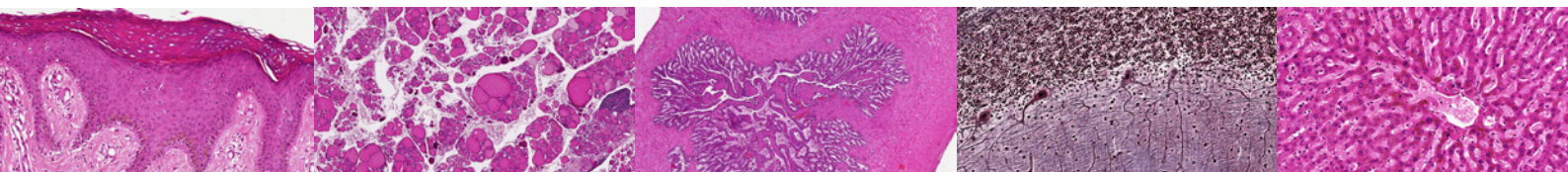




**Congreso**  
**SEHIT2019**  
4-6 septiembre · Murcia

**XX CONGRESO DE LA SOCIEDAD ESPAÑOLA DE HISTOLOGÍA E INGENIERÍA TISULAR**  
**VIII INTERNATIONAL CONGRESS OF HISTOLOGY AND TISSUE ENGINEERING**  
**VI CONGRESO IBEROAMERICANO DE HISTOLOGÍA**





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*(CIBIR, España)*
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*(Universidad de Oviedo, España)*
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*(Universidad Autónoma de Madrid, España)*
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*(Universidad de La Habana, Cuba)*
41. Trejo Iriarte, Cynthia  
*(Universidad Autónoma de México, México)*
42. Zaidan Dagli, María Lucía  
*(Universidad de Sao Paulo, Brasil)*
43. Rodríguez-Martinez, Heriberto  
*(Universidad de Linköping, Suecia)*
44. Zaccone, Giacomo  
*(Universidad de Messina, Italia)*

# PROGRAMA

## MIÉRCOLES DÍA 4 DE SEPTIEMBRE DE 2019

*Ubicación de las sesiones del congreso.*

Facultad de Letras: Hemiciclo (Sala A). Aula Mariano Baquero (Sala C). Aula Jorge Guillén (Sala D). Laboratorio MAV (sala para entrega de presentaciones)

Aulario de la Merced: Planta 0: aula Antonio Soler (Sala B). Planta 1: zona de colocación pósteres.

**8:30 h.**

Apertura de secretaría técnica (Hall Sala A Hemiciclo)

**9-14 h.**

### Cursos pre-Congreso

Los cursos se realizarán de 9 a 14 horas, con los descansos que programen los organizadores; excepto dos cursos que serán de 2 horas cada uno.

#### Aula Lavandera

1. **Introducción al procesamiento y análisis de Imagen con software libre** (teórico-práctico).

Conceptos básicos. Protocolo de trabajo en análisis de imagen. Aplicaciones: cuantificación y reconstrucciones 3D. La ética de las imágenes. Iniciación al programa ImageJ. Resolución de problemas prácticos. *Maria Inmaculada García García, María Teresa Castells Mora*. De **9-14 horas**.

#### Aula 02 (Aulario de la Merced)

2. **Introducción a la Ingeniería Tisular.**

Histología e Ingeniería Tisular: del laboratorio a la clínica (*Antonio Campos Muñoz*). Córnea artificial para el tratamiento de la ceguera corneal (*Miguel Alaminos Mingorance*). Piel artificial para el tratamiento de grandes quemados (*Fernando Campos Sánchez*). Nervio artificial para el tratamiento de lesiones del nervio periférico (*Jesús Chato Astrain*). Paladar artificial para el tratamiento de la fisura palatina (*Ingrid Garzón Bello*). Sesión teórico-práctica: Fabricación de tejidos artificiales en grupos reducidos (*David Sánchez Porras, Óscar D. García García, Ainhoa Irastorza Lorenzo*). Dirigido por *Ingrid Garzón y Fernando Campos*. De **9-14 horas**.

#### Aula Antonio Soler

3. **Estadística para histólogos.**

Métodos estadísticos habituales en los estudios histológicos. *Manuel Canteras Jordana*. De **9-11,30 horas**.

#### Aula Antonio Soler

4. **MALDI Imaging.**

Imagen directa de proteínas, lípidos, metabolitos y drogas en tejidos. *Francesc Márquez* (Bruker Company). De **12-14 horas**.

**15 h.**

*Hall Sala A - Hemiciclo*

**Inicio del Congreso** y recogida de documentación

**16-18 h.**

Simposios:

*Sala A - Hemiciclo*

### Histología Aplicada a la Patología Experimental

Moderador: Vicente Crespo Ferrer. Catedrático de Histología. Universidad de Granada

*Estimación de patrones de distribución nuclear y de heterogeneidad tisular mediante estereología de segundo orden, en próstata ventral de rata en un modelo de castración farmacológica.*

#### **Luis Santamaría Solís.**

Departamento de Anatomía, Histología y Neurociencia. Facultad de Medicina. Universidad Autónoma de Madrid.

*Aspectos morfológicos celulares de la activación del inflammasoma y la muerte por piroptosis.*

**Pablo Pelegrin.** Scientific Deputy Director & Principal Investigator BioMedical Research Institute of Murcia (IMIB-Arrixaca) Hospital Virgen de la Arrixaca de Murcia.

*Inmunofenotipaje multiespectral para el estudio del microambiente tumoral y la respuesta a inmunoterapia.*

**Alfonso Calvo Gonzalez.** Researcher Laboratory 2.03, Solid Tumors and Biomarkers Program Center for Applied Medical research (CIMA). Universidad de Navarra. Pamplona.



*Estudio histopatológico en la anguila europea (Anguilla anguilla L.) retada con Vibrio anguillarum y Tenacibaculum solae.*  
**Francisco Guardiola Abellán.** Departamento de Biología Celular e Histología. Facultad de Biología. Universidad de Murcia.

*Sala B – Antonio Soler*

### Histología y Reproducción Animal

Modera: Francisco José Sáez Crespo. Catedrático de Histología. Universidad del País Vasco

*Papel del cluster de microARNs miR-106b-25 y de su paralogo miR-17-92 en la regulación del ciclo espermatogénico.*

**Francisco J. Barrionuevo Jiménez.** Departamento de Genética. Facultad de Ciencias. Universidad de Granada.

*Transforming growth factor - 1, - 2, and - 3 in the male reproductive tract: findings from the pig animal model.*

**Jordi Roca Aleu.** Departamento de Medicina y Cirugía Animal. Facultad de Veterinaria. Universidad de Murcia.

*Presencia, función y relevancia de acuaporinas en el tracto reproductivo, gametos y embriones.*

**Marc Yeste.** Unidad de Biología Celular, Departamento de Biología, Universidad de Girona.

**19 h.**

Recorrido turístico por la ciudad de Murcia.

Punto de salida, oficina de turismo en plaza del Cardenal Belluga (plaza Catedral)

**20:30 h.**

Recepción en el Ayuntamiento de Murcia

**21 h.**

Cóctel de bienvenida en el Museo Los Molinos del Río

## JUEVES DÍA 5 DE SEPTIEMBRE DE 2019

**8:30 h.**

*Hall Sala A – Hemiciclo*

Apertura de secretaría técnica

**9:30 h.**

*Sala A - Hemiciclo*

Inauguración del Congreso

**10:30 h.**

*Sala A - Hemiciclo*

Conferencia de apertura:

Modera: Vicente Seco Rovira. Dpto. de Biología Celular e Histología. Facultad Medicina. Universidad de Murcia

*Sertoli cell: new perspectives*

**Marco G. Alves.** Department of Microscopy, Laboratory of Cell Biology, Abel Salazar Institute of Biomedical Sciences (ICBAS), Unit for Multidisciplinary Research in Biomedicine, Abel Salazar Institute of Biomedical Sciences (UMIB-ICBAS), University of Porto, Portugal.

**11:30-12 h.**

Café y colocación de pósteres

**12-14 h.**

Comunicaciones orales

*Sala A – Hemiciclo.* Modera: Cynthia Trejo Iriarte. Universidad Nacional Autónoma de México, México / M<sup>a</sup> José Izquierdo Rico. Universidad de Murcia, España

*Sala B – Antonio Soler.* Modera: Mario García Lorenzana. Universidad Autónoma Metropolitana de México, México / María Jiménez Movilla. Universidad de Murcia, España

*Sala C – Mariano Baquero.* Modera: Eva Monleón Moscardó. Universidad de Zaragoza, España / Tomás García-Caballero Parada. Universidad Santiago de Compostela, España

*Sala D – Jorge Guillén.* Modera: José Carmelo Utrilla Alcolea. Universidad de Sevilla, España / José Ángel Martínez Menárguez. Universidad de Murcia, España

**14-15:30 h.**

Comida en Cafetería Aulario de La Merced (Planta 0)

**15:30-17:30 h.**

*Sala A – Hemiciclo*

### Homenaje al Prof. Hernández Calvo

Reconocimiento a su trayectoria profesional por parte de los profesores Díaz-Flores Feo y Ballesta Germán.

Entrega a la familia de la medalla Aureliano Maestre de San Juan.

### Entrega de la medalla Aureliano Maestre de San Juan al Prof. Díaz-Flores Feo

Reconocimiento a su trayectoria profesional por parte del Prof. Gayoso Rodríguez.

Conferencia magistral *Angiogenesis y linfangiogénesis intususceptivas* por parte del Profesor Díaz-Flores Feo.

### Foto de grupo del congreso

**17:30-18 h.**

Café

**18-19 h.**

Comunicaciones orales

*Sala A – Hemiciclo.* Modera: Ignacio Jimena Medina. Universidad de Córdoba, España / Mercedes Salido Peracaula. Universidad de Cádiz, España

*Sala B – Antonio Soler.* Modera: Esther Uría Galicia. Escuela Nacional de Ciencias Biológicas, México / M<sup>a</sup> Dolores Boyano López. Universidad del País Vasco UPV/EHUI

*Sala C – Mariano Baquero.* Modera: Manuel Garrosa García. Universidad de Valladolid, España / Ana M<sup>a</sup> Navarro Incio. Universidad de Oviedo, España

*Sala D – Jorge Guillén.* Modera: M<sup>a</sup> José Gómez Torres. Universidad de Alicante, España / Manuel Avilés Sánchez. Universidad de Murcia, España

**19-20 h.**

Sesión de pósteres presencial y retirada.

**20:30 h.**

Visita guiada a los salones del Real Casino de Murcia.

**21 h.**

Cena del congreso en restaurante Real Casino de Murcia

## VIERNES DÍA 6 DE SEPTIEMBRE DE 2019

**8:30 h.**

*Hall Sala A – Hemiciclo*

Apertura de secretaría técnica

**9-9:30 h.**

Colocación de pósteres

**9:30-11 h.**

Simposios:

*Sala A – Hemiciclo*

### Histología y Envejecimiento

Modera: Inés María Martín Lacave. Catedrática de Histología. Universidad de Sevilla

*El envejecimiento de la retina desde la función a la morfología.*

**Marta Agudo-Barriuso.** Responsable de formación y Coordinador del ÁREA 4. Miembro del Comité Científico Interno. Investigador principal en el grupo: Oftalmología experimental. IMIB- Arrixaca.

*Envejecimiento, alzheimer y apolipoproteína D.*

**Jorge Luis Tolvía Fernández.** Departamento de Morfología y Biología Celular. Facultad de Medicina. Universidad de Oviedo.

*Pez cebra: modelo de envejecimiento y rejuvenecimiento.*

**María Luisa Cayuela Fuentes.** Investigadora principal en el grupo: Cirugía digestiva, endocrina y trasplante de órganos abdominales del IMIB-Arrixaca. Murcia

*Sala B – Antonio Soler*

### Histología en la Medicina Regenerativa e Ingeniería Tisular

Modera: Miguel Alaminos Mingorance. Catedrático de Histología. Universidad de Granada

*Histología de EICH murina y el efecto de las MSC sobre la reacción inflamatoria.*

**David García Bernal.** Unidad de Terapia Celular y Trasplante Hematopoyético. Instituto Murciano de Investigación Biosanitaria (IMIB-Virgen de la Arrixaca). Departamento de Medicina Interna. Universidad de Murcia.

*Tejidos artificiales biomiméticos. Modelos y aplicaciones.*

**Fernando Campos Sánchez.** Departamento de Histología. Facultad de Medicina. Universidad de Granada.

*Membrana amniótica humana: de la investigación básica a las aplicaciones clínicas.*

**Sebastián San Martín.** Centro de Investigaciones Biomédicas, Escuela de Medicina. Universidad de Valparaíso, Chile.

**11-11:30 h.**

Café

**11:30-13 h.**

Simposio:

*Sala A – Hemiciclo***Innovación Docente en la Enseñanza de la Histología**

Modera: Antonio Campos Muñoz. Catedrático de Histología, Universidad de Granada

*Innovación docente y calidad en la educación superior.***Catalina Guerrero Romera.** Departamento de Teoría e Historia de la Educación. Ex-coordinadora de Innovación. Universidad de Murcia.*A flipped classroom model for the teaching of Histology using thematic videos.***Francisco José Sáez Crespo.** Departamento de Biología Celular e Histología. Facultad de Medicina y Enfermería. Universidad del País Vasco UPV/EHU.*Educación superior en México, ¿todavía puede ser paradigma de transformación y renovación?***Germán Isauro Garrido Fariña.** Presidente de la Sociedad Mexicana de Histología. Responsable del Laboratorio de Apoyo a Histología y Biología. FES-Cuautitlán, Universidad Nacional Autónoma de México.**13:00-14:30 h.**

Asamblea de la Sociedad Española de Histología e Ingeniería Tisular

**14:30-16 h.**

Comida en cafetería Aulario de La Merced (planta 0).

**16-18 h.**

Comunicaciones orales

*Sala A – Hemiciclo.* Modera: Riánsares Arriazu Navarro. Universidad San Pablo CEU, España / Concepción Ferrer Cazorla. Universidad de Murcia, España*Sala B – Antonio Soler.* Modera: Natalio García Honduvilla. Universidad de Alcalá, España / Amparo Ruiz Saurí. Universidad de Valencia, España*Sala C – Mariano Baquero.* Modera: Antonia Álvarez Díaz. Universidad del País Vasco UPV/EHU, España / Rosa Noguera Salvá. Universidad de Murcia, España*Sala D – Jorge Guillén.* Modera: Germán Isauro Garrido Fariña. Universidad Autónoma de México, México / Xochitl Guzmán García. Universidad Nacional Autónoma Metropolitana, México**18-18:30 h.**

Café

**18:30-19:30 h.**

Sesión de pósteres presencial y retirada

**19:30-20:30 h.***Sala A - Hemiciclo*

Conferencia de clausura:

Modera: Ester Beltrán Frutos. Dpto. Biología Celular e Histología. Facultad de Ciencias Sociosanitarias. Universidad de Murcia.

*Mecanismos de necrosis programada en las enfermedades renales***Ana Belén Sanz Bartolomé.** Laboratorio de Nefrología, IIS-Fundación Jiménez Díaz-UAM, Madrid**20:30 h.**

Acto de clausura y entrega de premios a las mejores comunicaciones

**MAPA. CAMPUS DE LA MERCED**



# COMUNICACIONES ORALES

## JUEVES 5 / 12-14 h. – SALA A – HEMICICLO

### **5016** BRAF MUTATION IN THYROID PAPILLARY CARCINOMA AND ITS RELATION WITH THE MORPHOLOGICAL CHANGES

Cabrera Galván, J.J.<sup>1,3</sup>; Martínez-Martín, M.S.<sup>1,3</sup>; Araujo-Ruano, E.J.<sup>3</sup>; Galán-García, M.E.<sup>1</sup> and Salido-Ruiz, E.<sup>2</sup>

(1) Servicio de Anatomía Patológica del Complejo Hospitalario Universitario Insular-Materno Infantil de Las Palmas de Gran Canaria. (2) Hospital Universitario de Canarias-Tenerife. (3) Unidad de Anatomía Patológica Departamento de Morfología ULPGC.

### **5695** THE SYNTHETIC CANNABINOID URB447 REDUCES CELL DEATH, WHITE MATTER DEMYELINATION AND REACTIVE ASTROGLIOSIS IN THE NEONATAL RAT BRAIN

Carlioni, S.<sup>1</sup>; Duranti, A.<sup>1</sup>; Pintor-Rial, A.<sup>2</sup>; Pachó, M.<sup>2</sup>; Álvarez, A.<sup>2</sup>; Hilario, E.<sup>2</sup>; Balduini, W.<sup>1</sup>; Alonso-Alconada, D.<sup>2</sup>

(1) Department of Biomolecular Sciences, University of Urbino "Carlo Bo", Urbino, Italy. (2) Department of Cell Biology and Histology, School of Medicine and Nursing, University of the Basque Country (UPV/EHU), Leioa, Bizkaia, Spain.

### **5714** EVALUATION OF THE CHANGES IN THE EXTRACELLULAR MATRIX AFTER MYOCARDIAL INFARCTION BY MORPHOMETRIC ANALYSIS

Ruiz-Sauri A.<sup>1,2</sup>; Rios-Navarro C.<sup>1</sup>; Ortega M.<sup>1</sup>; Gavara J.<sup>1</sup>; Marcos-Garces V.<sup>3</sup>; Chorro F.J.<sup>1,3,4,5</sup>; Bodi V.<sup>1,3,4,5</sup>

(1) Institute of Health Research-INCLIVA. Valencia, Spain. (2) Pathology Department, Faculty of Medicine, University of Valencia. Valencia, Spain. (3) Cardiology Department. Hospital Clínico Universitario. Valencia, Spain. (4) Medicine Department, Faculty of Medicine, University of Valencia. Valencia, Spain. (5) Centro de Investigación Biomédica en Red – Cardiovascular (CIBER-CV). Madrid, Spain.

### **5720** HIGH EXPRESSION OF MAST CELLS AND ANGIOGENESIS THROUGHOUT THE PI3K→AKT→AM SIGNALING PATHWAY IN HUMAN RENAL CELL CARCINOMA

Ruiz-Sauri A.<sup>1,2</sup>; Ríos-Navarro C.<sup>2</sup>; García-Bustos V.<sup>3</sup>; Sales M.A.<sup>4</sup>; Nuñez-Benito E.<sup>1</sup>; Martín de Llano J.J.<sup>1,2</sup>; Mata M.<sup>1,2</sup>; Sancho-Tello M.<sup>1,2</sup>; Carda C.<sup>1,2</sup>; Llombart-Bosch A.<sup>1,2</sup>

(1) Pathology Department, Faculty of Medicine, University of Valencia. Valencia, Spain. (2) Institute of Health Research-INCLIVA. Valencia, Spain. (3) Internal Medicine Service, University Hospital and Polytechnic La Fe. Valencia, Spain. (4) Pathological Anatomy Service, Hospital Clínico Universitario. Valencia, Spain.

### **5757** MICROGLIAL REACTION TO SYNGENIC AND ALLOGENIC INTRAVITREOUS TRANSPLANT OF OLFACTORY ENSHEATHING GLIA

Norte-Muñoz M.<sup>1,2</sup>; Portela-Lomba M.<sup>3</sup>; Sobrado-Calvo P.<sup>1,2</sup>; Simón D.<sup>4</sup>; Di Pierdomenico J.<sup>1,2</sup>; Sierra-Isturiz J.<sup>3</sup>; Vidal-Sanz M.<sup>1,2</sup>; Moreno-Flores M.T.<sup>4</sup>; Agudo-Barriuso M.<sup>1,2</sup>

(1) Departamento de Oftalmología, Facultad de Medicina, Universidad de Murcia, Murcia, Spain. (2) Oftalmología Experimental, Instituto Murciano de Investigación Biosanitaria Virgen de La Arrixaca (IMIB-Arrixaca), Murcia, Spain. (3) Facultad de Ciencias Experimentales, Universidad Francisco de Vitoria, Madrid, Spain. (4) Departamento de Anatomía, Histología y Neurociencia, Facultad de Medicina, Universidad Autónoma de Madrid, Madrid, Spain.

### **6178** COMPARATIVE ANALYSIS OF THE NEURONAL DAMAGE AND NITROSATIVE STRESS IN THE CEREBELLUM AND BRAIN STEM OF RATS SUBMITTED TO GLOBAL ISCHEMIA BY CARDIAC ARREST

Hernández R.; Blanco S.; Peinado M.A.

Department of Experimental Biology. University of Jaén.

## JUEVES 5 / 12-14 h. – SALA B – ANTONIO SOLER

### **5742** SUCCESSFUL OUTCOME OF THE APPLICATION OF AMNIOTIC MEMBRANE TO DIFFICULT WOUNDS. WHAT IS IT THE MOLECULAR CODE BEHIND ITS EFFECT?

Bernabé-García A.<sup>1</sup>; Liarte, S.D.<sup>1</sup>; Rodríguez-Valiente, M.<sup>1,2</sup>; Moraleda, J.M.<sup>3</sup>; Castellanos, G.<sup>2</sup> y Nicolás, F.J.<sup>1</sup>

(1) Regeneration, Molecular Oncology and TGFβ. IMIB-Arrixaca, Murcia, Spain. (2) Chronic wounds and diabetic foot ulcer unit, Hospital Clínico Universitario Virgen de la Arrixaca, Murcia, Spain. (3) Hematology, hematopoietic transplantation and cellular therapy, University of Murcia, Murcia, Spain.

### **5781 TISSUE-LIKE BIOMIMETIC SCLERAL SUBSTITUTES AS MEDICAL PRODUCTS**

Campos F.<sup>1</sup>; Carriel V.<sup>1</sup>; Vizcaíno-López G.<sup>2</sup>; González-Gallardo C.<sup>3</sup>; Martín-Piedra M.A.<sup>1</sup>; Crespo P.V.<sup>1</sup>; García J.M.<sup>1</sup>; Sánchez-Montesinos I.<sup>4</sup>

(1) Tissue Engineering Group, Department of Histology, University of Granada and Instituto de Investigación Biosanitaria ibs.GRANADA, Spain. (2) Department of Histology, Autonomous University of Santo Domingo, Dominican Republic. (3) Division of Ophthalmology, University Hospital San Cecilio, Granada, Spain. (4) Department of Human Anatomy and Embryology, University of Granada, Spain.

### **5785 OSTEODIFFERENTIATION OF HUMAN DENTAL PULP PLURIPOTENTIAL CELLS**

Salazar A.<sup>1</sup>; Avelar F.J.<sup>2</sup>; Luna F.<sup>3</sup>; Moreno A.<sup>1</sup>; Guerrero-Barrera A.L.<sup>1</sup>

(1) Laboratory of Cellular and Tissue Biology, Department of Morphology. Autonomous University of Aguascalientes. Aguascalientes, Mexico. (2) Environmental Sciences Laboratory. Department of Physiology and Pharmacology. Autonomous University of Aguascalientes. Aguascalientes, Mexico. (3) Area of Health Sciences. Autonomous University of Zacatecas. Zacatecas, Mexico.

### **5796 FIBROSIS INCREASES MYOD EXPRESSION IN REGENERATING MUSCLE FIBERS**

Leiva-Cepas, Fernando<sup>1,2,3\*</sup>; Ruz-Caracuel, Ignacio<sup>1,2\*\*</sup>; Gil-Belmonte, María Jesús<sup>1</sup>; López-Espejo, María Eugenia<sup>1</sup>; Osuna-Soto, Julio<sup>1</sup>; Jimena, Ignacio<sup>1,2,3</sup>; Peña, José<sup>1,2,3</sup>

(1) Research Group in Muscle Regeneration, University of Córdoba, Spain. (2) Department Morphological Sciences, Section of Histology, Faculty of Medicine and Nursing. University of Córdoba. Spain. (3) Maimónides Institute for Biomedical Research IMIBIC, Reina Sofia University Hospital, University of Cordoba. Spain.

### **5824 IDENTIFICATION OF NOVEL AGAROSE TYPES AS TISSUE ENGINEERING SCAFFOLDS WITH IMPROVED BIOCOMPATIBILITY**

Irastorza-Lorenzo A.<sup>1</sup>; Martín-Piedra M.A.<sup>1</sup>; de Frutos M.J.<sup>2</sup>; Esteban E.<sup>2</sup>; Fernández J.<sup>2</sup>; Janer A.<sup>2</sup>; Campos A.<sup>1</sup>; Alaminos M.<sup>1</sup>

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### **5861 A 3D IN VITRO NEUROBLASTOMA MODEL REVEAL STIFFNESS-DEPENDENT VITRONECTIN EXPRESSION**

Monferrer E.<sup>1</sup>; Martí-Vañó S.<sup>1,2</sup>; Carretero A.<sup>1</sup>; García-Lizarriar A.<sup>3</sup>; Burgos-Panadero R.<sup>1,2</sup>; Navarro S.<sup>1,2</sup>; Samitier J.<sup>3,4</sup>; Noguera R.<sup>1,2</sup>

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### **5873 MICROT�CNOLOGIES FOR CELL TRANSFECTION WITH CONTROLLED CELL-CELL CONTACT**

Enrique Azuaje Hualde<sup>1,2</sup>; Melania Rosique<sup>2,3</sup>; Alba Calatayud-Sánchez<sup>1,4</sup>; Edilberto Ojeda<sup>1,4</sup>; Fernando Benito-Lopez<sup>4</sup>; Marian Martínez de Pancorbo<sup>2</sup> and Lourdes Basabe-Desmots<sup>1,5\*</sup>

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### **5932 HETEROGENEITY OF MESENCHYMAL CELLS IN DIVERSE ZONES OF HUMAN AMNIOTIC MEMBRANE**

Cortes S.<sup>2</sup>; Beltrán-Frutos E.<sup>1</sup>; Martínez-Hernández J.<sup>1</sup>; Seco-Rovira V.<sup>1</sup>; Serrano-Sánchez M.<sup>1</sup>; Delgado J.L.<sup>2</sup>; Ferrer C.<sup>1</sup>; Pastor L. M.<sup>1</sup>

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## **JUEVES 5 / 12-14 h. – SALA C – MARIANO BAQUERO**

### **5701 IDENTIFICATION OF PROPER SPAM1 DISTRIBUTION IN SELECTED HUMAN SPERM BY HYALURONIC ACID TEST**

Sáez-Espinosa, P.<sup>1</sup>; Manzano-Santiago, P.<sup>1</sup>; Huerta-Retamal, N.<sup>1</sup>; Robles-Gómez, L.<sup>1</sup>; Avilés, M.<sup>2</sup>; Romero, A.<sup>1</sup>; Gómez-Torres M.J.<sup>1,3</sup>

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**5722 FIELD EMISSION SCANNING ELECTRON MICROSCOPY (FE-SEM) TECHNIQUE APPLIED TO ANALYZE D-MANNOSE DISTRIBUTION IN HUMAN SPERM**

Robles-Gómez, L.<sup>1</sup>; Padilla-Cámara, E.<sup>1</sup>; Sáez-Espinosa, P.<sup>1</sup>; Huerta-Retamal, N.<sup>1</sup>; Avilés-Sánchez, M.<sup>2</sup>; Romero, A.<sup>1</sup>; Gómez-Torres, M.J.<sup>1,3</sup>

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**5835 OBJECTIVE DIAGNOSIS OF THYROID CARCINOMA USING SECOND HARMONIC MICROSCOPY IMAGES**

Bueno J.M.<sup>1</sup>; Hristu R.<sup>2</sup>; Párraga D.<sup>1</sup>; Stanciu S.G.<sup>2</sup> and Stanciu G.A.<sup>2</sup>

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**5854 HISTOLOGICAL CONSEQUENCES ON PLACENTAL CHAMBER IN WOMEN WITH VENOUS INSUFFICIENCY IN LOWER LIMBS**

Ortega M.A.<sup>1</sup>; Romero B.<sup>1</sup>; Bravo C.<sup>2,4</sup>; Sainz F.<sup>3</sup>; Asúnsolo Á.<sup>2</sup>; Coca S.<sup>1</sup>; Martínez-Vivero C.<sup>1</sup>; Álvarez-Rocha M.J.<sup>1</sup>; Sanz M.A.<sup>1,5</sup>; De León-Luis J.<sup>6</sup>; Álvarez-Mon M.<sup>1,7</sup>; Buján J.<sup>1</sup>; García-Honduvilla N.<sup>1</sup>

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**5856 VENOUS REFLUX INDUCES A INFLAMMATORY STATE MODULATED BY PI3K/AKT/MTOR PATHWAY**

Ortega M.A.<sup>1</sup>; Romero B.<sup>1</sup>; Asúnsolo Á.<sup>2</sup>; Sainz F.<sup>3</sup>; Álvarez-Rocha M.J.<sup>1</sup>; Coca S.<sup>1</sup>; Álvarez-Mon M.<sup>1,4</sup>; Buján J.<sup>1</sup>; García-Honduvilla N.<sup>1</sup>

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**5867 DIFFERENTIAL DISTRIBUTION OF PROTEOGLYCANS AND OTHER EXTRACELLULAR MATRIX COMPONENTS IN THE STROMA OF THE ZONES OF NORMAL HUMAN PROSTATES FROM YOUNG ADULTS**

Filipe G.R. Monteiro; Raquel L.R. Beltré; Carlos A. Mandarim-de-Lacerda; Luiz E.M. Cardoso\*

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**6176 IMPAIRED ACTIVITY OF ECTO-NUCLEOTIDASES IN HUMAN ENDOMETRIAL PATHOLOGIES**

Mireia Martín-Satué<sup>1,2</sup>; Aitor Rodríguez-Martínez<sup>1,2</sup>; Carla Trapero<sup>1,2</sup>; August Vidal<sup>1,2,3</sup>; Inmaculada Gómez de Aranda<sup>1</sup>; M<sup>a</sup> Eulalia Fernández-Montolí<sup>2,4</sup>; Josep Maria Piulats<sup>2</sup>; Buenaventura Coroleu<sup>5</sup>; Pere Barri<sup>5</sup>; Francesc Tresserra<sup>5</sup>; Jordi Ponce<sup>2,4</sup>; Xavier Matias-Guiu<sup>2,3</sup>

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**JUEVES 5 / 12-14 h. – SALA D – JORGE GUILLEN**

**5672 HISTOLOGICAL CHARACTERIZATION OF THE GAMETOGENIC STAGES OF MELONGENA MELONGENA (LINNAEUS, 1758)**

Uría Galicia E.A., Espinosa Almanza B.

Instituto Politécnico Nacional, Escuela Nacional de Ciencias Biológicas, Departamento de Morfología, Laboratorio de Histología Animal.

**5846 HISTOLOGICAL DESCRIPTION OF COMPOSITE EYE AND ENCEPHALON, OF ROMALEIDAE; BRUNNER VON WATTENWYL, 1893 (INSECTA: ORTHOPTERA)**Santa-Molina, M.V.<sup>1</sup>; Valenzuela Parra, V.<sup>1</sup>; Castro Suárez, D.C.<sup>1</sup>; Moreno, C.H.<sup>1</sup>

(1) Laboratorio de Neurociencias- Universidad Distrital Francisco José de Caldas, Bogotá-Colombia.

**5868 CHARACTERIZATION OF THE SEA ANEMONE BUNODOSOMA SP. CNIDOME, OF TECOLUTLA, VERACRUZ, MEXICO**Cordero-Ramos D.I.<sup>1</sup>; Márquez-Ramos J.A.<sup>1</sup>; Valdez-Peralta H.I.<sup>1</sup>; Matadamas-Guzmán M.F.<sup>1</sup>; Hernández-Calderas I.<sup>1</sup>; Guerrero-Legarreta I.<sup>2</sup>; Segoviano-Ramírez J.C.<sup>3</sup>; Díaz-Larrea J.<sup>4</sup>; y Guzmán-García X.<sup>1</sup>

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**5869 ANALYSIS OF THE HISTOPATHOLOGICAL INDEX IN THE DIGESTIVE GLAND OF THE CLAM POLYMESODA CAROLINIANA FROM TECOLUTLA, VERACRUZ, MEXICO**Jerónimo-Juárez J.R.<sup>1</sup>; Hernández-Calderas I.<sup>1</sup>; Segoviano-Ramírez J.C.<sup>2</sup>; y Guzmán-García X.<sup>1</sup>

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**6200 EFFECT OF DIETARY ADDITION OF THE PROBIOTIC BACILLUS PUMMILUS ON THE GUT AND LIVER OF SPARUS AURATA**Albaladejo-Riad, N.<sup>1</sup>; Jliidi, M.<sup>2</sup>; Mamdouh Ben Ali, M.<sup>2</sup> & Esteban, M.A.<sup>1\*</sup>

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**JUEVES 5 / 18-17 h. – SALA A – HEMICICLO****5882 VITRONECTIN AND ITS RECEPTORS: HUMAN NEUROBLASTOMA 2D IN VITRO CHARACTERIZATION**Burgos-Panadero R.<sup>1,2</sup>; Monferrer E.<sup>1</sup>; Noguera Salvá I.<sup>3</sup>; Navarro S.<sup>1,2</sup>; Noguera R.<sup>1,2</sup>

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**5890 EFFECT OF SEXUAL BEHAVIOR ON THE HISTOLOGICAL CHARACTERISTICS OF MAJOR PELVIC GANGLION AND DENERVATED PROSTATE**Sánchez-Zavaleta V.<sup>1</sup>; Mateos-Moreno A.<sup>1</sup>; Herrera-Covarrubias D.<sup>2</sup>; Aranda-Abreu G.E.<sup>2</sup>; Manzo-Denes J.<sup>2</sup>; Hernández-Aguilar M.E.<sup>2</sup>

(1) Doctorado en Investigaciones Cerebrales, Universidad Veracruzana. (2) Centro de Investigaciones Cerebrales, Universidad Veracruzana.

**5746 RABBIT PEYER'S PATCHES MEMBRANOUS CELLS (M CELLS) SUBCUTANEOUSLY CHALLENGED WITH OVOALBUMIN**Roma, S.M.<sup>1,2</sup>; Pérez, F.A.<sup>1</sup> y D'Ottavio A.E.<sup>2</sup>

(1) Cátedra de Histología y Embriología. Facultad de Ciencias Médicas y (2) Consejo de Investigaciones, Universidad Nacional de Rosario. República Argentina.

**JUEVES 5 / 18-17 h. – SALA B – ANTONIO SOLER****5895 EVALUATION OF DIGITAL STEREOLOGY METHODS FOR ESTIMATING THE BATCH FECUNDITY OF THE PACIFIC SARDINE (SARDINOPS SAGAX) ON THE WEST COAST OF BAJA CALIFORNIA SUR, MEXICO**Torres-Villegas J.R.<sup>1</sup>; Ochoa-Báez R.I.<sup>1,2</sup>; Valdez-Montiel U.F.<sup>1</sup>

(1) Centro Interdisciplinario de Ciencias Marinas (CICIMAR-IPN). Instituto Politécnico Nacional (IPN) Av. IPN s/n, Playa Palo de Santa Rita, 23096 La Paz, BCS, México. (2) Becariade la Comisión de Operación y Fomento de las Actividades Académicas del IPN

**5896 OOGENESIS AND SPAWNING IN SARDINOPS SAGAX, B.C.S., MEXICO, AND ENGRAULIS ENCRASICOLUS, MAR MEDITERRANEO**

Ochoa-Báez R.I.<sup>1,2</sup> and Torres-Villegas J.R.<sup>1</sup>

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**5897 HISTOLOGICAL COMPARISON OF THE REPRODUCTIVE SYSTEM BETWEEN OVIPAROUS AND VIVIPAROUS SPECIES OF ELASMOBRANCHS DISTRIBUTED IN THE MEXICAN COASTS**

Soto-López K.<sup>1</sup>; Ochoa-Báez R.I.<sup>1</sup>; Galván-Magaña F.<sup>1</sup>

(1) Centro Interdisciplinario de Ciencias Marinas (CICIMAR-IPN). Instituto Politécnico Nacional

**JUEVES 5 / 18-17h. – SALA C – MARIANO BAQUERO**

**5690 HETEROGENEITY OF WT1 IMMUNOEXPRESSION IN PERICARDIAL TISSUES**

Andrés-Delgado, L.; Santamaría, L.

Departamento de Anatomía, Histología y Neurociencia, Facultad de Medicina, Universidad Autónoma de Madrid, Spain

**5784 HIGH-RESOLUTION MICROSCOPY SHOWS A CONCENTRATION OF BETA2-ADRENERGIC RECEPTORS IN THE TERMINAL PIECE OF THE HUMAN SPERM FLAGELLUM**

Girela, J.L.<sup>1,2</sup>; Francou, M.<sup>1,2</sup>; De Juan, A.<sup>4</sup>; De Juan, J.<sup>2,3</sup>

(1) Department of Biotechnology, Faculty of Sciences.

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(3) IUIEG, University of Alicante, Spain.

(4) University Hospital, San Juan, Alicante, Spain.

**5874 TAPHONOMIC AND PALEOHISTOLOGIC ANALYSIS IN HUMAN BONE REMAINS FROM THE CACARAMOA ARCHAEOLOGICAL SITE, CARIBBEAN REGION OF COLOMBIA**

Ramos E.<sup>1</sup>; Ragua L.<sup>1</sup>; Rodríguez F.<sup>1</sup>

(1) Departamento de Antropología, Universidad de los Andes. (2) Laboratorio de ADN Antiguo, Universidad de los Andes.

**5902 BONE DIAGENESIS AND ANCIENT DNA PRESERVATION: A MICROSCOPIC EVALUATION FROM ARCHAEOLOGICAL SAMPLES FROM SABANA DE BOGOTA (COLOMBIA)**

Rodríguez F.<sup>1,2,3</sup>; Maldonado W.<sup>3</sup>; Rojas C.<sup>3</sup>

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**JUEVES 5 / 18-17 h. – SALA D – JORGE GUILLEN**

**5738 EFFECT OF 3-DAYS MAGNETIC FIELD EXPOSITION ON PELLET CULTURED HUMAN CHONDROCYTES**

Salvador-Clavell R.<sup>1</sup>; Martín de Llano J.J.<sup>1</sup>; Mata M.<sup>1</sup>; Milián L.<sup>1</sup>; Sancho-Tello M.<sup>1</sup>; Carda C.<sup>1,2</sup>

(1) Department of Pathology and INCLIVA, University of Valencia, Valencia, Spain. (2) CIBER-BBN, Instituto de Salud Carlos III, Spain.

**5761 RETINAL RESPONSE TO INTRAVITREAL OR SUBRETINAL TRANSPLANT OF MONONUCLEAR BONE MARROW STEM CELLS INTO TWO ANIMALS MODELS OF PHOTORECEPTOR HEREDITARY DEGENERATION**

Di Pierdomenico, J.<sup>1</sup>; Rodríguez González-Herrero, M.E.<sup>2</sup>; García-Ayuso, D.<sup>1</sup>; Agudo-Barriuso, M.<sup>1</sup>; Manuel Vidal-Sanz, M.<sup>1</sup>; Villegas Pérez, M.P.<sup>2</sup>

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**5816 EVALUATION OF CHEMICAL CROSSLINKING ON DECELLULARIZED PERIPHERAL NERVES**

García-García O.D.<sup>1</sup>; Campos F.<sup>1</sup>; El Soury M.<sup>1,2</sup>; Chato-Astrain J.<sup>1</sup>; Aguilar-Bohórquez E.<sup>3</sup>; Llinares-Monllor C.<sup>1</sup>; Campos A.<sup>1</sup>; Carriel V.<sup>1</sup>

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**5820 GENERATION AND IN VITRO CHARACTERIZATION OF ELASTIC CARTILAGE-DERIVED CHONDROCYTE MICROTISSUES**

Sánchez-Porras D.<sup>1</sup>; Durand-Herrera D.<sup>1</sup>; García-García O.D.<sup>1</sup>; Rodríguez M.A.<sup>1,2</sup>; Ortiz-Arrabal O.<sup>1</sup>; Munuera-Cabeza M.<sup>1</sup>; Crespo P.V.<sup>1</sup>; Carriel V.<sup>1</sup>

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# COMUNICACIONES ORALES

## VIERNES 6 / 16-18 h. – SALA A – HEMICICLO

### **5914** STUDENT'S EXPERIENCE USING A GAME-BASED RESPONSE SYSTEM (KAHOOT) IN HISTOLOGY

García-Caballero L.<sup>1</sup>; Caneiro J.<sup>1,2</sup>; Gándara M.<sup>3</sup>; Gallego R.<sup>1</sup>

(1) Área de Histología, Departamento de Ciencias Morfológicas. Facultad de Medicina y Odontología de la Universidad de Santiago de Compostela. (2) Servicio de Anatomía Patológica. Complejo Hospitalario Universitario de Santiago. (3) Servicio de Anatomía Patológica. Complejo Hospitalario Universitario de Vigo.

### **4676** USE OF THE VIRTUAL MICROSCOPE AS AN ACTIVE TOOL FOR AUTONOMOUS LEARNING

Sáez F.J.; Gómez-Santos L. and Badiola I.

Department of Cell Biology and Histology, School of Medicine and Nursing, University of the Basque Country UPV/EHU, B° Sarriena s/n, 48940 Leioa (Vizcaya), Spain.

### **5795** THAT OBSCURE OBJECT OF HISTOLOGY IMAGES: DO THEY HAVE SUBLIMINAL INFORMATION? A GRAPH-BASED AND SURVEY STUDY

De Juan, Joaquín<sup>1,2</sup>; Pérez-Cañaveras, Rosa María<sup>3</sup>; Girela López, José Luis<sup>1,4</sup>; De Juan Pérez, Alba<sup>5</sup>; Peña-Amaro, José<sup>6</sup>

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### **5859** FORMS IN NATURE APPLIED TO THE CYTOLOGICAL AND HISTOLOGICAL TEACHING-LEARNING PROCESS

Pérez, F.A.<sup>1</sup>; D'Ottavio A.E.<sup>2</sup> y Roma, S.M.<sup>1,2</sup>

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### **5912** "SKETCHING" LEARNING TO THINK THROUGH HISTOLOGY

Valencia Villa G.<sup>1,4</sup>, Padrón Posteraro R.<sup>1,3,4</sup>, De la Hoz Herazo H.<sup>1,2</sup>, Herrera Bedoya M.J.<sup>1,2,4</sup>

(1) Universidad del Norte de Barranquilla, Colombia. (2) Hospital de la Universidad del Norte. (3) CEDU (Centro de Excelencia Docente de la Universidad del Norte). (4) ASCOM (Asociación colombiana de Morfología).

## VIERNES 6 / 16-18 h. – SALA B – ANTONIO SOLER

### **5748** TNFR1 ANTAGONISM DELAYS AXOTOMY-INDUCED RETINAL GANGLION CELL DEATH

Lucas-Ruiz, F.; Galindo-Romero, C.; Salinas-Navarro, M.; González-Riquelme, MJ.; Vidal-Sanz, M.; Agudo-Barriuso, M.

Experimental Ophthalmology, IMIB-Arrixaca, University of Murcia, Murcia, Spain

### **5764** METHYLENE BLUE PREVENTS RETINAL DAMAGE CAUSED BY PERINATAL ASPHYXIA IN THE RAT

Manuel Rey-Funes<sup>1,†</sup>; Juan Carlos Fernández<sup>1,2,†</sup>; Rafael Peláez<sup>3,†</sup>; Manuel Soliño<sup>1</sup>; Daniela S. Contartese<sup>1</sup>; Verónica B. Dorfman<sup>4</sup>; Juan José López-Costa<sup>1</sup>; Ignacio M. Larrayoz<sup>3,¶</sup>; César F. Loidl<sup>1,¶</sup>; Alfredo Martínez<sup>3¶</sup>

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**5769 HYPOTHERMIA APPLIED DURING OR AFTER PERINATAL ASPHYXIA PREVENTS RETINAL DAMAGE IN RATS**

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**5772 TOPOGRAPHICAL DISTRIBUTION OF RETINAL CONE-PHOTORECEPTORS IN THE YELLOW-LEGGED GULL, LARUS MICHAHELLIS (NAUMANN, 1840)**

Victory Fiol, N.; García Irlles, M.; Navarro-Sempere, A.; Segovia Huertas, Y.

Department of Biotechnology, University of Alicante

**5773 RETINAL SPECIALIZATIONS IN THE RETINA OF YELLOW-LEGGED GULL, LARUS MICHAHELLIS (NAUMANN, 1840): CENTRAL AREA AND FOVEAE**

Victory Fiol, N.; Segovia Huertas, Y.; Navarro-Sempere, A.; García Irlles, M.

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**5853 GLIAL RESPONSE IN AN ANIMAL MODEL OF RETINAL DEGENERATION INDUCED BY TAURINE DEPLETION AND/OR LIGHT-EXPOSURE**

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**5885 NEW TECHNIQUE TO STUDY THE FUNCTIONAL INTEGRITY OF THE RETINAL PIGMENT EPITHELIUM IN RODENTS**

Valiente-Soriano F.J.; Salinas-Navarro M.; Di Pierdomenico J.; García-Ayuso D.; Villegas-Pérez M.P.; Vidal-Sanz M.; Agudo-Barriuso M.

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**VIERNES 6 / 16-18 h. – SALA C – MARIANO BAQUERO****5758 COURSE OF MICROGLIAL ACTIVATION AFTER OPTIC NERVE CRUSH IN THE INJURED AND CONTRALATERAL UN-INJURED RETINAS**

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**5765 AMNIOTIC MEMBRANE FOR THE TREATMENT OF DIABETIC FOOT ULCERS**

Rodríguez Valiente M.<sup>1</sup>, García Hernández A.M.<sup>2</sup>, Blanquer M.<sup>2</sup>, Almansa Saura S.<sup>1</sup>, Bernabé García, A.<sup>3</sup>, Liarte Lastra, S.D.<sup>3</sup>, Algueró M.C.<sup>2</sup>, Fuente Mora C.<sup>4</sup>, Alcaraz P.J.<sup>1</sup>, Moraleda J.M.<sup>2</sup>, Castellanos Escrig G.<sup>1</sup>, and Nicolás Villaescusa F.J.<sup>3</sup>

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**5799 RECONSTRUCTION OF MUSCLE VOLUMETRIC LOSS: HISTOLOGICAL AND ECOGRAPHIC ANALYSIS**

Leiva-Cepas, Fernando<sup>1,2,3\*</sup>; Benito-Ysamat, Alberto<sup>4</sup>; Ruz-Caracuel, Ignacio<sup>1,2\*\*</sup>; Gil-Belmonte, María Jesús<sup>1</sup>; Jimena, Ignacio<sup>1,2,3</sup>; Agüera-Vega, Antonio<sup>1,2</sup>; Villalba-Montoro, Rafael<sup>5</sup>; Peña-Amaro, José<sup>1,2,3</sup>

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**5810 GENERATION OF NOVEL SUBSTITUTES OF THE HUMAN ORAL MUCOSA WITH IMPROVED IN VIVO ANGIOGENIC POTENTIAL**

Blanco-Elices C.<sup>1</sup>; Morales-Álvarez C.<sup>1</sup>; Chato-Astrain J.<sup>1</sup>; Martín-Piedra M.A.<sup>1</sup>; Oruezabal R.I.<sup>2</sup>; Sánchez-Quevedo M.C.<sup>1</sup>; Fernández-Valadés R.<sup>1,3</sup>; Garzón I.<sup>1</sup>

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**5812 HISTOLOGICAL QUALITY CONTROL OF HUMAN BIOENGINEERED SKIN USED FOR THE TREATMENT OF SEVERELY-BURNT PATIENTS**

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**6179 STUDY OF THE ADNEXAL SKIN UNIT ON THICK SECTIONS**

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**VIERNES 6 / 16-18 h. – SALA D – JORGE GUILLEN**

**5692 HISTOLOGICAL FEATURES OF THE WASTING DISEASE AFFECTING COMMERCIAL EXPLOITATIONS OF PLEUROTUS OSTREATUS. FIRST STEPS TOWARDS THE IDENTIFICATION AND CHARACTERIZATION OF THE PATHOGEN**

Vilariño M.<sup>1,2</sup>; Tello-Martín M.<sup>2,3</sup>; Pérez M.<sup>2,3</sup>; Martínez A.<sup>1,2</sup>

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**5700 ABOUT HUMAN EMBRYONIC HEMATOPOIESIS: A MORPHOLOGICAL APPROACH**

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**5717 HISTOLOGICAL AND MORPHOMETRIC STUDY OF THE COMPONENTS OF THE SINUS AND ATRIOVENTRICULAR NODES IN HORSES AND DOGS**

Gómez-Torres F.A.<sup>1,2</sup>; Ballesteros-Acuña L.E.<sup>2</sup>; Ruíz-Sauri A.<sup>3,4</sup>

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**5718 MORPHOMETRIC AND HISTOLOGICAL AND MORPHOMETRIC STRUCTURE OF THE SINUS AND ATRIOVENTRICULAR NODES IN HUMANS AND PIGS**

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**5721 REDISTRIBUTION OF ARYLSULFATASE A ON THE HUMAN SPERM MEMBRANE AFTER CAPACITATION IN VITRO**

Huerta-Retamal, N.<sup>1</sup>; Sáez-Espinosa, P.<sup>1</sup>; Robles-Gómez, L.<sup>1</sup>; Romero, A.<sup>1</sup>; Avilés, M.<sup>2</sup>; Gómez-Torres, M.J.<sup>1,3</sup>

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**5934** **PROLIFERATION, APOPTOSIS AND NUMBER OF SERTOLI CELL IN PHOTOINHIBITED SYRIAN HAMSTER TESTES (MESOCRICETUS AURATUS) OWING TO A SHORT PHOTOPERIOD**

Martínez-Hernández, J.; Seco-Rovira, V.; Beltrán-Frutos, E.; Serrano-Sánchez, María Isabel.; Ferrer C. and Pastor L.M.

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**5921** **QUALITATIVE AND QUANTITATIVE HISTOLOGICAL ANALYSIS OF THE EFFECT OF MELATONIN ADMINISTRATION IN ISCHEMIA/REPERFUSION GASTRIC MODEL IN RATS**

Peña-Mercado, Eduardo<sup>1</sup>; García-Lorenzana, Mario<sup>2\*</sup>; Beltran, Nohra E.<sup>3</sup>

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**6177** **CYTOSKELETON CHANGES ARE CRUCIAL IN THE SELECTIVE CYTOTOXIC EFFECT OF CT4, A FLAVONOID FROM CHROMOLAENA TACOTANA**

Castellanos-Sánchez C.<sup>1,2</sup>; Ovelleiro D.<sup>1</sup>; Hernández R.<sup>1</sup>; Peinado M.A.<sup>1</sup> and Siles E<sup>1</sup>

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# PÓSTER

## JUEVES 5 / 19-20 h. SESIÓN DE PÓSTER PRESENCIAL

Modera: Joaquín de Juan Herrero. Universidad de Alicante, España / Alfredo Martínez Ramírez. Centro de Investigación Biomédica de la Rioja (CIBIR), España / José Peña Amaro. Universidad de Córdoba, España / Ana Alonso Varona. Universidad del País Vasco UPV/EHU, España

## BIOLOGÍA TISULAR

### **5095** CHANGES IN THE TISSUE CONCENTRATION OF LIPOFUSCIN IN THE MUSCULATURE OF FISH SPECIES *ASTYANAX ALTIPARANAE* AFTER ACUTE EXPOSURE TO LAS ((LINEAR ALKYL BENZENE SULFONATE)

Ciamarro, C.M.<sup>1</sup>; Pitol, D.L.<sup>2</sup>; Pereira, B.F.<sup>3</sup>; Caetano, F.H.<sup>1</sup>

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### **5697** HISTOLOGICAL TISSUE DISTRIBUTION OF DLK1 AND DLK2 DURING E16.5 MOUSE EMBRYO ORGANS: SIMILARITIES AND DIFFERENCES

García-Gallastegi P.<sup>1</sup>; Crende O.<sup>1</sup>; Ruiz-García A.<sup>2</sup>; Ibarretxe G.<sup>1</sup>; Rivero-Hinojosa S.<sup>3</sup>; González-Siccha A.D.<sup>4</sup>; Laborda J.<sup>5</sup>; García-Ramírez J.J.<sup>2</sup>; Unda F.<sup>1</sup>

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### **5699** POTENTIAL NEUROPROTECTIVE ROLE OF APOLIPOPROTEIN D IN A CELLULAR MODEL OF MULTIPLE SCLEROSIS INDUCED BY CUPRIZONE

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### **5870** "FOCUS STACKING" PHOTOGRAPHIC TECHNICAL FOR ANALYSIS OF CNIDOCYTES IN SEA ANEMONES

Márquez-Ramos, J.A.; Hernández-Calderas I.; Cordero-Ramos, D.I.; Matadamas-Guzmán F.M.; Jerónimo-Juárez J.R.; Valdez-Peralta, H.I.; Guzmán-García, X.

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### **5871** CELLULAR RESPONSE AFTER INJURY IN SEA ANEMONE *BUNODOSOMA SP.* OF TECOLUTLA, VERACRUZ

Matadamas-Guzmán F.M.<sup>1</sup>; Calderas-Hernández. I.<sup>1</sup>; Márquez-Ramos J.A.<sup>1</sup>; Valdez-Peralta H.I.<sup>1</sup>; Cordero-Ramos D.I.<sup>1</sup>; Guerrero-Legarreta I.<sup>2</sup>; Segoviano-Ramírez J.C.<sup>3</sup>; García-Barrientos R.<sup>4</sup> y Guzmán-García X.<sup>1</sup>

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### **5883** PERIPHERAL NERVE REGENERATION IS REGULATED BY THE ACTIVATION OF THE SMALL RAC GTPASE

Gayoso M.J.<sup>1,2</sup>; Gayoso S.<sup>1,2</sup>; Caloca M.J.<sup>3</sup>; Garrosa M.<sup>1,2</sup>

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**5941 CALORIC RESTRICTION ALTERS THE HORMONAL PROFILE AND TESTICULAR METABOLOME RESULTING IN SPERM HEAD DEFECTS**

 Martins A.D.<sup>1,2</sup>; Jarak I.<sup>1,2</sup>; Morais T.<sup>3,4</sup>; Carvalho R.A.<sup>5</sup>; Oliveira P.F.<sup>1,2,6,7</sup>; Monteiro M.P.<sup>3,4</sup>; Alves M.G.<sup>1,2\*</sup>

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**5942 MCT1-KNOCKOUT MICE PRESENT MORPHOLOGICAL ALTERATIONS IN THE TESTIS, SEX HORMONES DYSREGULATION AND ARRESTED SPERMATOGENESIS**

 Bernardino R.L.<sup>1</sup>; D'Souza W.N.<sup>2</sup>; Rato L.<sup>3</sup>; Rothstein J.L.<sup>2</sup>; Dias T.R.<sup>1,3,4</sup>; Chui D.<sup>2</sup>; Wannberg S.<sup>2</sup>; Alves M.G.<sup>1</sup>; Oliveira P.F.<sup>1,5,6\*</sup>

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**5943 AQUAGLYCEROPORINS EXPRESSION AND GLYCEROL PERMEABILITY ARE MODULATED BY ESTRADIOL IN MOUSE SERTOLI CELLS**

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**5944 CFTR MODULATES AQUAPORIN-MEDIATED GLYCEROL PERMEABILITY IN MOUSE SERTOLI CELLS**

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**5945 DELETION OF INSULIN-DEGRADING ENZYME IMPAIRS TESTICULAR MORPHOLOGY IN MICE**

 Meneses M.J.<sup>1,2,3</sup>; Borges D.O.<sup>1</sup>; Dias T.R.<sup>2,4</sup>; Martins F.O.<sup>1</sup>; Oliveira P.F.<sup>2,5,6</sup>; Macedo M.P.<sup>1,7,8</sup>; Alves M.G.<sup>2</sup>

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**5946 ASSESSMENT OF THE EXPRESSION OF OBESITY-RELATED GENES IN HUMAN SERTOLI CELLS AND SPERMATOZOA**

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## HISTOLOGÍA DE ÓRGANOS Y APARATOS

### **5659** RETINAL DIFFERENTIATION IN AN ALTRICIAL AVIAN SPECIES, THE ZEBRA FINCH (TAENIOPYGIA GUTTATA): AN IMMUNOHISTOCHEMICAL STUDY

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### **5677** EFFECTS OF AN ANTI-GONADOTROPHIN RELEASING HORMONE VACCINE ON THE MORPHOLOGY AND STRUCTURE OF BULL TESTES

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### **5682** ULTRASTRUCTURAL STUDY OF PIG LIVER REGENERATION FOLLOWING ABLATION WITH IRREVERSIBLE ELECTROPORATION

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### **5683** REMODELLING OF LIVER TISSUE AFTER IRREVERSIBLE ELECTROPORATION IN PORCINE

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### **5743** NORMAL HUMAN THYROID GLAND AND PRIMARY CILIUM: MORPHOMETRIC ANALYSIS

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### **5744** PRIMARY CILIUM EXPRESSION IN PENDRED SYNDROM

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### **5745** STUDY OF PRIMARY CILIA IN RAT EXOCRINE GLANDS

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### **5776** COMPARATIVE HISTOLOGY OF PACINIAN SENSORY RECEPTORS OF THE FINGERS AND TOES OF OLDER PERSONS

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### **5830** RESPONSE OF RETINAL GANGLION CELLS AFTER ACUTE OCULAR HYPERTENSION

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**5872 MORPHOLOGICAL AND TISSUE ANALYSIS OF SEA ANEMONES OF TECOLUTLA, VERACRUZ, MEXICO**

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**5876 ESTRUCTURA INTERNA DEL OJO DE MACROBRACHIUM SP. (LINNAEUS, 1758) LANGOSTINO DEL RÍO ACTOPAN, VERACRUZ, MÉXICO**

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**5930 POPULATION CHANGES IN MYOID CELLS DURING SPONTANEOUS RECRUDESCENCE AFTER EXPOSURE TO SHORT PHOTOPERIOD IN SYRIAN HAMSTER**

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**5931 CHANGES IN THE EXPRESSION PATTERN OF CONNEXIN-43 DURING TESTICULAR REGRESSION DUE TO SHORT PHOTOPERIOD IN THE SYRIAN HÁMSTER (MESOCRICETUS AURATUS)**

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**5933 DISTRIBUTION OF MUCINS IN HUMAN ENDOCERVICAL GLANDS DURING THE ENDOMETRIAL SECRETORY PHA**

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**5954 MORPHOLOGICAL EVALUATION OF THE LIVER IN WISTAR RATS INOCULATED WITH RHIPICEPHALUS SANGUINEUS (LATREILLE, 1806) (ACARI: IXODIDAE) SALIVARY GLAND EXTRACTS**

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**HISTOPATOLOGÍA****5017 ROSENTHAL FIBRES AS A MODEL OF GAIN OF FUNCTION. IMMUNOHISTOCHEMICAL STUDY IN AN ADULT ONSET ALEXANDER DISEASE**

Cabrera-Galván, J.J.<sup>1,2</sup>; Martínez-Martín, M.S.<sup>1,2</sup>; Galán-García, M.E.<sup>2</sup>; Déniz-García, D.<sup>1</sup> and Araujo-Ruano, E.<sup>1</sup>

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**5559 PRIMARY CILIA AND SPHEROSOMES BIOGENESIS IN LOW GRADE GLIOMA**

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**5674 REACTIVE MACROGLIA PROVIDE LIVING SCAFFOLDS FOR SPONTANEOUS AXON REGENERATION IN CONDITIONS OF TRAUMATIC NEUROMA IN THE LIZARD OPTIC NERVE**

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**5678 STUDY OF VASCULAR DENSITY IN ENDOCRINE AREA OF ISLETS OF LANGERHANS IN NON-OBESE DIABETIC MICE**

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**5679 STUDY OF VASCULAR ENDOTHELIAL GROWTH FACTOR-A IN ENDOCRINE AREA OF ISLETS OF LANGERHANS IN NON-OBESE DIABETIC MICE**

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**5698 MOLECULAR AND MORPHOLOGICAL ANALYSIS OF THE GOLGI APPARATUS OF DOPAMINERGIC NEURONS IN HUMAN SUBSTANTIA NIGRA: NEW CITOPATHOLOGICAL FINDINGS IN PARKINSON'S DISEASE**

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**5713 MICROSCOPIC STUDY OF THE INFARCT-RELATED CORONARY ARTERY IN A SWINE MODEL OF REPERFUSED MYOCARDIAL INFARCTION**

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**5719 CD31 OR CD34: WHICH IS THE BEST MARKER FOR EVALUATING MICROVASCULAR DENSITY IN RENAL CELL CARCINOMA?**

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**5725 OUTCOME AT 72 HOURS OF BRAIN INJURED NEWBORN PIGLETS AFTER HYPOXIA-ISCHEMIA**

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**5726 EARLY MARKERS OF CEREBRAL HYPOXIA IN NEWBORN PIGLETS**

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**5730 A HISTOLOGICAL APPROACH TO THE NEUROGENIC NICHE OF THE NEONATAL SUBVENTRICULAR ZONE**

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**5735 HISTOLOGY OF RABBIT LIVER (HOST MODELS FOR TICKS) EXPOSED TO CASTOR OIL ACID ESTERS**

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**5737 EXPRESSION OF MITOGEN-ACTIVATED PROTEIN KINASE KINASE 4 (MKK4) IN HISTOLOGICAL LESIONS OF HUMAN PROSTATE**

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**5747 PRELIMINAR STUDY OF PERCUTANEOUS NEEDLE ELECTROLYSIS IN A CALCANEAL TENDINOPATHY MICE MODEL**

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**5751 APOLIPOPROTEIN D EXPRESSION IN A MOUSE MODEL OF MULTIPLE SCLEROSIS**

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**5759 HEPATIC ALTERATIONS IN MUS MUSCULUS RATS AFTER EXPOSURE TO CARVACROL ACARICIDE**Barbosa Schiavolin M.<sup>1,2</sup>; Rossini de Oliveira S.A.<sup>2</sup>; Scopinho Furquim K.C.<sup>1</sup>; Camargo-Mathias M.I.<sup>1</sup>

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**5762 PLATELET RICH GEL SUPERNATANTS PREVENTS STRUCTURAL DAMAGE OF EQUINE TENDON EXPLANTS CHALLENGED WITH LYPOLYSACCHARIDE**

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**5770 PROPROTEIN CONVERTASE EXPRESSION IN WILD TYPE AND GLOBOZOOSPERMIC MOUSE TESTIS**Sáez F.J.<sup>1</sup>, Velado A.<sup>1</sup>, Gómez-Santos L.<sup>1</sup>, García-Gallastegui P.<sup>1</sup>, Crende O.<sup>1</sup>, Madrid J.F.<sup>2</sup>, Badiola I.<sup>1</sup>, Alonso E.<sup>1</sup>

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**5778 DETERMINATION OF NOVEL HISTOLOGICAL BIOMARKERS FOR IMPROVED DIAGNOSIS AND PROGNOSIS OF HUMAN MELANOMA**Apraiz A.<sup>1</sup>; Penas C.<sup>1</sup>; Rasero J.<sup>2</sup>; Asumendi A.<sup>1</sup>; Arroyo-Berdugo Y.<sup>1</sup>; Ezkurra P.A.<sup>1</sup>; Morales M.C.<sup>1</sup>; Cortés J.M.<sup>2</sup>; Pérez-Yarza G.<sup>1</sup> and Boyano M.D.<sup>1</sup>

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**5789 LUNG HISTOPATHOLOGICAL CHANGES AFTER DIETARY OLIVE OIL IN A PRISTANE-INDUCED SYSTEMIC-LUPUS ERYTHEMATOSUS MODEL**Utrilla Alcolea J.C.<sup>1</sup>; Castejón Martínez L.<sup>2</sup>; Fernández Santos J.M.<sup>1</sup>; Vázquez Román V.<sup>1</sup>; Martín Lacave I.<sup>1</sup> and Alarcón de la Lastra Romero C.<sup>2</sup>

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**5790 MAGNETIC STIMULATION TREATMENT REDUCES ATROPHY AND MUSCLE INJURIES IN AN EXPERIMENTAL MODEL OF MULTIPLE SCLEROSIS**Peña-Toledo, María Ángeles<sup>1,2</sup>; Ruz-Caracuel, Ignacio<sup>1,3\*</sup>; Leiva-Cepas, Fernando<sup>1,2,3\*\*</sup>; Jimena, Ignacio<sup>1,2,3</sup>; Peña-Amaro, José<sup>1,2,3</sup>; Luque, Evelio<sup>2,3</sup>; Túnez, Isaac<sup>2,4</sup>

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**5797 HISTOLOGICAL ANALYSIS OF SARCOPENIA IN PSOAS MUSCLE**Jiménez-Vílchez, A.J.<sup>1</sup>; Gil-Belmonte, M.J.<sup>2</sup>; Leiva-Cepas, F.<sup>2,3,4\*</sup>; Ruz-Caracuel, I.<sup>2,3\*\*</sup>; Peña-Toledo, M.A.<sup>3,4</sup>; López-Espejo, M.E.<sup>2</sup>; Gómez-Cabello, I.<sup>2</sup>; Jimena, I.<sup>2,3,4</sup>

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**5825 CAN BONE TRABECULAE BE USEFUL FOR THE ASSESMENT OF THE FEMORAL NECK IN HIP FRACTURE PATIENTS?**Crespo P.V.<sup>1</sup>; Sánchez-Quevedo M.C.<sup>1</sup>; Crespo-Lora V.<sup>2</sup>; García J.M.<sup>1</sup>; Cano J.R.<sup>3</sup>; Cruz E.<sup>3</sup>; Guerado E.<sup>3</sup>

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**5837 HISTOPATHOLOGICAL CHARACTERIZATION OF OVINE PULMONARY ADENOMATOSIS IN THE MUNICIPAL SLAUGHTERHOUSE OF LA UNIÓN HUÁNUCO**

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**5838 EFFECTS OF SUB-LETHAL DOSES OF THE POLYBROMINATED BDE-47 ON THE HISTOPATHOLOGY OF DIGESTIVE GLAND OF MYTILUS GALLOPROVINCIALIS**

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**5845 BIOCOMPATIBILITY AND TISSUE INFLAMMATORY REACTIONS OF FOUR COMMERCIAL BLEACHING PRODUCTS**

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**5855 PDF ELEVATION IN RELATION TO THE PROCESS OF CALCIFICATION IN PLACENTAS OF WOMEN WITH GESTACIONAL VENOUS INSUFFICIENCY**

Ortega M.A.<sup>1</sup>; Romero B.<sup>1</sup>; Asúnolo Á.<sup>2</sup>; Sainz F.<sup>3</sup>; Bravo C.<sup>2,4</sup>; Martínez-Vivero C.<sup>1</sup>; Fraile O.<sup>1</sup>; Álvarez-Rocha M.J.<sup>1</sup>; De León-Luis J.<sup>5</sup>; Álvarez-Mon M.<sup>1,6</sup>; Buján J.<sup>1</sup>; García-Honduvilla N.<sup>1</sup>

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**5866 EXPLORING MELANOMA HETEROGENEITY USING IMAGING MASS SPECTROMETRY**

Garate J.<sup>1</sup>; Fernandez R.<sup>1</sup>; Ochoa B.<sup>2</sup>; Martí-Laborda R.<sup>3</sup>; Martín-Saiz L.<sup>1</sup>; Asumendi A.<sup>4,8</sup>; Lage S.<sup>4</sup>; Velasco V.<sup>5,8</sup>; Artola J.L.<sup>6,8</sup>; Zabalza<sup>7,8</sup>; Fernandez J.A.<sup>1</sup> and Boyano M.D.<sup>4,8</sup>

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**5888 ANGIOGENESIS-LYMPHANGIOGENESIS AND VASCULAR ENDOTHELIAL GROWTH FACTOR DISTRIBUTION IN PRIMARY HUMAN PTERYGIUM**

Martín-López J.<sup>1</sup>; Pérez-Rico C.<sup>2,3</sup>; García-Honduvilla N.<sup>1,4</sup>; Buján J.<sup>1,4</sup>; Pascual G.<sup>1,4</sup>

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**5900 HISTOLOGICAL EFFECTS OF THE ORAL ADMINISTRATION OF MICROCYSTIN-LR EXTRACT IN AMBYSTOMA MEXICANUM LARVAE**

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**5908 EVALUATION OF MANDIBULAR BONE IN AN OSTEOPOROSIS RAT MODEL**

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**5915 IS THERE CORRELATION BETWEEN THE HER2 AMPLIFICATION LEVEL AND THE RESPONSE TO NEOADJUVANT TREATMENT WITH TRASTUZUMAB AND CHEMOTHERAPY?**

García-Caballero L.<sup>1</sup>, Vázquez-Boquete A.<sup>3</sup>, Santiago M.P.<sup>2</sup>, Reboredo C.<sup>2</sup>, Molina A.<sup>2</sup>, Mosquera J.<sup>2</sup>, Gallego R.<sup>1</sup>,  
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**DOCENCIA**
**5887 IMPLEMENTATION OF A NEW METHOD OF CONTINUOUS EVALUATION THAT FAVOR THE DEVELOPMENT OF THE PRACTICAL MICROSCOPIC HUMAN ORGANOGRAPHY COMPETENCES IN THE DEGREE IN MEDICINE**

Pascual G.<sup>1,2</sup>; Pérez-Köhler B.<sup>1,2</sup>; García-Honduvilla N.<sup>1,2</sup>; Buján J.<sup>1,2</sup>; González-Santander M.<sup>1</sup>

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**INGENIERÍA TISULAR**
**5865 POLYLACTIC ACID SCAFFOLDS, AN OPTIMAL AUXILIARY IN MANDIBULAR BONE REGENERATION**

Trejo-Iriarte, Cynthia G.<sup>1</sup>; César Antonio Rodríguez-Cortés<sup>1\*</sup>; Álvarez-Pérez, Marco A.<sup>2</sup>; Aguilar-Trujillo Mario A.<sup>1</sup>; Luis Medina<sup>3,4</sup>;  
 García-Honduvilla Natalio<sup>5,6</sup>; Estrada-Hernández Mónica G.<sup>1</sup>; García-Muñoz Alejandro<sup>1</sup>; Buján Julia<sup>5</sup>

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**5909 THE HISTOLOGICAL BEHAVIOUR AND KINETICS OF CALCIFICATION WERE EVALUATED DURING THE SPONTANEOUS REPAIR OF A CRITICAL MANDIBLE DEFECT IN RAT**

Cynthia G. Trejo-Iriarte<sup>1</sup>; Luis Alberto-Medina<sup>2,3</sup>; Janeth Serrano-Bello<sup>4</sup>; Mercado Márquez Crisóforo<sup>5</sup>;  
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# PÓSTER

## VIERNES 6 / 18:30 - 19:30 h. SESIÓN DE PÓSTER PRESENCIAL

Modera: Francisco José Sáez Crespo. Universidad del País Vasco UPV/EHU, España / Ester Beltrán Frutos. Universidad de Murcia, España / Pascual Vicente Crespo Ferrer. Universidad de Granada, España / Enrique Hilario Rodríguez. Universidad del País Vasco UPV/EHU

## DOCENCIA

### **5545 ELABORATION OF A MANUAL OF PRACTICAL HISTOLOGY CLASSES: AN INTEGRATED COLLABORATION BETWEEN STUDENTS AND TEACHERS**

Pereira, B.F.<sup>1</sup>; Caperuto, L.C.<sup>1</sup>; Carvalho, J.E.<sup>1</sup>; Pitol, D.L.<sup>2</sup>

(1) Federal University of São Paulo - Campus of Diadema - SP - Brazil. (2) University of São Paulo - FORP - Ribeirão Preto - SP - Brazil.

### **5671 STUDENTS SATISFACTION WITH TEACHING OF HISTOLOGY BEFORE AND AFTER THE ADAPTATION TO THE EUROPEAN HIGHER EDUCATION AREA IN THE ULPGC**

Romero-Alemán M.M.<sup>1,2</sup>

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### **5696 EXPLORING NEW VIRTUAL EDUCATIONAL METHODOLOGIES APPLICABLE TO CELL AND TISSUE BIOLOGY**

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### **5788 PATHOLOGY TRAINEES PERCEPTION TOWARDS HISTOLOGY**

Ruz-Caracuel, Ignacio<sup>1,2\*</sup>; Leiva-Cepas, Fernando<sup>1,2,3\*\*</sup>; Gil-Belmonte, María Jesús<sup>2</sup>; López-Espejo, María Eugenia<sup>2</sup>; Osuna Soto, Julio<sup>2</sup>; Jimena, Ignacio<sup>1,2,3</sup>; Peña, José<sup>1,2,3</sup>

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### **5798 ASSESSMENT OF HISTOLOGY TEACHING IN PHYSIOTHERAPY DEGREE**

Ruz-Caracuel, I.<sup>1,2\*\*</sup>; Leiva-Cepas, F.<sup>1,2,3\*</sup>; Gil-Belmonte, M.J.<sup>2</sup>; Gómez-Cabello, I.<sup>2</sup>; Agüera-Vega, A.<sup>1,2</sup>; Peña-Toledo, M.A.<sup>1,3</sup>; Jimena, I.<sup>1,2,3</sup>

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### **5826 EVALUATION OF PERCEPTIONS ON TISSUE ENGINEERING AS ADVANCED THERAPY BY POSTGRADUATE MEDICAL DOCTORS. A CONCEPTUAL, PROCEDURAL AND ATTITUDINAL STUDY**

Sola M.<sup>1</sup>; Campos F.<sup>2</sup>; Chato-Astrain J.<sup>2</sup>; Ruyffelaert A.<sup>3</sup>; Sánchez-Quevedo M.C.<sup>2</sup>; Carriel V.<sup>2</sup>; Garzón I.<sup>2</sup>; Campos A.<sup>2</sup>

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### **5827 IDENTIFICATION OF COGNITIVE THRESHOLD CONCEPTS IN HISTOLOGY**

Porras D.<sup>1</sup>; Durand-Herrera D.<sup>1</sup>; Irastorza-Lorenzo A.<sup>1</sup>; Campos Martín-Piedra M.A.<sup>1</sup>; Saavedra-Casado S.<sup>2</sup>; Campos F.<sup>1</sup>; Ruyffelaert A.<sup>3</sup>; Sánchez A.<sup>1</sup>

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### **5828 PERCEPTION OF THE STUDENTS ENROLLED IN A PARTICIPATIVE TEACHING PROGRAM IN TISSUE ENGINEERING AT THE UNIVERSITY OF GRANADA**

Garzón I.<sup>1</sup>; Chato-Astrain J.<sup>1</sup>; Sánchez-Porras D.<sup>1</sup>; Durand-Herrera D.<sup>1</sup>; García-García O.D.<sup>1</sup>; Fernández-Valadés R.<sup>1,2</sup>; Oyonarte S.<sup>1,3</sup>; Martín-Piedra M.A.<sup>1</sup>

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**5829 INFLUENCE OF THE TYPE OF EVALUATION ON THE FINAL PERFORMANCE OF STUDENTS OF MEDICAL CYTOLOGY**

Chato-Astrain J.<sup>1</sup>, Martín-Piedra M.A.<sup>1</sup>, Sánchez-Porras D.<sup>1</sup>, Irastorza-Lorenzo A.<sup>1</sup>, García-García O.D.<sup>1</sup>, Carriel V.<sup>1</sup>, Alaminos M.I., García J.M.<sup>1</sup>

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**5836 GAMIFICATION AND MOBILE DEVICES: USE OF KAHOOT! AS A TOOL FOR TEST PRACTICE IN THE CELL BIOLOGY AND HISTOLOGY SUBJECT**

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**5887 IMPLEMENTATION OF A NEW METHOD OF CONTINUOUS EVALUATION THAT FAVOR THE DEVELOPMENT OF THE PRACTICAL MICROSCOPIC HUMAN ORGANOGRAPHY COMPETENCES IN THE DEGREE IN MEDICINE**

Pascual G.<sup>1,2</sup>; Pérez-Köhler B.<sup>1,2</sup>; García-Honduvilla N.<sup>1,2</sup>; Buján J.<sup>1,2</sup>; González-Santander M.<sup>1</sup>

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**5928 EVALUATION OF THE TEACHING OF THE CONTENTS OF HISTOLOGY IN THE DEGREES OF NURSING, PHYSIOTHERAPY AND PHARMACY**

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## HISTOLOGÍA COMPARADA

**4641 PRENATAL HISTOMORPHOLOGICAL DEVELOPMENT OF THE RUMEN IN DAMA DAMA**

Eloy Redondo<sup>1</sup>; A. Gázquez<sup>1</sup>; Cristina Ortega<sup>2</sup>; Fernando J. Peña<sup>2</sup>; A. Javier Masot<sup>1</sup>

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**4642 PRENATAL HISTOMORPHOLOGICAL DEVELOPMENT OF THE RETICULUM IN DAMA DAMA**

Eloy Redondo<sup>1</sup>; A. Gázquez<sup>1</sup>; Cristina Ortega<sup>2</sup>; Fernando J. Peña<sup>2</sup>; A. Javier Masot<sup>1</sup>

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**4643 PRENATAL HISTOMORPHOLOGICAL DEVELOPMENT OF THE OMASUM IN DAMA DAMA**

Eloy Redondo<sup>1</sup>; A. Gázquez<sup>1</sup>; Cristina Ortega<sup>2</sup>; Fernando J. Peña<sup>2</sup>; A. Javier Masot<sup>1</sup>

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**5777 THE STRUCTURAL AND ULTRASTRUCTURAL ANATOMY OF THE WHALE EYE, WITH SPECIAL INTEREST IN THE STRUCTURES THAT CONTROL EYE PRESSURE**

Vecino E; Zulueta A; Pereiro X and Ruzafa N

Experimental Ophthalmology-Biology Group, Department of Cell Biology and Histology, Faculty of Medicine, University of the Basque Country UPV/EHU

**5800 HISTOLOGICAL EFFECTS OF TWO BREWERY BY-PRODUCTS-BASED DIETS IN MULLET (CHELON LABROSUS) LIVER**

Piñera-Moreno R.<sup>1</sup>; Vélchez-Gómez L.<sup>1</sup>; Ceballos-Francisco D.<sup>1</sup>; Guardiola F.A.<sup>1,2\*</sup>; Esteban M.A.<sup>1</sup>

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**5927 IMMUNOHISTOCHEMICAL STUDY OF HYPOXIA MARKERS IN PORCINE OVIDUCTS DURING THE ESTROUS CYCLE**

Párraga Ros E.<sup>1</sup>; López Albors O.<sup>1</sup>; Aparicio González M.<sup>1</sup>; Boronat Belda T.<sup>2</sup>; Candanosa Aranda E.<sup>3</sup>; Latorre Reviriego R.<sup>1</sup>

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## HISTOLOGÍA VEGETAL

### **5791 SEED ANATOMY OF SIX MIMOSA SPECIES (LEGUMINOSAE MIMOSOIDEAE) DISTRIBUTED IN MEXICO**

Montaño-Arias S.A.<sup>1\*</sup>; Zavaleta-Mancera H.A.<sup>2</sup>; Grether R.<sup>3</sup>; Montaño N.M.<sup>3</sup>; Camargo-Ricalde S.L.<sup>3</sup>; Pacheco L.<sup>3</sup>

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### **5794 INFLUENCE OF ALTITUDE ON THE WOOD ANATOMY OF MIMOSA LUISANA, A SPECIES ENDEMIC TO MEXICO**

Montaño-Arias S.A.<sup>1\*</sup>; Chicharo-Alonso P.S.<sup>2</sup>; Camargo-Ricalde S.L.<sup>2</sup>; Grether R.<sup>2</sup>; Montaño N.M.<sup>2</sup>; Pacheco L.<sup>2</sup>

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### **5802 PETIOLE AND RACHIS HISTOLOGY OF EIGHT SPECIES OF THE GENUS DIPLAZIUM (ATHYRIACEAE-POLYPODIOPSIDA)**

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### **5803 LEAF EPIDERMIS MORPHOLOGY OF 15 SPECIES OF THE GENUS DIPLAZIUM (ATHYRIACEAE-POLYPODIOPSIDA)**

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### **5891 LEAF EPIDERMIS MORPHOLOGY OF SIX SPECIES OF THE GENUS ANEMIA (ANEMACEAE-POLYPODIOPSIDA)**

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## INGENIERÍA TISULAR

### **5688 HUMAN ADIPOSE DERIVED STEM CELLS (HASCs) AS A THERAPEUTIC TOOL FOR OLIGODENDROCYTES OXIDATIVE STRESS DAMAGE**

Garrido-Pascual, P.; Burón, M.; Palomares, T.; Alonso-Varona, A.

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### **5707 ADIPOSE-DERIVED MESENCHYMAL STEM CELLS CONDITIONED MEDIUM ATENUATED ULTRAVIOLET B-INDUCED AGING ON HUMAN DERMAL FIBROBLASTS**

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### **5731 BIOLOGICAL CHARACTERIZATION OF ELECTROSPUN WEBS FOR THE ADHESION AND GROWTH OF HUMAN DENTAL PULP AND PERIODONTAL LIGAMENT STEM CELLS**

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**5732 MORPHOLOGICAL ANALYSIS OF AN ACELLULAR NERVOUS SCAFFOLD FOR ITS POTENTIAL USE IN PERIPHERAL NERVE INJURY RECONSTRUCTION**

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**5755 ARTICULAR CARTILAGE REGENERATION INDUCED BY SCAFFOLD IMPLANTATION: IN VIVO AND COMPUTATIONAL MODEL**

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**5766 IDENTIFICATION OF EPITHELIAL MARKERS IN BIOARTIFICIAL HUMAN CORNEAS FOR CLINICAL TRANSLATION**

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**5767 EVALUATION OF THE EXTRACELLULAR MATRIX AND BASEMENT MEMBRANE IN A HUMAN ARTIFICIAL CORNEA MODELS GENERATED BY TISSUE ENGINEERING**

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**5768 DEVELOPMENT OF A BASEMENT MEMBRANE IN HUMAN ORTHOTYPICAL AND HETEROTYPICAL BIOENGINEERED CORNEAS**

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**5774 USEFULNESS OF POLY(L-LACTIC ACID) (PLLA) MATS FOR HUMAN AIRWAY MUCOSA REGENERATION**

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**5775 COLLAGEN RELATED GENE EXPRESSION IN HUMAN PRIMARY CHONDROCYTES AND DENTAL PULP STEM CELLS DIFFERENTIATED IN ALGINATE-AGAROSE HIDROGELS**

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**5782 OSTEOCONDUCTIVE PROPERTIES OF SILICA/CHITOSAN/B-TCP SONOGELS DESIGNED FOR GBR IN BONE TISSUE ENGINEERING**

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**5783 OSTEOBLASTIC RESPONSE TO BIOACTIVE SILICA/CHITOSAN/B-TCP SCAFFOLDS IN GBR. AN IN VITRO PILOT STUDY**

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**5807 USE OF NANOFORMULATED GROWTH FACTORS FOR THE EFFICIENT CULTURE OF CORNEAL EPITHELIAL CELLS**

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**5808 DESIGN OF NOVEL BIOMATERIALS WITH DEFINITE ANISOTROPIC BEHAVIOUR FOR USE IN TISSUE ENGINEERING**

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**5809 CELL-BASED STRATEGIES TO PROMOTE IN VIVO VASCULARIZATION IN TISSUE ENGINEERED BIOARTIFICIAL CONSTRUCTS**

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**5811 ANGIOGENESIS PROTEOME ANALYSIS OF PRECONDITIONED MESENCHYMAL STEM CELLS FOR USE IN ORAL MUCOSA SUBSTITUTES**

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**5814 EGF LIPID NANOPARTICLES FOR IMPROVING HUMAN SKIN KERATINOCYTES PROLIFERATION**

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**5815 TISSUE ENGINEERING OF THE HUMAN VAGINA MUCOSA**

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**5817 HEMATOLOGICAL QUALITY CONTROL OF DECELLULARIZED PERIPHERAL NERVES USED IN A MODEL OF SCIATIC NERVE DEFECT**

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**5818 ANALYSIS OF BIOCOMPATIBILITY AND MECHANICAL PROPERTIES OF NANOSTRUCTURED HYDROGELS FOR USE IN TISSUE ENGINEERING**

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**5819 IN VIVO EVALUATION OF FIBRIN-AGAROSE HYDROGELS FUNCTIONALIZED WITH MAGNETIC NANOPARTICLES**

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**5821 DEVELOPMENT OF BIOACTIVE MICROAGGREGATE TISSUES USING HUMAN MESENCHYMAL STEM CELLS**

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**5822 EPITHELIAL CELL CULTURE USING BIOCOMPATIBLE COATING BIOMATERIALS FOR TISSUE ENGINEERING**

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**5823 GENERATION OF A BIOMECHANICALLY SUITABLE TISSUE-LIKE STROMA FOR TISSUE ENGINEERING APPLICATIONS**

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**5839 DIRECT SUTURE VERSUS TUBULATION FOR DECELLULARIZED PROSTHESES GRAFTING IN EXPERIMENTAL NEURECTOMY REPAIR**

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**5840 MULTILINEAR DIFFERENTIATION OF ADIPOSE TISSUE-DERIVED MESENCHYMAL STEM CELLS IN A MODEL OF BONE REGENERATION**

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**5857 TISSUE RESPONSE AND TOLERANCE TO A DESIGNED 3D POROUS SCAFFOLD COMPOSED OF NANOCRYSTALLINE CARBONATE-HYDROXYAPATITE AND AGAROSE AS PRELIMINARY STEP IN BONE REPAIR AND REGENERATION**

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**5858 POLYLACTIC-CO-GLYCOLIC ACID MICROSPHERES AS A VEHICLE FOR THE RELEASE OF ANTIBIOTICS IN A PRECLINICAL ENVIRONMENT OF BONE CONTAMINATION**

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**5886 HISTOLOGICAL EVALUATION OF THE TISSUE INTEGRATION PROCESS OF RETICULAR HYBRID MESHES FOLLOWING INTRAPERITONEAL ABDOMINAL WALL IMPLANT**

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**5922 ALGINATE-CHITOSAN SCAFFOLDS MODIFIED BY GOLD NANOPARTICLES FOR CARDIAC TISSUE ENGINEERING**

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## TÉCNICAS

**4729 NEW DIRECT PROGRESSIVE HEMATOXILIN FOR THE APPLICATION IN ROUTINE AND SPECIAL TECHNIQUES**

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**5542 STANDARDIZATION OF MORPHOMETRY AND STEREOLOGY TECHNIQUES IN LIVER OF FISH OF THE SPECIES ASTYANAX ALTIPARANAÉ**

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**5741 MORPHOHISTOCHEMICAL INVESTIGATION OF THE FEEDING, DIGESTIVE AND REPRODUCTIVE SYSTEMS OF FEMALE DOG TICKS IN RAPID FEEDING STAGE**

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**5750 QUANTIFICATION OF PROTEIN EXPRESSION BY IMMUNOHISTOLOGY: COMPARISON OF TWO DIFFERENT TECHNIQUES**

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**5779 HISTOLOGICAL DETECTION OF THE F-ACTININ CYTOSKELETON COMPARING PARAFFIN-EMBEDDED VERSUS FROZEN SECTIONS OF XENOGRAFTED TUMORS**

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## BIOLOGÍA TISULAR (2)

**5709 CO-LOCALIZATION OF IGF1 AND CHOLINERGIC RECEPTORS IN NEURONS OF THE BASAL FOREBRAIN. IMPLICATION IN PHYSIOLOGICAL CONDITIONS**

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**5711 FREE SOFTWARE APPLIED TO AUTOMATED DIGITAL ANALYSIS OF CD34 EXPRESSION IN HUMAN MENINGIOMA**

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**5763 CUMULUS CELLS PROJECTIONS ON ZP COATED BEADS**

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**5786 A SCANNING ELECTRON MICROSCOPY STUDY OF HEIFER CERVICAL MUCUS**

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**5787 FOUR GLYCOPROTEINS (ZP1, ZP2, ZP3 AND ZP4) ARE EXPRESSED IN MUS MATTHEYI AND MUS PAHARI'S OVARIES: ZP4 PSEUDOGENIZATION IS RESTRICTED TO THE SUBGENUS MUS**

 Moros-Nicolás C.<sup>1</sup>; Chevret P.<sup>2</sup>; Veyrunes F.<sup>3</sup>; Guillén-Martínez A.<sup>1</sup>; Ballesta J.<sup>1</sup>; Izquierdo-Rico M.J.<sup>1</sup>; Avilés M.<sup>1</sup>

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**5834 COPY NUMBER LOAD: QUANTIFICATION AND ROLE IN HIGH RISK NEUROBLASTOMA TUMORS**

 Fernández-Blanco B.<sup>1</sup>; Berbegall A.P.<sup>1,2</sup>; Martín-Vañó S.<sup>1,2</sup>; Noguera R.<sup>1,2</sup>

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**5875 FRACTALITY IN CRYSTALLISATION OF HEIFER CERVICAL MUCUS**

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**5889 QUANTIFICATION OF GLYCOSAMINOGLYCANS IN PAIRED NEUROBLASTOMA SAMPLES AS A PROGNOSTIC FACTOR OF AGGRESSIVENESS**

 Tarazona C.<sup>1</sup>; López-Carrasco A.<sup>1</sup>; Burgos-Panadero R.<sup>1,2</sup>; Tadeo I.<sup>1,2</sup>; Gamero E.<sup>1,2</sup>; Navarro S.<sup>1,2</sup>; Noguera R.<sup>1,2</sup>

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**5905 COMPARISON BETWEEN ZP RESISTANCE TO TRYPSIN DIGESTION AND ZP STRUCTURE OF CARNIVORES (CANINE AND FELINE) USING POLARIZED LIGHT MICROSCOPY (POLSCOPE)**

 Cots-Rodríguez, P.<sup>1\*</sup>; Sánchez-Férez, J.<sup>2</sup>; Gómez, E.<sup>3</sup>; López-Fortún, N.<sup>1</sup>; González-Brusi, L.<sup>1</sup>; Moros-Nicolás, C.<sup>1</sup>; Izquierdo-Rico, M.J.<sup>1</sup>; Avilés, M.<sup>1</sup>

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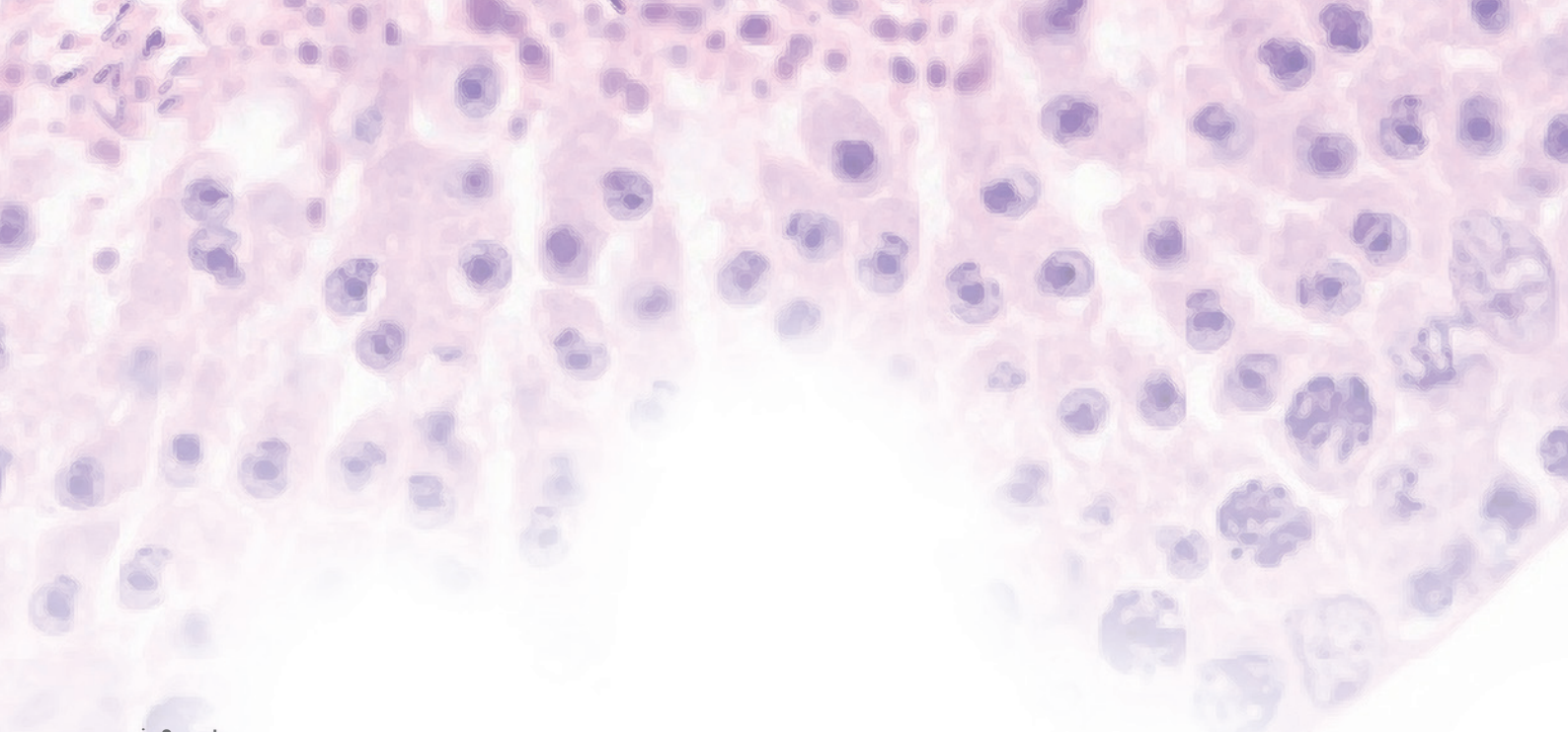
**5706 OSTEOARTHRITIS INDUCED BY PAPAINE AND MONOIODOACETATE IN RABBIT TEMPOROMANDIBULAR JOINTS: A MICROSCOPIC STUDY**

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