

**ORAL
COMMUNICATIONS**
LX Annual Meeting of the
Argentine Society for
Biochemistry and Molecular
Biology Research (SAIB)

Del 5 al 8 de noviembre de 2024
**Pabellón Argentina de la UNC,
Ciudad de Córdoba, Argentina.**



Wednesday, November 6th

Microbiology/Cell Biology (I). Sala de las Américas

Chairpersons: Julieta Fernández- Matías Asención Diez

8:30 MI-01

MOLECULAR INSIGHTS INTO THE COORDINATION OF PEPTIDOGLYCAN AND MEMBRANE SYNTHESIS IN *Bacillus subtilis*.

Benatti MA, Armesto R, Albanesi D.

8:45 MI-02

***Chlamydia trachomatis* CTL0175/PTR ENCODES A ZN-DEPENDENT PROTEASE THAT FACILITATES RECOVERY FROM IFN γ -INDUCED PERSISTENCE**

Bettucci Ferrero GN, Veraguas Herran S, Scarzello FL, Panzetta ME, Anna AN, Saka HA.

9:00 MI-03

INDUCTION OF CYSTS FORMATION IN *Capsaspora owczarzaki* BY BROMO OCTANOATE, A LIPOYL RELAY PATHWAY INHIBITOR

Scattolini A, Costa J, Uttaro A, Mansilla MC.

9:15 MI-04

CONTRIBUTION OF ERROR-PRONE POL IV TO GENOME EVOLUTION OF *Pseudomonas aeruginosa*

Castell SD, Fernandez CM, Tumas IN, Margara LM, Miserendino MC, Ceschin Danilo G, Pezza RJ, Monti MR.

9:30 MI-05

LOSS OF CAPSULAR POLYSACCHARIDE EXPRESSION IN *Staphylococcus aureus* ENHANCES PROTEIN A EXPOSURE AND CONTRIBUTES TO INCREASED OSTEOCLASTOGENESIS

Gehrke A-KE, Gonzalez CD, Noto Llana M, Sordelli DO, Gómez MI.

9:45 MI-06

PHYSIOLOGICAL CHARACTERIZATION OF *Mycobacterium tuberculosis* CRISPRi MUTANTS IN PIsB AND PIsC ACYLTRANSFERASE ENZYMES

Deschutter MS, Gramajo H, Gago G.

10:00 CB-01

TRYPANOSOMA CRUZI: MITOSIS AND A NOVEL PHOSPHORYLATION OF SERINE 10 IN HISTONE H3

López MR, Vílchez Larrea S, Ocampo J, Alonso G.

Lipids. Salón de Actos

Chairpersons: Natalia Alza-Leandro Parra

8:30 LI-01

GLIAL sPLA2-IIID IS ASSOCIATED WITH RESOLUTION RESPONSES DURING NEUROTOXICITY

Benzi Juncos ON, Alza NP, Salvador GA.

8:45 LI-02

UNSATURATED FATTY ACIDS ARE KEY MOLECULES TO ENSURE REPRODUCTION IN CAENORHABDITIS ELEGANS

Battista B, Hernández-Craveró B, Láscarez Lagunas L, Cochella L, Binolfi A, Colaiácovo M, de Mendoza D.

9:00 LI-03

ALPHA-SYNUCLEIN AND SCHWANN CELL DIFFERENTIATION: A POTENTIAL CROSSTALK WITH LIPID METABOLISM?

Conde MA, Aparicio GI, Andersen N, Quintero J, Gerhardt G, van Horne C, Monje PV, Salvador GA.

9:15 LI-04

SILENCING OF CYP4G GENE AND ITS EFFECT ON SURVIVAL, REPRODUCTION AND CUTICULAR RESISTANCE TO INSECTICIDES IN TRIATOMA INFESTANS

Ifran NJN, Mijailovsky SJ, Santana M, González-Baró M, Ves-Losada A, Remón C, Girotti JR, Calderón Fernández GM.

9:30 LI-05

THE PALMITOYLPROTEOME AND THE PROXITOME OF PALMITOYLTRANSFERASES IN SACCHAROMYCES CEREVISIAE

Meinero R, Klössel S, González Montoro A, Valdez Taubas J.

9:45 LI-06

EXPLORING THE ROLE OF LIPID COMPOSITION IN LIPID DROPLETS DYNAMICS AND THEIR INTERACTION WITH PROTEINS

Guastaferrri F, Delprato C, Hernández Craveró B, Lombardo V, Vranych C, De Mendoza D, Binolfi A.

10:00 LI-07

JBU AFFECTS REPRODUCTION IN THE CHAGAS DISEASE VECTOR RHODNIUS PROLIXUS: IMPLICATIONS FOR LIPID DYNAMICS

Paglione PA, Leyria J, Canavoso LE, Fruttero LL.

10:15 LI-08

SPHINGOSINE 1-PHOSPHATE MODULATES COLLECTING DUCT CELL DIFFERENTIATION AND EPITHELIAL INTEGRITY DURING POSTNATAL RENAL DEVELOPMENT UNDER HYPERTONIC CONDITION

Guaytima,, E del V, Favale NO, Pescio LG, Romero JV, Carrizo JM, Altamirano Carvajal LB, Sterin-Speziale NB.

Thursday, November 7th

Plants (I). Sala de las Américas

Chairpersons: Ana Laura Villasuso – Noelia Foresi

8:30 PL-01

THE TIMES THEY ARE A-CHANGIN': INNOVATING IN CROP EPIGENOTYPING

Filippi CV, Bertolotti M, Aguirre NC, Paniego NB, Lia VV, Borsani Cambón O.

8:45 PL-02

PLANT GROWTH ENHANCEMENT VIA AUXIN-MEDIATED ROOT REGULATION BY METHYLOBACTERIUM SP. 2A

Grossi CEM, Tani A, Mori IC, Matsuura T, Ulloa RM.

9:00 PL-03

ATMINIONT: A NEW PLAYER IN GROWTH REGULATION

Becerra-Agudelo E, Welchen E.

9:15 PL-04

INFLUENCE OF MATERNAL NUTRIENT SUPPLY ON INTRINSIC METABOLISM AND RESERVE COMPOUND ACCUMULATION IN SOYBEAN EMBRYOS

Zucchetti JI, Pavlovic T, Gorini ME, Barat Carnino M, Angelozzi V, Saenz E, Borrás L, Gerde JA, Saigo M, Gerrard Wheeler MC.

9:30 PL-05

DUAL FUNCTION OF PHYTOCHROME B IN LIGHT AND TEMPERATURE SENSING: EXPLORING THE IMPACT OF TEMPERATURE ON NUCLEAR CONDENSATES

Murcia MG, Casal JJ.

9:45 PL-06

MOLECULAR RESPONSES BEHIND THE YIELD ADVANTAGE UNDER HEAT STRESS IN WHEAT PLANTS THAT EXPRESS THE HAHB4 GENE

Murguía JP, Chan RL, González FG.

10:00 PL-07

TOLERANCE TO ADVERSE GROWTH CONDITIONS RELIES ON HIGHLY ROBUST PHOTOSYSTEM I

Bultri JG, Brugnara C, Lobais C, Panozzo Zenere EA, Fusari CM, Blanco NE.

10:15 PL-08

ROLE OF AUTOPHAGY IN AUXIN-MEDIATED CAULONEMATA DEVELOPMENT IN *P. PATENS*

Pettinari G, Liberatore F, Bezanilla M, Lascano R, Saavedra L.

Signal Transduction. Salón de Actos

Chairpersons: Anahi Bignante-Guillermo Alonso

8:30 ST-01

ADVANCES IN THE VISUALIZATION OF THE DES PATHWAY COMPONENTS BY SINGLEMOLECULE SUPER-RESOLUTION MICROSCOPY IN *Bacillus subtilis*

Pereyra JI, Alzogaray V, Escalante G, López L, Stefani F, Albanesi D.

8:45 ST-02

LOW-COST COMMUNICATION: ALLOSTERIC COUPLING MECHANISM IN HISTIDINE KINASES

Porrini L, Almada JC, Bortolotti A, Albanesi D, Miguel V, Cybulski L.

9:00 ST-03

PEPTIDOMIMETICS AS NOVEL THERAPEUTIC AGENTS FOR CHAGAS CARDIOMYOPATHY

Leis JM, Iolster J, Vilchez Larrea S, Alonso GD.

9:15 ST-04

TRANSCRIPTIONAL ROBUSTNESS IN A EUKARYOTIC SIGNAL TRANSDUCTION PATHWAY

Braunstein H, Miodownik I, Pryciak P, Colman-Lerner A.

9:30 ST-05

EXPLORING THE ROLE OF METABOLITES IN THE REGULATORY MECHANISM OF PDK1

Galceran F, Gross LZ, Sacerdoti M, Hicks K, Rutter J, Klinke S, Leroux AE, Biondi RM.

9:45 ST-06

THE $G\beta\gamma$ /PLC β 3 PATHWAY AS A MEDIATOR OF AMYLOID β -INDUCED NEUROTOXICITY

Almirón R, Antonino M, Lorenzo A, Bignante EA.

10:00 ST-07

INDUCTION OF MUTANT P53 DEGRADATION AS AN ANTITUMOR STRATEGY: ROLE OF AUTOPHAGY AND CHAPERONES

Cocordano N, Velasquez S, Arel Zalazar EE, Borini Etichetti MC, Llorens de los Ríos MC, Soria G, Girardini J.

Friday, November 8th

Cell Biology (II). Sala de las Américas

Chairpersons: Victoria Rozes-Salvador- Carlos Wilson

8:30 CB-02

**ONE MORE SPOT IN THE CELL: SMAUG SUPERMODEL MUTANT FORMS
MEMBRANELESS ORGANELLES**

Corvetto Aristarain F, Thomas MG, Peters T, Gimenez M, Cozza LH, Fernández Álvarez AJ, Fernández Marqués V, Boccaccio GL.

8:45 CB-03

OXIDATIVE STRESS PHENOTYPES IN HUMAN AUTOSOMAL TRISOMIES

Zamponi E, Altamirano F, Busciglio J, Helguera P.

9:00 CB-04

SEARCHING FOR PROTEINS INVOLVED IN CELL FUSION IN FUNGI

Gudiño V, Aguilar PS.

9:15 CB-05

**EXPLORING pH-DEPENDENT CROSS-PRESENTATION: PERSPECTIVES FROM AN
AGENT-BASED MODEL OF DENDRITIC CELL ENDOMEMBRANE DYNAMICS**

Nieto F, Garrido F, Dinamarca S, Cebrián I, Mayorga LS.

9:30 CB-06

**HYDROLYTIC ACTIVITY OF MICROBIOTA ON GLIADIN USING CAENORHABDITIS
ELEGANS AS AN ANIMAL MODEL**

Patarroyo Sánchez H, Poveda Espinosa E, Chaib De Mares M.

9:45 CB-07

**UNRAVELING THE ROLE OF GLUCOSIDASE I IN TRYPANOSOMA CRUZI: A
PROTOZOAN PARASITE WITH A NON-CANONICAL N-GLYCOSYLATION**

Idrovo-Hidalgo T, Vilchez Larrea SC, Orioli S, Alonso GD, D'Alessio C.

10:00 CB-08

**REGULATION AND FUNCTION OF YTHDF2 IN A HUMAN PULMONARY ARTERY
SMOOTH MUSCLE DIFFERENTIATION MODEL**

Natali L, de la Cruz-Thea B, Ho H, Stolz A, Musri M.

10:15 CB-09

**UNRAVELING THE LIPID DROPLETS-MITOCHONDRIA INTERPLAY DURING
METABOLIC ADAPTATION TO SHEAR STRESS**

Rojas ML, Morel E.

Plants (II)/Biotechnology/Structural Biology/Neurosciences. Salón de Actos
Chairpersons: Georgina Fabro- Paula Casati

8:30 PL-09

A CYTOCHROME C-SNRKI CONNECTION LINKS MITOCHONDRIAL FUNCTION TO GROWTH AND STRESS RESPONSES IN PLANTS

Coronel FP, Gras DE, Canal MV, Roldan F, Welchen E, Gonzalez DH.

8:45 PL-10

TCP TRANSCRIPTION FACTORS MODULATE CHLOROPHYLL BIOSYNTHESIS TO PREVENT PHOTO-OXIDATIVE DAMAGE DURING DE-ETIOLATION IN ARABIDOPSIS THALIANA

Jure RM, Alem AL, Viola IL, González DH.

9:00 PL-11

A CROSSTALK BETWEEN STRIGOLACTONES AND BRASSINOSTEROIDS AFFECTS ARABIDOPSIS STEM ARCHITECTURE IMPACTING SEED YIELD

Raminger BL, Chan RL, Cabello JV.

9:15 PL-12

MBD PROTEINS IN ARABIDOPSIS: ROLE IN PLANTS GROWN UNDER GENOTOXIC STRESS CONDITIONS

Amelong D, Giustozzi M, Qüesta J, Falcone Ferreyra ML, Casati P.

9:30 BT-01

EXPRESSION OF BIOLOGICALLY ACTIVE RECOMBINANT VIBRIO CHOLERAE CYTOLYSIN FOR TARGETED TUMOR THERAPEUTIC APPLICATIONS

Ochoa DE, Scarzello F, Donzeau M, Saka HA, Bocco JL.

9:45 SB-01

STUDYING THE UNFOLDING AND REFOLDING MECHANISM OF TOP7 AT THE SINGLE MOLECULE LEVEL AT DIFFERENT TEMPERATURES AND STRETCHING SPEEDS

Corrêa GC, Mjaavatten A, Martínez Bilbao J, Figueroa FM, Wilson AM.

10:00 NS-01

ALPHA SYNUCLEIN SELECTIVELY DISRUPTS INTRACELLULAR TRAFFICKING VIA ACTIN CYTOSKELETON REMODELING

Ovejero M, Bisbal M, Cáceres A, Anastasía A.