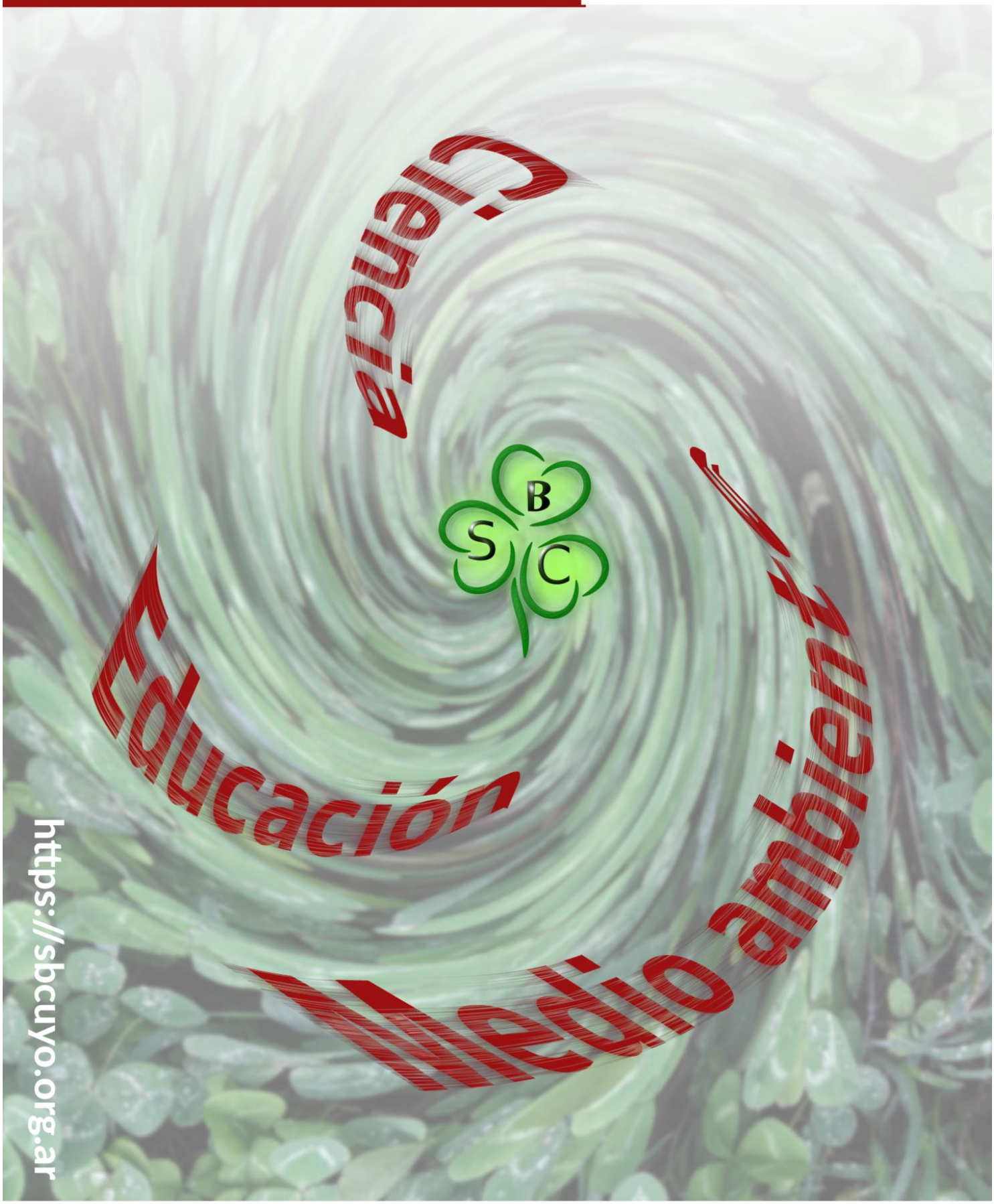
Sociedad de Biología de Cuyo

XXXVII Reunión Científica Anual

5 y 6 dic 2019 - San Luis



Libro de Resúmenes

XXXVII Reunión Científica Anual

Sociedad de Biología de Cuyo

5 y 6 de Diciembre de 2019

Centro Cultural José La Vía

Avenida Lafinur esquina Avenida Illia
San Luis
Argentina

Índice General

COMISIÓN DIRECTIVA (2018-2020)

Presidente
Dr. Walter MANUCHA
Vicepresidente
Dra. María Verónica PÉREZ CHACA
Secretario
Dr. Miguel FORNÉS
Tesorera
Dra. María Eugenia CIMINARI
Vocales Titulares
Dra. Silvina ÁLVAREZ
Dr. Juan CHEDIACK
Dr. Diego GRILLI
Vocales Suplentes
Dra. Claudia CASTRO
Dra. Ethel LARREGLE
Dr. Luis LOPEZ
Revisores de Cuentas
Dra. Lucía FUENTES y Dr. Diego CARGNELUTTI

COMISIÓN ORGANIZADORA

Dra. M. Verónica Pérez Chaca
Dr. Walter Manucha
Dra. M. Eugenia Ciminari
Dra. Nidia Gomez
Dr. Juan Chediack
Lic. Silvana Piguillém
Dra. Silvina Álvarez
Dra. Ethel Larregle
Dra. Lucia Fuentes
Tec. Adriana Soriano
Tec. Gerardo Randazo

COMITÉ CIENTÍFICO

MENDOZA

Dr. Walter MANUCHA
Dr. Carlos GAMARRA LUQUES
Dra. Adriana TELECHEA
Dra. Claudia CASTRO
Dr. Miguel SOSA
Dra. Silvia BELMONTE
Dr. Carlos MASUELLI
Dra. Luciana MAZZEI
Dr. Roberto YUNES
Dra. Patricia CABALLERO
Méd. Vet. Paula GINEVRO
Dr. Fernando SARAVÍ
Dr. Luis LÓPEZ
Dra. Marcela MICHAUT
Dra. María Teresa DAMIANI
Dr. Miguel FORNÉS
Dra. Nora ARENAS
Dr. Eduardo KOCH

SAN LUIS

Dra. M. Verónica PÉREZ CHACA
Dra. María Eugenia CIMINARI
Dra. Nidia N. GOMEZ
Dra. Silvina M. ALVAREZ
Esp. Mónica Laurentina GATICA
Dra. Marta MOGLIA
Dra. Liliana VILLEGAS
Dra. María Esther ESCUDERO
Dra. Lucia FUENTES
Dra. Alicia LAPIERRE
Dr. Juan G. CHEDIACK
Dra. Gladys CIUFFO
Dra. Susana FERRARI
Dra. Hilda PEDRANZANI
Dra. Cristina BARCIA
Dra. Alba VEGA
Dra. Edith PEREZ
Dr. Fabricio CID

SAN JUAN

Dra. Gabriela FERESIN

AUSPICIOS

Universidad Nacional de San Luis

Universidad Nacional de Cuyo

Facultad de Química, Bioquímica y Farmacia - UNSL

Universidad Juan Agustín Maza

Instituto de Medicina y Biología Experimental de Cuyo (IMBECU, CONICET)

Departamento de Asistencia Médico Social Universitario (DAMSU)

Sociedad Argentina de Genética (SAG)

Municipalidad de San Luis

Legislatura de la Provincia de Mendoza

PROGRAMA

Jueves 5 de diciembre

Desde las 8:00 hs	**Acreditación en sección Secretaría**
08:30-13:00	**SESIÓN DE POSTERS I:** La evaluación se realizará entre las 9 y las 11hs, pero los pósters deberán estar expuestos desde las 8:30 hasta las 13 hs. **Áreas:** *Biología General, Celular y Molecular (BM). Biología del Desarrollo y Reproducción (DR). Bioquímica, Fisiología y Neuroquímica (BF). Biotecnología y Genética (BG)*
10:30	**Acto Inaugural, Conferencia**: "Desafíos bioéticos frente a los avances tecnológicos en Biología reproductiva" - Dra. Myriam R. Laconi (IMBECU-CONICET)
11:30-12:00	**Café**
12:00-13:00	**Conferencia:** Infecciones de transmisión sexual: qué hay de nuevo para el control de las infecciones clamidiales- Dra. María Teresa Damiani (UNCuyo- CONICET)
13:00-14:00	**Almuerzo Libre**
14:00-15:30	**Simposio 1: Nuevos horizontes en salud** "Un enfoque molecular de la reproducción femenina y asistida"- Dra. Marcela Alejandra Michaut (IHEM-UNCuyo-CONICET) "Nanotecnología y su impacto en el ámbito de la salud"- Farm. Virna Margarita Martín Giménez (UCC, sede San Juan) "Mitos y realidades sobre cáncer mamario hereditario" -Dra. Laura Vargas Roig (IMBECU- CONICET) "Implementación de las TICs, inteligencia artificial, big data y análisis de imágenes biomédicas en reproducción humana. Hacia una medicina basada en evidencia científica." -Dr. Gerardo De Blas (UNCuyo-CONICET) **Coordina: Dr. Walter Manucha**
15:30-16:00	**Café**
15:30-19:00	**SESIÓN DE POSTERS II:** La evaluación se realizará entre las 16:00 y las 18:00hs, pero los pósters deberán estar expuestos desde las 14:00 hasta las 19:00 hs. **Áreas:** *Clínica Humana, y Odontología (CL). Farmacología y Toxicología (FT). Nutrición y Salud (NS). Veterinaria, Anatomía, Histología y fisiología Animal (VAH)*
19:30	**CÓCTEL DE BIENVENIDA**

Viernes 6 de diciembre

08:30-13:00	**SESIÓN DE POSTERS III:** La evaluación se realizará entre las 9:00 y las 11hs, pero los pósters deberán estar expuestos desde las 8:30 hasta las 13 hs. Áreas: *Educación Y Extensión (EE). Microbiología e Inmunología (MI)*
11:30-11:00	**Café**
11:00-13:00	**Simposio 2: Repensando la Educación Superior** "Irrupción tecnológica… ¿Disrupciones educativas?" - Dra Fernanda Ozollo (UNCuyo) "Búsquedas de estrategias para mejorar la enseñanza/aprendizaje en el aula"- Dr. Jorge Olivares (UNLaPampa) **Coordina: Dr. Juan Chediack**
13:00-14:00	**Almuerzo libre**
14:00-16:00	**Simposio 3: "Ambiente, biodiversidad y salud: los nuevos paradigmas del mundo científico"** "Eco-epidemiología: caso ejemplo leishmaniasis"- Dr. Oscar Daniel Salomón (SAB) "Remoción de metales tóxicos utilizando como adsorbentes biomasa bacteriana inactiva y/o desechos industriales" – Dra. Paola Boeris (SBC) "Efectos de la iluminación ambiental sobre la calidad de vida en diferentes ecorregiones de la provincia de Jujuy" - Dra. Nancy Hernandez de Borsetti (ABT) "Los cambios en el medio ambiente y las enfermedades infecciosas emergentes" Dr. Claudio Pidone (SBR) **Coordina: Dra. Verónica Pérez Chaca**
16:00-16:30	**Café**
16:00-19:00	**SESIÓN DE POSTERS IV:** La evaluación se realizará entre las 16:00 y las 18:00hs, pero los pósters deberán estar expuestos obligatoriamente desde las 14:00 hasta las 19:00 hs. **Áreas:** *Bioquímica, Fisiología, Patología y Producción Vegetal (BV). Ecología, Etología y Biodiversidad (EB)*
17:30 – 18:30	**Conferencia de Cierre y Acto clausura.** Conferencia: "Diseño racional de formulaciones biocompatibles de nuevos antifúngicos para su aplicación en agricultura sustentable"- Dra. Natividad Carolina Herrera Cano (ICYTAC- CONICET)
19:00	**Entrega certificados y premios**

the shortening of the fatting cycle, inferring lower greenhouse gases production (GHG), due to the lower total DM intake of the MEJ. The replacement of the 2.7 Tn of corn diminished the production of 1389.85 Kg CO2 Eq. (equivalent carbon dioxide) of GHG, without even considering the positive costs of using second generation material as the filter residue. It is concluded that filter earth residues can be used as a component of bovine finishing rations and increasing efficiency in more than 20% in the MEJ category; that impact on environmental, social and economic benefit of the beef production process.

125. SEASONAL STUDY OF THE EXPRESSION OF THE S-100 PROTEIN IN PITUITARY PARS NERVOSA OF VISCACHA (*Lagostomus maximus maximus*)

Mariqueo BL[1], Díaz Guevara MC[2], Rosales G[2,3], Filippa V[2,3], Perez E[2], Mohamed F[2]
[1]Becaria EVC-CIN, [2]Área de morfología, Universidad Nacional de San Luis, Facultad de Química, Bioquímica y Farmacia; [3]Universidad Nacional de San Luis, CONICET. betsa.mariqueo@hotmail.com

The pars nervosa (PN) of the neurohypophysis is mainly constituted by pituicytes and other neuroglial cells such as microglial cells, astrocytes and oligodendrocytes, endothelial cells of blood vessels and amylinic axons. The PN pituicytes express the S-100 protein that has a regulatory role within the cell and on different target cells. The aim of this work was to study the seasonal expression of S-100 protein in pituitary PN of adult male viscachas (*Lagostomus maximus maximus*). The animals were captured in their habitat during the most representative months of their annual reproductive cycle. This cycle has three periods: reproductive (RepP), gonadal regression (RegP), and gonadal recovery (RecP). Four pituitary glands of each period were removed and processed for optical microscopy. The S-100 protein was used as markers of pituicytes and their expression was detected by immunohistochemistry. The primary antibody used was the rabbit polyclonal anti-S-100 protein. Immunohistochemical staining was performed using a streptavidin-biotin-peroxidase complex method with the 3, 3'- diaminobenzidine tetrahydrochloride (DAB) as chromogen. A morphometric study was performed and the percentage of immunopositive area for S-100 (% IA-S-100) was measured. The results obtained from these periods were statistically analyzed. Most of the pituicytes presented a cytoplamic immunostaining pattern. However, some of them also exhibited nuclear staining. The nuclei were round, oval and irregular in shape, with varying density of chromatin and an evident nucleolus. Numerous immunostained cytoplasmic processes in contact with blood vessels were observed. The % IA-S-100 varied throughout the annual reproductive cycle. The % IA during the RepP (13.09 ± 1.49) and RegP (9.77 ± 1.56) were significantly lower than in the RecP (25.61 ± 2.36; $P < 0.001$). These results demonstrated that the highest expression of S-100 protein was in the RecP. This period agrees with the increase of seasonal rainfall pattern during spring, so the viscachas have greater water availability in the environment. It is likely that the pituicytes participate in the seasonal regulation of the neurohormonal secretion through the expression of the S-100 protein. This protein is associated with functions such as modulation of enzymatic activity, stimulation of adenylate cyclase, maintenance of cell shape and mobility. However, further research is needed to elucidate the relationship between S-100 expression and the neurohormonal PN secretion of *Lagostomus*.

126. LEVELS OF METALS IN *Caracara plancus* NESTLINGS NEAR AN OIL PRODUCTION PLANT

Ortega NE[1], Bach NC[1], Saggese[2] MD, Quaglia AIE[3], Nelson RW[4], Ellis DH[5], Morrison J[6], Amorós M[7], Gil R[8], Cid FD[1]
[1]IMIBIO-SL, Universidad Nacional de San Luis, CONICET, [2] Western University of Health Sciences (USA), [3] University of Florida (USA), [4]Alberta University (Canadá), [5] Institute for Raptor Studies (USA), [6] Trinity College, Connecticut, [7]Universidad Blas Pascal, [8]INQUISAL, Universidad Nacional de San Luis, CONICET. nadiaortega22@gmail.com; fabricio.cid@gmail.com

In Southern Patagonia, Argentina, one of the main production activities is the oil and gas industry. This type of industry is has been associated to increased heavy metals concentrations in the surrounding environment and biota. Birds are widely used to assess metal pollution in the environment, usually by determining heavy metals in blood, a non-invasive method. The objective of this study was to determine the levels of selected metals in the blood of the Southern Caracara (*Caracara plancus*) nestlings and evaluate the relationship between these levels and the distance between their nests and an oil production plant in Guer Aike Department, Santa Cruz province, Argentina. Blood samples were collected from 26 nestlings, between 3 and 6 weeks old, belonging to 8 Southern Caracaras' nests on November - December 2010 and December 2011. Blood levels of Pb, As, Zn, Se, Ni, Cu, Cr and V were determined using an inductively coupled plasma mass spectrometer (ICP-MS). Relation of blood heavy metal levels and the distance to the oil production plant was evaluated by a linear regression for each metal and date of sampling. Linear correlation of Pearson was performed to assess the relationship between metals blood concentrations. Additionally, a repeated measure analysis of variance (RMANOVA) was performed to compare the blood metals levels of nestlings between sampling sites. Associations were found between the blood levels of As, V and Cr and between Zn, V and Cr. No relationship was found between the distance to the oil production plant and the concentration of heavy metals in blood of *Southern Caracara* nestlings ($p > 0.05$). There was no difference in the concentrations of metals between sites (RMANOVA $p > 0.05$). In conclusion, the results of this study provide evidence that Southern Caracara nestlings are exposed to these metals, although the distance of the nests to the oil plant did not relate with variations in their blood levels. This is the first report of the blood levels of heavy metals in nestlings of *C. plancus* inhabiting Southern Argentine Patagonia and constitutes the baseline that provides a diagnosis of the environmental situation and alerts on the exposure of other species to these potentially toxic compounds.

127. ARE THERE HISTOLOGICAL CHANGES IN THE INTESTINE OF BIRDS IN A STRESS SITUATION?

Padrones MN[1], Filippa VP[1,2], Cid FD[1,3] and Chediack JG[1,3].