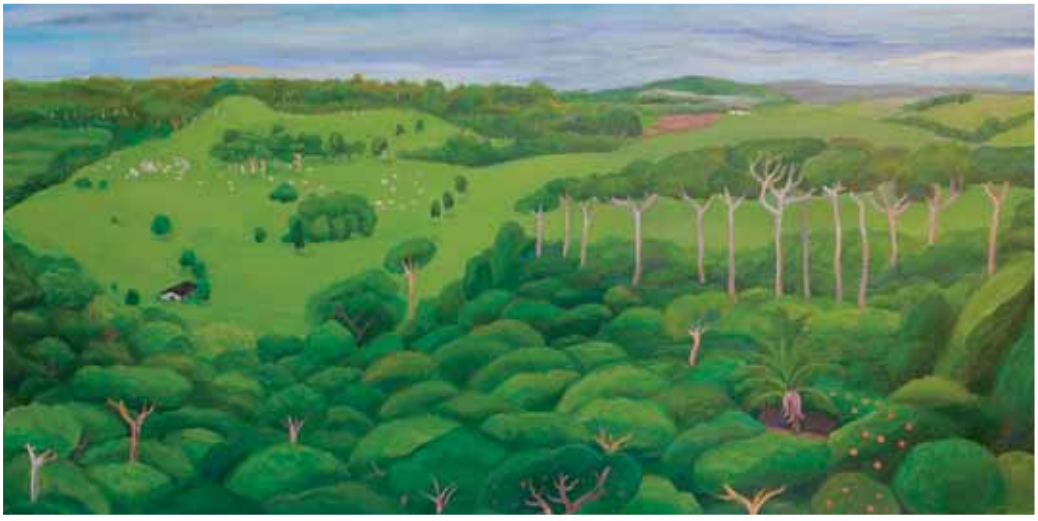
2018

medicina

BUENOS AIRES VOL. 78 Supl. III - 2018



MEDICINA

Volumen 78, Supl. III, págs. 1-273

medicina

BUENOS AIRES, VOL. 78 Supl. III - 2018

COMITÉ DE REDACCIÓN

La Tapa (Ver p xx)
Los palos rosas, 2015
Daniela Kantor

MEDICINA (Buenos Aires) – Revista bimestral – ISSN 0025-7680 (Impresa) – ISSN 1669-9106 (En línea)

REVISTA BIMESTRAL
Registro de la Propiedad Intelectual N° 5350968
Personería Jurídica N° C-7497
Publicación de la Fundación Revista Medicina (Buenos Aires)
Propietario de la publicación: Fundación Revista Medicina
Queda hecho el depósito que establece la Ley 11723

Publicada con el apoyo del Ministerio de Ciencia, Tecnología e Innovación Productiva.
MEDICINA no tiene propósitos comerciales. El objeto de su creación ha sido propender al adelanto de la medicina argentina. Los beneficios que pudieran obtenerse serán aplicados exclusivamente a este fin.
Aparece en *MEDLINE (PubMed), ISI-THOMSON REUTERS (Journal Citation Report, Current Contents, Biological Abstracts, Biosis, Life Sciences), CABI (Global Health), ELSEVIER (Scopus, Embase, Excerpta Medica), SciELO, LATINDEX, BVS* (Biblioteca Virtual en Salud), *DOAJ, Google Scholar y Google Books*.
Incluida en el Núcleo Básico de Revistas Científicas Argentinas del CONICET.

Directores Responsables:
Basilio A. Kotsias, Damasia Becú Villalobos, Isabel Narvaiz Kantor, Guillermo B. Semeniuk

Secretaría de Redacción: Ethel Di Vita, Instituto de Investigaciones Médicas Alfredo Lanari, Combatientes de Malvinas 3150, 1427 Buenos Aires, Argentina
Tel. 5287-3827 Int. 73919 y 4523-6619
e-mail: revmedbuenosaires@gmail.com – http//: www.medicinabuenosaires.com

Vol. 78, Supl.III, Noviembre 2018

Edición realizada por
Diseño y Diagramación: Andrés Esteban Zapata - aez.sgi@gmail.com - 11 5509 2767
Impreso en PQC - Berón de Astrada 2064 - C.A.B.A. - 4919 1702

medicina
BUENOS AIRES, VOL 78 Supl. III - 2018

REUNIÓN CONJUNTA SAIC SAI SAFIS 2018

LXIII REUNIÓN ANUAL DE LA

SOCIEDAD ARGENTINA DE INVESTIGACIÓN CLÍNICA (SAIC)

LXVI REUNIÓN ANUAL DE LA

SOCIEDAD ARGENTINA DE INMUNOLOGÍA (SAI)

REUNIÓN ANUAL DE LA

SOCIEDAD ARGENTINA DE FISIOLOGÍA (SAFIS)

CON LA PARTICIPACIÓN DE

SOCIEDAD ARGENTINA DE VIROLOGÍA (SAV)

ASOCIACIÓN ARGENTINA DE NANOMEDICINAS (NANOMED-ar)

14-17 de noviembre de 2018
Hotel 13 de Julio – Mar del Plata

EDITORES RESPONSABLES

Claudia Pérez Leirós
Pablo Baldi
Alberto Crottogini

medicina
BUENOS AIRES, VOL 78 Supl. III - 2018

JOINT MEETING SAIC SAI SAFIS 2018

LXIII ANNUAL MEETING OF

SOCIEDAD ARGENTINA DE INVESTIGACIÓN CLÍNICA (SAIC)

LXVI ANNUAL MEETING OF

SOCIEDAD ARGENTINA DE INMUNOLOGÍA (SAI)

ANNUAL MEETING OF

SOCIEDAD ARGENTINA DE FISIOLOGÍA (SAFIS)

WITH THE PARTICIPATION OF

SOCIEDAD ARGENTINA DE VIROLOGÍA (SAV)

ASOCIACIÓN ARGENTINA DE NANOMEDICINAS (NANOMED-ar)

November 14-17, 2018
Hotel 13 de Julio – Mar del Plata

RESPONSIBLE EDITORS

Claudia Pérez Leirós
Pablo Baldi
Alberto Crottogini

LA TAPA

Los palos rosas, 2015

Daniela Kantor

Técnica: Acrílico sobre bastidor. Medidas: 35 x 70 cm

Daniela Kantor es diseñadora gráfica (FADU-UBA), historietista, ilustradora y pintora. Desde 2014 es docente en la materia Ilustración, cátedra Roldán, FADU, y da talleres para niños (Filbita 2017, taller de comics librerías Matilda-Tigre, taller de historietas CCK, etc.) Estudió con el maestro Alberto Breccia dibujo de historieta y con Carlos Gorriarena realizó el Curso de color. Asistió al Taller de acuarela y pastel de Carlos Nine y realizó clínicas de pintura con Mariano Sapia y Tulio de Sagastizábal. Además de ilustrar muchos libros para niños y adolescentes (Editoriales Troquel, Abran Cancha, Puerto de Palos, Santillana, etc.), es parte de la revista de historietas El tripero, publica en revistas (Barcelona, Zona de obras, Crisis, suplemento Ñ, entre otras). Publicó su primera novela gráfica: Mujer primeriza (2014). Su proyecto de segundo libro de historietas Naturalella obtuvo la primera mención del Premio Nueva Historieta Argentina (2016) y fue publicado en parte en Dis-tinta, el compilado de Liniers y Martín Pérez (Ed. Sudamericana, 2016). Expone sus pinturas desde 2003; recientemente exhibió en Cic.edu.ar

Instagram: Daniela.kantor.9

www.kantorconk.blogspot.com

www.danikantor.portfoliobox.net

CONSEJOS DIRECTIVOS

SAIC

Presidente
Claudia Pérez Leirós

Vicepresidente
Mónica Costas

Secretaria
Flavia Saravia

Tesorera
Daniela Vittori

Prosecretaria
Gabriela Marino

Vocales
Bruno Buchholz
Jimena Cabilla
Cintia Eliana Citterio
Alejandro Curino
Walter Fornes
María Noel Galardo
Yanina Langle
Gabriela Lombardi
Vanina Medina
Liliana Monasterolo
Analía Reinés
Nora Saraco
Carmen Stanganelli

Revisores de cuentas
Ruth Rosenstein
Pablo Azurmendi

SAI

Presidente
Pablo Baldi

Vicepresidente
Gladis Susana Álvarez

Secretaria
Marisa Mariel Fernández

Tesorero
Daniel González Maglio

Pro-Secretaria
María Susana Salva

Pro-Tesorera
María Victoria Delpino

Vocales
Belkys Maletto
Paula Carasi
Ana Rosa Pérez
Luciana Balboa
Gisela Seminario
Mercedes Fuertes
Alejandra Goldman
Federico Jensen

SAFIS

Presidente
Alberto Crottogini

Vicepresidente
María Cecilia Larocca

Secretaria
Elena Lascano

Tesorero
Juan Gabriel Barra

Vocales Titulares
Luján Alvarez
Daniela Olea
Martín Vila Petroff
María Celeste Villa Abrille

Vocales Suplentes
Valeria Rivarola
Roxana Toriano

Vocal Región Litoral Noreste
Silvina Villanueva

Vocal Región Cuyo
Emiliano Diez

Vocal Región Centro
Ana Macchione

Vocal Región Litoral Noroeste
Susana Jerez

Vocal Región Sur
Marta Elena Roque

Vocales Externos
Carolina Garciarena
Guillermo L.Lehmann

Órgano de fiscalización
Paola Locatelli
Carlos Valverde

LAS SOCIEDADES QUE ORGANIZAN ESTA REUNIÓN CONJUNTA

AGRADECEN EL APOYO DE

INSTITUCIONES OFICIALES

CONSEJO NACIONAL DE INVESTIGACIONES CIENTÍFICAS Y TÉCNICAS

MINISTERIO DE CIENCIA, TECNOLOGÍA E INNOVACIÓN PRODUCTIVA

AGENCIA NACIONAL DE PROMOCIÓN CIENTÍFICA Y TECNOLÓGICA

OTRAS INSTITUCIONES Y AUSPICIANTES

FUNDACIÓN CHERNY

FUNDACIÓN HONORIO BIGAND

PREMIO EDUARDO SOTO EN NEUROCIENCIAS

PREMIO IRENE FARYNA DE RAVEGLIA

FAMILIA CAMILIÓN DE HURTADO

FUNDACIÓN ARGENTINA DE NANOTECNOLOGÍA

AMERICAN SOCIETY FOR MICROBIOLOGY

INTERNATIONAL SOCIETY FOR NEUROIMMUNOMODULATION

SOCIETY FOR MUCOSAL IMMUNOLOGY

EMBO

THE COMPANY OF BIOLOGISTS

LAS SOCIEDADES QUE ORGANIZAN ESTA REUNIÓN CONJUNTA

AGRADECEN LA COLABORACIÓN DE LAS SIGUIENTES

EMPRESAS Y AUSPICIANTES

ANALITICAL TECH
APBIOTECH
BIOCIENTIFICA SA
BIODYNAMICS SRL
BRISTOL-MYERS SQUIBB
CIENTIST
DIAGNOSMED
EMBIOTEC
ETC INTERNACIONAL
GADOR
INBIO
LAB SYSTEMS
LOBOV
MICROLAT
MIGLIORE LACLAUSTRA
NOVARTIS
SARTORIUS
TECNOLAB
THERMOFISHER

PALABRAS DE BIENVENIDA

Estimados colegas y amigos,

Nos complace darles la bienvenida a la Reunión Conjunta SAIC SAI SAFIS 2018 de la **Sociedad Argentina de Investigación Clínica (SAIC),** la **Sociedad Argentina de Inmunología (SAI)** y la **Sociedad Argentina de Fisiología (SAFIS),** que este año también cuenta con la participación de la **Sociedad Argentina de Virología (SAV)** y la **Asociación Argentina de Nanomedicinas (NANOMED-ar).**

El Programa Científico es abarcador y cubre los aspectos más sobresalientes e innovadores de las diferentes disciplinas. Contamos con la presencia de investigadores argentinos y extranjeros de la mayor jerarquía internacional que expondrán los avances de su trabajo en conferencias y simposios. Además, se han inscripto más de 760 trabajos de estudiantes de doctorado, becarios, investigadores, médicos residentes y otros profesionales del ámbito de la Salud con los últimos resultados de sus investigaciones, los que serán expuestos en forma de comunicaciones orales y pósters. Se han seleccionado algunos de estos trabajos para su presentación en simposios para favorecer el intercambio con los pares extranjeros. Asimismo, Jurados de expertos han pre-seleccionado trabajos para competir por distintos premios: se otorgarán los Premios León Cherny al mejor trabajo multidisciplinario, Honorio Bigand al mejor proyecto presentado por investigadores jóvenes, Eduardo Soto al mejor trabajo en Neurociencias, Irene Faryna de Raveglia en Oncología, Leonardo Satz en Inmunología, SAFIS Jóvenes Investigadores en Fisiología, Camilión de Hurtado en Fisiopatología Cardiovascular y César Milstein en Enfermedad de Chagas. Se otorgará un premio de la American Society for Microbiologists en el área de Infectología y Menciones a los mejores pósters por áreas de la SAIC. Estos premios constituyen un estímulo para los grupos de investigación argentinos que mejoran la calidad de sus trabajos año tras año y se otorgan merced al generoso aporte de las fundaciones Cherny, Bigand, de la Dra Pasquini, de la Familia Camilión de Hurtado y de las empresas ETC Internacional y Novartis Argentina SA. Habrá también minicursos, encuentros con expertos y exposición comercial.

El principal objetivo de esta Reunión Conjunta es ofrecer a los asistentes el marco académico propicio para alentar la interacción entre científicos argentinos y con pares extranjeros que investigan las bases moleculares y bioquímicas de las enfermedades humanas. Nuestras sociedades reúnen a investigadores y académicos de las distintas ramas de la Biomedicina, con un importante enfoque en la medicina traslacional. Desde la organización alentamos la discusión y formación científica en un clima de intercambio cordial y multidisciplinario.

Aprovechamos la oportunidad para agradecer a las comisiones directivas de las sociedades participantes quienes, en un año de crecientes complicaciones económicas y de funcionamiento, han trabajado con enorme dedicación y responsabilidad para el éxito de esta Reunión. Nuestro agradecimiento a las instituciones oficiales y no gubernamentales que apoyaron la organización de este evento a través de subsidios u otros aportes; a las empresas y entidades que auspiciaron y acompañan con su presencia este Congreso; a las empresas organizadoras y a la gerencia del Hotel 13 de Julio por su amabilidad y profesionalismo.

Esperamos que disfruten de este encuentro en sus aspectos científicos y académicos como también en salidas sociales aprovechando las instalaciones turísticas de esta espléndida ciudad de Mar del Plata.

Dra. Claudia Pérez Leirós	**Dr. Pablo Baldi**	**Dr. Alberto Crottogini**
Presidente SAIC	Presidente SAI	Presidente SAFIS

WELCOME WORDS

We are pleased to welcome you to the SAIC SAI SAFIS 2018 Joint Meeting, organized by Sociedad Argentina de Investigación Clínica (SAIC), Sociedad Argentina de Inmunología (SAI) and Sociedad Argentina de Fisiología (SAFIS), with the participation of Sociedad Argentina de Virología (SAV) and Asociación Argentina de Nanomedicinas (NANOMED-ar).

The scientific program is comprehensive, spanning the most glowing and innovative aspects of the diverse fields. Outstanding international experts from Argentina and from abroad will discuss their recent advances in the setting of conferences and symposia. In addition, PhD and postdoctoral fellows, young investigators, resident physicians and other health professionals will address the recent results of their research in over 760 communications during poster and oral sessions. A number of these works have been selected for presentation in symposia, in order to foster interactions of their authors with foreign colleagues. Likewise, expert juries have pre-selected communications to compete for the following awards: The León Cherny Award to the best multidisciplinary research, The Honorio Bigand Award to the best project presented by young investigators, The Eduardo Soto Award to the best research in Neuroscience, The Irene Faryna de Raveglia Award in Oncology, The Leonardo Satz Award in Immunology, The SAFIS Young Investigators in Physiology Award, The Camilión de Hurtado Award in Cardiovascular Pathophysiology and The César Milstein Award in Chagas Disease. A Prize in the field of Infectology from The American Society for Microbioloy, as well as Mentions from SAIC to the best posters, will also be awarded. These awards convey a motivation to the Argentine research groups that progressively improve the quality of their investigations, and are granted thanks to the generosity of the Cherny and Bigand Foundations, Dr. Pasqualini, the Camilión de Hurtado Family and the companies ETC Internacional y Novartis Argentina SA. Minicourses, Meeting with the Expert Sessions and a commercial exhibit will also take place during the Joint Meeting.

The main goal of this Joint Meeting is providing the attendees with an appropriate academic framework to encourage interactions between Argentine scientists and colleagues from abroad who investigate the molecular and biochemical bases of human ailments. The members from our societies are investigators and academics from diverse biomedical areas with a strong focus in translational medicine. From the Organizing Committee, we firmly encourage scientific discussion and training in an atmosphere of warm, multidisciplinary interaction.

We take advantage of this opportunity to thank the Boards of the participating Societies which, in a year of increasing economic and managing complications have worked with enormous commitment and responsibility for the success of this Meeting. Our gratitude, as well, to the official and private institutions that supported the organization of this event with grants or other financial contributions; to the sponsoring and organizing companies and entities; and to the staff of 13 de Julio Hotel for their kindness and professionalism.

We wholeheartedly hope that you enjoy this Meeting in its scientific, academic and social aspects, while profiting the attractions of this beautiful, splendid Mar del Plata.

Dr. Claudia Pérez Leirós
SAIC President

Dr. Pablo Baldi
SAI President

Dr. Alberto Crottogini
SAFIS President

ISSN 1669-9106

MEDICINA (Buenos Aires) 2018; 78 (Supl. III): 11-16

REGENERATING CNS MYELIN - FROM MECHANISMS TO EXPERIMENTAL MEDICINE

Robin J.M. Franklin

Wellcome Trust-MRC Cambridge Stem Cell Institute, University of Cambridge, United Kingdom

Remyelination, the process by which new myelin sheaths are restored to demyelinated axons, represents one of the most compelling examples of adult multipotent stem cells contributing to regeneration of the injured CNS. This process can occur with remarkable efficiency in multiple sclerosis (MS), and in experimental models, revealing an impressive ability of the adult CNS to repair itself. However, the inconsistency of remyelination in MS, and the loss of axonal integrity that results from its failure, makes enhancement of remyelination an important therapeutic objective. There is now compelling evidence that ageing is the major contributor to the declining efficiency of remyelination and that this is largely due to a failure of stem cell differentiation. This talk will cover some of our recent studies on how ageing effects many aspects of CNS remyelination, including the divergent properties of CNS progenitors of different developmental origin and how changes in the mechanical properties of the ageing brain change the properties of CNS progenitors.

EMBO Keynote Lecture

MAINTENANCE AND REACTIVATION OF IMMUNOLOGICAL MEMORY

Andreas Radbruch

Deutsches Rheumaforschungszentrum Berlin, a Leibniz institute, and Charité University Medicine Berlin; radbruch@drfz.de

Recent observations have fundamentally challenged the classical view that immunological memory is maintained by coherent populations of circulating and proliferating immune memory cells. Distinct populations of memory T lymphocytes and memory plasma cells residing in epithelial tissues and in the bone marrow have been described. They provide first-line protection and long term memory to prevailing antigenic challenges of the environment. We have now also identified memory B lymphocytes of the bone marrow as a population distinct from their splenic counterparts in terms of repertoire and phenotype. Immune memory cells of the bone marrow are individually docking onto stromal cells, implying that stromal cells determine the capacity of immunological memory. There they rest in terms of mobility and activity. These resident memory lymphocytes apparently are not maintained by (homeostatic) proliferation. As we could show for memory plasma cells, their survival is dependent on cell contact to the stromal cell, inducing PI3K signaling, and on the cytokines April or BAFF from their environment, inducing NFkB signaling. In synergy, both signaling pathways in memory plasma cells upregulate expression of the vital transcription factor IRF4 and prevent caspase-induced apoptosis. Memory T and B lymphocytes are maintained by PI3K signalling as well in the bone, suggesting that stromal cells play a pivotal role for the persistence of immunological memory, by preventing apoptosis of the memory cells through contact-dependent PI3K signaling. In secondary immune reactions, resident quiescent T and B lymphocytes obviously have to be mobilized from their memory niches. We could show for resident CD4+ memory T lymphocytes that this mobilization leads (a) to the formation of “Immune clusters” in the bone marrow, resulting in amplification of the specific memory lymphocytes, and (b) to the emigration of specific resident memory T lymphocytes into the blood, and their participation in the secondary immune reaction.

SAIC CONFERENCE ‘ALBERTO TAQUINI’

SIGNALING NEW THERAPEUTIC APPROACHES IN HEPATOCELLULAR CHOLESTASIS

Marcelo G. Roma

IFISE-CONICET, Universidad Nacional de Rosario

Hepatocellular cholestasis is associated with a functional failure in the capability of hepatocytes to produce bile. It is often due to a functional impairment in the main transporters involved in the canalicular efflux of solutes acting as driving force for bile flow generation (*e.g.*, bile salts and gluthation, transported via Bsep and Mrp2, respec-

μm; p<0.05). In PCOS+FLU rats, the organization of the collagen fibers did not show differences with both PCOS and control animals. Also, the water content in PCOS+FLU rats did not show differences with PCOS rats. However, the expression of AQP8 in PCOS+FLU rats decreased in the myometrium showing similar values to control rats. Our results show that the inhibition of AR inhibited the increase of the myometrial thickness observed in PCOS rats, and suggest that this effect could be, at least in part, due to changes in collagen organization. In addition, we showed that AQP8 expression in the myometrium is mediated by AR and that this protein is not regulating the water imbibition in the uterus of PCOS animals.

134. (623) **AQUAPORIN-3 EXPRESSION IN PLACENTAL EXOSOMES ISOLATED FROM PLASMA OF FIRST TRIMESTER PREGNANT WOMEN**

Natalia Szpilbarg[1], Paola Ayala-Ramírez[2], Yollyseth Medina[1], Nora Martinez[1], Reggie García-Robles[3], Alicia Damiano[1, 4]
[1]*Laboratorio de Biología de la Reproducción, Instituto de Fisiología y Biofísica Bernardo Houssay (IFIBIO)- CONICET- Facultad de Medicina, Universidad de Buenos Aires. Buenos Aires, Argentina*, [2]*Human Genetics Institute. Faculty of Medicine – Pontificia Universidad Javeriana-Bogotá, Colombia*, [3]*Department of Physiological Sciences. Faculty of Medicine – Pontificia Universidad Javeriana-Bogotá, Colombia*, [4]*Cátedra de Biología Celular y Molecular, Departamento de Ciencias Biológicas, Facultad de Farmacia y Bioquímica, Universidad de Buenos Aires. Buenos Aires, Argentina.*

Aquaporin-3 (AQP3) is expressed from early stages of gestation to term placenta. Evidences have described the participation of this protein in physiological processes and in diverse clinical dysfunctions. Regarding the human placenta, we recently found that AQP3 participates in the migration of the extravillous trophoblast cells and in the apoptosis of the villous trophoblast. In addition, we also described a decreased expression of AQP3 in preeclamptic placentas. Among the strategies that have arisen for the study of placental pathologies, exosomes derived from placenta have been proposed as the candidates that could best represent the changes that occur in the trophoblast throughout pregnancy. These extracellular vesicles derived from the syncytiotrophoblast are present in maternal circulation from week 6 to the end of gestation.
Our hypothesis is that the AQP3 normal expression is crucial for an appropriate placental development.
Our objective is to study the presence of AQP3 in placental exosomes isolated from the plasma of pregnant women to evaluate its potential use as an indicator of placental function.
Plasma samples (n=5) from pregnant women before 20 weeks of gestation were obtained after the approval of the bioethics committee and the signing of the informed consent.
Exosomes were isolated by differential centrifugation from the plasma of pregnant women during the first trimester of pregnancy. Samples were positively selected by binding to anti-CD63 (exosome marker). Then, the isolated exosomes were analyzed for AQP3 and PLAP (syncytiotrophoblast marker) by quantitative RT-PCR and western blot.
The results showed that the expression of mRNA and protein of AQP3 is detectable in exosomes obtained from the plasma of pregnant women in the first trimester.
Therefore, the level of AQP3 may be useful as an indicator of placental function throughout pregnancy and potentially correlate with the development of placental pathologies.

ENDOCRINOLOGÍA / ENDOCRINOLOGY 1

135. (67) **NARINGIN, NATURAL FLAVONOID, PREVENTS BONE ALTERATIONS INDUCED BY A FRUCTOSE RICH DIET**

Valeria Rodriguez, María Angélica Rivoira, Lucía Raquel Corball, Solange Guizzardi, Nori Tolosa de Talamoni
Bioquímica y Biología Molecular, Facultad de Ciencias Médicas, INICSA (CONICET-UNC), Argentina

There is a considerable evidence that fructose rich diet (FRD) causes adverse metabolic perturbations. Recently, we have demonstrated that FRD inhibits the intestinal Ca2+ absorption, which was avoid naringin (NAR). The aim of this study was to know the effect of NAR on bone alterations in FRD rats. Male Wistar rats were used: 1) controls, 2) treated with FRD, 3) FRD treated with 40 mg NAR/kg b.w. for 30 days. Histomorphometric parameters were measured in distal femur and proximal tibiae. Parameters of oxidative stress were measured in bone marrow from femur. Adipocytes and osteocytes were counted in tibiae histological sections. Osteocalcin(OCN) was determined in bone and serum. The data showed that serum OCN levels were reduced by FRD, and NAR treatment returned them to the control values. FRD rats presented reduced bone volume, thickness and intertrabecular spaces in proximal tibiae. All these changes were normalized with NAR. There are no differences in the histomorphometric parameters from distal femur. An increase in the number of adipocytes in tibiae from FRD rats was blocked by NAR. In the proximal tibiae from FRD rats, the number of OCN(+) cells and osteocytes decreased as compared to that of control rats. NAR treatment significantly increased the number of OCN(+) cells and osteocytes. In FRD rats, the GSH content was similar to the control, but NAR treatment increased total GSH in comparison with that from the control and FRD rats. .O2- levels were highly augmented by the FRD and NAR could not normalize them. CAT activity decreased in FRD and NAR administration avoided this response. In summary, NAR protects the bone alterations triggered by FRD. The OCN normalization, the reduction in the number of adipocytes and the increase in the number of osteocytes suggest that NAR is acting as a possible bone protector in FRD rats.

136. (281) **DOPAMINE AND ESTRADIOL REGULATE PITUITARY ACTIVIN AND TGFB1 SYSTEMS IN 11 DAYS-OLD RATS**

Alejandra Abeledo Machado, María Andrea Camilletti, Erika Faraoni, Graciela Díaz-Torga
Instituto de Biología y Medicina Experimental (IBYME - CONICET)

TGFβ1 and activins are known inhibitors of lactotroph function. We previously studied the pituitary expression of several components of these inhibitory systems during postnatal development in rats. We found that 11 days-old females present stronger pituitary TGFβ1 and activin systems compared to males and older females. Only in females pituitary expression of those systems inversely correlates with serum prolactin levels during postnatal development. Since dopamine (DA) and estradiol (E2) are the main regulators of lactotroph function, the aim of the present work was to study the estrogenic and dopaminergic regulation of pituitary TGFβ1 and activin systems at early postnatal age. To this end, 11 days-old Sprague Dawley rats were injected with E2 valerate (0.2mg/kg, sc), cabergoline (DA agonist, 2mg/Kg, ip), sulpiride (DA antagonist, 5mg/kg, ip) or vehicle (castor oil or saline). After three hours, animals were euthanized and pituitary expression of TGFβ1 and activin systems components was evaluated by RTqPCR. Statistical analysis: two-way ANOVA, followed by *post hoc* Tukey test. We found that E2 increased pituitary mRNA expression of most of TGFβ1 and activin systems components evaluated (TGFβ1, TβRII, βA and βB subunits, ActRIIB, ALK4 and FST) in both females and males. On the other hand, sulpiride treatment significantly decreased pituitary TGFβ1, TβRII, βA-subunit and FST expression in both genders; while cabergoline treatment had no effect on TGFβ1 and TβRII pituitary expression but increased expression of βA-subunit and FST. Taken together, the present results indicate a strong positive regulation by E2 and DA on both inhibitory systems of lactotroph function at early postnatal days, and suggest that the hormonal environment at 11 days-old could be determining the gender differences found in the pituitary expression of TGFβ1 and activin systems.

137. (70) **CARDIOMETABOLIC CHANGES IN HYPOGONADIC ADULT FEMALE RATS CAUSE BY MILD HYPERURICEMIA AND EXPOSURE TO A HIGH-FRUCTOSE DIET**

M. Jimena Soutelo, Yanina A. Samaniego, M. Cecilia Fornari, Carlos F. Reyes Toso, Rodrigo M. Bilbao, Osvaldo Juan Ponzo