



LVII SAIB Meeting - XVI SAMIGE Meeting

SAIB - SAMIGE Joint Meeting
2021 on line

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Lipids
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Microbiology
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SAIB-SAMIGE Joint meeting 2021 - Program at a glance

	Monday, Nov 1 st	Tuesday, Nov 2 nd	Wednesday, Nov 3 rd	Thursday, Nov 4 th	Friday, Nov 5 th
9:00-9:15	Opening ceremony				
9:15-11:15	<p>PARALLEL SYMPOSIA</p> <p><i>Cell Biology</i></p> <p><i>Microbiology I: Host-pathogen Interactions</i></p>	<p>PARALLEL SYMPOSIA</p> <p><i>Plants</i></p> <p><i>Microbiology II: Biotechnology & Environmental Microbiology</i></p>	<p>PARALLEL SYMPOSIA</p> <p><i>Lipids</i></p> <p><i>Microbiology III: Molecular Microbiology</i></p> <p><i>Signal transduction</i></p>	<p>PARALLEL SYMPOSIA</p> <p><i>Glycobiology</i> (Tribute to Dr. J.L. Daniotti)</p> <p><i>Microbiology IV: Microbial Ecology & Physiology</i></p>	<p>SYMPOSIUM</p> <p><i>Young investigators</i></p>
11:15	Break	Break	Break	Break	Break
11:30-12:30	<p>SAIB Plenary lecture "A.Sols"</p> <p><i>Consuelo Guerri</i></p>	<p>SAMIGE Plenary lecture</p> <p><i>Francisco García del Portillo</i></p>	<p>SAIB Plenary Lecture EMBO</p> <p><i>Daniela Corda</i></p>	<p>SAMIGE Plenary lecture</p> <p><i>Dennis Dean</i></p>	Closing ceremony
12:30	Break	Break	Break	Break	
13:30-13:50		<i>Tribute to Dr. Israel Algranati</i>		<i>Tribute to Dr. Juan Dellacha</i>	
14:00-15:00	<p>SAMIGE Plenary lecture</p> <p><i>Luis Larrondo</i></p>	<p>SAIB Plenary Lecture "Héctor Torres"</p> <p><i>Joaquín Espinosa</i></p>	<p>SAMIGE Plenary lecture</p> <p><i>Josep Casadesus</i></p>	<p>SAIB Plenary Lecture "Ranwel Caputto"</p> <p><i>Beatriz Caputto</i></p>	
15:00-15:15	Break	Break	Break	Break	
15:15-17:15	Poster session	Poster session	Poster session	Oral communications	
17:15-17:30	Break	Break	Break	Break	
17:30-19:30	Oral communications	Oral communications	Break	Break	
			19:00 SAIB Assembly	19:00 SAMIGE Assembly	

This meeting was supported by:



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**SAIB-SAMIGE
ONLINE
PROGRAM**

MONDAY, NOVEMBER 1st 2021

Virtual Room Córdoba

9:00-9:15

OPENING CEREMONY

*María Isabel Colombo- SAIB President
Eleonora García Véscovi - SAMIGE President*

9:15-11:15

SYMPOSIA

Virtual Room Córdoba

SI-SAIB- CELL BIOLOGY

Chairpersons: Javier Valdez Taubas-Claudia Tomes

Guillermo Gomez

Centre for Cancer Biology

SA Pathology and University of South Australia

“Harnessing artificial intelligence and patient-derived glioblastoma tumour organoids to predict response to therapies on a patient-by-patient basis”

Damian Refojo

IBioBA-CONICET-Max Planck Partner Institute, Buenos Aires, Argentina.

“Neddylation, an old post-translational modification that becomes new”

Maya Schuldiner

Weizmann Institute of Science, Israel

“Making contact - systematic analysis of contact site proteomes reveals novel players in cellular homeostasis”

Vivek Malhotra

Centre for Genomic Regulation, Barcelona, Spain

“Tunnelling of secretory cargo”

Virtual Room Rosario-1

S2- MICROBIOLOGY I - Host-Pathogen Interactions.

Chairpersons: Osvaldo Yantorno-Guadalupe Vizoso Pinto

Angeles Zorreguieta

FIL- IIBBA-CONICET-UBA, CABA, Argentina.

“Adhesion of Brucella to host cells”

Teresa Damiani

IMBECU-CONICET-Argentina

“Novel preventive and therapeutical strategies for the control of chlamydial infections”

Pablo Zunino

IIBCE, Montevideo, Uruguay

“Bases of the interaction among proteus mirabilis and the urinary tract”

Alex Saka
CIBICI-UNC-CONICET-Argentina.
“Identification of chlamydial genes involved in persistence: a genomics approach”

Virtual Room Córdoba

11:30-12:30 SAIB LECTURE “Alberto Sols”

Chairperson: Fabiana Drincovich-Gustavo Chiabrando

Consuelo Guerri
Center Prince Felipe, Valencia-Spain
“Critical role of Tall-like receptors in the neuroinflammation, neurodegeneration and alcohol-induced brain damage”

Virtual Room Córdoba

14:00-15:00 SAMIGE LECTURE

Chairperson: Mónica Delgado

Luis Larrondo
Pontificia Universidad Católica de Chile, Santiago, Chile
“Developing a detailed map of gene expression and implementing tools to reprogram population-level dynamics utilizing fungal optogenetic”

Gather Town

15:15-17:15 POSTERS

17:30-19:30 ORAL COMMUNICATIONS

Virtual Room Córdoba

C-LIPIDS

Virtual Room Rosario-1

C-MICROBIOLOGY I

TUESDAY, NOVEMBER 2nd 2021

9:15-11:15 SYMPOSIA

Virtual Room Córdoba

S3-SAIB-PLANTS

Chairpersons: José Estévez-María Victoria Bussi

Clara Sánchez-Rodríguez
ETH Zurich- IHSM-UMA-CSIC
“The role of the cell wall in plant adaptation to environmental stresses”

Juan C. del Pozo
Centro de Biotecnología y Genómica de Plantas (CBGP)-Spain
“Getting close to nature to understand plant responses to high temperatures”

Guido Grossmann
Institute of Cell and Interaction Biology (ICIB), Heinrich-Heine-University Düsseldorf-Germany

“Root hairs - shaping a cell designed to invade”

Ana María Laxalt

Instituto de Investigaciones Biológicas (IIB-CONICET-UNMDP-Argentina)

“Phospholipase c in plant stress and development”

Virtual Room Rosario-2

S4- MICROBIOLOGY II: Biotechnology & Environmental Microbiology

Chairpersons: María de las Mercedes Pescaretti-Leonardo Curatti

Marcela Ferrero

YPF Tecnología (Y-TEC)-CONICET-Argentina

“Biotechnology challenges in the petroleum industry”

Juan Pablo Busalmen

INTEMA-CONICET-UNMDP-Argentina

“The business of REAL STATE DEVELOPMENTS for bacteria”

Emanuel De Souza

Universidade Federal do Paraná, Curitiba- Brazil

“Regulation of the transcription regulator NifA by ammonium and PII in Herbaspirillum seropedicae”.

María Eugenia Farías

PROIMI-CCT-CONICET, San Miguel de Tucumán -Argentina

“Modern microbialites and microbial mats in volcanoes, wetlands and salt flats of the central andes. prospection, science, preservation and biotechnological applications”

Virtual Room Córdoba

11:30-12:30

SAMIGE LECTURE

Chairperson: Eleonora García Vescovi

Francisco García del Portillo

Laboratory of Intracellular Bacterial Pathogens, CNB-CSIC, Madrid, Spain

“The peptidoglycan and the evolution of Salmonella enterica as intracellular pathogen”

Virtual Room Córdoba

13:30-13:50

Tribute to Dr. Israel Algranati

Armando Parodi

FIL-CONICET-Argentina

Virtual Room Córdoba

14:00-15:00

SAIB LECTURE “Hector Torres”

Chairpersons: Diego De Mendoza-Nora Calcaterra

Joaquín Espinosa

Linda Crnic Institute for Down Syndrome-Department of Pharmacology, University of Colorado Anschutz Medical Campus-USA

“COVID-19 and Down syndrome: unexpected connections and therapeutic implications”

Gather Town

15:15-17:15

POSTERS

17:30-19:30

ORAL COMMUNICATIONS

[Virtual Room Leloir](#)

C-SIGNAL TRANSDUCTION

[Virtual Room Rosario-2](#)

C-MICROBIOLOGY II

[Virtual Room Córdoba](#)

C-PLANTS & GLYCOBIOLOGY

WEDNESDAY, NOVEMBER 3rd 2021

9:15-11:15

SYMPOSIA

[Virtual Room Córdoba](#)

S5. SAIB- Lipids

Chairpersons: Nicolás Favale-Gabriela Salvador

Patricia Torre Bozza

Oswaldo Cruz Foundation-Brasil

“Targeting lipid metabolism in CoVid-19”

Karen Reue

University of California-Los Angeles- USA

“The lipin phosphatidic acid phosphatases: diverse roles in lipid homeostasis”

Silvia Belmonte

IHEM-CONICET-Argentina.

“Human sperm phosphatidylinositol 4-phosphate 5-kinase type $i\gamma$ ($pi4p-5ki\gamma$) activity is crucial for the acrosome granule exocytosis”

Ariel Quiroga

IFISE-CONICET-Argentina.

“Role of microsomal triglyceride transfer protein (mtp) in tumor growth. A new function for mtp ?”

[Virtual Room Rosario-3](#)

S6. MICROBIOLOGY III: Molecular Microbiology

Chairpersons: Julieta Fernandez –Claudio Valverde

Miguel Camara

NBIC-Nottingham-UK

“Complexity of quorum sensing regulatory systems and their therapeutic exploitation”

Antonio Lagares

IBBM-CONICET-UNLP-Argentina

“The genetic language in prokaryotes. Evidences of an ancestral search for more efficient and accurate textual forms correlating with gene ancestry”

Alejandro Viale

IBR-CONICET -UNR -Argentina

“Dynamic state of genomic architectures resulting from recombination at XerC/D sites located in acinetobacter plasmids carrying carbapenem resistance adaptive modules”

Julia Pettinari

IQUIBICEN-CONICET-UBA-Argentina

“A holistic approach to metabolic engineering: Manipulation of global regulators for bioproduct synthesis optimization”

Virtual Room Leloir

S7. SAIB-SIGNAL TRANSDUCTION

Chairpersons: Vanesa Gottifredi-Graciela Boccaccio

Diego Comerci

IIB-UNSAM-Argentina

“When bio and nano meet: development and production of diagnostic tests in the fight against CoVid-19”.

Andrea Gamarnik

FIL-CONICET - Argentina

“From molecular virology to a public health emergency: how did we change the way we pursue science during the pandemic?”

Fernando Goldbaum

FIL-CONICET-Argentina

“RBD-specific polyclonal f(ab')₂ fragments of equine antibodies in patients with moderate to severe CoVid-19 disease”

Juliana Cassataro

IIB-UNSAM -Argentina

“Development of new adjuvants for vaccine formulations against infectious diseases. usefulness of this knowledge to build a vaccine against SARSCoV-2”

Virtual Room Córdoba

11:30-12:30

EMBO LECTURE

Chairpersons: María Isabel Colombo-Luis Mayorga

Daniela Corda

Department of Biomedical Sciences, National Research Council, -Italy

“PARP12-dependent mono-ADP-ribosylation controls specific membrane transport route”

Virtual Room Córdoba

14:00-15:00

SAMIGE LECTURE

Chairperson: Andrea Smania

Josep Casadesus

Departamento de Genética, Universidad de Sevilla, Spain

“Phenotypic heterogeneity in bacterial populations”

Gather Town

15:15-17:15

POSTERS

19:00

SAIB ASSEMBLY

THURSDAY, NOVEMBER 4TH 2021

9:15-11:15

SYMPOSIA

Virtual Room Córdoba

S8. SAIB- GLYCOBIOLOGY (tribute to Dr. José Luis Daniotti)

Chairpersons: José Estevez-Javier Valdez Taubas

Hugo Maccioni

CIQUIBIC-CONICET-Argentina

Tribute to Dr. José Luis Daniotti

Gabriel Rabinovich

IBYME-CONICET-Argentina

“A sweet adventure from tumor-immune escape to the resolution of inflammation”

Richard Proia

NIDDK-NIH-EE.UU

“Orchestration of the sphingolipid metabolic network”

Cecilia D’ Alessio

FBMC-FCEN-UBA-Argentina

“A journey in the early steps of n-glycosylation and glycoprotein folding in the fission yeast secretory pathway”

Virtual Room Rosario-4

S9. MICROBIOLOGY IV: Microbial Ecology & Physiology

Chairpersons: María Julia Pettinari-Elvira María Hébert

Karyn Johnson

School of Biological Sciences, Queensland, Australia

“Wolbachia interference with virus infection and transmission”

Jorgelina Ottado

IBR-CONICET-UNR-Argentina

“Environmental bacteria with ability to degrade glyphosate”

Leonardo Erijman

INGEBI-CONICET-UBA-Argentina

“Ecological plasticity of microbial communities in environmental biotechnology systems”

Lucila Saavedra

CERELA-CONICET-Argentina

“Postbiotic metabolites produced by lactic acid bacteria. a molecular and functional overview”

Virtual Room Córdoba

11:30-12:30

SAMIGE LECTURE

Chairperson: Leonardo Curatti

Dennis Dean

College of Agricultural and Life Sciences, Virginia Tech, USA

“Nitrogenase catalysis and assembly”

Virtual Room Córdoba

13:30-13:50

Tribute to Dr. Juan Dellacha
Nicolás Favale
IQUIFIB-UBA-CONICET

Virtual Room Córdoba

14:00-15:00

SAIB LECTURE “Ranwel Caputto”
Chairpersons: Mario Guido-Carlos Argaraña

Beatriz Caputto
CIQUIBIC-UNC-Argentina
*“c-Fos, a protein with a dual function:
“How far did we go in deciphering its lipid synthesis activator function?”*

15:15-17:15

ORAL COMMUNICATIONS

Virtual Room Leloir

C-CELL BIOLOGY

Virtual Room Rosario-4

C-MICROBIOLOGY III

Virtual Room Córdoba

C-BIOTECHNOLOGY

19:00

SAMIGE ASSEMBLY

FRIDAY, NOVEMBER 5th 2021

9:15-11:45

SYMPOSIUM

Virtual Room Córdoba

S10. SAIB-SAMIGE- Young Investigators

Chairpersons: Andrea Smania – Federico Sisti

Ezequiel Nazer
IFIBYNE-CONICET-UBA, Argentina.
“Demystifying the transcriptional function of argonaute proteins in metazoan”

Patricio Martín Sobrero
Laboratory of Physiology and Genetics of Plant-Growth Promoting Bacteria, DCyT-UNQ-Argentina
“The hitchhiker's guide to the galaxy of Csr/Rsm RNA-binding protein family in the genus Pseudomonas”

Clarisa Alvarez
CEFOBI- CONICET-UNR- Argentina
“Malic enzyme family: structural-biochemical analysis to improves catalytic properties”

Cecilia Mlewski
IMBIV-CONICET / CICTERRA-CONICET, Argentina
“Assessing the potential of Rivularia halophila for arsenic removal”

Martín Hernández
INBIOP-UNPSJB-CONICET, Argentina

“Contribution of some transcriptional regulators to the oleaginous phenotype in rhodococci”

María Victoria Martín

INBIOTEC-CONICET / CIB-FIBA – UNMdP, Argentina

“Regulated cell death in cyanobacteria: new horizons for developing methodologies to face the problem of cyanobacterial blooms”

Virtual Room Córdoba

12:00-12:30

Closing Ceremony: Oral Communication Awards

ORAL COMMUNICATIONS- Monday November 1- 17:30-19:30

Virtual Room Córdoba

LIPIDS

Chairpersons: Nicolás Favale-Ariel Quiroga

17:30-17:43

LI-C01-05. SPHINGOMYELIN METABOLISM INVOLVEMENT IN EPITHELIAL-MESENCHYMAL TRANSITION (EMT) PROCESS IN RENAL COLLECTING DUCTS DURING AGING. *Brandán YR¹, Guaytina EV¹, Pescio Lucila G², Favale NO², Santacreu BJ², Sterin-Speziale NB², Márquez MG¹.*

17:45-17:58

LI-C02-23. EFFECT OF PHOSPHATIDYLCHOLINE ON NEURONAL PLASTICITY OF NEURAL STEM CELLS UNDER INFLAMMATORY CONDITIONS. *Magaquian D, Delgado Ocaña S, Banchio C.*

18:00-18:13

LI-C03-45. EX VIVO PROGRESSION OF SPERMATOGENESIS ENTAILS ACCRETION OF LIPIDS WITH LONG AND VERY-LONG-CHAIN POLYENOIC FATTY ACIDS. *Santiago Valtierra FX, Luquez JM, Oresti GM.*

18:15-18:28

LI-C04-59. CYCLOOXYGENASES AND LIPOXYGENASES: KEY PLAYERS IN THE NEURONAL RESPONSE TO MANEB TOXICITY. *Benzi Juncos, ON^{1,2}, Alza, NP^{1,3}, Salvador GA^{1,2}.*

18:30-18:43

LI-C05-85. NUCLEAR CARBOXYLESTERASE IS A LIPASE INVOLVED IN LIPID-DROPLETS HOMEOSTASIS. *Lagrutta LC¹, Trejo SA^{2,3}, Ves-Losada A^{1,4}.*

18:45-18:58

LI-C06-175. SPHINGOSINE-1-PHOSPHATE RECEPTOR 2 (S1PR2) PROMOTES EPITHELIAL MESENCHYMAL TRANSITION IN DIFFERENTIATED MDCK CELLS THROUGH ERK1/2 SIGNALING INVOLVING β -CATENIN AND SNAI2. *Romero DJ, Santacreu BJ, Mosca JM, Favale NO.*

19:00-19:13

LI-C07-247. SUBCELLULAR LOCALIZATION OF FOXO1 CHANGES IN 3T3L1 PREADIPOCYTE CELLS SILENCED FOR 14-3-3 γ PROTEIN. *Müller S¹, Del Veliz S¹, Rivera L¹, Uhart M¹, Bustos DM^{1,2}.*

19:15-19:28

LI-C08-248. 14-3-3 GAMMA OR BETA KNOCKDOWN AFFECTS 3T3-L1 ADIPOGENIC DIFFERENTIATION THROUGH HIPPO PATHWAY MODULATION. *Del Veliz S¹, Uhart M¹, Bustos DM^{1,2}.*

Virtual Room Rosario-1

MICROBIOLOGY I

Chairpersons: Laura Raiger-Iustman – Jorgelina Morán Barrio

17:30-17:43

MI-C01-230. DECOLORIZATION OF SULPHUR BLACK DYE AND REAL TEXTILE WASTEWATER BY THE ENDOPHYTIC STRAIN *Talaromyces purpureogenus* H4.

Bonilla JO, Lencina NM, Barbero B, Kurina-Sanz M, Magallanes-Noguera C.

17:45-17:58

MI-C02-235. AZODYES DECOLOURIZATION BY THE HALOTOLERANT YEAST *Leucosporidium muscorum* F20A UNDER SUBMERGED FERMENTATION.

Ruscasso F, Scaramutti M, Rios P, Cavello I

18:00-18:13

MI-C03-306. INDUCED PRODUCTION OF AMYLOLYTIC CAZYMES OF A NATIVE *Aspergillus niger* STRAIN USING WHEAT BRAN AND MICROALGAL BIOMASS AS A HYDROLYZABLE SUBSTRATE.

Bader AN, Sánchez Rizza L, Consolo VF, Curatti L

18:15-18:28

MI-C04-74. NOVEL FERMENTED BEVERAGE USING SELENIZED LACTIC ACID BACTERIA.

Martínez FG, Madrid Y, Ordoñez OF, Pescuma M, Mozzi F

18:30-18:43

MI-C05-231. A GLYCOENGINEERING PLATFORM FOR DESIGN AND HIGH YIELD PRODUCTION OF RECOMBINANT NEUTRAL CYCLIC BETA GLUCANS.

Guidolin LS, Caillava AJ, Couto A, Casabuono A, Comerci DJ, Ciocchini AE

18:45-18:58

MI-C06-238. OPTIMIZING THE MICROENCAPSULATION OF *Lactobacillus salivarius* LET201 WITH SOYBEAN PROTEIN ISOLATE AND SODIUM ALGINATE.

Babot JD, Argañaraz Martínez E, Grande SMM, Apella MC, Perez Chaia A

19:00-19:13

MI-C07-258. APPLICATION OF *Vishniacozyma victoriae* AND CALCIUM CHLORIDE FOR THE CONTROL OF POSTHARVEST DISEASES OF PEAR FRUIT UNDER SEMI-COMMERCIAL CONDITIONS.

Gorordo E, Lucca ME, Sangorrín MP

ORAL COMMUNICATIONS-Tuesday November 2- 17:30-19:30

Virtual Room Leloir

SIGNAL TRANSDUCTION, NEUROSCIENCES, ENZYMOLOGY

Chairpersons: Vanesa Gottifredi- Eduardo Ceccarelli

17:30-17:43

ST-C01-88. CROSSTALK BETWEEN cAMP-PKA AND HOG-MAPK PATHWAYS IN THE REGULATION OF THE OSMOTIC STRESS RESPONSE IN *S. CEREVISIAE*. *Ojeda, Lucas E;*

Gulias, Facundo; Ortola, María C; Galello, Fiorella A; Rossi, Silvia G; Bermudez Moretti, Mariana; Portela, Paula.

17:45-17:58.

ST-C02-251. ORGANELLE-DERIVED SIGNALS CONTROL ALTERNATIVE SPLICING IN *ARABIDOPSIS THALIANA* VIA TOR KINASE. *Servi, L¹; Riegler, S²; Scarpin, MR³; Godoy Herz, MA¹;*

Kubaczka, MG¹; Venhuizen, P²; Meyer, C⁴; Brunkard, JO³; Kalyna, M²; Barta, A⁵; and Petrillo, E¹.

18:00-18:13.

EN-C01-187. **IDENTIFICATION AND CHARACTERIZATION OF TeGA, A NOVEL THERMOACTIVE AND THERMOSTABLE GLUCOAMYLASE FROM *Thermoanaerobacter ethanolicus*.** Natael M. Wayllace, Nicolas Hedín, María V. Busi* and Diego F. Gomez-Casati*

18:15-18:28

NS-C01.39 **NSC-EXTRACELLULAR VESICLES FAVORS NEURONAL DIFFERENTIATION UNDER STRESS CONDITIONS.** Delgado S, Magaquian D and Banchio C

Virtual Room Córdoba

PLANTS AND GLYCOBIOLOGY

Chairpersons: José Estevez-Elina Welchen

17:30-17:43

PL-C01-216. **CBM20CP, A NOVEL FUNCTIONAL PROTEIN OF STARCH METABOLISM IN GREEN ALGAE.** Velazquez MB, Hedin N, Barchiesi J, Gomez-Casati DF, Busi MV

17:45-17:58

PL-C02-221. **LINK BETWEEN DNA MISMATCH REPAIR SYSTEM AND IMMUNE RESPONSE IN *ARABIDOPSIS THALIANA*.** Ramos RS, Spampinato CP.

18:00-18:13

PL-C03-285. **THE CHROMATIN REMODELER MOM1 AND THE IMMUNOLOGICAL MEMORY IN PLANTS** .Miranda de la Torre JO, Peppino Margutti M, Lescano I, Alvarez ME, Cecchini NM

18:15-18:28

PL-C04-264. **POLYAMINES AND SODIUM NITROPRUSSIDE EXHIBITED DIFFERENT BEHAVIOUR AS PROTECTORS UNDER DARK OR Cd-INDUCED SENESCENCE.** Cabrera AV; Recalde L, Blager L, Groppa MD, Benavides MP.

18:30-18:43

GB-C01-94. **DETERMINATION OF MUC5B SULFATED GLYCANS IN SJÖGREN'S SYNDROME PATIENTS.** Landoni M¹, Vazquez TJ¹, Castro P², González MJ², Couto AS¹

18:45-18:58

GB-C02-93. **GLYCOENGINEERING BY HYPERGLYCOSYLATION: AN INNOVATIVE STRATEGY TO BLOCK THE UNDESIRE EFFECTS OF HUMAN ERYTHROPOIETIN AS A NEUROTHERAPEUTIC CANDIDATE.** Bürgi M^{1,3,3}, Aparicio G², Wandel-Petersen V¹, Depetris M³, Kratje R^{1,3}, Scorticati C², Oggero-Eberhardt M^{1,3}

19:00-19:13

GB-C03-172. **PHENOTYPE OF AN α -GLUCOSIDASE I-DEFICIENT FISSION YEAST STRAIN BY COMPLEMENTATION WITH CATALYTIC AND CDG IIb PATIENTS GLUCOSIDASE MUTANTS.** Idrovo-Hidalgo T, Aramburu S, Gallo GL, D'Alessio C.

19:15-19:28

GB-C04-302. **GLUCOSAMINE-1P AS A SUBSTRATE IN ADP-GLUCOSE PYROPHOSPHORYLASES FROM GRAM-POSITIVE BACTERIA.** Iglesias MJ, Iglesias AA, Asencion Diez MD

Virtual Room Rosario-2

MICROBIOLOGY II

Chairpersons: Rosana de Castro – Mariana Grillo Puertas

17:30-17:43

MI-C08-6. **DEGRADATION OF THE MYCOTOXIN FUSARIC ACID IN *Burkholderia ambifaria* T16: GENES AND METABOLIC PATHWAYS INVOLVED.**

Vinacour M, Forne I, Jung K, Imhof A, Ruiz J

17:45-17:58

MI-C09-305. **MODIFICATIONS OF *Burkholderia contaminans* LIPOPOLYSACCHARIDE IN ISOLATES RECOVERED DURING CHRONIC LUNG INFECTION OF PATIENTS WITH CYSTIC FIBROSIS.**

Casco D, Prieto C, Valdez H, León B, Lamberti Y, Bettioli M, Vita C, Figoli C, Rodríguez ME, Yantorno O, Bosch A

18:00-18:13

MI-C10-29. **AN INTEGRATED SYSTEM APPROACH REVEALED A PLEIOTROPIC CONTROL MEDIATED BY THE KEY CARBON GLOBAL REGULATOR PhaR IN *Bradyrhizobium diazoefficiens*.**

Egoburo D, Cabrera JJ, Díaz Peña R, Tortosa G, Delgado MJ, Mongiardini E, Müller-Santos M, Pettinari J, Mesa S, Quelas JI

18:15-18:28

MI-C11-128. **CypB, A *Brucella abortus* TYPE IV EFFECTOR PROTEIN, INTERACTS WITH N-WASP, A CRITICAL REGULATOR OF ACTIN CYTOSKELETAL DYNAMICS.**

Pepe MV, Giménez AB, Briones G, Roset MS.

18:30-18:43

MI-C12-151. **THE INFLAMMATORY RESPONSE INDUCED BY *Pseudomonas aeruginosa* IN MACROPHAGES ENHANCES APOPTOTIC CELL REMOVAL.**

Arias P, Jäger AV, Tribulatti MV, Brocco MA, Pepe MV, Kierbel A

18:45-18:58

MI-C13-156. **DYNAMICS OF *Pseudomonas aeruginosa* AGGREGATE FORMATION ON APOPTOTIC CELLS.**

Dea C, Pepe V, Peruaní F, Kierbel A

19:00-19:13

MI-C14-164. **ADHESIVE FUNCTIONS OR PSEUDOGENIZATION OF MONOMERIC AUTOTRANSPORTERS IN *Brucella* SPECIES.**

Bialer MG, Ferrero MC, Delpino MV, Ruiz-Ranwez V, Posadas DM, Baldi PC, Zorreguieta A

19:15-19:28

MI-C15-25. **BIOFILM ON STEEL OR PLANKTONIC CELLS? WHAT DRIVES EITHER GROWTH FORM.**

Robledo A, Escalada L, Busalmen JP, Simison S, Massazza D

ORAL COMMUNICATIONS -Thursday November 4- 15:15-17:15

Virtual Room Leloir

CELL BIOLOGY

Chairpersons: Javier Valdez Taubas- Pablo Aguilar

15:15-15:28

CB-C01-219. **THE NEW ROLE OF AP-2 ADAPTOR PROTEIN IN *GIARDIA LAMBLIA* ENCYSTATION.** Feliziani C; Rivero MR; Quassollo G, Rópolo AS; Touz, MC.

15:30-15:43

CB-C02-36. **THE ROLE OF CHEMOKINES WITH SKIN AND NASAL MUCOSAL TROPISM IN THE OUTCOME OF AMERICAN TEGUMENTARY LEISHMANIASIS (ATL).** Pimentel J, García Bustos MF, Marco JD, Barroso P, Ragone P, Mesías A, Pérez Brandán C, Acuña L, Parodi C

15:43-15:58

CB-C03-250. THE INTERPLAY BETWEEN LRRK2, RQC AND STRESS REVEALS NEW INSIGHTS IN LRRK2'S FUNCTIONS. *La Spina PE, Fernández-Alvarez AJ, Perez-Pepe M, Larotonda L, Boccaccio GL.*

16:00-16:13

CB-C04-106. CONSERVATION OF ZEBRAFISH miRNA-145 AND ITS ROLE DURING NEURAL CREST DEVELOPMENT. *Steeman T.J., Calcaterra N.B., Weiner A.M.J.*

16:15-16:28

CB-C05-226. THE HIV-1 ACCESSORY PROTEIN Vpu RETAINS HOST SLC1A5 (ASCT2) AMINO ACID TRANSPORTER IN THE ER AND PROMOTES ITS CLEAVAGE AND DEGRADATION VIA PROTEASOME. *Morellatto Ruggieri L, Drake Figueredo A, Magadán JG*

16:30-16:43

CB-C06-222. TRAFFICKING OF IAV M1 PROTEIN AT LATE STAGES OF INFECTIOUS CYCLE IS INDEPENDENT OF OTHER VIRAL PROTEINS AND INDIRECTLY DEPENDS ON GOLGI COMPARTMENT . *Drake Figueredo A, Morellatto Ruggieri L, Magadán JG.*

16:45-16:58

CB-C07-42. IDENTIFICATION AND ANALYSIS OF NOVEL CELLULAR KEY FACTORS IN HPV INFECTION USING PSEDOVIRAL PARTICLES. *Bugnon Valdano M¹; Dizanzo MP¹; Leiva S¹; Banks L²; Gardiol D¹*

17:00-17:13

CB-C08-32. ALTERATIONS ON PDZ POLARITY PROTEIN EXPRESSION DURING HPV ONCOGENESIS. *Dizanzo MP¹, Bugnon Valdano M¹, Marziali F¹, Leiva S¹, Cavatorta AL¹, Banks L², Gardiol D¹.*

Virtual Room Córdoba

BIOTECHNOLOGY

Chairpersons: Eleonora Campos- Claudia Sttudert

15:15-15:28

BT-C01-65. DEVELOPMENT OF A NOVEL MULTI-EPI TOPE ANTIGEN EFFECTIVE TO CONTROL TRYPANOSOMA CRUZI INFECTION

María Elisa Vázquez¹, Brenda Zabala¹, Andrea C. Mesías¹, Cecilia Parodi¹, Cecilia Pérez Brandán¹, Leonardo Acuña¹

15:30-15:43

BT-C02-122. DEVELOPMENT OF COVID-19 MONOCLONAL ANTIBODIES AND RECOMBINANT PROTEINS AS REAGENTS FOR BIOMEDICAL RESEARCH AND DIAGNOSTIC TESTS.

Acuña Intriери ME¹, Deriane MA¹, Miller C¹, Czibener C², Correa E³, Cragnaz L³, Guerra L³, Rodríguez S³, Goldbaum FA¹, Seigelchifer M³, Comerci DJ², Montagna G², Cerutti ML¹

15:45-15:58

BT-C03-135. GROWTH OF ELECTRO-ACTIVE BACTERIA WITH BIOCHAR AS CHEMICAL ELECTRON ACCEPTOR AND ELECTRODE MATERIAL.

Antic Gorrazzi S; Massazza D; Pedetta A; Busalmen JP; Bonanni PS¹.

16:00-16:13

BT-C04-246. BIOTECHNOLOGICAL STRATEGIES TOWARD AN AROMA KETONE.

Ceccoli RD¹, Bianchi DA², Rial DV¹.

16:15-16:28

BT-C05-257. PLOMBOX: A DEVICE FOR OPEN-SOURCE METROLOGY TO FIGHT LEAD CONTAMINATION IN DRINKING WATER.

*Gándola Y^{*1,2}, Alvarez M^{*1}, Gasulla J^{1,3}, Nadra AD¹, for the TRACE collaboration of PlomBOX project (plombox.org)*

Virtual Room Rosario-4

MICROBIOLOGY III

Chairpersons: Claudio Valverde – Augusto Bellomio.

15:15-15:28

MI-C16-10. **POSSIBLE ELECTRON UPTAKE MECHANISMS OF ELECTROAUTOTROPHIC NITRATE REDUCING BACTERIA.**

Rodríguez Simón CN, Busalmen JP, Bonanni PS, Villareal FD

15:30-15:43

MI-C17-102. **STRUCTURE BASED IDENTIFICATION OF INHIBITORS OF FASR, A KEY TRANSCRIPTIONAL REGULATOR OF CELL WALL SYNTHESIS IN *Mycobacterium tuberculosis*.**

Colaccini F, Quiroga R, Villarreal MA, Gramajo H, Gago G

15:45-15:58

MI-C18-148. **METAL ION-INTERACTION IN SYNTHETIC BROAD-SPECTRUM SENSORS DERIVED FROM THE Cu-RESPONSIVE CueR REGULATOR.**

Lescano J, Mendoza J, Soncini FC, Checa SK

16:00-16:13

MI-C19-186. **TAILORING A CRISPR/Cas9 CYTIDINE BASE-EDITOR ENABLES FAST AND RELIABLE CONSTRUCTION OF COMPLEX PHENOTYPES IN *Pseudomonas* SPECIES.**

Martino RA, Volke DC, Kozueva E, Smania AM, Nikel PI

16:15-16:28

MI-C20-242. ***Bordetella bronchiseptica* DIGUANYLATE CYCLASE BdcB INHIBITS TYPE THREE SECRETION SYSTEM AND IMPACTS ON IMMUNE RESPONSE.**

Belhart K, Gestal MC, Sisti F, Fernández J

16:30-16:43

MI-C21-260. **RESPIRATORY BURST INDUCES TOLERANCE TO FLUOROQUINOLONES IN *Streptococcus pneumoniae*.**

Hernández-Morfa M, Reinoso-Vizcaíno N, Olivero N, Cortes P, Zappia V, Echenique J

16:45-16:58

MI-C22-308. **UTILIZATION OF *Lactobacillus plantarum* AND *Oenococcus oeni* STRAINS TO APPLY IN FRUITS AND GRAPE JUICE: PRESERVATIVE AND HEALTH BENEFICIAL POTENTIAL.**

Del Valle Rivero L, Morales MR, Rodriguez Vaquero MJ, Saguir FM

17:00-17:13

MI-C023-309. **UTILIZATION OF AUTOCHTHONOUS STRAINS FROM WINERY WASTE AND GRAPE MUST AS STARTER CULTURES FOR WINEMAKING IN NORTHERN ARGENTINA.**

Morales MR, Rivero L, Saguir F

dark, and the profiles of membrane fatty acids were compared at early logarithmic, logarithmic and stationary growth phases. It was observed that the growth under sublethal UVA doses increased the proportion of unsaturated fatty acids in the logarithmic growth phase; in concordance, the analysis of fluidity indexes suggested higher membrane fluidity. Moreover, exposure to UVA radiation induced the expression of *desA* and *desB* desaturase genes at this growth phase, demonstrating the relevant role of this agent on the homeophasic response at the transcriptional level. On the contrary, the opposite effect was observed in the stationary growth phase. These results are useful for a better understanding of the general adaptive response generated to face the high doses of UVA radiation that this microorganism can encounter in the environment, or when antibacterial techniques applying this type of radiation are proposed.

MI-P043-15

REACTIVATION OF A CEPARIUM OF *Yersinia enterocolitica* THAT HAD BEEN CONSERVED BY TWO DIFFERENT METHODS FOR MORE THAN THREE DECADES

Iriarte HJ^{1,2}, Favier GP, Escudero ME², Lucero Estrada CSM^{1,2}

¹IMIBIO-SL-CONICET. ²Área de Microbiología e Inmunología (FQBYF-UNSL).

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The ceparia are genetic resources that preserve microorganisms, guaranteeing the availability of biological material for teaching and scientific research activities. Preservation must guarantee its viability in an inactive pure homogeneous state, under conditions that ensure microscopic, macroscopic, biochemical, physiological, and genetic stability, that is, without phenotypic variations or mutations with respect to the original conditions. The World Federation of Culture Collections recommends creating a duplicate of the collection and storing it in a different location, in case such collections may be lost due to exposure to hazards such as fire, flood, earthquake or war. In addition, it states that they must be preserved using two different methods to ensure conservation. Criteria for method selection are feasibility, purity, cost, amount of culture, and frequency of use. Ultrafrozen and lyophilized are long-term preservation methods, also known as methods of choice. Regardless of the preservation techniques used, a quality control must be carried out that includes the evaluation of viability, purity, biochemical and molecular properties. These evaluations must be carried out at the beginning, after the conservation of the first batch, as well as after certain periods of time. The objective of this work was to reactivate 20 strains *Yersinia enterocolitica* ceparia conserved in the 1980s under two different preservation methods: lyophilization (LIO) and semi-solid medium (SS). The LIO strains were reactivated in tinalized skim milk and cultured at 25 °C for 24 h, then were replicated in tryptic soy broth (TSB) + 0.6% yeast extract (STBY) and finally in brain heart broth (BHB). The strains conserved in SS medium were reactivated in STBY, picked up at BHB and finally at TSB at 25 °C for 24 h, respectively. All strains, after reactivated, were seeded on MacConkey agar and biochemically identified to corroborate purity. Subsequently, they were ultrafrozen at -80 °C in TSB + 20% glycerol in duplicate, and in tryptic soy SS medium in duplicate at 4 °C. Counting was not performed because the strains were very weak, and it was necessary to carry out the replicate cultures in nutritionally rich culture medium in order to prioritize survival over quantification. Of the 20 LIO strains, 5 were reactivated, representing 25% survival; meanwhile, from the strains conserved in SS medium, 14 strains could be reactivated, representing 70% survival. This demonstrates the importance of establishing periodic reactivation protocols and control of viability, in order to preserve every strain from the collection. In our study it was shown that conservation in SS medium gives better results than LIO, for long periods of conservation of *Y. enterocolitica* strains.

MI-P044-18

GENERATION AND CHARACTERIZATION OF *Haloflex volcanii* MUTANTS IN GENES WITH PREDICTED ROLES IN MOTILITY AND ELECTRON TRANSFER

Costa M, De Castro R, Giménez M

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The halophilic archaeon *Haloflex volcanii* develops in a wide range of salinities (1.5-3.5 M NaCl) and, due to its ease of cultivation in the laboratory and the possibility of being genetically manipulated, it is used as a model organism for the study of archaeal biology. In the context of a comparative proteomics study of a rhomboid protease (RhoII) gene deletion mutant, we identified several proteins involved in metal homeostasis and cell surface structure/s assembly with differences in concentration and/or electrophoretic mobility in the protease deficient strain. Out of these, some were proteins which had not been previously characterized in *H. volcanii*, and that may constitute RhoII endogenous substrates. With the aim of understanding their physiological role, two of these annotated proteins (HVO_1153 and HVO_2150) were selected to generate and characterize the corresponding gene knock-out mutants. The hypothetical protein HVO_1153 primary sequence shows homology to adhesins and flagellins, and the *hvo_2150* gene encodes HcpG, a predicted small copper protein (similar to plastocyanin and azurin) that may participate in electron transport and/or act as a copper reservoir in the cell membrane of *H. volcanii*. Genes were removed from the wild type chromosome by the "pop-in / pop-out" method and the deletion in the null mutants was confirmed by PCR. The successful generation of the null mutant strains indicated that these genes are not essential for *H. volcanii* viability. The Δhvo_{1153} mutant evidenced no differences in cell/colony morphology, cell adhesion to glass surfaces or growth in liquid medium at different conditions, when compared to the wild type strain. However, this mutant