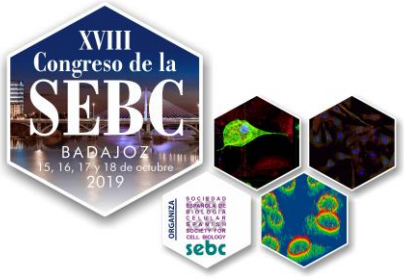


Symposium 1: "Therapeutical approaches for cancer stem cells"

Chairmen:

Xosé Bustelo. Salamanca Cancer Research Center (CSIC-University of Salamanca) and CIBERONC, Salamanca.

Alberto Muñoz. Instituto de Investigaciones Biomédicas "Alberto Sols", CSIC-UAM, and CIBERONC, Madrid.

Altered nucleologenesis and nucleolar functions in hippocampal neurons from the Ts65Dn mouse model of Down syndrome (ID_46)

A. Puente-Bedia [1], M. Lafarga [2], M.T. Berciano [2], O. Narcís [2,3], O. Tapia [2], C. Martínez-Cué [1], N. Rueda [1]

1 *Department of Physiology and Pharmacology, Faculty of Medicine, University of Cantabria, Santander;* ***2*** *Department of Anatomy and Cell Biology, Faculty of Medicine, University of Cantabria, Santander;* ***3*** *Department of Psychiatry, Icahn School of Medicine at Mount Sinai, New York*

Characterization of a new natural compound as chemotherapeutic agent against Glioblastoma Stem Cells (ID_19)

Villoch-Fernández, J.[1], Martín-López, M.[1,2], Sánchez, J.M.[2], Maeso-Alonso, L.[1], Fernández, A.[2], Marques, M.M.[3] & Marin, M.C.[1]

1 *Instituto de Biomedicina (IBIOMED), Universidad de León, León, Spain;* ***2*** *Biomar Microbial Technologies, León, Spain;* ***3*** *Instituto de Desarrollo Ganadero y Sanidad Animal, Universidad de León, León, Spain*

Evaluation of tumor stemness inhibition as a strategy to revert chemotherapy resistance in breast tumors (ID_63)

Tebar-García D[1], Noblejas-López MM[1,2], Nuncia-Cantarero M[1], Nieto-Jiménez C[1,2], Burgos M[2], Ocaña A[1,2,3], Galan-Moya EM[1]

[1]Translational Oncology Laboratory, Centro Regional de Investigaciones Biomédicas (CRIB), Universidad de Castilla La Mancha, Albacete, Spain. [2]Translational Research Unit, CIBERONC and University Hospital, Albacete, Spain. [3]Experimental Therapeutics Unit, Medical Oncology Department. Hospital Clínico San Carlos and IdISSC, Madrid, Spain.

HLA-A and HLA-B expression recognizes activated breast tumors with favorable outcome (ID_ 8)

Noblejas-López MDM[1], Nieto-Jiménez C[1], Morcillo García S[1], Pérez-Peña J[1], Nuncia-Cantarero M[1], Galán-Moya EM[1], Amir E[2], Pandiella A[3], Győrffy B[4] and Ocana A[1, 5]

1 *Translational Oncology Laboratory, Centro Regional de Investigaciones Biomedicas, Castilla-La Mancha University (CRIB-UCLM), Albacete, Castilla-La Mancha, Spain;* ***2*** *Division of Medical Oncology and Hematology, Princess Margaret Cancer Centre, University of Toronto, Toronto, Canada;* ***3*** *Instituto de Biología Molecular y Celular del Cáncer and CIBERONC. CSIC Salamanca, Castilla y León, Spain;* ***4*** *Semmelweis University 2nd Department of Pediatrics, Budapest, Hungary and MTA TTK Lendület Cancer Biomarker Research Group, Institute of Enzymology, Budapest, Hungary;* ***5*** *Hospital Clínico Universitario San Carlos, IDISSC and CIBERONC, Madrid, Spain.*

Inhibition of mitochondrial dynamics preferentially targets pancreatic cancer cells with enhanced tumorigenic and invasive potential (ID_ 32)

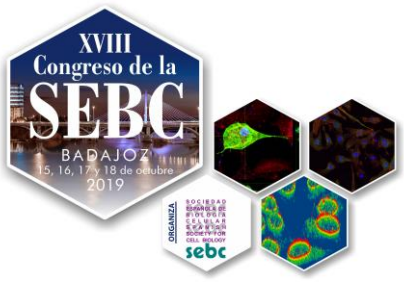
De Luxán-Delgado B.[1], Penin-Peyta L.[1], Royo-García A.[2], Parejo-Alonso B.[2], Jagust P.[1], Heeschen C.[1] and Sancho P.[1,2]

[1]Centre for Stem Cells in Cancer & Ageing (Barts Cancer Institute), London, UK; [2]Instituto de Investigación Sanitaria de Aragón (IIS Aragón), Zaragoza, Spain

Sub-cytotoxic concentrations of a new Pd(II)-based compound in combination with melatonin promote apoptosis of human promyelocytic leukaemia HL-60 cells (ID_ 78)

Elena Fernández[1], Samuel Estirado[1], Emilio Viñuelas-Zahínos[2], Francisco Luna-Giles[2], Ana Beatriz Rodríguez[1], Javier Espino[1], José A. Pariente[1]

[1]Department of Physiology (Neuroimmunophysiology and Chrononutrition Research Group) and [2]Departament of Organic and Inorganic Chemistry (Chemistry of Coordination Group), Faculty of Science, University of Extremadura, Badajoz, Spain.



Symposium 2: "Cell-microenvironment interactions"

Chairs:
Joaquín Teixidó. Centro de Investigaciones Biológicas (CIB)
Francisco Sánchez Madrid. Hospital Universitario La Princesa, Madrid

Effect of β2 adrenergic stimulation on the inflammatory profile of peritoneal macrophages in obese mice (ID_ 30)

[1]Martín-Cordero L., [1]Gálvez I., [1]Hinchado MD., [2]Álvarez-Barrientos A., [1]Ortega E.

[1] Instituto Universitario de Investigación Biosanitaria de Extremadura (INUBE), Grupo de Investigación en Inmunofisiología. Universidad de Extremadura, Badajoz, Spain; [2] Servicio de Técnicas Aplicadas a la Biociencia (STAB), Universidad de Extremadura, Badajoz, Spain.

Effects of melatonin on the bull sperm capacitation (ID_42)

Fernández-Alegre, E.[1,4], Álvarez-Fernández, I. [1], Gallego-Clemente, E.[1], Núñez-González, A.[1,4], Martín-Fernández, B.[1,4], Domínguez, J.C. [1,2] and Martínez-Pastor, F.[1,3]

1 *INDEGSAL, Universidad de León, 24071 León, Spain.;* ***2*** *Medicine, Surgery and Veterinary Anatomy, Universidad de León, 24071 León, Spain. ;* ***3*** *Molecular Biology (Cell Biology), Universidad de León, 24071 León, Spain;* ***4*** *Bianor Biotech, 24071 León, Spain.*

Field Emission Scanning Electron Microscopy (FE-SEM) allows the specific location of SED1 in human spermatozoa surface (ID_15)

Robles-Gómez[1], L; De Madaria, JM[1]; Sáez-Espinosa, P[1]; Huerta-Retamal, N[1]; Avilés, M[2]; Romero, A[1]; Gómez-Torres, MJ[1,3]

[1] Departamento de Biotecnología, Universidad de Alicante, Alicante, España; [2] Departamento de Biología Celular e Histología, Universidad de Murcia e IMIB-Arrixaca, Murcia, España; [3] Cátedra Human Fertility, Universidad de Alicante, Alicante, España.

High quality spermatozoa are recovered after four-hour in vitro capacitation (ID_ 60)

Sáez-Espinosa P [1,2]; Robles-Gómez L [1]; Huerta-Retamal N [1]; Avilés M [3]; Aizpurua J [4]; Romero A [1]; Gómez-Torres MJ [1,5].

1 *Departamento de Biotecnología, Universidad de Alicante, Alicante, Spain;* ***2*** *FISABIO - Hospital Universitario San Juan de Alicante, Servicio de Ginecología y Obstetricia, San Juan de Alicante, Spain;* ***3*** *Departamento de Biología Celular e Histología, Universidad de Murcia e IMIB-Arrixaca, Murcia, Spain;* ***4*** *VF Spain , Medicina Reproductiva, Alicante, Spain;* ***5*** *Cátedra Human Fertility, Universidad de Alicante, Alicante, Spain.*

Looking for a sanctuary for leukaemia cells in Central Nervous System: Role of choroid plexus stroma in tumour chemoresistance (ID_ 69)

Vicente A[1], Fernández-Sevilla LM [1], Valencia J [1], Flores, MA [2], Fraile-Ramos, A [1], Jiménez E [1], Sacedón R [1], Ramírez M [3], Varas A [1]

1 *Cell Biology, Complutense University of Madrid, School of Medicine, Madrid, Spain;* ***2*** *School of Chemistry, Autonomous University of Chihuahua, Chihuahua, Mexico;* ***3*** *Pediatric Hematology & Oncology, Hospital Universitario Niño Jesús, Madrid, Spain*

Morphological and functional studies of leukemia-leptomeningeal cell interactions (ID_ 74)

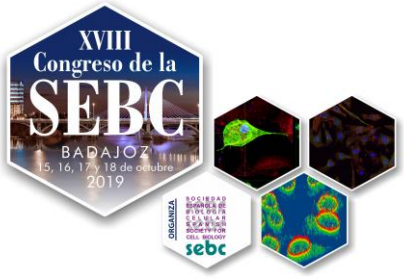
Vicente A, Ortiz P, Fernández-Sevilla LM, Fraile-Ramos A

Sección departamental de Biología Celular, Facultad de Medicina, Universidad Complutense de Madrid

Ocoxin oral solution impairs tumor cell-fibroblast crosstalk mediated protumoral effects and chemorresistance in melanoma (ID_ 40)

Benedicto A[1], Herrero A[1], Sanz E[2], Márquez J[1].

[1] University of the Basque Country,Bizkaia , Spain; [2] Catalysis SL, Madrid



Role of androgens in the adipose tissue differentiation in the prostate cancer microenvironment (ID_ 26)

Álvarez-Artime A.[a,b], Artime-Naveda F.[a,b], Sainz RM.[a,b],* Mayo JC[a,b]*,

a. *Department of Morphology and Cell Biology, Redox Biology Unit. University of Oviedo, Facultad de Medicina, Julian Clavería 6, 33006 Oviedo, Asturias;* ***b.*** *University Institute of Oncology of Asturias (IUOPA), Santiago Gascón building, Fernando Bongera s/n, 33006 Oviedo, Asturias.*

The SFK signaling pathway mediates the communication of cancer cells and their surrounding microenvironment in triple negative breast cáncer (ID_61)

Nuncia-Cantarero M.[1], Nieto-Jimenez C.[2], Burgos-Lozano M.[2], Montero JC.[3], Pandiella A.[3], Ocana A.[1,3,4] and Galan-Moya EM.[1]

1 *Translational Oncology Laboratory, Regional Center for Biomedical Research (CRIB), University of Castilla-La Mancha, Albacete, Spain;* ***2*** *Translational Research Unit, University Hospital, Albacete, Spain.;* ***3*** *Cancer Research Center, CSIC-IBSAL and CIBERONC, Salamanca, Spain;* ***4*** *Hospital Clínico Universitario San Carlos and Instituto de Investigación Sanitaria San Carlos (IdISSC), Madrid, Spain.*

Tumour microenvironment directed β-catenin signaling in melanoma (ID_ 11)

Ramírez-Sánchez A.[1], Gutiérrez-Salmerón M.[1], García-Martínez JM.[1], Lucena SR.[1], Román J.L.[1], Martín-Orozco RM.[1], Fiuza C.[2], Goding CR.[3], García-Jiménez C.[1], Chocarro-Calvo, A.[1]

[1]Universidad Rey Juan Carlos, Alcorcón, Madrid; [2]Fundación Hospital Alcorcón, Alcorcón, Madrid; [3]Ludwig Institute for Cancer Research, Oxford, UK.

Oxidative stress and histopathological alterations are early biomarkers of Pb-induced damage in Gilt-head Bream (Sparus aurata, L.) (ID_ 77)

Rafael Torronteras[a], Milagrosa Oliva Ramírez[b], M. Díaz de Alba[c], M.D. Granado-Castro[c], E. Espada-Bellido[c], Mª Dolores Galindo Riaño[c], Antonio Canalejo Raya[a]

a *Department of Integrated Sciences/ Research Center RENSMA, University of Huelva. Spain;* ***b*** *Department of Biology. Faculty of Sea and Environmental Sciences. University of Cádiz. Spain.* ***c****Department of Analytical Chemistry. Faculty of Science. University of Cádiz. Spain.*

Symposium 3: "Plant cell Biology"

Chairs:

Pilar S. Testillano. Centro de Investigaciones Biológicas (CIB)

Nuria Sánchez-Coll. Centro de Investigación en Genómica agrícola (CRAG). Barcelona

Improving plant cell reprogramming and somatic embryogenesis yield with small molecule epigenetic modulators for regeneration and breeding of cork oak (ID_68)

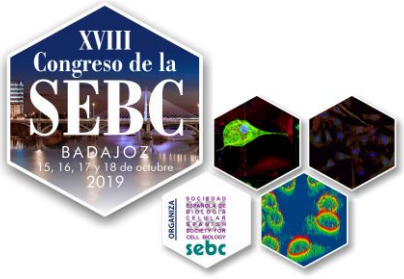
Carneros E, Díaz-Luzza EM, Pérez-Pérez E, Bárány I, Risueño MC, Testillano PS

Biological Research Center, CIB-CSIC, Madrid, Spain.

Self-incompatibility induced programmed cell death in field poppy and Arabidopsis (ID_ 18)

Triviño MM[1,2,3], Lin Z[2,3], Nowack MK[2,3], Franklin-Tong VE[4] and Bosch M[1].

1 *Institute of Biological, Environmental and Rural Sciences (IBERS), Aberystwyth University, Plas Gogerddan, Aberystwyth, SY23 3EE, UK;* ***2*** *Department of Plant Biotechnology and Genetics, Ghent University, 9052 Ghent, Belgium;* ***3*** *VIB Center for Plant Systems Biology, 9052 Ghent, Belgium;* ***4*** *School of Biosciences, College of Life and Environmental Sciences, University of Birmingham, Edgbaston, Birmingham, B15 2TT, UK*



Symposium 4: "Cellular trafficking and signal transduction"

Chairs:

Isabel Fabregat. Bellvitge Biomedical Research Institute (IDIBELL). Barcelona.

Francisco Javier Martín-Romero. Instituto de Biomarcadores de Patologías Moleculares. Universidad de Extremadura (UEX)

Cross-talk between the NADPH Oxidase 4 (NOX4) and Cyclin D1 in hepatocellular carcinoma (ID_ 33)

[1,2*]Fusté, N.P., [1,2]Bonilla-Amadeo, R., [3]Pons, G. and [1,2,3]Fabregat, I.

1 *TGF- β and Cancer Group. Oncobell Program. IDIBELL, Barcelona, Spain ;* ***2*** *Oncology Program, CIBEREHD, Instituto de Salud Carlos III, Barcelona, Spain ;* ***3*** *Dept. de Ciències Fisiològiques II, Universitat de Barcelona, Barcelona, Spain.*

Dissecting the role of the NADPH oxidase NOX4 during liver regeneration (ID_ 4)

[1,2] Herranz-Itúrbide, M., [1,2] López-Luque, J., [1,2] Caballero-Díaz, D., [1] Crosas-Molist, E., [3] Jaquet, V., [4] Jiang, X., [3,5] Krause, K.H., [4] Török, N.J., [1,2,6] Fabregat, I.

1. *TGF-β and Cancer Group. Oncobell Program, IDIBELL, Barcelona, Spain.* ***2.*** *Oncology Program, CIBEREHD, Instituto de Salud Carlos III, Spain.* ***3.*** *Centre Médical Universitaire, University of Geneva, Switzerland.* ***4.*** *Gastroenterology and Hepatology, Stanford University, Palo Alto, CA, US.* ***5.*** *Department of Genetic and Laboratory Medicine, Geneva University Hospitals, Geneva, Switzerland.* ***6.*** *Dept. de Ciències Fisiològiques II, Universitat de Barcelona, Barcelona, Spain.*

Epidermal Shoc2 contributes to skin homeostasis (ID_43)

Anta B[1], De Lucas MP[1], López-Alonso V[3], Peña-Jiménez D[1], Zarich N[1], Mantecon R[1], Ortega-Rodríguez J[1], Dura LM[1], Castro J[1], Camara AB[1], Lopez-Briones T[1], Oliva JL[1], Parejo NF[2], Lorenzo-Martin LF[2], Bustelo XR[2] & Rojas-Cabañeros, JM[1].

[1]Unidad de Biología Celular. UFIEC-Instituto de Salud Carlos III, Majadahonda, Madrid, Spain; [2]Centro de Investigación del Cáncer, CSIC-Universidad de Salamanca, Salamanca, Spain; [3]Unidad de Biología Computacional. UFIEC- Instituto de Salud Carlos III, Majadahonda, Madrid, Spain.

Focal adhesion remodeling during cell migration stimulated by amniotic membrane (ID_ 71)

Bernabé-García A[1], Liarte S[1], Rodríguez-Valiente M[1], Moraleda JM[2], Castellanos G[3] and Nicolás FJ[1*]

1 Laboratorio de Regeneración, Oncología Molecular y TGFß, IMIB-Arrixaca, El Palmar, Murcia, Spain; **2** Unidad de Trasplante y Terapia Celular. Hospital Clínico Universitario Virgen de la Arrixaca, Murcia, Spain; **3** Servicio de Cirugía, Hospital Clínico Universitario Virgen de la Arrixaca, El Palmar, Murcia, Spain.

ImageJ macro for analysis of muscular contractions in zebrafish embryos (ID_ 27)

Llopis J, Vicente Ruiz M, Salgado-Almario J, Domingo B and Soriano Felipe J.

Centro Regional de Investigaciones Biomédicas (CRIB) y Facultad de Medicina, Universidad de Castilla-la Mancha (UCLM), Albacete.

Mitochondrial influence on skeletal muscle Ca2+ signals seen in zebrafish embryos in vivo (ID_ 7)

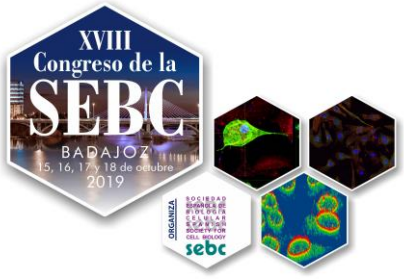
Vicente Ruiz M., Salgado-Almario J.; Soriano J.; Domingo, B. and Llopis, J.

Centro Regional de Investigaciones Biomédicas (CRIB) and Facultad de Medicina de Albacete, Universidad de Castilla-La Mancha, Albacete.

Modulation of transforming growth factor-β signaling is essential for the stimulation of cell migration by amniotic membrane (ID_ 72)

Bernabé-García, A[1], Liarte, S[1], Ruiz-Cañada, C[1], Moraleda, JM[2], Castellanos, G[3] and Nicolás FJ[1,*]

[1]Laboratorio de Regeneración, Oncología Molecular y TGFß. IMIB-Arrixaca, El Palmar, Murcia, Spain; [2]Unidad de Trasplante y Terapia Celular. Hospital Clínico Universitario Virgen de la Arrixaca, Murcia, Spain; [3]Servicio de Cirugía, Hospital Universitario Virgen de la Arrixaca, El Palmar, Murcia, Spain.



Comunicaciones Posters

Oleanolic acid potentiates migration in Mv1Lu and MDA-MB 231 epithelial cell lines by promoting EGF receptor and MAP kinases activation (ID_ 10)

Stelling-Férez J[1-2], Bernabé-García A[1], Liarte S[1], Gabaldón JA[2], Núñez-Delicado E[2], Nicolás FJ[1].

1 *Laboratorio de Oncología Molecular y TGF-ß, Instituto Murciano de Investigaciones Biosanitarias- Arrixaca (IMIB), El Palmar, Murcia, España;* ***2****Departamento de Nutrición y Tecnología de los Alimentos, Universidad Católica de Murcia (UCAM), Guadalupe, Murcia, España*

p73 regulates core-PCP proteins localization by modulating actin and microtubule cytoskeleton dynamics (ID_ 17)

Laura Maeso-Alonso[1], Sandra Fuertes-Álvarez[1], Javier Villoch-Fernández[1], Marta Martín-López[1,2], Inmaculada Diez-Prieto[3], Margarita M. Marques[4] & Maria C Marin[1].

1 *Instituto de Biomedicina (IBIOMED), Universidad de León León, España;* ***2*** *Biomar Microbial Technologies, León, España;* ***3*** *Departamento de Medicina Veterinaria, Cirugia y Anatomia, Universidad de León, León, España;* ***4*** *Dept. de Producción Animal, Universidad de León, León, España.*

Physiological Characterization of a Sur8/SHOC2 Mouse Model (ID_65)

Fermín-Sánchez L[1], Peña-Jiménez D[1], Oliva JL[2], Anta B[2], López-Alonso V[2], de Lucas MP[2], Martínez-Rodriguez S[1], Sardón D[1], Fernández-Aceñero MJ[3], Cámara AB[2], Zarich N[2], Rojas-Cabañeros JM[2] and Yunta M[1]

1*. Universidad Alfonso X El Sabio, Villanueva de La Cañada, Madrid;* ***2.*** *Unidad Funcional de Investigación en Enfermedades Crónicas, Majadahonda, Madrid;* ***3.*** *Hospital Clínico San Carlos, Madrid.*

Protein Convertase Subtilisin/Kexin type 9 (PCSK9) in colon cancer cells (ID_57)

Casado Andres .M[1,2], Garcia Gallastegui.P[1], Etxebeste Agudo .E[1], Crende Arruabarrena.O[1], Badiola Etxaburu .I[1]

[1]Departament of cell biology and histology, Faculty of Medicine and Nursing. Leioa/ Biscay. Spain; [2]Université de Bordeaux, INSERM .Bordeaux /Nouvelle aquitaine. France.

RAC1 controls ORAI1 translocation and externalization at the leading edge to potentiate cell migration (ID_ 59)

Espinosa-Bermejo N[1], Lopez-Guerrero AM[1], Sanchez-Lopez I[1], Pascual-Caro C[1], Pozo-Guisado E[2], Martin-Romero FJ[1].

1 *Department of Biochemistry and Molecular Biology, School of Life Sciences and Institute of Molecular Pathology Biomarkers, University of Extremadura, Badajoz 06006 (Spain);* ***2*** *Department of Cell Biology, School of Medicine and Institute of Molecular Pathology Biomarkers, University of Extremadura, Badajoz 06006 (Spain).*

Rapid protein depletion for the study of ytubulin-dependent microtubule nucleation (ID_ 48)

Roca García J, Gandolfo Domínguez P, Gavilán Dorronzoro MP, Ríos Sánchez RM

Centro Andaluz de Biología Molecular y Medicina Regenerativa (CABIMER), Seville

STIM1-CaV1.2-ITPR3 axis regulates endoplasmic reticulum-mitochondria Ca2+ shuttling and mitochondrial function (ID_ 58)

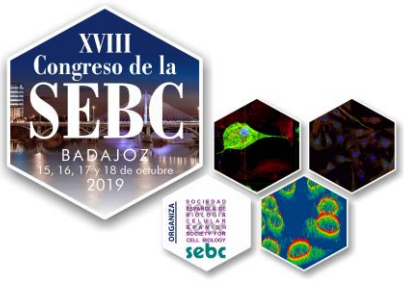
Pascual-Caro C.[1], Pozo-Guisado E.[2], Martín-Romero FJ.[1]

1 *Department of Biochemistry and Molecular Biology, School of Life Sciences and Institute of Molecular Pathology Biomarkers, University of Extremadura, Badajoz 06006 (Spain);* ***2*** *Department of Cell Biology, School of Medicine and Institute of Molecular Pathology Biomarkers, University of Extremadura, Badajoz 06006 (Spain).*

Study of the degradative interactome of magnetic nanoparticles developed for biomedical applications (ID_ 37)

Portilla, Y, Paradela, A, Barber, D.F

Centro Nacional de Biotecnología/CSIC, Madrid, Spain



TGFβ stimulation promotes distinct Sirt1phosphorylation patterns in different mammary cancer cell lines (73)

Liarte S[1], Moreno-Sánchez PM[1], Carballo-Santana M[1], Alonso-Romero JL[2], Nicolás FJ[1]

1 Laboratorio de Regeneración, Oncología Molecular y TGFß, IMIB-Arrixaca, El Palmar, Murcia, Spain; **2** Servicio de Oncología, Hospital Clínico Universitario Virgen de la Arrixaca, El Palmar, Murcia, Spain.

The NADPH Oxidase NOX4 Inhibits c-Myc and Nrf2 Activation and Protects Cells from Oxidative Stress in Hepatocellular Carcinoma (ID_ 5)

Peñuelas-Haro, I[1,2], Bertran, E[1,2], Crosas-Molist, E[1], Zhang, S[3], Knaus, UG[3], Fabregat, I[1,2,4]

[1]TGF- ß and Cancer Group. Oncobell Program. IDIBELL, Barcelona, Spain; [2]Oncology Program, CIBEREHD, Instituto de Salud Carlos III, Barcelona, Spain; [3]Conway Institute, School of Medicine, University College Dublin, Dublin, Ireland; [4]Dept. de Ciències Fisiològiques II, Universitat de Barcelona, Barcelona, Spain

The plasma membrane Ca2+ channel ORAI1 is required for lamellipodia formation, persistence, and cell directness (ID_50)

Sánchez-López I[1], Espinosa-Bermejo N[1], Rodriguez-Ruiz L[2], Perez-Oliva AB[2], Mulero V[2], Pozo-Guisado E[3], Martin-Romero FJ[1]

*(**1**) Department of Biochemistry and Molecular Biology, School of Life Sciences and Institute of Molecular Pathology Biomarkers, University of Extremadura, Badajoz 06006 (Spain); (**2**) Department of Cell Biology and Histology, University of Murcia, IMIB-Arrixaca, Murcia 30100 (Spain); (**3**) Department of Cell Biology, School of Medicine and Institute of Molecular Pathology Biomarkers, University of Extremadura, Badajoz 06006 (Spain).*

Symposium 5: "Cell differentiation and reprogramming"

Chairs:
María Abad. Cellular Plasticity and Cancer Group Vall d'Hebron Institute of Oncology (VHIO)
Anna Bigas. Institut Hospital del Mar d´Investigacions Mèdiques (IMIM). Barcelona

A novel Wt1 mosaic mice in Wt1-cre demonstrates (ID_12)

Alejo Torres-Cano[1], Marina Ramiro-Pareta[1], Manuel Reina[1], Francesc X. Soriano[1,3] and Ofelia M. Martínez Estrada[1,2]

***1** Celltec-UB, Department of Cell Biology, Physiology and Immunology, Faculty of Biology, University of Barcelona. Barcelona, Barcelona; **2** Institute of Biomedicine (IBUB), University of Barcelona. Barcelona, Barcelona; **3** Institut de Neurociències, Universitat de Barcelona. Barcelona, Barcelona.*

AhR as diagnostic marker and/or therapeutic target in hepatocellular carcinoma (ID_53)

Rejano-Gordillo C. M.[1], Moreno-Marín N.[2] & Fernández-Salguero P.M[1].

***1** Instituto Universitario de Investigación Biosanitaria de Extremadura, (INUBE), Badajoz, Spain*; **2** *Gulbenkian Institute of Science (IGC), Research institute Oeiras, Portugal*

Cell corpse removal is dependent on non-canonical autophagy during retinal neurogenesis (ID_16)

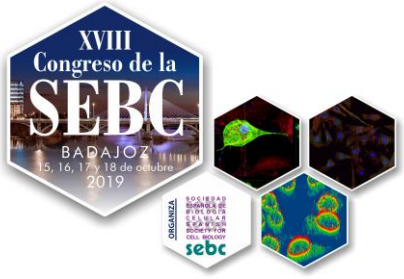
Beatriz Villarejo-Zori, Lorena-Esteban Martinez and Patricia Boya

CIB-CSIC, Madrid, Spain

Immunohistochemical detection of proteins involved in planar cell polarity (PCP) during retinal development (ID_ 34)

Álvarez-Hernán G.[1], Garrido-Jiménez S.[2], Román AC.[2], Carvajal-González JM.[2], Francisco-Morcillo J.[1]

***1** Área de Biología Celular, Facultad de Ciencias, Universidad de Extremadura, Badajoz; **2** Área de Bioquímica, Facultad de Ciencias, Universidad de Extremadura, Badajoz.*



Comunicaciones Posters

Long-term exposure of human skin keratinocytes to graphene produces molecular and cellular alterations resembling cell transformation (ID_ 23)

Frontiñán-Rubio, J. [1,2]***; González-Velázquez, V.J.*** [1]***, Vázquez, E.*** [1,3]***; Durán-Prado, M.*** [2]

1 *Instituto Regional de Investigación Científica Aplicada (IRICA), UCLM, Ciudad Real;* ***2*** *Grupo de Estrés Oxidativo y Neurodegeneración, UCLM, Ciudad Real;* ***3*** *Facultad de Ciencias y Tecnologías Químicas, UCLM, Ciudad Real*

Neuroendocrine component of the tumour microenvironment and its redox regulation in androgen-dependent prostate cancer cells (ID_ 36)

Quirós-González, I. [1,3,4]***, Alvarez-Artime A.*** [1,2,3]***, Cernuda-Cernuda R.*** [1,3]***, MayoJ.C.1,2,3 & Sainz R.M.*** [1,2,3]

1 *Departamento de morfología y biología celular, Universidad de Oviedo. Oviedo. Asturias;* ***2*** *Redox biology group, IUOPA, Universidad de Oviedo. Oviedo. Asturias;* ***3*** *BioxMet, ISPA-FINBA, Hospital central de Asturias. Oviedo. Asturias;* ***4*** *Department of physics and Cancer Research UK Cambridge institute, University of Cambridge, Cambridge UK.*

Stemness-related genes expression pattern in SHSY5Y human neuroblastoma cell line differentiation process (ID_ 51)

González-Rico F.J., del Valle-del Pino N., Mulero-Navarro S., Merino J.M.

Departamento de Bioquímica y Biología Molecular, Facultad de Ciencias, Universidad de Extremadura, Badajoz, Badajoz. Instituto Universitario de Investigación Biosanitaria de Extremadura (INUBE), Badajoz, Badajoz.

Wt1 is a major regulator of developmental angiogénesis (ID_ 13)

Marina Ramiro-Pareta [1]***, Alejo Torres-Cano*** [1]***, Manuel Reina*** [2]***, Francesc X. Soriano*** [3] ***and Ofelia M Martínez-Estrada*** [1]***.***

[1]*Celltec UB, Department of Cell Biology, Physiology and Immunology, University of Barcelona, Barcelona; and Institute of Biomedicine, University of Barcelona, Barcelona;* [2]*Celltec UB, Department of Cell Biology, Physiology and Immunology, University of Barcelona, Barcelona;* [3]*Celltec UB, Department of Cell Biology, Physiology and Immunology, University of Barcelona, Barcelona; and Institut de Neurociències, University of Barcelona, Barcelona*

Symposium 6: "Cellular death and autophagy"

Chairmen:

Joan Gil. Departamento de Ciencias Fisiológicas, Universidad de Barcelona

José M. Fuentes. Departamento de Bioquímica, Universidad de Extremadura (UEX)

Fluorizoline inhibits mitophagy in a Parkin-independent manner (ID_55)

Sonia Núñez-Vázquez [1]***, José Saura-Esteller*** [1]***, Ismael Sánchez-Vera*** [1]***, Ana M. Cosialls*** [1]***, Gabriel Pons*** [1]***, Daniel Iglesias-Serret1,*** [2]***, Sandrine Marchetti*** [3]***, Jean-Ehrland Ricci3 and Joan Gil*** [1]

1 Departament de Ciències Fisiològiques, Universitat de Barcelona-Institut d'Investigació Biomèdica de Bellvitge (IDIBELL), L'Hospitalet de Llobregat, Catalunya, Spain; **2** Facultat de Medicina. Universitat de Vic – Universitat Central de Catalunya (UVic- UCC), Vic, Barcelona, Spain; **3** Univeristé Côte d'Azur, INSERM, C3M, Nice, France.

Symposium 7: "Cellular neurobiology"

Chairwomen:

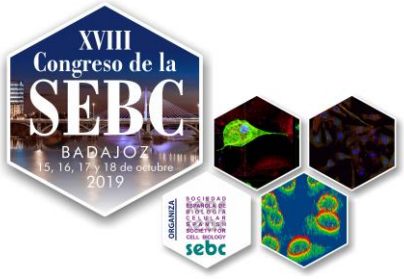
Inés M. Antón. Centro Nacional de Biotecnología (CNB-CSIC) and CIBERNED, Madrid

María Ángeles Moro. Departamento de Farmacología y Toxicología. Universidad Complutense de Madrid (UCM). Madrid

Ahr gene expression during the embryonary development of Gallus gallus (ID_ 1)

Callejas-Marín A. [1,2]***, Lois C.*** [2]***, Hidalgo-Sánchez M.*** [1]***, Sánchez-Guardado L.*** [2]

[1]*School of Science, University of Extremadura, Badajoz E06071, Spain;* [2]*California Institute of Technology, Pasadena, California, USA*



Comunicaciones Posters

Coenzyme Q10 as a novel modulator of protein expression in glioblastoma (ID_ 45)

Llanos-González E[1,2], García-Carpintero S[1,2], Peinado JR[1,2], Muñoz J [3], Zarzuela E[3], Malumbres M[4], Alcaín FJ[1,2] and Durán-Prado M[1,2#]

1 *Department of Medical Sciences, Faculty of Medicine, University of Castilla-la Mancha, Ciudad Real, Spain;* ***2*** *Oxidative Stress and Neurodegeneration Group, Faculty of Medicine, Regional Centre for Biomedical Research, University of Castilla-La Mancha, Ciudad Real, Spain;* ***3*** *Proteomics Unit, Spanish National Cancer Research Centre (CNIO), Madrid, Spain;* ***4*** *Cell Division and Cancer group, Spanish National Cancer Research Centre (CNIO), Madrid, Spain.*

Cortical distribution of GABAergic interneurons in the adult brain is determined by timing and birth place (ID_ 6)

Fazzari P [1, 6], Mortimer N [2, 3, 4, 6], Yabut O [2] and Pla R [2, 5]

1 *CIPF, Centro de Investigación Príncipe Felipe, Valencia, Valencia;* ***2*** *University of California San Francisco (UCSF) San Francisco, California;* ***3*** *Departamento de Psiquiatría Hospital Universitario Vall d'Hebron, Barcelona, Barcelona;* ***4*** *Division of Molecular Psychiatry, Center of Mental Health, University of Würzburg, Würzburg, Germany;* ***5*** *Instituto de Investigación en Discapacidades Neurológicas (IDINE)-Universidad Castilla-La-Mancha, Albacete, Castilla La Mancha;* ***6*** *These authors contributed equally*

Distribution of 5-HT1B receptors in human sperm studied with high-resolution microscopy and graph-based methods (ID_ 62)

De Juan, A[1]; Girela, JL[2]; De Juan, J [2,3]

[1]University Hospital, San Juan, Alicante, Spain; [2]Biotechnology Research Group, Department of Biotechnology, Faculty of Sciences, University of Alicante, San Vicente del Raspeig, Alicante, Spain, [3]IUIEG, University of Alicante, San Vicente del Raspeig, Alicante, Spain.

Human β-amyloid enriched extracts as a tool to investigate prion-like hypothesis of Alzheimer's disease (ID_ 20)

Pedrero-Prieto, C.M.[1], Flores-Cuadrado, A.[2], Saiz-Sánchez, D.[2], Úbeda-Bañón, I.[2], Frontiñán-Rubio, J.[1], Alcaín, F.J. [1], Mateos-Hernández, L.[3,4], de la Fuente, J.[3,5], Durán-Prado, M.[1], Villar, M.[3], Martínez-Marcos, A.[2*], Peinado, J.R.[1*]

1 *Department of Medical Sciences, Ciudad Real Medical School, Oxidative Stress and Neurodegeneration Group, Regional Center for Biomedical Research, University of Castilla-La Mancha, Ciudad Real, Spain;* ***2*** *Department of Medical Sciences, Ciudad Real Medical School; Neuroplasticity and Neurodegeneration Group, Regional Center for Biomedical Research, University of Castilla-La Mancha, Ciudad Real, Spain;* ***3*** *SaBio. Instituto de Investigación en Recursos Cinegéticos IREC, CSIC-UCLM-JCCM, Ciudad Real, Spain;* ***4*** *UMR BIPAR, INRA, ANSES, Ecole Nationale Vétérinaire d'Alfort, Université Paris-Est, 94700 Maisons-Alfort, France;* ***5*** *Department of Veterinary Pathobiology, Center for Veterinary Health Sciences, Oklahoma State University, Stillwater, Oklahoma, United States of America.*

Impact of Mitofusin 2 tethering role on mitochondrial bioenergetics (ID_ 41)

Sergi Casellas-Díaz [(1,2)], Marc Segarra-Mondéjar [(1,2)], Guillem Riqué-Pujol [(1)], Ofelia M. Martínez-Estrada [(1)], Manuel Reina [(1)], Francesc X Soriano [(1,2)]

1*- CELLTEC-UB, Department of Cell Biology, Physiology and Immunology, Faculty of Biology, University of Barcelona, Barcelona, Spain;* ***2****- Institute of Neurosciences, University of Barcelona, Barcelona, Spain.*

Poly (ADP-Ribose) Polymerase (PARP-1) inhibition activates the DNA damage response pathway and sensitizes retinal cells to cell death induced by oxidative stress (ID_ 22)

Martín-Guerrero SM[1], Casado P[2], Cuadros MA[1], Navascués J[1], Cutillas PR[2], Martín-Oliva D[1].

1. *Departamento de Biología Celular, Facultad de Ciencias, Universidad de Granada, Granada.*

2. *Cell Signalling and Proteomics Group, Centre for Haemato-Oncology, Barts Cancer Institute, Queen Mary University of London, London.*

Symposium 8: "Last generation technologies in Cell Biology"

Chairs:

Juan Llopis. Universidad de Castilla - La Mancha, Albacete

Alberto Álvarez-Barrientos. Servicio de Técnicas Aplicadas a la Biociencia, Universidad de Extremadura. (UEX)

Proteomic profiling of stallion spermatozoa suggests a shift towards glycolysis after cryopreservation (ID_21)

Martín-Cano FE, Ortiz-Rodriguez JM, Silva-Rodriguez A, Ortega-Ferrusola C, Gil MC, Peña FJ*

Laboratory of Equine Reproduction and Equine Spermatology, Veterinary Teaching Hospital, University of Extremadura, Cáceres, Spain

Detection of Bacterial Communities in human heart valves by NGS (ID_29)

Gutiérrez-Martín Y [(2)], Calvo-Cano A [(1)], Muñoz-Sanz A [(1)], Álvarez-Barrientos A [(2)].

(1) *Infectious Diseases Department, Universitary Hospital of Badajoz, Spain*; ***(2)*** *Servicio de Técnicas Aplicadas a las Biociencias (STAB), Universidad de Extremadura, Badajoz, Spain.*

New experimental murine models for colorectal cáncer (ID_ 38)

López-Briones, T[1], Ortega-Rodríguez, J[1], Cámara, AB[123], Fernández-Barral, A[23], Bustamante-Madrid, P[23], Costales-Carrera, A[23], Zarich, N[1], Oliva, JL[4], Barbáchano, A[23], Muñoz, A[23], Anta, B[1], Rojas-Cabañeros, JM[1] and de Lucas, MP[1].

[1] Unidad de Biología celular. UFIEC. Instituto de Salud Carlos III. Majadahonda, Madrid; [2] Instituto de Investigaciones Biomédicas "Alberto Sols", Consejo Superior de Investigaciones Científicas - Universidad Autónoma de Madrid. Madrid, Madrid; [3] Biomedical Research Networking Centres-Oncology (CIBERONC), Madrid, Madrid; [4] Unidad de Senescencia Celular. UFIEC. Instituto de Salud Carlos III. Majadahonda, Madrid.

Transcriptome analysis reveals that fertilization with cryopreserved sperm ownregulates genes relevant for early embryo development in the horse (ID_ 66)

Gutiérrez Martín Y [2], Ortiz-Rodríguez JM [1], Ortega-Ferrusola C [1], Gil MC [1], Martín-Cano FE [1], Álvarez-Barrientos A [2], Román Á 3 , Peña FJ [1] .

1) *Laboratory of Equine Reproduction and Equine Spermatology, Veterinary Teaching Hospital, University of Extremadura, Cáceres, Spain.* ***2****) STAB, University of Extremadura, Badajoz, Spain.* ***3)*** *Department of Biochemistry and Molecular Biology, University of Extremadura, Badajoz, Spain.*