favale NO; Sterin-Speziale NB, Universidad de Buenos Aires. Facultad de Farmacia y Bioquímica. IQUIFIB – CONICET, e-mail: lucilagpescio@ffyb.uba.ar

9:36-9:48
LI-C04
DUAL FUNCTION OF SPHINGOSINE-1-PHOSPHATE RECEPTOR 2 IN EPITHELIAL CELL MIGRATION
Romero DJ; Santecreu BJ; Pescio LG; Tarallo E; Chavez Flores JC; Favale NO, Universidad de Buenos Aires, Facultad de Farmacia y Bioquímica, IQUIFIB-CONICET, e-mail: danielaromero05@gmail.com

9:48-10:00
LI-C05
SPHINGOSINE KINASE 2 COORDINATES THE DISASSEMBLY OF CELL JUNCTIONS DURING CELL EXTRUSION
Santacreu BJ; Pescio LG; Romero DJ; Chavez Flores JC; Tarallo E; Sterin-Speziale NB; Favale NO, Universidad de Buenos Aires, Facultad de Farmacia y Bioquímica, IQUIFIB-CONICET, Argentina, e-mail: bsantacreu@ffyb.uba.ar

10:00-10:12
LI-C06
EFFECT OF CULTURE TEMPERATURE ON FATTY ACID COMPOSITION OF DIATOM *Cylindrotheca closterium*,
Almeyda D[3]; Scodelaro Bilbao P[13]; Constenla D[24]; Popovich C[13]; Leonardi P[13], [1]Dpto. BByF-UNS, [2]Dpto.IQ-UNS, [3]CERZOS, [4]PLAPIQUI - UNS-CONICET, e-mail: delfinaalmeyda@hotmail.com

10:12-10:24
LI-C07
CELLULAR LIPIDS CHANGES DURING ADIPOSE-DERIVED STEM CELLS OSTEOGENIC DIFFERENTIATION
Parra LG[1]; Casali CI[1]; Setton-Avruj PC[2]; Fernández Tomé MC[1], [1]BCM, FFyB, UBA, IQUIFIB-CONICET, CABA, Argentina [2]QBP, FFyB, UBA, IQUIFIB-CONICET, CABA, Argentina, e-mail: lparra@docente.ffyb.uba.ar

10:24-10:36
LI-C08
EXPRESSION OF GENES INVOLVED IN LIPID AND FATTY ACID METABOLISM IN *EX VIVO* CULTURED MOUSE TESTES
Oresti GM[1];Isoler-Alcaraz J[2]; Klampachas A[1]; Santiago Valtierra FX[1]; Aveldaño MI[1]; Del Mazo J[2], [1]INIBIBB, CONICET y Depto. BByF, UNS, Bahía Blanca, Argentina. [2]CIB, CSIC, Madrid, España., e-mail: gmoresti@criba.edu.ar

10:36-10:48
LI-C09
NOVEL ROLES OF MTP ON CANCER DEVELOPMENT, CELL SURVIVAL AND MIGRATION
Comanzo CG[1]; Lucci A[1]; Vera MC[1]; Lorenzetti F[1]; Ceballos MP[1]; Ferretti AC[2]; Alvarez ML[1]; Quiroga AD [1]Instituto de Fisiología Experimental (IFISE-CONICET). [2]Área Morfología (FCByF-UNR), e-mail: comanzo@ifise-conicet.gov.ar

10:48-11:00
LI-C10
PIP 2 PROMOTES MEMBRANE CURVATURE AND IS A SIGNALING HUB IN HUMAN SPERM ACROSOME EXOCYTOSIS
Altamirano KN; Suhaiman L; Lucchesi O; Ruete MC; Belmonte SA, Instituto de Histología y Embriología, IHEM-CONICET-FCMédicas-UNCuyo, e-mail: karina.altam@gmail.com

11:00-11:30 *COFFEE BREAK*

11:30-12:30 *PLENARY LECTURE*

Andrés Aguilera

Role of chromatin and DNA damage response functions in R loop-mediated genome instability

Centro Andaluz de Biología Molecular y Medicina Regenerativa-CABIMER,
Universidad de Sevilla, España

Chairperson: Silvia Moreno

Room A

12:30-14:30 *LUNCH*

14:30-16:30 *SYMPOSIA*

Room A
MICROBIOLOGYSYMPOSIUM
Chairpersons: Monica Delgado and Jorgelina Morán Barrio

Jorge Diego Marco
Recombinant antigens of* Leishmania *for the immunodiagnosis and immunoprophylaxis of American tegumentaryleishmaniasis
Instituto de Patología Experimental (UNSa-CONICET)

Augusto Bellomio
Study of the mechanism of action of lineal bacteriocins using suicide probes
Instituto Superior de Investigaciones Biológicas (UNT-CONICET)

Daniela Gardiol
Conserved mechanisms of viral pathogenesis: alterations of cell polarity and intercellular junctions
Instituto de Biología Molecular y Celular de Rosario (IBR)-CONICET, Facultad de Ciencias Bioquímicas y Farmacéuticas, Universidad Nacional de Rosario, Argentina

Hebe Dionisi
Brown algae polysaccharide assimilation potential in subantarctic sediments
Laboratorio de Microbiología Ambiental, Centro para el Estudio de Sistemas Marinos (CESIMAR-CONICET).

Room 1
PROTEIN KINASES SYMPOSIUM
Chairpersons: Silvia Rossi and Daniela Albanesi

Ricardo Biondi
Small compounds modulating bi-directional allostery in protein kinases: a new grip on an old trick?
IBioBA-CONICET-Partner Institute of the Max Planck Society; Frankfurt University Hospital (Germany)

Paula Portela
Role of PKA in protein translation regulation during adverse environmental growth conditions
Departamento Química Biológica-FCEN-UBA. IQUIBICEN-CONICET, Buenos Aires. Argentina

Virginia Novaro
Study of PI3K/AKT/mTOR pathway in breast cancer progression
Instituto de Biología y Medicina Experimental, IBYME-CONICET, Buenos Aires.

Viviana Castilla
Involvement of RAF/MEK/ERK cell signaling pathway in Junín virus replication
Depto. de Química Biológica, Facultad de Ciencias Exactas y Naturales, Universidad de Buenos Aires

Room 3
PLANT BIOTECHNOLOGY SYMPOSIUM
Chairpersons: Maria Valeria Lara and Elina Welchen

Raquel Chan
Successes and failures developing biotechnological tools in a model plant to improve crops. The long way from the growth chamber to the greenhouse and from the greenhouse to the field
Instituto de Agrobiotecnología del Litoral (UNL-CONICET) y FBCB (UNL).

Juan Carlos Diaz Ricci
The elicitor AsES regulates ripening and enhances protection in avocado and strawberry fruit
Instituto Superior de Investigaciones Biológicas (INSIBI, CONICET-UNT), Facultad de Bioquímica, Química y Farmacia, UNT.

Maria Victoria Busi
Different targets for the design of biomass of plants
Centro de Estudios Fotosintéticos y Bioquímicos de Rosario (CEFOBI-CONICET-UNR)

Marina Clemente
Molecular farming to produce vaccines against human and veterinary coccidian parasites: improving the antigen expression in plants
Laboratorio de Molecular Farming y Vacunas, Instituto Investigaciones Biotecnológicas-Instituto Tecnológico Chascomús (IIB-INTECH, sede Chascomús), Provincia de Buenos Aires, Argentina.

16:30-18-30 *COFFEE BREAK*

POSTER SESSION

MI-P01 to MI-P20

PL-P01 to PL-P15

BC-P01 to BC-P15

18:30-19:30 *RANWEL CAPUTTO CONFERENCE*

Claudio Fernandez

Structural and cell biology of synucleinopathies

Max Planck Laboratory of Structural Biology, Chemistry and Molecular Biophysics of Rosario (MPLbioR, UNR-MPIbpC), Rosario, Argentina; Instituto de Investigaciones para el Descubrimiento de Fármacos de Rosario (IIDEFAR, UNR-CONICET), Rosario, Argentina; Max Planck Institute for Biophysical Chemistry (MPIbpC-MPG), Göttingen, Germany

Chairperson: Gerardo Fidelio
Room A

WEDNESDAY, November 7, 2018

09:00-11:00 *ORAL COMMUNICATIONS*

Room 1: **Cell Biology** (BC-C01 toBC-C10)
Room 3: **Microbiology** (MI-C09 to MI-C16) **Biotechnology** (BT-C01and BT-C02

ROOM 1
Chairpersons: Javier Valdez Taubas and Cesar Casale

9:00-9:12
BC-C01
GLYCOGEN SYNTHASE KINASE 3 INHIBITION PREVENTS UV ELICITED TRANSCRIPTIONAL RESPONSE AND APOPTOSIS
Nieto Moreno N[1], Cuenca C[1], Villafáñez F[2], Soria G[2], Muñoz MJ[1], Kornblihtt AR[1], [1] IFIBYNE-UBA-CONICET, Argentina. [2] CIBICI-UNC-CONICET, Argentina, e-mail: nnietomoreno@fbmc.fcen.uba.ar

9:12-9:24
BC-C02
INTRAGENIC HISTONE ACETYLATION HELPS UPREGULATION OF *SMN2* EXON 7 INCLUSION BY SPINRAZA
Marasco LE[1], Krainer AR[2], Kornblihtt AR[1],1 IFIBYNE-UBA-CONICET, Buenos Aires, Argentina. 2 Cold Spring Harbor Laboratory, New York, USA, e-mail: lemarasco@agro.uba.ar

9:24-9:36
BC-C03
REGULATION OF THE SODIUM/IODIDE SYMPORTER (NIS) BY CREB3L1.
Di Giusto P, Martin M, Torres Demichelis VA, Sampieri L, Nicola JP, Alvarez C, Facultad de Ciencias uímicas, UNC. Departamento de Bioquímica Clínica / CIBICI-CONICET, e-mail: pablodigiusto91@gmail.com

9:36-9:48
BC-C04
TRANSLATIONAL CONTROL MEDIATED BY DIFFERENT DOMAINS OF ME31B IN *Drosophila*
Vilardo E, Rivera Pomar R, Layana C, Centro Regional de Estudios Genómicos, Fac. Cs Exactas, UNLP,e-mail: emilianovilardo@gmail.com

9:48-10:00
BC-C05
JOINT PROCESSING OF APOPTOTIC CELLS AND *Pseudomonas aeruginosa* BY MACROPHAGES
Jäger AV, Arias P, Pepe MV, Tribulatti V, Kierbel A, Instituto de Investigaciones Biotecnológicas "Dr. Rodolfo Ugalde" (IIIB-INTECH-UNSAM-CONICET), e-mail: avjager@gmail.com

10:00-10:12
BC-C06
LC3 OVEREXPRESSION MODULATES THE SECRETOME OF SENESCENCE TUMOR CELLS INDUCED BY RADIATION
Salvarredi LA[1]; Aguero H[1]; Marra F[2]; Millan E[2]; Lopez LA[2], [1]Fundación Escuela de Medicina Nuclear-CNEA. [2]IHEM CCT-CONICET, Mendoza, e-mail: leonardosalvarredi@yahoo.com.ar

10:12-10:24
BC-C07
CYTOSKELETAL DYNAMICS AT THE LEADING EDGE OF OVARIAN CANCER CELLS IS ENHANCED BY LA AND OL
Masner M[1]; Lujea N[1]; Bisbal M[2]; Acosta C[3]; Kunda P[1],[1] CIMETSA, IUCBC Córdoba [2] INIMEC-CONICET-UNC, Córdoba [3] IIHEM, FM, UNC Mendoza, e-mail: mmasner@gmail.com

10:24-10:36
BC-C08
MECHANISTIC ANALYSIS OF INFLUENZA A VIRUS GLYCOPROTEIN COMPENSATION
Drake A[1]; Garrido FM[1]; MorellattoRuggieri L[1]; Yewdell JW[2]; Magadan JG[1], [1]IHEM-CONICET, Fac. Cs. Médicas, UNCuyo. Mendoza, Argentina. [2]NIAID, NIH. Bethesda, MD, USA, e-mail: jmagadan@mendoza-conicet.gob.ar

10:36-10:48
BC-C09
EXPLORING THE DRIVING FORCES INFLUENCING S-ACYLATION OF PERIPHERAL PROTEINS AT THE GOLGI COMPLEX
Chumpen Ramirez S; Astrada MR; Daniotti JL, CIQUIBIC (UNC-CONICET), Fac. de Cs. Químicas, Universidad Nacional de Córdoba, Córdoba, Argentina, e-mail: svchumpen@gmail.com

10:48-11:00
BC-C10
SUPINE FALLS IN *Ceratitis capitata*CORRELATE WITH DISTINCT GENE EXPRESSION PROFILES
Bochicchio PA; Pérez MM; Rabossi A; Cavaliere-Candedo V; Quesada-Allué LA, IIBBA-CONICET, FCEyN-University of Buenos Aires and Fundación Leloir, e-mail: pbocchicchio@leloir.org.ar.

ROOM 3

Chairpersons: Eduardo Rodríguez and Nestor Cortez

9:00-9:12

MI-C09

DISRUPTION OF CTL0175 HAMPERS *Chlamydia trachomatis* REPLICATION POST IFN GAMMA-INDUCED STRESS

Panzetta ME[1]; Lujan AL[2]; Bastidas RJ[3]; Damiani MT[2]; Valdivia RH[3]; Saka HA[1], [1]CIBICI-CONICET, UNC, Arg, [2]IMBECU-CONICET, UNCu, Arg., [3]Duke University School of Medicine, USA, e-mail: epanzetta@fcq.unc.edu.ar

9:12-9:24

MI-C10

INCREASE IN THE VIRULENCE FITNESS OF *Shigellaflexneri*: THE NOA POPULATION'S PREVALENT PATHOGEN

Torrez Lamberti MF; Ballesteros MF; Bonano M; Pescaretti MM; Delgado MA, INSIBIO, e-mail: mftorrezlamberti@gmail.com

9:24-9:36

MI-C11

EXPLORING INTERACTIONS OF THE S-LAYER PROTEIN OF *Lactobacillus acidophilus* ATCC4356

Fina Martin J[1]; Palomino MM[1]; Cutine A[2]; Allievi MC[1]; Zanini SH[1]; Mariño KV[2]; BarqueroA[1]; Ruzal SM[1], [1]UBA-FCEN-Qca Biológica CONICET-IQUIBICEN[2], IBYME-CONICET, Bs As, Argentina, e-mail: joaquinafinamartin@gmail.com

9:36-9:48

MI-C12

DIVERSITY AND EVOLUTION OF β-LACTAMASE ampC IN LONG-TERM *Pseudomonas aeruginosa* CHRONIC INFECTIONS

Colque CA[1]; Albarracin AG[1]; Hedemann G1; Hickman RA[2]; Sommer LM[3]; Molin S[3]; Johansen HK[2]; Smania AM[1], [1]Depto. de Qca. Biologica, FCQ, UNC, CIQUIBIC-CONICET. [2]Rigshospitalet. [3]CFB-DTU, e-mail: acolque@fcq.unc.edu.ar

9:48-10:00

MI-C13

IMMUNOPROPHYLACTIC EFFECT OF R-*Leishmaniabraziliensis* HSP70 IN EXPERIMENTAL CUTANEOUS LEISHMANIASIS

Moya Alvarez A; Bracamonte ME; Hoyos CL; Uncos DA; Acuña L; Basombrio MA; Barroso PA; Marco JD, Instituto de Patología Experimental, FCS, UNSa/CONICET, Salta, Arg, e-mail: elagus177@gmail.com

10:00-10:12

MI-C14

TAM SYSTEM IS INVOLVED IN CELL ENVELOPE HOMEOSTASIS IN α-PROTEOBACTERIA

Bialer MG[1]; Sycz G[1]; Ruiz-Ranwez V[1]; Estein S[2]; Zorreguieta A[1], [1]Fundación Instituto Leloir, IIBBA-CONICET. Bs As. [2]CIVETAN, CONICET-U.N.C.P.B.A. Tandil. e-mail: mbialer@leloir.org.ar

10:12-10:24

MI-C15

SYNERGISTIC MECHANISM BETWEEN INFLUENZA A VIRUS AND *Streptococcus pneumoniae* IN PNEUMOCYTES

Reinoso Vizcaino N[1]; Olivero N[1]; Cortes P[1]; Yandar N[1]; Hernandez Morfa M[1]; Perez DR[2]; Echenique J[1], [1]CIBICI-CONICET, Fac. Cs. Qcas, UNC. [2]College of Veterinary, University of Georgia, USA, e-mail: nreinoso@fcq.unc.edu.ar

10:24-10:36
MI-C16
DIFFERENTIAL YEAST POPULATIONS IN GRAPE MUSTS FROM DIFFERENT *Vitis* SPECIES IN A SHARED TERROIR
Raymond Eder ML; Conti F; Rosa AL, IRNASUS-CONICET, Facultad de Ciencias Químicas, Universidad Católica de Córdoba. Argentina, e-mail: marialraymond@hotmail.com

10:36-10:48
BT-C02
A GH 8 ENDOGLUCANASE FROM *Paenibacillus* sp. *A59* FOR APPLICATION IN BIOPROCESSES
Bradanini M; Ghio S; Ontañon O; Garrido M; Campos E, Instituto de Biotecnología, CICVyA. INTA- IABIMO CONICET, e-mail: mariabradanini@hotmail.com.ar

10:48-11:00
BT-C03
CHARACTERIZATION OF POLYHYDROXYALKANOATE PRODUCTION BY *KHS3*
Rodríguez AN[1]; D'Amico D[2]; Cyras V[2]; Studdert CA[1]; Herrera Seitz MK[3], [1]IAL-UNL-CONICET, Santa Fe, Argentina [2 3] INTEMA e IIB–UNMdP– CONICET, Mar del Plata, Argentina, e-mail: ailennatalirodriguez@gmail.com

11:00-11:30 *COFFEE BREAK*

11:30-12:30 *PLENARY LECTURE HECTOR TORRES*

Sebastian Kadener

Molecular and physiological functions of circRNAS

Brandeis University, Waltham, Massachusetts, USA

Chairperson: Luis Quesada Allué
Room A

12:30-14:30 *LUNCH*

14:30-16:30 *SYMPOSIA*

Room A

PLANT SYMPOSIUM
Chairparsons: Paula Casati and Caudia P. Spampinato

Erich Grotewold
Emerging patterns in plant gene regulation
Department of Biochemistry & Molecular Biology Michigan State University, East Lansing, Michigan USA

Åsa Strand
The role of retrograde signals during plant stress responses
Umeå Plant Science Centre, Dept. of Plant Physiology, Umeå University, Umeå, Sweden.

Jorge Casal
Signalling dynamics and plant plasticity in complex environments
IFEVA, Universidad de Buenos Aires y Consejo Nacional de Investigaciones Científicas y Técnicas, Facultad de Agronomía, Argentina. Fundación Instituto Leloir, Instituto de Investigaciones Bioquímicas de Buenos Aires-CONICET, Argentina.

Javier Palatnik
The ups and downs of an* Arabidopsis *microRNA
IBR (Instituto de Biologia Molecular y Celular de Rosario), UNR-CONICET. Argentina.

Room 3

CELL BIOLOGY
Chairpersons:Gustavo Chiabrando and Claudio Fader

Claudio Fader
Erythropoiesis and autophagy: two closely related partners.
Laboratorio de Biología Celular y Molecular, Instituto de Histología y Embriología (IHEM), Universidad Nacional de Cuyo, CONICET, Mendoza, Argentina, Facultad de Odontología, Universidad Nacional de Cuyo, Mendoza, Argentina.

Galiano Mauricio
N-terminal post-translational arginylation regulates multiple roles of calreticulin
CIQUIBIC-Dpto. Qca Biológica RanwelCaputto, Facultad de Ciencias Químicas, Universidad Nacional de Córdoba.

Osorio-Fuentealba Cesar
Insulin-independent Glut4 trafficking in skeletal muscle: new mechanisms and advances to face metabolic diseases
Laboratorio de Biología Molecular, Celular y Metabolismo, Departament de Kinesiología, UMCE, Santiago, Chile, Centro de Investigación de Alcoholismo Adolescente (CIAA), Santiago Chile

Kashina Anna
Protein arginylation as a global regulator of intracellular protein trafficking and function
Department of Biomedical Sciences, School of Veterinary Medicine, University of Pennsylvania, Philadelphia, USA

Room 1

YOUNG INVESTIGATORS
Chairpersons: Silvia Morenoand Eleonora Garcia Vescovi

Juan Pablo Fededa
Investigating the role of microRNAs during mammalian brain development
Instituto de Investigaciones Biotecnológicas, IIB-INTECH/CONICET-UNSAM, San Martín, Prov. de Bs. As., Argentina.

Nicolas Cecchini
The Azi1 subcellular targeting mechanism: how to anchor immune receptors to the plastid envelope
CIQUIBIC-CONICET, Departamento de Química Biológica-RanwelCaputto, Facultad de Ciencias Químicas, Universidad Nacional de Córdoba, Argentina.

Leticia Llarrull
Architecture of MecR1 of Staphylococcus aureus: clues to the signal transduction mechanism that unleashes resistance to β-lactams
Laboratorio de Sensores Bacterianos, IBR-CONICET-Universidad Nacional de Rosario, Argentina

Andrés Garelli
***Dilp8-Lgr3* pathway: a relaxin-like pathway controlling developmental transitions**
Instituto de Investigaciones Bioquímicas de Bahía Blanca (UNS-CONICET), Buenos Aires Argentina

Ignacio Cebrián
The endocytic pathway as a key modulator of antigen cross-presentation by dendritic cells
Facultad de Ciencias Médicas, Instituto de Histología y Embriología de Mendoza(IHEM)-CONICET, Universidad Nacional de Cuyo, Argentina

16:30-18-30 *COFFEE BREAK*
POSTER SESSION

LI-P01 to LI-P07

SB-P01 to SB-P03

EN-P01 to EN-P13

ST-P01 to ST-P07

BT-P01 to BT-P16

18:30-19:30 *PLENARY LECTURE*

SeongWook Yan

Integration of light signaling into microRNA biogenesis

1Department of Systems Biology, College of Life Science and Biotechnology, Yonsei University, Seoul, 120-749, Korea

Chairperson: Pablo Manavella

Room A

19:45 *SAIB Assembly*

THURSDAY, November 8, 2018

09:00-11:00 *ORAL COMMUNICATIONS*

Room 1: **Plants** PL-C10 to PL-C19)
Room 3: **Signal transduction** (ST-C01 to ST-C10)

ROOM 1
Chairpersons: Fabiana Drincovich and Renata Reinheimer

9:00-9:12
PL-C10
IS THE METABOLISM OF XENOBIOTIC COMPOUNDS REGULATED BY CIRCADIAN CLOCK?
Sosa Alderete LG[1]; Ronchi H[1]; Medina MI[1]; Guido ME[2]; Agostini E[1], [1]Dpto Biología Molecular-FCEFQyN UNRC, 5800- Rio Cuarto-Arg[2]CIQUIBIC-CONICET, FCQ UNC, 5000 Córdoba-Argentina,e-mail: lucasaureus@gmail.com

9:12-9:24
PL-C11
***Arabidopsis* KINESIN 13B INTERACTS WITH SEVERAL TRANSCRIPTION FACTORS INVOLVED IN GROWTH REGULATION**
Miguel VN; Ribichich KF; Chan RL, Laboratorio de Biología Vegetal, IAL, UNL, CONICET, CCT CONICET, Santa Fe, Argentina.e-mail: vmiguel@santafe-conicet.gov.ar

9:24-9:36
PL-C12
ROLE OF E2FC TRANSCRIPTION FACTOR DURING THE UV-B RESPONSES IN *Arabidopsis*
Gomez MS; FalconeFerreyra ML; Casati P, Centro de Estudios Fotosintéticos y Bioquímicos (CEFOBI), UNR – CONICET, Rosario, Santa Fe, e-mail: gomez@cefobi-conicet.gov.ar

9:36-9:48
PL-C13
THE LNK GENE FAMILY: AT THE CROSSROADS OF LIGHT SIGNALING AND THE CIRCADIAN CLOCK
Hernando CE; De Leone MJ; Romanowski A; Hourquet M; Casal J; Rugnone M; Mora Garcia S; Yanovsky MJ, Instituto de Investigaciones Bioquímicas de Buenos Aires - Fundación Instituto Leloir, e-mail: chernando@leloir.org.ar

9:48-10:00
PL-C14
ROLE OF MSH6 DURING DNA RECOMBINATION IN *Arabidopsis thaliana*
Gonzalez V; Spampinato CP, Centro de Estudios Fotosintéticos y Bioquímicos (CEFOBI, CONICET-UNR), Suipacha 570, 2000 Rosario, e-mail: gonzalez@cefobi-conicet.gov.ar

10:00-10:12
PL-C15
MECHANISMS INVOLVED IN THE CELLULAR ENERGY HOMEOSTASIS IN PLANTS
Blanco NE[1]; Liebsch D[2]; Jásik J[3]; Whelan J[4]; Strand Å[5], [1]CEFOBI/UNR-CONICET, [2]IBR/CONICET, [3]Institute of Botany, Slovakia, [4]Latrobe, Australia, [5]UPSC, Sweden, e-mail: blanco@cefobi-conicet.gov.ar

10:12-10:24
PL-C16
LIGHT REGULATION OF ALTERNATIVELY SPLICED GENES DURING *Arabidopsis thaliana* SEED GERMINATION
Tognacca RS[1]; Servi L[2]; Botto JF[1]; Petrillo E[2], [1]IFEVA, CONICET-UBA.[2]IFIBYNE, CONICET-UBA., e-mail: rtognacca@agro.uba.ar

10:24-10:36
PL-C17
NON-THERMAL PLASMAS AFFECT SEED QUALITY, PLANT GROWTH AND DNA METHYLATION PATTERNS IN SOYBEAN
Pérez Pizá M[1]; Zilli C[1]; Ibáñez V[3]; Varela A[3]; Cejas E[2]; Prevosto L[2]; Marfil C[3]; Balestrasse K. [1]INBA (CONICET-FAUBA), [2]FRVT-UTN (CONICET), [3]IBAM (CONICET-UNCuyo), e-mail: macycecy@hotmail.com

10:36-10:48
PL-C18
SALICYLIC ACID SIGNALING PATHWAY AS KEY PLAYER IN THE EARLY ACTIVATION OF IMMUNE RESPONSES IN MAIZE
Agostini R[1]; Postigo A[1]; Rius S[1]; Campos Bermudez V[1]; Vargas W[2], [1]CEFOBI-CONICET. Rosario, Argentina. [2]YPF-Tecnologia-CONICET (Y-TEC). Berisso, Argentina, e-mail: agostini@cefobi-conicet.gov.ar

10:48-11:00
PL-C19
PAP-SAL1 CHLOROPLAST RETROGRADE PATHWAY MODULATES IRON DEFICIENCY RESPONSE IN ALKALINE SOILS
Balparda M; Gomez-Casati DF; Pagani MA, Centro de Estudios Fotosintéticos y Bioquímicos (CEFOBI – CONICET), Universidad Nacional de Rosario, e-mail: balparda@cefobi-conicet.gov.ar

ROOM 3
Chairpersons: Fabiana Cornejo and Ricardo Biondi

9:00-9:12
ST-C01
IT TAKES TWO TO TANGO: YvfTU AND DesKR TWO COMPONENT SYSTEMS REGULATE ABC TRANSPORTER TRANSCRIPTION
Fernández P; Albanesi D; De Mendoza D; Mansilla MC, Instituto de Biología Molecular y Celular de Rosario-CONICET. Facultad de Cs Bioq y Farm – UNR, e-mail: pfernandez@ibr-conicet.gov.ar

9:12-9:24
ST-C02
TcAMPK: IDENTIFICATION AND CHARACTERIZATION OF AN ENERGY REGULATORY HUB IN *Trypanosoma cruzi*
Sternlieb T1; Schoijet AC; Genta PD; Barrera NM; MassiminoStepñicka M; Alonso GD, Instituto de Investigaciones en Ingeniería Genética y Biología Molecular Dr. Héctor N. Torres, e-mail: tamara.sternlieb@gmail.com

9:24-9:36
ST-C03
CALCIUM SIGNALING: THE COMMUNICATION BETWEEN INTRACELLULAR CA2+ STORES IN HUMAN SPERM
Mata-Martínez E[1]; Arias RJ[1]; Treviño CL[2]; Mayorga LS[1]; Darszon A[2]; De Blas GA[1], 1IHEM-CONICET, UNCuyo, Argentina. 2IBT-UNAM, México, e-mail: ematamartinez@mendoza-conicet.gob.ar

9:36-9:48
ST-C04
THE ROLE OF MITOCHONDRIA IN CALCIUM SIGNALING AND HUMAN SPERM PHYSIOLOGY ACTIVATED BY PROGESTERONE.
Arias RJ[1]; Vargas S[2]; Mata-Martinez E[1]; Garcia A[2]; Härtel S[2]; Mayorga LS[1]; De Blas GA[1], 1IHEM-CONICET-UNCuyo, Mendoza, Argentina. 2CEDAI-Facultad de Medicina, Universidad de Chile, e-mail: rodojosearias@gmail.com

9:48-10:00
ST-C05
EXPRESSION REGULATION OF PROTEIN KINASE A SUBUNITS FROM *Saccharomyces cerevisiae*
Cañonero L[1]; Pautasso C[1]; Sigaut LI[2]; Ortolá MC[1]; Rossi S[1], [1]Química Biológica, FCEN, UBA, IQUIBICEN (CONICET-UBA) [2]Física, FCEN, UBA and IFIBA, CONICET, e-mail: lucianac@qb.fcen.uba.ar

10:00-10:12
ST-C06
ROLE OF AKR1B1 IN TUMOR AGGRESSIVENESS AND ITS INTERPLAY WITH THE P53 PATHWAY IN BREAST CANCER
*Di Benedetto C*1*; BoriniEtichetti CM[1]; Bicciato S[2]; Menacho Márquez M3; Girardini JE[1], [1] IBR-CONICET, 2 Universidad de Módena, 3 IIDEFAR-CONICET, e-mail: girardini@ibr-conicet.gov.ar*

10:12-10:24
ST-C07
ICMT COOPERATES WITH TUMOR AGGRESSIVENESS AND IT IS UNDER COMPLEX CONTROL BY p53 FAMILY MEMBERS
BoriniEtichetti CM[1]; Di Benedetto C[1]; Baglioni MV[2]; Bicciato S[3]; MenachoMarquez M[4]; Girardini JE[1], [1]IBR-CONICET. [2] IGE-Fac. Cs. Med. UNR. [3] Universidad de Módena. [4] IIDEFAR-CONICET, e-mail: girardini@ibr-conicet.gov.ar

10:24-10:36
ST-C08
DAL81 AND UGA3 TRANSCRIPTION FACTORS AND STRESS RESPONSE IN *Saccharomyces cerevisiae*
Muñoz SA; Mercau M; Gulías J; Valencia-Guillen J; Correa-García S; Bermúdez-Moretti M, Departamento de Química Biológica, FCEN, UBA - IQUIBICEN, CONICET. CABA, Argentina, e-mail: munozsebastiananibal@gmail.com

10:36-10:48
ST-C09 INTERACTIONS BETWEEN PROTEIN TYROSINE PHOSPHATASE 1B (PTP1B), EGFR AND FAK IN INTACT CELLS
Perez Collado ME; González Wusener AE; Arregui CO, IIB-INTECH, UNSAM-CONICET, Buenos Aires, Argentina, e-mail: mcollado@iibintech.com.ar

10:48-11:00
ST-C10
PKA AND HOG1 ROLE IN GENE EXPRESSION AND CELL SURVIVAL IN RESPONSE TO OSMOSTRESS IN *Saccharomyces cerevisiae*
Ojeda LE; Portela P, Departamento de Química Biológica, FCEN, UBA/IQUIBICEN–Conicet, e-mail: leojeda@qb.fcen.uba.ar

11:00-11:30 *COFFE BREAK*

18:30-19:30 *PLENARY LECTURE*

Miguel Ballicora

Biosynthesis of bacterial glycogen: Evolution of allosteric control

Department of Chemistry and Biochemistry, Loyola University Chicago, Chicago, IL, USA.

Chairperson: Alberto Iglesias

RoomA

12:30 -14:30 *LUNCH*

14:30-16:30 *SYMPOSIA*

Room 3

LIPIDS
Chairpersons: Hugo Gramajo and Nicolas Favale

Claudia Banchio
Specific phospholipids regulate the acquisition of neuronal and astroglial identities in post-mitotic cells
Instituto De Biología Molecular y Celular de Rosario IBR-CONICET Rosario, Argentina

Hector Alvarez
***Unraveling the molecular mechanisms involved in the regulation of lipid accumulation in oleaginous* Rhodococcus**
Instituto de Biociencias de la Patagonia (CONICET y Universidad Nacional de la Patagonia San Juan Bosco)

Richard Lehner
Regulation of lipid metabolism by endoplasmic reticulum-localized lipases
University of Alberta, Edmonton, Canada

SipioneSimoneta
Gangliosides in Huntington's disease and beyond
Alberta, Edmonton, Canada

Room A

APPLIED MICROBIOLOGY
Chairpersons: Sandra Ruzal and Christian Magni

Mariana Piuri
Fluorophages for rapid Tb-diagnosis in sputum samples and phenotypic drug susceptibility testing
Departamento De Química Biológica, Facultad de Ciencias Exactas y Naturales, Universidad de Buenos Aires, IQUIBICEN-CONICET

Fadda Silvina
Study of lactic acid bacteria*—Escherichia coli *o157:h7 interaction and its contribution to bioprotection strategies in meat
Laboratorio de tecnología y desarrollo (CERELA-CONICET), Tucumán, Argentina

Serradell María de los Angeles
Probiotic lactobacilli as a source of proteins of biotechnological interest:* Lactobacillus kefiri *and its S-layer proteins
Cátedra De Microbiología, Departamento De Ciencias Biológicas, Facultad De Ciencias Exactas, Universidad Nacional De La Plata, instituto De Ciencias De La Salud, Universidad Nacional Arturo Jauretche

Eleonora Campos
Microbial enzymes and their application in cellulosic ethanol industry
Laboratorio de bioenergía y enzimas industriales, instituto de biotecnología-IABIMO, INTA-CONICET, Argentina.

Room 1

SIGNAL TRANSDUCTION
Chairpersons: Mario Rossi and Javier Girardini

Andrea Smania
Hipermutability and the evolution of small colony variants in* Pseudomonas aeruginosa *biofilms.
CIQUIBIC-CONICET, Dpto de Química Biológica, Facultad de Ciencias Químicas, Universidad Nacional de Córdoba

Vanesa Gottifredi
Specialized DNA polymerase iota coordinates DNA replication and checkpoint activation
Fundación Instituto Leloir. Instituto de Investigaciones Bioquímicas De Buenos Aires (Iibba), CONICET, Buenos Aires

Gaston Soria
A survival screen targeting the human kinome reveals synthetic lethal interactions with therapeutic potential for BRCA-deficient cancer cells
CIBICI-CONICET, Depto. de Bioquímica Clínica, Facultad de Ciencias Químicas, Universidad Nacional de Córdoba, Argentina

Lucas Pontel
Novel targets of formaldehyde toxicity in cancer cells
IBIOBA-CONICET-Partner Institute of the Max Planck Society, Buenos Aires, Argentina

16:30-18-30 ***COFFEE BREAK***
POSTER SESSION

PL-P16 to LI-P32

BC-P16 to SB-P30

EN-P01 to EN-P03

18:30-19:30 *CLOSING LECTURE*

Pedro Aramendia

Quantitative imaging in single molecule fluorescence localization

Centro de Investigaciones en Bionanociencias "Elizabeth Jares-Erijman" (CIBION-CONICET) y Departamento de Química Inorgánica. FCEN. Universidad de Buenos Aires

Chairperson: Maria Isabel Colombo

RoomA

19:30 *CLOSING CEREMONY AND AWARDS*

21:30 *CLOSING PARTY*

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POSTERS

BIOTECHNOLOGY

BT-P01
BIOCONVERSION OF GLYCEROL INTO POLYHYDROXYALKANOATES BY AN INDIGENOUS STRAIN, *Halomonas titanicae* KHS3

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Halomonastitanicae KHS3 was isolated from hydrocarbon-contaminated water in Mar del Plata harbor. This strain is able to accumulate polyhydroxyalkanoates (PHAs), reserve polymers that can be used as raw material for the preparation of bioplastics. The aim of this work was to evaluate the ability of *H. titanicae* KHS3 to use glycerol as the only source of carbon and energy and convert it into PHAs. When grown in mineral salts medium with 0.25% commercial glycerol, PHAs synthesis was only moderate. However, when cells were harvested at mid-exponential phase and resuspended in medium depleted of nitrogen source, PHA accumulation was dramatically increased and reached up to 60% of dry cell weight. Such accumulation also occurred when cultures were fed with glycerol obtained from a biodiesel reactor, both in its crude form (contaminated with methanol and salts) and partially purified (technical grade), suggesting that this bioconversion potentially represents a way of adding value to the otherwise disposable glycerol.We show the kinetics of PHA accumulation after nitrogen deprivation under different conditions. Good PHA accumulation occurred in media containing between 2 and 10% NaCl. PHAs inside cells remained stable after long incubations in nitrogen-lacking medium, but decreased rapidly after re-addition of ammonium sulfate.The purified polymer is currently under RMN analysis to determine its precise chemical composition.

BT-P02
BIOREMEDIATION OF HEAVY METALS USING GENETICALLY MODIFIED *Chlamydomonas reinhardtii*

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Heavy metals are an important source of water pollution around the world. They are toxic at very low concentrations and cannot be degraded or destroyed. Cells have diverse strategies for handling heavy metals: all eukaryotic organisms synthesize small proteins called metallothioneins, which are the first response to high concentrations of metals. In addition, most organisms present frataxin, an essential protein involved in iron homeostasis and related to other metals too, such as copper. In this work we propose *C. reinhardtii* as a model for remediation of heavy metals in water and effluents. This unicellular green algae, that has a simple life cycle, allows us to isolate transgenic cells easily. Transgenic *Chlamydomonas* expressing a soybean metallothionein (GmMT3) or frataxins of *C. reinhardtii* (CrFH) and maize (ZmFH2) were obtained by electroporation and the presence of transcripts was confirmed using quantitative Real Time PCR. In liquid cultures supplemented with Cu, the GmMT3 lines and those that express frataxins grow faster than the wild type line. ICP-MS analysis of the recovered cells showed that transgenic lines have a higher capacity than the control line to incorporate metals such as Cu, Fe and Zn, both in their cell wall and intracellularly. Currently a practical application over a metallic sludge is being tested. Results are promising since transgenic lines resist better the stress generated by high amounts of heavy metals, developing larger amounts of biomass (with the ability to adsorb and absorb metals) in a shorter time than the wild type strain.

BT-P03
EFFECT OF PROBIOTIC BACTERIA ISOLATED FROM PATAGONIA ON ZEBRAFISH GUT MICROBIOTA AND GROWTH

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Probiotics are an interesting alternative for sustainable aquaculture. The aim of this study was to assess the effect of probiotic bacteria isolated from Patagonian fish (T4, H16, and TW34) on gut microbiota and growth performance using zebrafish as an experimental model. Assays included one recirculating system (3 tanks) for each probiotic treatment (commercial feed inoculated with one probiotic strain at 1x107 CFU/g) and a control system (only commercial feed). Each tank was randomly stocked with 18 fish, whose weight and length were determined at 0, 15, 30, 60, and 90 days during probiotic treatment. Fish specific growth rate (SGR), condition factor (K), and food conversion ratio (FCR) were also calculated. Total viable bacteria, lactic acid bacteria (LAB), enterobacteria, and *Vibrio* spp. were quantified by plate-counting to assess the intestinal microbiota at the end of the experiment. As the probiotic strains have antimicrobial activity against fish pathogens, their abundances were detected using the double layer agar method. After 90 days of treatment with T4, H16, or TW34, intestine LAB counts were higher, and

*Vibrio s*pp. and enterobacteria lower than those of the control group. Strains T4, H16, or TW34 were recovered from the intestinal microbiota of treated fish (6.8, 7.24, and 7.4 Log10CFU/g of intestine, respectively). At the same time, fish weight of groups fed with T4 or H16 was significantly greater than that of the control. Particularly, fish treated with H16 showed the highest SGR and K, and the lowest FCR, thus its application in aquaculture could be promising.

BT-P04
NOVEL RECOMBINANT ANTIGENS OF *Leishmania* (*Viannia*) *braziliensis* FOR LEISHMANIASIS IMMUNODIAGNOSIS

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Leishmania (Viannia) braziliensis is the main causative agent of American tegumentary leishmaniasis (ATL) in Argentina. Despite of the development of molecular methods, nowadays its diagnosis remains as a challenge. In this work we applied seroproteomic approaches for the selection and identification of *L. (V.) braziliensis* antigen candidates, for sensitive and specific immunodiagnoses of this endemic disease. By two dimensional Western blots of amastigote extract of *L. (V). braziliensis* , three antigen candidates were selected for their differential reactivity against sera from patients with ATL and non-reactive with Chagas disease, which cross-reaction have been previously reported. They were identified by Mass Spectrometry and Fingerprinting analysis. One of them was overexpressed in *Escherichia coli*, purified and used for serological tests. To analyze their immunological performance, sera from ATL patients and 52 from non ATL cases were included in this study. The antigen selected was termed HAT-LbAg1 (50.2 kDa, IP 5.2). The sensitivity - specificity of this antigen immunoblotting and ELISA were 80.5 - 90.5% and 70.7- 72, 88% respectively. With this molecular methods of identification of new candidates to ATL diagnosis, the cross-reaction with Chagas disease was reduced, increasing the specificity values of the immunoblotting technique. On the other hand, the sensitivity percentage can be improved by the combination with other candidates to diagnose true positives cases of ATL. Further studies are necessary to know the performance of HAT-LbAg1 and the other candidates in their application in novel immunological techniques.

BT-P05
IMMOBILIZATION AND CHARACTERIZATION OF G51 KERATINOLYTIC ENZYMES WITH POTENTIAL FOR WOOL PROCESSING

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Bacillus sp. G51 produces extracellular keratinases with potential for shrink-proofing of wool. Keratinases are proteases with autolytic activity which are restringing their industrial application in free form. Immobilization could contribute to a better control of their catalytic activity. Our aim was to immobilize and characterize G51 extracellular enzymes by cross-linking of enzyme aggregates (CLEA). G51 culture supernatant was used for CLEA with glutaraldehyde as cross-linking agent. G51 enzyme units (EU)/glutaraldehyde ratio was optimized, obtaining the best recovery of the proteolytic activity with the lowest ratio tested (8.4% with 3.5 EU/mlglu25%). CLEA-G51 thermal stability was higher (91 and 71% of residual activity after 1 h at 50 and 60°C, respectively) than that of free enzymes (40 and 5% residual activity under the same conditions). After 4 month-storage at room temperature, the free and immobilized enzymes kept 20 and 80% of residual proteolytic activity, respectively. This improvement of storage stability suggests that immobilization could prevent G51-keratinase autolysis and loss of activity. More than 60% of the proteolytic activity was preserved in the 3rd use, and it gradually diminished to 30% after seven re-uses. CLEA-G51 enzymes retained its wool keratinolytic activity (0.06 EU/ml), which is essential for wool shrink-proofing. CLEA-G51 operational and storage advantages could be valuable for industrial applications. Particularly, increased molecular size of immobilized G51 keratinases could avoid their diffusion into the wool fiber, allowing wool treatments with higher enzyme concentrations and without excessive degradation.

BT-P06
ENGINEERED BACTERIAL OUTER MEMBRANE VESICLES AS AN EXPERIMENTAL VACCINE AGAINST CHAGAS DISEASE

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Outer membrane vesicles (OMVs) are nanoparticles released from bacteria. Three of the most promising characteristics of OMVs are their high adjuvant capacity, their safety and the possibility of generating genetically engineered vesicles. Therefore, the utilization of OMVs as vaccines offers promising potential against a wide range of diseases. With this in mind we proposed to evaluate the potential role of engineered OMVs carrying different *Trypanosoma cruzi* antigens as an experimental immunogen against Chagas disease. We selected two antigens which have been extensively evaluated in vaccination models against *T. cruzi*, Tc24 and Tc52. The rational of selecting these antigens is that as a first step we propose to elucidate the advantage of using OMVs as carriers of parasite antigens and evaluate their adjuvant properties. As the first time reported, we were able to obtain recombinant OMVs with the selected *T. cruzi* antigens expressed on the outside of the vesicles as well as packaged within their lumen. These rOMVs were preliminarily evaluated in a murine prime-boot-challenge scheme for Chagas disease. During the vaccination stage, a slight increase in IFN-γ production was detected in immunized animals. In the challenge phase, a mild decrease in parasite load in vaccinated animals versus control groups could be detected. Several factors still need to be tested in order to optimize the use of