REUNIÓN ANUAL SAFIS 2019
ROSARIO, 10 Y 11 DE OCTUBRE
Hotel Plaza Real

Programa científico

Jueves 10

8:00 – 10:00 **Acreditación**

10:00 – 12:00 **Simposio "Cardiovascular Physiopathology: from molecules to treatment"** *(Salón Belgrano)*
Eugenio Cingolani. Reprogramming heart rhythm with biological pacemakers.
Gustavo Yannareli. Mesenchymal stem cell-derived exosomes for cardiac regeneration.
Germán González. Galectins and heart inflammation.
Julieta Palomeque. Sarcoplasmic Reticulum-Mitochondria interaction in prediabetic heart.
Coordinadores: Alicia Mattiazi; Martín Vila-Petroff

12:00 – 13:00 **Almuerzo**

13:00 – 15:00 **Sesión de Posters I** *(Salón Plaza Real)*

Fisiología Cardiovascular

Coordinadores: Verónica De Giusti; Luis Gonano; Matilde Said; María Celeste Villa Abrile

C5. Mechanisms that define sarcoplasmic reticulum Ca release restitution in cardiac myocytes. Cely-Ortiz, A.
C6. Stabilization of Hypoxia-Inducible Factor-1 alpha enhances the tubulogenic capacity of genetically modified Muse cells. Castillo, M.
C7. Subcellular mechanisms underlying the low cardiotoxicity of istaroxime. Racioppi, MF.
C8. The specific inhibition of the cardiac electrogenic sodium/bicarbonate cotransporter (NBCe1) leads to cardiac hypertrophy. Di Mattia, R.
C9. Generation and transduction optimization of a baculoviral vector encoding the antimitotic gene meis1 as a preliminary in vitro model to evaluate possible cell cycle regulators. López, A.
C10. Selective activation of the G-protein-coupled estrogen receptor (GPER) decreases cardiac contractility through inhibition of the L-type calcium channel (ICa) via Nitric Oxide Synthase. Diaz Zegarra, LA.
C11. CaMKII determines arrhytmogenic events induced by acute exposure to high glucose. López, S.
C12. SR- leak, mitochondria injury and SR-mitochondria miscommunication culminate in apoptosis in prediabetic hearts. Marilen, F.
C13. Role of soluble adenylate cyclase (sAC) in basal of normotrophic and hypertrophic hearts. Rossetti, N.
C14. Transverse Aortic Constriction (TAC): Technique Minimally Invasive for induction of left ventricular hypertrophy in mice.Rossetti, NS.
C15. Tbx20 gene overexpression increases cell proliferation and the levels of pro mitotic genes in post-natal rat cardiomyocytes. Bauzá, MR.
C16. Acute myocardial glucocorticoid receptor activation decreases NHE1 activity. Amarillo, ME.
C17. Hyperactivity of the NHE1 Na+/H+ exchanger in a mouse model of type 2 diabetic cardiomyopathy. Carrizo, FE.
C18. Functional studies of six uncharacterized mutations in low-density lipoprotein receptor gene. Gomez, A.
C19. Lipoprotein (a) contributes to non-monogenic Familial Hypercholesterolemia status. Gomez, A.
C20. Modulation of cardiac function by the chronic supplementation with n-3 polyunsaturated fatty acids. Zavala, MR.
C21. Quercetin electrophysiological protective effects in a proarrhythmic dysmetabolic rat model. Villanueva, F.

Metabolismo y Nutrición

Coordinadoras: Fabiana García; Marcela Vázquez Prieto

MN1. Grape pomace extract supplementation activates FNDC5/irisin in muscle and promotes white adipose browning in rats fed a high-fat diet. Rodriguez Lanzi, C.
MN2. Vitamin K2 blocks the inhibitory effects of interferon alpha 2b on migration and invasion of liver cancer cells. Vera, MC.
MN3. High-fat diet and fructose overload modify aortic vascular morphology and type C natriuretic peptide expression in rats. Hyun Jin, L.
MN4. Chronic administration of antioxidant substances in experimental metabolic syndrome improves dyslipidemia and hepatic lipoperoxidation. Reyes Toso, CF.

MN5. Prolactin modulation of breast cancer resistance protein and P-glycoprotein expression in a murine model of obesity induced by a high fat diet. Sedlmeier, MG.

MN6. Study of the metabolic impact of hyperlipemic diets in peripheral blood mononuclear cells: preliminary results. Elías, ML.

MN7. Natriuretic peptide system in the adipose tissue: the effect of high fat diet. Martínez Tambella, J.

MN8. Protein malnutrition during the critical developmental stage induces type 2 diabetes in adulthood. Echarte, SM.

Nefrología

Coordinadoras: Anabel Brandoni; Sara Molinas

R1. Urinary excretion of the organic anion transporter 5 (Oat5u) as a diagnostic biomarker of obstructive nephropathy. Campagno, RV.

R2. Renal organic anion transporter 1 (Oat1) is primarily localized in caveolae and is redistributed into non-caveolar domains in extrahepatic cholestasis. Nosetto, EC.

R3. Is sex chromosome complement (SCC) responsible for sex differences in kidney V2 receptor (V2R) expression and desmopressin-induced antidiuresis? González, L.

R4. Text mining applied to PubMed searches on Hemolytic Uremic Syndrome. Dorr, R.

R5. Renal expression of RhoGTPases and its modulator, ICMT, in the evolution of tubular epithelial renal expression of RhoGTPases and its modulator, ICMT, in the evolution of tubular epithelial response to acute renal damage. Buono, G.

R6. RhoGTPases and end-binding protein 1 (EB1) expression associated with apelin-induced proximal tubule function improvement in the post-ischemic kidney. Molinas, SM.

R7. Effect of vitamin K2 supplementation on vascular calcification in patients on hemodialysis. Pérez Abúd, R.

Neurobiología

Coordinadora: Liliana Monasterolo

N2. Anesthetic effects in rats: interaction alpha2 agonists with ketamine hydrochloride. Cogo Pagella, J.

N3. Combined action of melatonin and alpha2 agonist for anesthesia in rats. Cogo Pagella, J.

N4. Effect of prenatal and postnatal zinc deficiency on central nervous system and anxiety-like behavior. Mendes Garrido, F.

N5. Glyphosate exposure induces neurobehavioral alterations in developmental rats. Luna, S.

15:00 – 16:45 **Simposio "Metabolic Signaling: impact on cellular and tissue physiopathology"** *(Salón Belgrano)*

Mauricio Martín. Epigenetic consequences of cholesterol loss in the aging brain.

Darío Krapf. Regulation of multiple pathways by a unique kinase in sperm capacitation.

Daniel Francés. Cyclooxygenase-2 (COX-2)-derived prostaglandins in the regulation of liver cell metabolism: Role in the prevention of insulin-resistance, fibrosis and ischemia/reperfusion injury.

Coordinadores: Cristián Favre; Ariel Quiroga

17:15 – 18:45 **Premio Camilión de Hurtado** *(Salón Belgrano)*

Alejandro Ciocci Pardo. Cardioprotective effects of N-methylacetazolamide mediated by inhibition of L-type Ca^{2+} current.

Carlos S. Giménez. Transient gene therapy with baculoviral vector encoding mutant HIF-1A induces collateral vessels formation in rabbits with peripheral arterial disease.

Juan Ignacio Elio Mariángelo. A defective sarcoplasmic reticulum Ca2+ cycling is linked to the increased susceptibility to Ca^{2+} alternans of the hypertrophied myocardium.

Romina A. Di Mattia. The activation of the G Protein-Coupled Estrogen Receptor (GPER) prevents and regresses cardiac hypertrophy.

Jurados: Carolina Caniffi; Germán González; Gustavo Yannarelli

Coordinadora: Verónica De Giusti

19:00 – 20:00 **Conferencia de apertura** *(Salón Belgrano)*

James R. Goldenring. Immune cell regulation of the induction of metaplasia in the stomach.

Coordinadora: María Cecilia Larocca

21:00 **Cóctel de bienvenida** *(Salón Plaza Real)*

Viernes 11

8:00 – 9:50 **Mesa Redonda "La Transposición Didáctica en la Enseñanza de Fisiología. Límites y Potencialidades"** *(Salón Belgrano)*

1. Confluencia entre saber científico en ciencias fisiológicas y saber didáctico, aportes para una correcta vigilancia.
2. Éxito académico versus éxito científico/profesional: cómo diferenciarlos y potenciarlos.
3. Riesgos y ventajas de la transformación del objeto científico en el espacio áulico, una vara que se dobla y se quiebra.

Panelistas invitadas: **Claudia Drogo**, **Edy Machado**, **Miryam Pires**. *Moderador: Sebastián Caffera*

10:00 – 11:30 **Symposio "Membrane Transporters: involvement in physiological and pathological conditions"** *(Salón Belgrano)*

Alicia Damiano. Role of aquaporins in the development of human placenta. Implications in the physiopathology of preeclampsia.

Fernando Crocenzi. Relevance of canalicular transporter endocytosis in hepatocellular cholestasis.

Juan Pablo Rigalli. Modulation of luminal ATP levels by extracellular vesicles along the nephron: potential role in intrarenal communication and electrolyte reabsorption.

Coordinadores: Raúl Marinelli; Silvina Villanueva

12:00 – 13:00 **Asamblea SAFIS** *(Salón Belgrano)*

13:00 – 15:00 **Presentación de posters II** *(Salón Plaza Real)*

Endocrinología y Reproducción

Coordinadora: Andrea Chisari

EN1. Osmotic stress and human amnion aquaporins. Di Paola, M.

EN3. Effects of hyperthyroidism on the cellular antioxidant system and the expression of DNMT-1 in peripheral blood mononuclear cells of patients with Graves' disease. Costilla M.

Fisiología celular

Coordinadoras: Rocío Cantero; Julieta Marrone; María Laura Ruiz

FC1. The loss of functionality of aquaporin 9 adversely affects the survival of trophoblast cells. Medina Y.

FC2. Effects of α-hemolysin on cell volume and intracellular sodium and potassium of human erythrocytes. Lauri N.

FC3. Bioassay standardization to assess exosomes anti-inflammatory activity in vitro. Malvicini, R.

FC4. Aquaporin-4 facilitates cell proliferation in retinal Müller cells: implications in neuromyelitis optica. Netti, V.

FC5. Regulation of oxidative stress on the activity of Nrf-2 factor and the expression of antioxidant enzymes in lymphoid cells of a murine model of hyperthyroidism. Costilla, M.

FC6. Aquaporin-2 and Na+/H+ exchanger isoform 1 modulate the efficiency of renal cell migration. Di Giusto, G.

FC7. Release of ATP by TRPV4 activation is dependent upon the expression of AQP2 in renal cells. Pizzoni, A.

FC8. Estradiol 17ß-d-glucuronide-induced impairment of MRP2 activity in rat hepatocytes involves NADPH oxidase-mediated oxidative stress. Salas, G.

FC9. Role of ATP homeostasis in the microparticles produced by erythrocytes infected with Plasmodium falciparum. Alvarez, CL.

FC10. Microfluidics to study deformability of human erythrocytes exposed to alpha hemolysin. Leal Denis, MF.

FC11. Characterization of AKAP350 participation in actin reorganization at the immune synapse in natural killer cells. Pariani, A.

FC12. Chalcone derivative synthesis and cytotoxicity in hepatocellular carcinoma cells. Kamecki, F.

FC13. Tauroursodesoxicolate prevents activation of pro-cholestatic signalling pathways in estradiol 17ß-d-glucuronide -induced cholestasis independently of protein phosphatases and the integrin receptor. Medeot, AC.

FC14. Extracellular ATP regulation of Caco-2 cells. Bazzi, ZK.

FC15. Regulation by the cAMP pathway of primary cilia length in LLC-PK1 renal epithelial cells. Perez, PL.

Gastroenterología

Coordinadores: Ismael Barosso; Cecilia Basiglio; Andrea Chisari

G2. A mutation in multidrug resistance-associated protein 2 linker region prevents its internalization triggered by classic protein kinase c activation. Domínguez, CJ.

G3. Vitamin C (VitC) reverts intestinal Mrp2 down-regulation in rats with fructose-induced metabolic syndrome (MS). Zecchinati, F.

G4. Levels of salivary immunoglobulin A in edentulous subjects. Juárez, RP.

G5. Bibliometric analysis of scientific production on saliva in PubMed and Dentistry & Oral Sciences Source during the period 2000-2018. Juárez, RP.
G6. 5-lipoxygenase (5-LOX) inhibition by zileuton reduces the amount of neutrophils that reaches the liver during liver regeneration after partial hepatectomy (PH). Lorenzetti, F.
G7. Molecular mechanism of P-glycoprotein induction by Genistein in rat hepatocyte primary culture. Semeniuk, M.
G8. In vivo inhibition of bilirubin conjugation does not induce a loss of its protective effect in oxidative stress-induced cholestasis. Martín, PL.
G9. Hemeoxygenase 1 inhibition induces a loss of antioxidant protection in rats with bile duct ligation. Taurizano, D.
G10. Hepatic gene transfer of human aquaporin-1 improves MRP2/ABCC2 transport activity in rats with lipopolysaccharide-induced cholestasis. Marrone, J.
G11. Thioacetamide impairs hepatocyte ureagenesis from ammonia, but not from glutamine or alanine: Involvement of mitochondrial aquaporin-8. Capiglioni, A.
G12. Effect of Insulin growth factor 1 binding protein 2 (IGF2BP1) knock down on the expression of multidrug resistance proteins in HepG2 cells. Bucci Muñoz, M.
G13. KIR6.2 protein defficency affects normal liver regeneration after partial hepatectomy in mice. Lorenzetti, F.

Oncología

Coordinadoras: María de Luján Alvarez; Barbara Fingleton; María Fernanda Troncoso

O1. Myeloid differentiation primary response protein 88 (Myd88) knockout mice are more susceptible to develop liver cancer. Heit Barbini FJ.
O2. Epidermal growth factor receptor (EGFR) activation induces the expression of multidrug resistance associated protein 4 (MRP4/ABCC4) in a pancreatic cancer human cell line. Lagos, R.
O3. Antiproliferative and apoptotic effects of combined treatment of interferon alpha-2b (IFN) and vitamin e (vit E) on SK HEP-1 cells. Lucci, A.
O4. The flavonoid 2'nitroflavone inhibits proliferation, survival and migration of human triple-negative breast cancer cells. Vachetta, VS.
O5. Role of AMPK-p53 pathway in the antimigratory effects of alpha lipoic acid in hepatocellular carcinoma cells. Hidalgo, F.
O6. The sirtuins inhibitor cambinol reverses sorafenib resistance in human hepatocellular carcinoma HepG2 cells. Delprato, CB.
O7. Effect of alkaline gradient on clear renal cell carcinoma mortality: role of isoform 1 of Na^+/H^+ exchanger function. Mazzocchi, M.

15:00- 17:00 **Simposio "Polarity Proteins: common actors of multiple cellular functions"** *(Salón Belgrano)*

María Isabel Yusseff. Regulation of the immune synapse by polarized membrane trafficking: impact on B cell responses.
Mariano Bisbal. A key function for Microtubule-Associated-Protein 6 in activity-dependent stabilization of actin filaments in dendritic spines.
Daniela Gardiol. Cell polarity proteins as common targets for viral pathogenesis.
Andrés Zucchetti. Golgi apparatus plays a pivotal role in the trafficking of the Linker for Activation of T cells (Lat) to the immune synapse (IS) and in T-cell activation.
Coordinadores: Javier Girardini; Mauricio Menacho Márquez

17:15 – 18: 45 **Premio SAFIS investigadores jóvenes** *(Salón Belgrano)*

Julieta Reppetti. An intact caveolar structure is necessary for the proper formation of placental microvasculature.
Guillermo N. Tocchetti. Acute modulation of intestinal multidrug resistance-associated protein 2 localization and activity by nutrients.
Brenda C. Gutierrez. Actin filaments modulate the electrical activity of brain microtubules.
Jurados: Alejandro Aiello; Claudia Capurro; Gabriela Coux
Coordinadora: María Cristina Carrillo

19:00 – 20:00 **Conferencia de cierre** *(Salón Belgrano)*

Alejandro Schinder. Rewiring adult brain circuits by neurogenesis and experience.
Coordinadora: Alejandra Pacchioni

20:00 **Entrega de premios. Ceremonia de clausura.**

Libro de Resúmenes disponible en https://safisiol.org.ar/