



Lisardo Boscá Gomar

Generated from: Editor CVN de FECYT

Date of document: 27/11/2020

v 1.4.3

39a998774e323f2d7b9269b68793ac29

This electronic file (PDF) has embedded CVN technology (CVN-XML). The CVN technology of this file allows you to export and import curricular data from and to any compatible data base. List of adapted databases available at: <http://cvn.fecyt.es/>



Summary of CV

This section describes briefly a summary of your career in science, academic and research; the main scientific and technological achievements and goals in your line of research in the medium -and long- term. It also includes other important aspects or peculiarities.

Under the viewpoint of the molecular mechanisms that govern the metabolic profiling of macrophages and their impact on the cell function we have demonstrated the basic principles associated to the metabolic adaptation of macrophages depending on their functional proinflammatory polarization (M1) or anti-inflammatory and pro-resolution (M2a/b). These works use techniques intended to provide fluxomics and metabolomics maps associated to the functional polarization. The use of these routes, which is important in pathological contexts where oxygen is limiting are mainly directed towards anaplerotic purposes. Finally, we have concluded that HIF-1alpha did not exert the preponderant role that the in vitro studies show, being replaced by HIF-2alpha in animals in which this gene is deleted. These works have been positioned the group in a relevant position in the field of the metabolic regulation of macrophage function associated to its polarization. As evidence of this, these works have been cited more than 140 times in high impact journals in the field of immunobiology. As an extension of these studies, the diagnosing of atherogenesis requires imaging techniques to identify the presence of 'active' plates, i.e. recruiting macrophages and other cell types following an atherogenic event. In collaboration with the group of Dr. J. Narula (Mount Sinai Med School, NY) we tried different PET-based tracers to improve the imaging based on the classic FDG incorporation that offers low resolution levels. One of the most promising new substrates to characterize macrophage signatures is the uptake of fluoro-deoxymannose that provides a significant increase in the intracellular 'burden' signal. Our group identified the mechanisms by which this mannose mark exceeds widely that of glucos, allowing a significant increase in the quality and specificity of the PET image without affecting costs, toxicity or detection mechanism. This work has opened new perspectives for the characterization of alternative molecules to FDG tracers of atherogenesis, with a clear application to biomedical imaging. These studies have been conducted in rodents, rabbits and are being implemented in humans. With a cost of € 5-10 for each administration in humans and an increase up to 3 times in the signal vs. noise ratio, represent a valid alternative for the athero detection. The study of molecules derived from natural products with anti-inflammatory activity is a subject of broad translational interest. However, surprisingly little is known regarding the molecular mechanisms involved. Chemical series derived from acanthoic acid exhibit potent anti-inflammatory action and we showed that they selectively activate the nuclear receptor LXR. By examining the mechanisms that mediate the pharmacological actions of these molecules we saw that they also selectively activate two isoforms of PI3K in the macrophage. The recapitulation of these data provides for the first time a series of molecules (from natural products) that simultaneously activate a nuclear receptor (LXR) and PI3K, both converging in suppressing macrophage inflammatory genes. The work has paid an editorial in the journal BIOL&CHEM from the CELL group.



General quality indicators of scientific research

This section describes briefly the main quality indicators of scientific production (periods of research activity, experience in supervising doctoral theses, total citations, articles in journals of the first quartile, H index...). It also includes other important aspects or peculiarities.

índice h=53 (marzo 2019). Promedio de citas por publicación: 31,32 .
Total de veces citado 9.364; sin citas propias 8.642

Lisardo Boscá Gomar

Surname(s): **Boscá Gomar**
Name: **Lisardo**
ORCID: **0000-0002-0253-5469**
Contact aut. region/reg.: **Community of Madrid**

Current professional situation

Employing entity: Instituto de Investigaciones Biomédicas Alberto Sols **Type of entity:** State agency
Department: Centro Mixto CSIC-UAM
Professional category: Profesor de Investigación **Educational Management (Yes/No):** No
Start date: 01/12/2006
Type of contract: Civil servant **Dedication regime:** Full time
Field of management activity: Public Research Body

Previous positions and activities

	Employing entity	Professional category	Start date
1	Instituto de Salud Carlos III	Subdirector General de Fomento y Evaluación de la Investigación	01/03/2013
2	IIBm (CSIC-UAM)	Director de Instituto (IIBm, CSIC-UAM)	2008
3	FUNDACION PRIVADA INSTITUT D'INVESTIGACIO BIOMEDICA DE BELLVITGE (IDIBELL)	Director Científico	2007
4	CSIC-Universidad Complutense de Madrid	Profesor de Investigación CSIC. Instituto de Bioquímica. Centro Mixto CSIC-UCM. Facultad de Farmacia.	2004
5	Instituto de Bioquímica. Facultad de Farmacia UCM	Director Instituto.	2002
6	Centro Nacional de Investigaciones Cardiovasculares (CNIC)	Jefe de grupo	2001
7	CSIC-Universidad Complutense de Madrid	Investigador Científico CSIC. Instituto de Bioquímica. Centro Mixto CSIC-UCM. Facultad de Farmacia.	1999
8	CSIC-Universidad Complutense de Madrid.	Científico Titular CISC. Instituto de Bioquímica. Facultad de Farmacia.	1986
9	Institute for Cellular Pathology. Brussels	EMBO Fellow	1984
10	Universidad Autónoma de Madrid	Profesor Ayudante UAM.Facultad de Medicina.	1980
11	IIBm (CSIC-UAM)	Profesor de Investigación CSIC-IIBM-Alberto Sols	2007



- 1** **Employing entity:** Instituto de Salud Carlos III **Type of entity:** Public Research Body
Professional category: Subdirector General de Fomento y Evaluación de la Investigación
Start-End date: 01/03/2013 - 01/09/2015
- 2** **Employing entity:** IIBm (CSIC-UAM)
Professional category: Director de Instituto (IIBm, CSIC-UAM)
Start-End date: 2008 - 2012
- 3** **Employing entity:** FUNDACION PRIVADA INSTITUT D'INVESTIGACIO BIOMEDICA DE BELLVITGE (IDIBELL)
Professional category: Director Científico
Start-End date: 2007 - 2008
- 4** **Employing entity:** CSIC-Universidad Complutense de Madrid
Professional category: Profesor de Investigación CSIC. Instituto de Bioquímica. Centro Mixto CSIC-UCM. Facultad de Farmacia.
Start-End date: 2004 - 2008
- 5** **Employing entity:** Instituto de Bioquímica. Facultad de Farmacia UCM
Professional category: Director Instituto.
Start-End date: 2002 - 2006
- 6** **Employing entity:** Centro Nacional de Investigaciones Cardiovasculares (CNIC)
Professional category: Jefe de grupo
Start-End date: 2001 - 2006
- 7** **Employing entity:** CSIC-Universidad Complutense de Madrid
Professional category: Investigador Científico CSIC. Instituto de Bioquímica. Centro Mixto CSIC-UCM. Facultad de Farmacia.
Start-End date: 1999 - 2004
- 8** **Employing entity:** CSIC-Universidad Complutense de Madrid.
Professional category: Científico Titular CISC. Instituto de Bioquímica. Facultad de Farmacia.
Start-End date: 1986 - 1999
- 9** **Employing entity:** Institute for Cellular Pathology. **Type of entity:** University Brussels
Professional category: EMBO Fellow
Start-End date: 1984 - 1985
- 10** **Employing entity:** Universidad Autónoma de Madrid
Professional category: Profesor Ayudante UAM.Facultad de Medicina.
Start-End date: 1980 - 1983
- 11** **Employing entity:** IIBm (CSIC-UAM)
Professional category: Profesor de Investigación CSIC- IIBM-Alberto Sols
Start date: 2007



Education

University education

1st and 2nd cycle studies and pre-Bologna degrees

Name of qualification: Licenciado en Ciencias Químicas

Degree awarding entity: Universitat de València

Date of qualification: 1979

Doctorates

Doctorate programme: Doctor en Ciencias Químicas.

Degree awarding entity: Universidad Autónoma de Madrid

Date of degree: 1983

Thesis director: Alberto Sols García

Language skills

Language	Listening skills	Reading skills	Spoken interaction	Speaking skills	Writing skills
German		B1	C1	C1	C1
French		C1	C1	C1	C1
English		C1	C1	C1	C1

Teaching experience

Experience supervising doctoral thesis and/or final year projects

- Project title:** Papel de la pro-proteína convertasa subtilisina kexina de tipo 9 (PCSK9) en el macrófago. Implicaciones en el desarrollo de aterosclerosis

Entity: Universidad Autónoma de Madrid **Type of entity:** University

Student: César Eduardo Rosales mensoza

Obtained qualification: Sobresaliente cum laude

Date of reading: 01/09/2017
- Project title:** Estudio del perfil transcripcional de los receptores nucleares LXR en un modelo celular de macrófago murino inmortalizado

Entity: Universidad Complutense de Madrid **Type of entity:** University

Student: Almudena Ramón Vázquez

Obtained qualification: Sobresaliente cum laude

Date of reading: 01/07/2017



- 3** **Project title:** Nod1 is pro-atherogenic and its genetic deletion prevents early atherosclerosis development in Apoe^{-/-} mice.
Entity: Universidad Autónoma de Madrid **Type of entity:** University
Student: Silvia González Ramos
Obtained qualification: Sobresaliente cum laude
Date of reading: 16/12/2016
Quality recognition: Yes
- 4** **Project title:** Potencial terapéutico de diterpenos en inflamación y cardioprotección
Entity: Instituto de Investigaciones Biomédicas Alberto Sols **Type of entity:** State agency
Student: Irene Cuadrado Berrocal
Date of reading: 21/11/2013
- 5** **Project title:** Los derivados de productos naturales como fuente de nuevos agentes bioactivos
Entity: Instituto de Investigaciones Biomédicas Alberto Sols **Type of entity:** State agency
Student: María Pimentel santillana
Date of reading: 25/10/2013
- 6** **Project title:** Estudio del efecto pro-apoptótico de los diterpenos derivados del labdano en células tumorales
Entity: Instituto de Investigaciones Biomédicas Alberto Sols **Type of entity:** State agency
Student: Gabriel Bergazyn Liberman
Date of reading: 20/10/2011
- 7** **Project title:** Papel del supresor tumoral p19ARF en la respuesta inflamatoria
Entity: Instituto de Investigaciones Biomédicas Alberto Sols **Type of entity:** State agency
Student: Raquel López Fontal
Date of reading: 17/04/2010
- 8** **Project title:** Papel antiapoptótico de la lipoxina A4 en macrófagos: Papel en la resolución de la inflamación
Entity: Instituto de Investigaciones Biomédicas Alberto Sols **Type of entity:** State agency
Student: Patricia Prieto Chinchilla
Date of reading: 01/04/2010
- 9** **Project title:** Papel de la caveolina-1 en proliferación y regeneración hepática
Entity: Instituto de Investigaciones Biomédicas Alberto Sols **Type of entity:** State agency
Student: Rafael Mayoral Moñibas
Date of reading: 01/10/2007
- 10** **Project title:** Respuesta inflamatoria temprana de monocitos humanos expuestos a lipoproteínas y cortisol
Entity: Instituto de Investigaciones Biomédicas Alberto Sols **Type of entity:** State agency
Student: Mónica Torres Coronado
Date of reading: 01/09/2007



- 11** **Project title:** Aproximación genómica al estudio del receptor X de retinoides (RXR) en la biología del macrófago. Papel de RXR en la regulación de quimioquinas
Entity: Instituto de Investigaciones Biomédicas Alberto Sols **Type of entity:** State agency
Student: Daniel Rico Rodríguez
Date of reading: 01/04/2007
- 12** **Project title:** Respuesta del cardiomiocito al estrés inflamatorio
Entity: Instituto de Investigaciones Biomédicas Alberto Sols **Type of entity:** State agency
Student: Jimena Cuenca Romero
Date of reading: 15/10/2006
- 13** **Project title:** Efectos anti-inflamatorios de derivados sintéticos del ácido acantoico
Entity: Instituto de Investigaciones Biomédicas Alberto Sols **Type of entity:** State agency
Student: Francisca González Través
Date of reading: 01/10/2006
- 14** **Project title:** Mecanismos de regeneración hepática: regulación por óxido nítrico y prostaglandinas
Entity: Instituto de Bioquímica **Type of entity:** State agency
Student: Miriam Zeini Moreno
Date of reading: 01/10/2005
- 15** **Project title:** Factores condicionantes de la viabilidad del injerto en el trasplante hepático humano
Entity: Instituto de Bioquímica **Type of entity:** State agency
Student: Luis Olmedilla Arenal
Date of reading: 01/07/2003
- 16** **Project title:** Mecanismos de regulación negativa de NF κ B en el macrófago activado
Entity: Instituto de Bioquímica **Type of entity:** State agency
Student: Antonio Castrillo Viguera
Date of reading: 01/10/2001
- 17** **Project title:** Papel del NF κ B en la regulación de la viabilidad del macrófago activado
Entity: Instituto de Bioquímica **Type of entity:** State agency
Student: Eduardo López Collazo
Date of reading: 01/12/1998
- 18** **Project title:** Bases moleculares de la regulación transcripcional de la óxido nítrico sintasa inducible en el hepatocito
Entity: Instituto de Bioquímica **Type of entity:** State agency
Student: Marta Velasco Cardenal
Date of reading: 01/02/1998
- 19** **Project title:** Regulación de la expresión de la óxido nítrico sintasa inducible hepática
Entity: Instituto de Bioquímica **Type of entity:** State agency
Student: Sonsoles Hortelano Blanco
Date of reading: 01/04/1996



- 20** **Project title:** Análisis de la respuesta hormonal en distintos estadios de diferenciación hepática
Entity: Instituto de Bioquímica **Type of entity:** State agency
Student: María Junco Petrement
Date of reading: 01/06/1993
- 21** **Project title:** Proteína quinasa C hepática: Caracterización y mecanismos de activación
Entity: Instituto de Bioquímica **Type of entity:** State agency
Student: María Martínez Díaz-Guerra
Date of reading: 01/05/1990

Healthcare experience

Other activities/achievements not included above

Other relevant activities: Subdirector General de Fomento y Evaluación de la Investigación
Entity where project took place: Instituto de Salud Carlos III **Type of entity:** Public Research Body
End date: 31/08/2014

Scientific and technological experience

Scientific or technological activities

R&D projects funded through competitive calls of public or private entities

- 1** **Name of the project:** Consorcio para el estudio del fracaso renal agudo: fisiopatología, nuevas terapias, biomarcadores y modelos experimentales.
Entity where project took place: Consejo Superior de Investigaciones Científicas **Type of entity:** State agency
City of entity: MADRID, Spain
Nº of researchers: 1
Start-End date: 01/01/2018 - 31/12/2021
Total amount: 830.000 €
- 2** **Name of the project:** CIBER SOBRE ENFERMEDADES CARDIOVASCULARES
Entity where project took place: Consejo Superior de Investigaciones Científicas **Type of entity:** State agency
City of entity: MADRID, Spain
Nº of researchers: 1
Start-End date: 01/01/2018 - 31/12/2020
Total amount: 174.000 €
- 3** **Name of the project:** Modulación inmunometabólica del macrófago a través de mTOR y de la señalización purinérgica para favorecer la estabilidad de la placa en la aterogénesis
Entity where project took place: Consejo Superior de Investigaciones Científicas **Type of entity:** State agency

City of entity: MADRID, Spain
Nº of researchers: 1
Start-End date: 01/01/2018 - 31/12/2020
Total amount: 305.000 €

- 4** **Name of the project:** valoración de la cardioprotección frente a infarto de miocardio por administración de aptámeros antagonistas selectivos de Tlr4 (aptámero 4ft-aptoll).
Entity where project took place: CSIC **Type of entity:** R&D Centre
City of entity: Madrid, Community of Madrid, Spain
Name principal investigator (PI, Co-PI....): Lisardo Bosca Gomar
Nº of researchers: 1
Start-End date: 01/09/2018 - 31/12/2019
Total amount: 84.000 €
- 5** **Name of the project:** Characterization of the immunometabolic actions of trabectedin and PM01183 in murine and human macrophages: An approach to understand the role of these drugs on tumor associated macrophages (TAM)
Entity where project took place: Consejo Superior **Type of entity:** State agency de Investigaciones Científicas
City of entity: MADRID, Community of Madrid, Spain
Nº of researchers: 1
Start-End date: 01/06/2018 - 31/12/2019
Total amount: 58.800 €
- 6** **Name of the project:** Desarrollo preclínico de una molécula basada en tecnología de aptámeros específica de TLR-4 y de aplicación en ictus agudo y enfermedades cardiovasculares
Entity where project took place: RTC-2015-3741-1. 10/15-12/17
City of entity: MADRID,
Name principal investigator (PI, Co-PI....): Lisardo BOSCA GOMAR; Lisardo Boscá. IIB-AS (Centro Mixto CSIC-UAM)
Start date: 01/10/2015
- 7** **Name of the project:** Estudio de la relación entre polarización funcional y metabolismo energético del macrófago en patologías inflamatorias
Entity where project took place: SAF2014-52492. 1/15-12/17
City of entity: MADRID,
Name principal investigator (PI, Co-PI....): Lisardo Boscá. IIB-AS (Centro Mixto CSIC-UAM)
Start date: 01/01/2015
- 8** **Name of the project:** Nuevas tecnologías para la producción de los concentrados de alta pureza de los ácidos grasos omega3 EPA y DHA. Cantidad financiada: 138.783 €.
Entity where project took place: MINECO PROGRAMA INNFACTO. IPT2012-1331-06000. 12/12-12/15
Name principal investigator (PI, Co-PI....): SOLUTEX. GRUPO ASOCIADO Lisardo Boscá. IIB-AS. CSIC-UAM.
Start date: 01/01/2013
- 9** **Name of the project:** Red temática de enfermedades cardiovasculares. Cantidad financiada: 64.671,59 €.
Entity where project took place: ISCIII RED CARDIOVASCULAR (RD12/0042/0019) 01/13-12/13
Name principal investigator (PI, Co-PI....): Lisardo Boscá. IIB-AS (CSIC) Coordinador
Start date: 01/01/2013



- 10 Name of the project:** Metabolic interplay during macrophage activation and role in the outcome of cardiovascular diseases. Cantidad financiada: 295.000 €.
Entity where project took place: MICINN BFU2011-24760. 01/12-12/14
Name principal investigator (PI, Co-PI....): Lisardo Boscá. IIB-AS (Centro Mixto CSIC-UAM)
Start date: 01/01/2012
- 11 Name of the project:** Utilización de modelos animales y celulares para caracterizar el fracaso renal agudo y multiorgánico. Cantidad financiada: 793.500 €; Presupuesto Grupo 30.000 €/año.
Entity where project took place: Instituto de Investigaciones Biomédicas Alberto Sols
Type of entity: State agency
Name principal investigator (PI, Co-PI....): Lisardo Boscá. IIB-AS. CSIC-UAM. (Coordinador)
Start date: 01/01/2012
- 12 Name of the project:** Identificación y validación de mecanismo de acción y biomarcadores de respuesta a fármacos antitumorales en tumores humanos. Cantidad financiada: 60.000 €.
Entity where project took place: CENIT ONCOLOGICA. 01/10-12/11
Name principal investigator (PI, Co-PI....): Lisardo Boscá. IIB-AS (Centro Mixto CSIC-UAM)
Start date: 01/10/2011
- 13 Name of the project:** Estudio del potencial terapéutico de las nuevas arilideno tiazolininedionas: Efecto sobre el estrés oxidativo, la inflamación y la aterosclerosis. Cantidad financiada: 70.000 €.
Entity where project took place: MICINN PIB2010BZ-00540. 12/10-11/12
Name principal investigator (PI, Co-PI....): Lisardo Boscá. UCM
Start date: 01/12/2010
- 14 Name of the project:** Fisiopatología de la infiltración cardiaca. Papel de los macrófagos en la disfunción cardiaca. Cantidad financiada: 270.000 €.
Entity where project took place: BFU2008-02161. 08/08-07/11
Type of entity: State agency
City of entity: MADRID,
Name principal investigator (PI, Co-PI....): Lisardo Boscá. IIB-AS (Centro Mixto CSIC-UAM)
Start date: 01/08/2008
- 15 Name of the project:** Modelos animales para el estudio del fracaso renal agudo. Cantidad financiada: 900.000 €; Presupuesto Grupo 60.000 €/año.
Name principal investigator (PI, Co-PI....): Lisardo Boscá. UCM (Coordinador)
Start date: 01/01/2007
- 16 Name of the project:** Red temática de enfermedades cardiovasculares. Cantidad financiada: 270.716 €.
Entity where project took place: ISCIII RECAVA (RD06/0014/0006) 01/07-12/09
Name principal investigator (PI, Co-PI....): Lisardo Boscá. IIB-AS (CSIC) Coordinador
Start date: 01/01/2007
- 17 Name of the project:** Respuesta inflamatoria a fármacos antitumorales de FAES. Cantidad financiada: 80.000 €.
Entity where project took place: CENIT CDTI-FAES. 01/07-12/09
Name principal investigator (PI, Co-PI....): Lisardo Boscá. IIB-AS (Coordinador: S. Lamas; CIB)
Start date: 01/01/2007
- 18 Name of the project:** Inflamación y disfunción cardiomiocitaria: Papel de la infiltración y activación de células inflamatorias en la fisiopatología cardiaca. Cantidad financiada: 290.000 €.
Entity where project took place: MEC (SAF2005-03022). 12/05-11/08



Name principal investigator (PI, Co-PI....): Lisardo Boscá. Centro Nacional de Investigaciones Cardiovasculares

Start date: 01/12/2005

- 19 Name of the project:** Efectos tempranos de antimetabolitos nucleotídicos sobre la proliferación y diferenciación de células linfoides. Cantidad financiada: 5.900.000 pts.

Name principal investigator (PI, Co-PI....): Lisardo Boscá. Instituto de Bioquímica (CSIC-UCM)

Start date: 01/01/1995

- 20 Name of the project:** Participación de la proteína quinasa C en la inducción de la oxido nítrico sintasa. Cantidad financiada: 650.000 pts.

Entity where project took place: CICYT (HB93-182); 3/94-4/95

Name principal investigator (PI, Co-PI....): Lisardo Boscá/Peter J. Parker. Instituto de Bioquímica (CSIC-UCM)/Imperial Cancer Research Fund (Lon

Start date: 01/03/1994

- 21 Name of the project:** Inducción de la oxidonítrico sintasa por ésteres de forbol y citoquinas. Cantidad financiada: 2.000.000 pts.

Name principal investigator (PI, Co-PI....): Lisardo Boscá. Instituto de Bioquímica (CSIC-UCM)

Start date: 01/01/1994

- 22 Name of the project:** Regulación de la expresión de la 6-fosfofructo 2-quinasa hepática durante la transición fetal/neonatal. Caracterización del promotor del enzima fetal. Cantidad financiada: 10.810.000 pts.

Entity where project took place: FISS (92/0267); 1/92-12/94

Name principal investigator (PI, Co-PI....): Paloma Martín. Instituto de Bioquímica (CSIC-UCM)

Start date: 01/01/1994

- 23 Name of the project:** Inducción de la óxido nítrico sintasa por ésteres de forbol y citoquinas. Participación de la proteína quinasa C en el proceso. Cantidad financiada: 15.175.000 pts.

Entity where project took place: CICYT (PB92-070); 5/93-4/96

Name principal investigator (PI, Co-PI....): Lisardo Boscá. Instituto de Bioquímica (CSIC-UCM)

Start date: 01/05/1993

- 24 Name of the project:** Caracterización de los isoenzimas de la proteína quinasa C mediante la utilización de sustratos específicos. Cantidad financiada: 3.000.000 pts.

Entity where project took place: CICYT (PB91-134); 4/92-4/93

Name principal investigator (PI, Co-PI....): Lisardo Boscá. Instituto de Bioquímica (CSIC-UCM)

Start date: 01/04/1992

- 25 Name of the project:** Adquisición de infraestructura dentro del proyecto: Participación del ciclo del fosfatidilinositol en el mecanismo de transmisión de señales extracelulares en hepatocitos. Cantidad financiada: 3.000.000 pts.

Entity where project took place: CICYT (IN89-069); 1-12/1990

Name principal investigator (PI, Co-PI....): Lisardo Boscá. Instituto de Bioquímica (CSIC-UCM)

Start date: 01/01/1990

- 26 Name of the project:** Participación del ciclo del fosfatidilinositol en el mecanismo de transmisión de señales extracelulares en hepatocitos. Cantidad financiada: 14.300.000 pts.

Entity where project took place: CICYT (PM88-025); 3/89-3/91

Name principal investigator (PI, Co-PI....): Lisardo Boscá. Instituto de Bioquímica (CSIC-UCM)

Start date: 01/03/1989



- 27** **Name of the project:** Mechanism of cold-adaptation in lower vertebrates and invertebrates. Cantidad financiada: 600.000 pts.
Entity where project took place: NATO (0615/88); 6-11/1988
City of entity: Ottawa,
Name principal investigator (PI, Co-PI....): Lisardo Boscá; Kenneth B. Storey. Institute of Biochemistry Carleton University (Ottawa; Canada)
Funding entity or bodies:
NATO (0615/88);
City funding entity: Ottawa, Canada
Start date: 1988
- 28** **Name of the project:** Proteína quinasa C hepática. Participación en la transducción de señales hormonales. Cantidad financiada: 1.500.000 pts.
Entity where project took place: FISS (88/1452); 1-12/1988
Name principal investigator (PI, Co-PI....): Lisardo Boscá. Instituto de Bioquímica (CSIC-UCM)
Funding entity or bodies:
FISS (88/1452)
Start date: 1988
- 29** **Entity where project took place:** FISS (88/1544); 1-12/1988
Name principal investigator (PI, Co-PI....): Luz Barbolla. Clínica Puerta de Hierro
Start date: 1988
Applicant's contribution: es de los trasplantes ABH incompatibles al conocimiento del sistema ABH. Cantidad financiada: 1.700.000 pts.
- 30** **Name of the project:** Proteína quinasa C en células hepáticas.
Entity where project took place: Instituto de Bioquímica (CSIC-UCM) **Type of entity:** State agency
Name principal investigator (PI, Co-PI....): Lisardo Boscá.
Start date: 1987 **Duration:** 12 months
- 31** **Name of the project:** 6-Fosfofructo-2-quinasa y piruvato quinasa hepáticas durante la transición fetal/neonatal en la rata. Factores de transcripción implicados en la expresión específica de las formas fetal y adulta. Cantidad financiada: 13.350.000 pts.
Entity where project took place: FISS (95/0966); 1/95-12/97
Name principal investigator (PI, Co-PI....): Paloma Martín. Instituto de Bioquímica (CSIC-UCM)
- 32** **Name of the project:** Activación de proteínas Ras por la ciclopentenona 15dPGJ2: Papel en procesos tumorales. Cantidad financiada: 46.800 €.
Entity where project took place: Fundació La Caixa (ON03/180-02). 10/03-09/06
Name principal investigator (PI, Co-PI....): Lisardo Boscá. Instituto de Bioquímica (CSIC-UCM)
- 33** **Name of the project:** Adquisición de sistemas de detección de emisión radiactiva. Cantidad financiada: 10.000.000 pts.
Entity where project took place: CICYT. Plan de I+D (infraestructura; 1996)
Name principal investigator (PI, Co-PI....): Lisardo Boscá. Instituto de Bioquímica (CSIC-UCM)
- 34** **Name of the project:** Estudio de la endotoxemia en ratas gestantes. Efecto sobre la placenta y tejidos fetales. Cantidad financiada: 14.861.000 pts.
Entity where project took place: FISS (98/0220); 1/98-12/00



Name principal investigator (PI, Co-PI....): Paloma Martín. Instituto de Bioquímica (CSIC-UCM)

35 Name of the project: Expresión de receptores de glucocorticoides en monocitos circulantes de pacientes con aterosclerosis coronaria. Efecto de la carga lipídica intracelular en el mecanismo de acción de los glucocorticoides. Cantidad financiada: 42.000 €.

Entity where project took place: Fundación de Investigación Médica Mutua Madrileña. 10/05-09/08

Name principal investigator (PI, Co-PI....): Lisardo Boscá. Universidad Complutense de Madrid.

36 Name of the project: Mecanismos de control negativo en la activación del macrófago: Inhibición de la expresión de la óxido nítrico sintasa tipo 2. Cantidad financiada: 22.000.000 pts.

Entity where project took place: CICYT (PM98-0120). 6/99-5/02

Name principal investigator (PI, Co-PI....): Lisardo Boscá. Instituto de Bioquímica (CSIC-UCM)

37 Name of the project: Mecanismos de protección y muerte celular mediados por inmunofilinas a nivel hepatorrenal. Papel del endotelio vascular. Cantidad financiada: 4.000.000 pts.

Name principal investigator (PI, Co-PI....): Lisardo Boscá. Instituto de Bioquímica (CSIC-UCM)

38 Name of the project: Mecanismos implicados en la expresión de la óxido nítrico sintasa en el hígado. Cantidad financiada: 18.000.000 pts.

Entity where project took place: CICYT (PM95-0007). 6/96-5/99

Name principal investigator (PI, Co-PI....): Lisardo Boscá. Instituto de Bioquímica (CSIC-UCM)

39 Name of the project: Mecanismos moleculares implicados en la resolución de los procesos inflamatorios. Cantidad financiada: 280.750 €.

Entity where project took place: CICYT (SAF 2002-00783). 12/02-11/05

Name principal investigator (PI, Co-PI....): Lisardo Boscá. Centro Nacional de Investigaciones Cardiovasculares

40 Name of the project: Nuevas perspectivas en el fracaso renal agudo y la disfunción del injerto renal. Mecanismos celulares y moleculares de la defensa tubular y endotelial frente a la agresión. Cantidad financiada: 48.480 €.

Name principal investigator (PI, Co-PI....): Lisardo Boscá (coordinado)

41 Name of the project: Papel del IFN en la defensa celular mediada por la síntesis de NO. Cantidad financiada: 3.500.000 pts.

Entity where project took place: CICYT. Plan de I+D (BIO95-2071-E); 1-12/1996

Name principal investigator (PI, Co-PI....): Lisardo Boscá. Instituto de Bioquímica (CSIC-UCM)

42 Name of the project: Regulación de la apoptosis durante la inflamación y en la resolución de los procesos inflamatorios: Activación del apoptosoma por NO e hipoxia. Cantidad financiada: 10.000 €.

Entity where project took place: MCYT, Acciones integradas hispano-alemanas. 1/03-12/04

Name principal investigator (PI, Co-PI....): Lisardo Boscá. Centro Nacional de Investigaciones Cardiovasculares; Bernhart Brüne. U. de Kaiserslautern

43 Name of the project: Remodelación de la matriz extracelular: Papel del NO en la regulación de la expresión y actividad de las metaloproteinasas de matriz extracelular. Cantidad financiada: 30.790.000 pts.

Entity where project took place: Proyectos FEDER (2FD97-1432). 1/00-12/01

Name principal investigator (PI, Co-PI....): Lisardo Boscá. Instituto de Bioquímica (CSIC-UCM)

44 Name of the project: Respuesta celular endotelial y tubular a CsA y FK506: Implicaciones en la disfunción primaria del injerto. Cantidad financiada: 3.225.000 pts.

Name principal investigator (PI, Co-PI....): Lisardo Boscá (coordinado)



- 45 Name of the project:** Respuesta hepatorenal a la agresión celular por inmunosupresores mediados por inmunofilinas. Cantidad financiada: 3.000.000 pts.
Name principal investigator (PI, Co-PI....): Lisardo Boscá. Instituto de Bioquímica (CSIC-UCM)

R&D non-competitive contracts, agreements or projects with public or private entities

- 1 Name of the project:** Valoración de la cardioprotección frente a infarto de miocardio por administración de aptámeros antagonistas selectivos de tlr4 (aptámero 4ft-aptoll).
Name principal investigator (PI, Co-PI....): Lisardo Bosca Gomar
Nº of researchers: 1
Start date: 01/09/2018 **Duration:** 1 year
Total amount: 78.000 €
- 2 Name of the project:** Evaluation of antiinflammatory molecules from FAES-FARMA pipeline
Degree of contribution: Scientific coordinator
Start date: 01/01/2013 **Duration:** 2 years
Total amount: 70.000 €

Scientific and technological activities

Scientific production

Publications, scientific and technical documents

- 1** Patricia Prieto; César Eduardo Rosales Mendoza; Verónica Terrón; Víctor Toledano; Antonio Cuadrado; Eduardo López Collazo; Gerard Bannenberg; Paloma Martín Sanz; María Fernández Velasco; Lisardo Boscá. Activation of autophagy in macrophages by pro-resolving lipid mediators. *Autophagy*. 11 - 10, pp. 1729 - 1773. 03/10/2015. ISSN 1554-8635
PMID: 26506892
Type of production: Scientific paper
Corresponding author: Yes
Relevant publication: Yes
- 2** Carmen Delgado; Gema Ruiz Hurtado; Nieves Gómez Hurtado; Silvia González Ramos; Angelica Rueda; Gemma Benito; Patricia Prieto; Carlos Zaragoza; Esmerilda G Delicado; Raquel Pérez Sen; Maria Teresa Miras Portugal; Gabriel Núñez; Lisardo Boscá; María Fernández Velasco. NOD1, a new player in cardiac function and calcium handling. *Cardiovascular research*. 106 - 3, pp. 375 - 461. 01/06/2015. ISSN 1755-3245
PMID: 25824149
Type of production: Scientific paper
Corresponding author: Yes
Relevant publication: Yes
- 3** Paqui G Través; María Pimentel Santillana; Daniel Rico; Nuria Rodriguez; Thomas Miethke; Antonio Castrillo; Emmanuel A Theodorakis; Paloma Martín Sanz; Michael A Palladino; Lisardo Boscá. Anti-inflammatory actions of acanthoic acid-related diterpenes involve activation of the PI3K p110 α subunits and inhibition of NF- κ B. *Chemistry & biology*. 21 - 8, pp. 955 - 1021. 14/08/2014. ISSN 1879-1301
PMID: 25065531



Type of production: Scientific paper
Corresponding author: Yes
Relevant publication: Yes

- 4** Silvia González Ramos; Marta Paz García; Cristina Rius; Alberto Del Monte Monge; Cristina Rodríguez; Victoria Fernández García; Vicente Andrés; José Martínez González; Miguel A Lasunción; Paloma Martín Sanz; Oliver Soehnlein; Lisardo Boscá. Endothelial NOD1 directs myeloid cell recruitment in atherosclerosis through VCAM-1. *FASEB journal*. 33 - 3, pp. 3912 - 3921. 03/2019. ISSN 1530-6860
PMID: 30496704
Type of production: Scientific paper **Format:** Journal
Corresponding author: Yes
- 5** A. Ramon-Vazquez; J. V. de la Rosa; C. Tabraue; F. Lopez; B. N. Diaz-Chico; L. Bosca; P. Tontonoz; S. Alemany; A. Castrillo. Common and Differential Transcriptional Actions of Nuclear Receptors Liver X Receptors alpha and beta in Macrophages. *Mol Cell Biol*. 39 - 5, 2019. ISSN 0270-7306
Type of production: Scientific paper **Format:** Journal
- 6** P. Prieto; R. I. Jaen; D. Calle; M. Gomez-Serrano; E. Nunez; M. Fernandez-Velasco; P. Martin-Sanz; S. Alonso; J. Vazquez; S. Cerdan; M. A. Peinado; L. Bosca. Interplay between post-translational cyclooxygenase-2 modifications and the metabolic and proteomic profile in a colorectal cancer cohort. *World J Gastroenterol*. 25 - 4, pp. 433 - 446. 2019. ISSN 1007-9327
Type of production: Scientific paper **Format:** Journal
- 7** M. Mojena; A. Povo-Retana; S. Gonzalez-Ramos; V. Fernandez-Garcia; J. Regadera; A. Zazpe; I. Artaiz; P. Martin-Sanz; F. Ledo; L. Bosca. Benzylamine and Thenylamine Derived Drugs Induce Apoptosis and Reduce Proliferation, Migration and Metastasis Formation in Melanoma Cells. *Front Oncol*. 8, pp. 328 - 328. 2018. ISSN 2234-943X (Print)2234-943x
Type of production: Scientific paper **Format:** Journal
- 8** A. Val-Blasco; J. A. Navarro-Garcia; M. Tamayo; M. J. Piedras; P. Prieto; C. Delgado; G. Ruiz-Hurtado; L. Rozas-Romero; M. Gil-Fernandez; C. Zaragoza; L. Bosca; M. Fernandez-Velasco. Deficiency of NOD1 Improves the beta-Adrenergic Modulation of Ca(2+) Handling in a Mouse Model of Heart Failure. *Front Physiol*. 9, pp. 702 - 702. 2018. ISSN 1664-042X (Print)1664-042x
Type of production: Scientific paper **Format:** Journal
- 9** J. C. Silva; E. M. de Oliveira; W. M. Turato; G. H. G. Trossini; V. G. Maltarollo; M. G. R. Pitta; I. R. Pitta; B. de Las Heras; L. Bosca; M. Rudnicki; D. S. P. Abdalla. GQ-11: A new PPAR agonist improves obesity-induced metabolic alterations in LDLr(-/-) mice. *Int J Obes (Lond)*. 42 - 5, pp. 1062 - 1072. 2018. ISSN 0307-0565
Type of production: Scientific paper **Format:** Journal
- 10** R. Brea; O. Motino; D. Frances; C. Garcia-Monzon; J. Vargas; M. Fernandez-Velasco; L. Bosca; M. Casado; P. Martin-Sanz; N. Agra. PGE2 induces apoptosis of hepatic stellate cells and attenuates liver fibrosis in mice by downregulating miR-23a-5p and miR-28a-5p. *Biochim Biophys Acta Mol Basis Dis*. 1864 - 2, pp. 325 - 337. 2018. ISSN 0925-4439 (Print)0925-4439
Type of production: Scientific paper **Format:** Journal
- 11** R. I. Jaen; P. Prieto; M. Casado; P. Martin-Sanz; L. Bosca. Post-translational modifications of prostaglandin-endoperoxide synthase 2 in colorectal cancer: An update. *World J Gastroenterol*. 24 - 48, pp. 5454 - 5461. 2018. ISSN 1007-9327
Type of production: Scientific paper **Format:** Journal



- 12** M. Mojena; M. Pimentel-Santillana; A. Povo-Retana; V. Fernandez-Garcia; S. Gonzalez-Ramos; P. Rada; A. Tejedor; D. Rico; P. Martin-Sanz; A. M. Valverde; L. Bosca. Protection against gamma-radiation injury by protein tyrosine phosphatase 1B. *Redox Biol.* 17, pp. 213 - 223. 2018. ISSN 2213-2317
PMID: 29705509
Type of production: Scientific paper **Format:** Journal
Corresponding author: Yes
- 13** O. Motino; D. E. Frances; N. Casanova; M. Fuertes-Agudo; C. Cucarella; J. M. Flores; M. T. Vallejo-Cremades; L. Olmedilla; J. Perez Pena; R. Banares; L. Bosca; M. Casado; P. Martin-Sanz. Protective Role of Hepatocyte Cyclooxygenase-2 Expression Against Liver Ischemia-Reperfusion Injury in Mice. *Hepatology.* 2018. ISSN 0270-9139
Type of production: Scientific paper **Format:** Journal
- 14** P. Martin-Sanz; M. Casado; L. Bosca. Cyclooxygenase 2 in liver dysfunction and carcinogenesis: Facts and perspectives. *World J Gastroenterol.* 23 - 20, pp. 3572 - 3580. 2017. ISSN 1007-9327
Type of production: Scientific paper **Format:** Journal
- 15** G. Ruiz-Hurtado; C. F. Garcia-Prieto; H. Pulido-Olmo; J. P. Velasco-Martin; P. Villa-Valverde; M. E. Fernandez-Valle; L. Bosca; M. Fernandez-Velasco; J. Regadera; B. Somoza; M. S. Fernandez-Alfonso. Mild and Short-Term Caloric Restriction Prevents Obesity-Induced Cardiomyopathy in Young Zucker Rats without Changing in Metabolites and Fatty Acids Cardiac Profile. *Front Physiol.* 8, pp. 42 - 42. 2017. ISSN 1664-042X (Print)1664-042x
Type of production: Scientific paper **Format:** Journal
- 16** A. Val-Blasco; P. Prieto; S. Gonzalez-Ramos; G. Benito; M. T. Vallejo-Cremades; I. Pacheco; P. Gonzalez-Peramato; N. Agra; V. Terron; C. Delgado; P. Martin-Sanz; L. Bosca; M. Fernandez-Velasco. NOD1 activation in cardiac fibroblasts induces myocardial fibrosis in a murine model of type 2 diabetes. *Biochem J.* 474 - 3, pp. 399 - 410. 2017. ISSN 0264-6021
Type of production: Scientific paper **Format:** Journal
- 17** L. Paniagua-Herranz; J. C. Gil-Redondo; M. J. Queipo; S. Gonzalez-Ramos; L. Bosca; R. Perez-Sen; M. T. Miras-Portugal; E. G. Delicado. Prostaglandin E2 Impairs P2Y2/P2Y4 Receptor Signaling in Cerebellar Astrocytes via EP3 Receptors. *Front Pharmacol.* 8, pp. 937 - 937. 2017. ISSN 1663-9812 (Print)1663-9812
Type of production: Scientific paper **Format:** Journal
- 18** A. Val-Blasco; Mjgm Piedras; G. Ruiz-Hurtado; N. Suarez; P. Prieto; S. Gonzalez-Ramos; N. Gomez-Hurtado; C. Delgado; L. Pereira; G. Benito; C. Zaragoza; N. Domenech; M. G. Crespo-Leiro; D. Vasquez-Echeverri; G. Nunez; E. Lopez-Collazo; L. Bosca; M. Fernandez-Velasco. Role of NOD1 in Heart Failure Progression via Regulation of Ca(2+) Handling. *J Am Coll Cardiol.* 69 - 4, pp. 423 - 433. 2017. ISSN 0735-1097
PMID: 28126160
Type of production: Scientific paper **Format:** Journal
Corresponding author: Yes
- 19** P. Prieto; M. Fernandez-Velasco; M. E. Fernandez-Santos; P. L. Sanchez; V. Terron; P. Martin-Sanz; F. Fernandez-Aviles; L. Bosca. Cell Expansion-Dependent Inflammatory and Metabolic Profile of Human Bone Marrow Mesenchymal Stem Cells. *Front Physiol.* 7, pp. 548 - 548. 2016.
PMID: 27899899
Type of production: Scientific paper **Format:** Journal
Corresponding author: Yes



- 20** O. Motino; N. Agra; R. Brea Contreras; M. Dominguez-Moreno; C. Garcia-Monzon; J. Vargas-Castrillon; C. E. Carnovale; L. Bosca; M. Casado; R. Mayoral; M. P. Valdecantos; A. M. Valverde; D. E. Frances; P. Martin-Sanz. Cyclooxygenase-2 expression in hepatocytes attenuates non-alcoholic steatohepatitis and liver fibrosis in mice. *Biochim Biophys Acta.* 1862 - 9, pp. 1710 - 23. 2016. ISSN 0006-3002 (Print)0006-3002
Type of production: Scientific paper **Format:** Journal
- 21** P. Singh; S. Gonzalez-Ramos; M. Mojena; C. E. Rosales-Mendoza; H. Emami; J. Swanson; A. Morss; Z. A. Fayad; J. H. Rudd; J. Gelfand; M. Paz-Garcia; P. Martin-Sanz; L. Bosca; A. Tawakol. GM-CSF Enhances Macrophage Glycolytic Activity In Vitro and Improves Detection of Inflammation In Vivo. *J Nucl Med.* 57 - 9, pp. 1428 - 35. 2016. ISSN 0161-5505
PMID: 27081166
Type of production: Scientific paper **Format:** Journal
Corresponding author: Yes
- 22** J. C. Silva; F. A. Cesar; E. M. de Oliveira; W. M. Turato; G. L. Tripodi; G. Castilho; A. Machado-Lima; B. de Las Heras; L. Bosca; M. M. Rabello; M. Z. Hernandez; M. G. Pitta; I. R. Pitta; M. Passarelli; M. Rudnicki; D. S. Abdalla. New PPARgamma partial agonist improves obesity-induced metabolic alterations and atherosclerosis in LDLr(-/-) mice. *Pharmacol Res.* 104, pp. 49 - 60. 2016. ISSN 1043-6618
Type of production: Scientific paper **Format:** Journal
- 23** M. Rudnicki; G. L. Tripodi; R. Ferrer; L. Bosca; M. G. Pitta; I. R. Pitta; D. S. Abdalla. New thiazolidinediones affect endothelial cell activation and angiogenesis. *Eur J Pharmacol.* 782, pp. 98 - 106. 2016. ISSN 0014-2999
Type of production: Scientific paper **Format:** Journal
- 24** Lisardo Boscá; Silvia González Ramos; Patricia Prieto; María Fernández Velasco; Marina Mojena; Paloma Martín Sanz; Susana Alemany. Metabolic signatures linked to macrophage polarization: from glucose metabolism to oxidative phosphorylation. *Biochemical Society transactions.* 43 - 4, pp. 740 - 744. 08/2015. ISSN 1470-8752
Type of production: Scientific paper
Corresponding author: Yes
- 25** Fernanda A César; Martina Rudnicki; Beatriz de Las Heras; Lisardo Boscá; Maria C A Lima; Ivan R Pitta; Dulcinea S P Abdalla. New indole-thiazolidine attenuates atherosclerosis in LDLr(-/-) mice. *Vascular pharmacology.* 71, pp. 174 - 254. 08/2015. ISSN 1879-3649
Type of production: Scientific paper
- 26** Omar Motiño; Daniel E Francés; Rafael Mayoral; Luis Castro Sánchez; María Fernández Velasco; Lisardo Boscá; Carmelo García Monzón; Rocío Brea; Marta Casado; Noelia Agra; Paloma Martín Sanz. Regulation of MicroRNA 183 by Cyclooxygenase 2 in Liver Is DEAD-Box Helicase p68 (DDX5) Dependent: Role in Insulin Signaling. *Molecular and cellular biology.* 35 - 14, pp. 2554 - 2621. 07/2015. ISSN 1098-5549
Type of production: Scientific paper
- 27** Ahmed Tawakol; Parmanand Singh; Marina Mojena; María Pimentel Santillana; Hamed Emami; Megan MacNabb; James H F Rudd; Jagat Narula; José A Enriquez; Paqui G Través; María Fernández Velasco; Ramón Bartrons; Paloma Martín Sanz; Zahi A Fayad; Alberto Tejedor; Lisardo Boscá. HIF-1? and PFKFB3 Mediate a Tight Relationship Between Proinflammatory Activation and Anerobic Metabolism in Atherosclerotic Macrophages. *Arteriosclerosis, thrombosis, and vascular biology.* 35 - 6, pp. 1463 - 1534. 06/2015. ISSN 1524-4636
PMID: 25882065
Type of production: Scientific paper
Corresponding author: Yes

Type of production: Scientific paper

Corresponding author: Yes

- 45** Noelia Agra Andrieu; Omar Motiño; Rafael Mayoral; Cristina Llorente Izquierdo; Ana Fernández Alvarez; Lisardo Boscá; Marta Casado; Paloma Martín Sanz. Cyclooxygenase-2 is a target of microRNA-16 in human hepatoma cells. *PloS one.* 7 - 11, pp. e50935. 2012. ISSN 1932-6203

Type of production: Scientific paper

- 46** A Fernández Alvarez; C Llorente Izquierdo; R Mayoral; N Agra; L Boscá; M Casado; P Martín Sanz. Evaluation of epigenetic modulation of cyclooxygenase-2 as a prognostic marker for hepatocellular carcinoma. *Oncogenesis.* 1, pp. e23. 2012. ISSN 2157-9024

Type of production: Scientific paper

- 47** María Fernández Velasco; Patricia Prieto; Verónica Terrón; Gemma Benito; Juana M Flores; Carmen Delgado; Carlos Zaragoza; Begoña Lavin; Mónica Gómez Parrizas; Eduardo López Collazo; Paloma Martín Sanz; Lisardo Boscá. NOD1 activation induces cardiac dysfunction and modulates cardiac fibrosis and cardiomyocyte apoptosis. *PloS one.* 7 - 9, pp. e45260. 2012. ISSN 1932-6203

Type of production: Scientific paper

Corresponding author: Yes

- 48** Marta López Peláez; Irene Soria Castro; Lisardo Boscá; Margarita Fernández; Susana Alemany. Cot/tpl2 activity is required for TLR-induced activation of the Akt p70 S6k pathway in macrophages: Implications for NO synthase 2 expression. *European Journal of Immunology.* 41 - 6, pp. 1733 - 1774. (Germany): 06/2011. ISSN 1521-4141

Type of production: Scientific paper

- 49** I Cuadrado; M Fernández Velasco; L Boscá; B de Las Heras. Labdane diterpenes protect against anoxia/reperfusion injury in cardiomyocytes: involvement of AKT activation. *Cell death & disease.* 2, pp. e229. 2011. ISSN 2041-4889

Type of production: Scientific paper

Corresponding author: Yes

- 50** Juan-Carlos Rodríguez Prados; Paqui G Través; Jimena Cuenca; Daniel Rico; Julián Aragonés; Paloma Martín Sanz; Marta Cascante; Lisardo Boscá. Substrate fate in activated macrophages: a comparison between innate, classic, and alternative activation. *Journal of immunology.* 185 - 1, pp. 605 - 619. 01/07/2010. ISSN 1550-6606

Type of production: Scientific paper

Corresponding author: Yes

- 51** P Prieto; J Cuenca; P G Través; M Fernández Velasco; P Martín Sanz; L Boscá. Lipoxin A4 impairment of apoptotic signaling in macrophages: implication of the PI3K/Akt and the ERK/Nrf-2 defense pathways. *Cell death and differentiation.* 17 - 7, pp. 1179 - 1267. 07/2010. ISSN 1476-5403

Type of production: Scientific paper

Corresponding author: Yes

- 52** Paloma Martín Sanz; Rafael Mayoral; Marta Casado; Lisardo Boscá. COX-2 in liver, from regeneration to hepatocarcinogenesis: what we have learned from animal models?. *World journal of gastroenterology.* 16 - 12, pp. 1430 - 1435. (China): 28/03/2010. ISSN 1007-9327

Type of production: Scientific paper

Corresponding author: Yes

- 53** Rafael Mayoral; Angela M Valverde; Cristina Llorente Izquierdo; Agueda González Rodríguez; Lisardo Boscá; Paloma Martín Sanz. Impairment of transforming growth factor beta signaling in caveolin-1-deficient hepatocytes: role in liver regeneration. *The Journal of biological chemistry.* 285 - 6, pp. 3633 - 3675. 05/02/2010. ISSN 1083-351X



Type of production: Scientific paper

Corresponding author: Yes

- 54** Raquel López Fontal; Miriam Zeini; Paqui G Través; Mariana Gómez Ferrería; Ana Aranda; Guillermo T Sáez; Concha Cerdá; Paloma Martín Sanz; Sonsoles Hortelano; Lisardo Boscá. Mice lacking thyroid hormone receptor Beta show enhanced apoptosis and delayed liver commitment for proliferation after partial hepatectomy. *PLoS one*. 5 - 1, pp. e8710. 2010. ISSN 1932-6203

Type of production: Scientific paper

Corresponding author: Yes

- 55** Teresa Pérez de Prada; Aranzazu Ortega Pozzi; Mónica Torres Coronado; Marie Anne Pouchard; Pablo Gonzalez; Lisardo Boscá; Panayotis Fantidis. Atherogenesis takes place in cholesterol-fed rabbits when circulating concentrations of endogenous cortisol are increased and inflammation suppressed. *Atherosclerosis*. 191 - 2, pp. 333 - 342. 04/2007. ISSN 0021-9150

Type of production: Scientific paper

- 56** José L M Madrigal; Olivia Hurtado; María A Moro; Ignacio Lizasoain; Pedro Lorenzo; Antonio Castrillo; Lisardo Boscá; Juan C Leza. The increase in TNF-alpha levels is implicated in NF-kappaB activation and inducible nitric oxide synthase expression in brain cortex after immobilization stress. *Neuropsychopharmacology*. 26 - 2, pp. 155 - 218. 02/2002. ISSN 0893-133X

Type of production: Scientific paper

- 57** S Hortelano; A Castrillo; A M Alvarez; L Boscá. Contribution of cyclopentenone prostaglandins to the resolution of inflammation through the potentiation of apoptosis in activated macrophages. *Journal of immunology*. 165 - 11, pp. 6525 - 6556. 01/12/2000. ISSN 0022-1767

Type of production: Scientific paper

- 58** M J Díaz Guerra; A Castrillo; P Martín Sanz; L Boscá. Negative regulation by protein tyrosine phosphatase of IFN-gamma-dependent expression of inducible nitric oxide synthase. *Journal of immunology*. 162 - 11, pp. 6776 - 6859. 01/06/1999. ISSN 0022-1767

Type of production: Scientific paper

- 59** M J Díaz Guerra; A Castrillo; P Martín Sanz; L Boscá. Negative regulation by phosphatidylinositol 3-kinase of inducible nitric oxide synthase expression in macrophages. *Journal of immunology*. 162 - 10, pp. 6184 - 6274. 15/05/1999. ISSN 0022-1767

Type of production: Scientific paper

- 60** G del Real; M Llorente; L Boscá; S Hortelano; A Serrano; P Lucas; L Gómez; J L Torán; C Redondo; C Martínez. Suppression of HIV-1 infection in linomide-treated SCID-hu-PBL mice. *AIDS*. 12 - 8, pp. 865 - 937. 28/05/1998. ISSN 0269-9370

Type of production: Scientific paper

- 61** E López Collazo; S Hortelano; A Rojas; L Boscá. Triggering of peritoneal macrophages with IFN-alpha/beta attenuates the expression of inducible nitric oxide synthase through a decrease in NF-kappaB activation. *Journal of immunology*. 160 - 6, pp. 2889 - 2984. 15/03/1998. ISSN 0022-1767

Type of production: Scientific paper

- 62** P Martín Sanz; L Boscá. Measurement of NOS mRNA by northern blotting and the ribonuclease-protection assay. *Methods in molecular biology*. 100, pp. 163 - 233. 1998. ISSN 1064-3745

Type of production: Scientific paper



- 63** M Velasco; M J Díaz Guerra; P Díaz Achirica; D Andreu; L Rivas; L Boscá. Macrophage triggering with cecropin A and melittin-derived peptides induces type II nitric oxide synthase expression. *Journal of immunology*. 158 - 9, pp. 4437 - 4480. 01/05/1997. ISSN 0022-1767
Type of production: Scientific paper
- 64** S Hortelano; M J Díaz Guerra; A Gonzalez García; E Leonardo; C Gamallo; L Boscá; C Martínez A. Linomide administration to mice attenuates the induction of nitric oxide synthase elicited by lipopolysaccharide-activated macrophages and prevents nephritis in MRL/Mp-lpr/lpr mice. *Journal of immunology*. 158 - 3, pp. 1402 - 1410. 01/02/1997. ISSN 0022-1767
Type of production: Scientific paper
- 65** B Gil; M Casado; M A Pajares; L Boscá; J M Mato; P Martín Sanz; L Alvarez. Differential expression pattern of S-adenosylmethionine synthetase isoenzymes during rat liver development. *Hepatology*. 24 - 4, pp. 876 - 957. 10/1996. ISSN 0270-9139
Type of production: Scientific paper
- 66** P Martín Sanz; M J Díaz Guerra; M Casado; L Boscá. Bacterial lipopolysaccharide antagonizes transforming growth factor beta 1-induced apoptosis in primary cultures of hepatocytes. *Hepatology*. 23 - 5, pp. 1200 - 1207. 05/1996. ISSN 0270-9139
Type of production: Scientific paper
- 67** A Alonso; J Carvalho; S R Alonso Torre; L Núñez; L Boscá; M Sánchez Crespo. Nitric oxide synthesis in rat peritoneal macrophages is induced by IgE/DNP complexes and cyclic AMP analogues. Evidence in favor of a common signaling mechanism. *Journal of immunology*. 154 - 12, pp. 6475 - 6558. 15/06/1995. ISSN 0022-1767
Type of production: Scientific paper
- 68** S Hortelano; B Dewez; A M Genaro; M J Díaz Guerra; L Boscá. Nitric oxide is released in regenerating liver after partial hepatectomy. *Hepatology*. 21 - 3, pp. 776 - 862. 03/1995. ISSN 0270-9139
Type of production: Scientific paper
- 69** M Cascales; A Alvarez; P Gascó; L Fernández Simón; N Sanz; L Boscá. Cocaine-induced liver injury in mice elicits specific changes in DNA ploidy and induces programmed death of hepatocytes. *Hepatology*. 20 - 4 Pt 1, pp. 992 - 1993. 10/1994. ISSN 0270-9139
Type of production: Scientific paper
- 70** A M Genaro; S Hortelano; L Boscá. [Changes in distribution and isoenzymatic expression of protein kinase C in B lymphocytes induced by alloantigenic stimulation]. *Acta physiologica, pharmacologica et therapeutica latinoamericana : órgano de la Asociación Latinoamericana de Ciencias Fisiológicas y [de] la Asociación Latinoamericana de Farmacología*. 44 - 4, pp. 124 - 158. (Argentina): 1994. ISSN 0327-6309
Type of production: Scientific paper
- 71** C Díez Fernández; L Boscá; L Fernández Simón; A Alvarez; M Cascales. Relationship between genomic DNA ploidy and parameters of liver damage during necrosis and regeneration induced by thioacetamide. *Hepatology*. 18 - 4, pp. 912 - 920. 10/1993. ISSN 0270-9139
Type of production: Scientific paper
- 72** A M Genaro; L Boscá. Early signals in alloantigen induced B-cell proliferation. Comparison between B-cell triggering by intact allogeneic cells and solubilized alloantigen. *Journal of immunology*. 151 - 4, pp. 1832 - 1875. 15/08/1993. ISSN 0022-1767
Type of production: Scientific paper



- 73** C Marquez; C Martinez; G Kroemer; L Bosca. Protein kinase C isoenzymes display differential affinity for phorbol esters. Analysis of phorbol ester receptors in B cell differentiation. *Journal of immunology*. 149 - 8, pp. 2560 - 2568. 15/10/1992. ISSN 0022-1767
Type of production: Scientific paper
- 74** M Cascales; P Martin Sanz; A Alvarez; M Sanchez Pérez; C Diez Fernández; L Boscá. Isoenzymes of carbohydrate metabolism in primary cultures of hepatocytes from thioacetamide-induced rat liver necrosis: responses to growth factors. *Hepatology*. 16 - 1, pp. 232 - 272. 07/1992. ISSN 0270-9139
Type of production: Scientific paper
- 75** C Márquez; C Martínez; L Boscá. Protein kinase C mobilization in B lymphocytes. Differential isoenzyme translocation upon activation. *Journal of immunology*. 147 - 2, pp. 627 - 659. 15/07/1991. ISSN 0022-1767
Type of production: Scientific paper
- 76** P A Lazo; L Bosca. Mitochondrial membrane-bound hexokinase of ascites tumor cells. Functional implications of lysine residues studied by modification with imidoesters. *Hoppe-Seyler's Zeitschrift für physiologische Chemie*. 363 - 6, pp. 635 - 676. 06/1982. ISSN 0018-4888
Type of production: Scientific paper
- 77** Nieves Gómez Hurtado; María Fernández Velasco; María Soledad Fernández Alfonso; Lisardo Boscá; Carmen Delgado. Prolonged leptin treatment increases transient outward K⁺ current via upregulation of Kv4.2 and Kv4.3 channel subunits in adult rat ventricular myocytes. *Pflügers Archiv : European journal of physiology*. 466 - 5, pp. 903 - 917. (Germany): 05/2014. ISSN 1432-2013
- 78** A González Rodríguez; R Mayoral; N Agra; M P Valdecantos; V Pardo; M E Miquilena Colina; J Vargas Castrillón; O Lo Iacono; M Corazzari; G M Fimia; M Piacentini; J Muntané; L Boscá; C García Monzón; P Martín Sanz; Á M Valverde. Impaired autophagic flux is associated with increased endoplasmic reticulum stress during the development of NAFLD. *Cell death & disease*. 5, pp. e1179. 2014. ISSN 2041-4889
- 79** Irene Fernández Ruiz; Francisco Arnalich; Carolina Cubillos Zapata; Enrique Hernández Jiménez; Raúl Moreno González; Víctor Toledano; María Fernández Velasco; María T Vallejo Cremades; Laura Esteban Burgos; Rebeca Pérez de Diego; Miguel A Llamas Matias; Elena García Arumi; Ramón Martí; Lisardo Boscá; Antoni L Andreu; José Luis López Sendón; Eduardo López Collazo. Mitochondrial DAMPs induce endotoxin tolerance in human monocytes: an observation in patients with myocardial infarction. *PloS one*. 9 - 5, pp. e95073. 2014. ISSN 1932-6203
- 80** P G Través; V Pardo; M Pimentel Santillana; Á González Rodríguez; M Mojena; D Rico; Y Montenegro; C Calés; P Martín Sanz; A M Valverde; L Boscá. Pivotal role of protein tyrosine phosphatase 1B (PTP1B) in the macrophage response to pro-inflammatory and anti-inflammatory challenge. *Cell death & disease*. 5, pp. e1125. 2014. ISSN 2041-4889
Corresponding author: Yes
- 81** María Pimentel Santillana; Paqui G Través; Raquel Pérez Sen; Esmerilda G Delicado; Paloma Martín Sanz; María Teresa Miras Portugal; Lisardo Boscá. Sustained release of prostaglandin E₂ in fibroblasts expressing ectopically cyclooxygenase 2 impairs P2Y-dependent Ca²⁺-mobilization. *Mediators of inflammation*. 2014, pp. 832103. 2014. ISSN 1466-1861
Corresponding author: Yes
- 82** Cristina Llorente Izquierdo; Rafael Mayoral; Juana María Flores; Pilar García Palencia; Carme Cucarella; Lisardo Boscá; Marta Casado; Paloma Martín Sanz. Transgenic mice expressing cyclooxygenase-2 in hepatocytes reveal a minor contribution of this enzyme to chemical hepatocarcinogenesis. *The American journal of pathology*. 178 - 3, pp. 1361 - 1434. 03/2011. ISSN 1525-2191



- 83** Carmelo García Monzón; Oreste Lo Iacono; Rafael Mayoral; Agueda González Rodríguez; María E Miquilena Colina; Tamara Lozano Rodríguez; Leonor García Pozo; Javier Vargas Castrillón; Marta Casado; Lisardo Boscá; Angela M Valverde; Paloma Martín Sanz. Hepatic insulin resistance is associated with increased apoptosis and fibrogenesis in nonalcoholic steatohepatitis and chronic hepatitis C. *Journal of hepatology*. 54 - 1, pp. 142 - 194. 01/2011. ISSN 1600-0641
- 84** L A Faine; M Rudnicki; F A César; B L Heras; L Boscá; E S Souza; M Z Hernandez; S L Galdino; M C A Lima; I R Pitta; D S P Abdalla. Anti-inflammatory and antioxidant properties of a new arylidene-thiazolidinedione in macrophages. *Current medicinal chemistry*. 18 - 22, pp. 3351 - 3411. 2011. ISSN 1875-533X
- 85** Romina Manarin; María Fernanda Pascutti; Juan Pablo Ruffino; Beatriz De Las Heras; Lisardo Boscá; Oscar Bottasso; Silvia Revelli; Esteban Serra. Benzimidazole blocks NF-kappaB activation but not AP-1 through inhibition of IKK. *Molecular immunology*. 47 - 15, pp. 2485 - 2576. 09/2010. ISSN 1872-9142
- 86** Sonia Camano; Alberto Lazaro; Estefania Moreno Gordaliza; Ana M Torres; Carmen de Lucas; Blanca Humanes; Jose A Lazaro; M Milagros Gomez Gomez; Lisardo Boscá; Alberto Tejedor. Cilastatin attenuates cisplatin-induced proximal tubular cell damage. *The Journal of pharmacology and experimental therapeutics*. 334 - 2, pp. 419 - 448. 08/2010. ISSN 1521-0103
- 87** Vanessa Núñez; Daniel Alameda; Daniel Rico; Rubén Mota; Pilar Gonzalo; Marta Cedenilla; Thierry Fischer; Lisardo Boscá; Christopher K Glass; Alicia G Arroyo; Mercedes Ricote. Retinoid X receptor alpha controls innate inflammatory responses through the up-regulation of chemokine expression. *Proceedings of the National Academy of Sciences of the United States of America*. 107 - 23, pp. 10626 - 10657. 08/06/2010. ISSN 1091-6490
- 88** Sonsoles Hortelano; Raquel López Fontal; Paqui G Través; Natividad Villa; Carsten Grashoff; Lisardo Boscá; Alfonso Luque. ILK mediates LPS-induced vascular adhesion receptor expression and subsequent leucocyte trans-endothelial migration. *Cardiovascular research*. 86 - 2, pp. 283 - 375. 01/05/2010. ISSN 1755-3245
- 89** A M C Pedrosa; L A Faine; D M Grosso; B de Las Heras; L Boscá; D S P Abdalla. Electronegative LDL induction of apoptosis in macrophages: involvement of Nrf2. *Biochimica et biophysica acta*. 1801 - 4, pp. 430 - 437. 04/2010. ISSN 0006-3002
- 90** Luciane A Faine; Danielle M H Cavalcanti; Martina Rudnicki; Simone Ferderbar; Sandra M D Macedo; Heraldo P Souza; Sandra H P Farsky; Lisardo Boscá; Dulcinea Saes Parra Abdalla. Bioactivity of nitrolinoleate: effects on adhesion molecules and CD40-CD40L system. *The Journal of nutritional biochemistry*. 21 - 2, pp. 125 - 157. 02/2010. ISSN 1873-4847
- 91** Souliman Amrani; Hicham Harnafi; Dounia Gadi; Hassane Mekhfi; Abdelkhaleq Legssyer; Mohammed Aziz; Françoise Martin Nizard; Lisardo Boscá. Vasorelaxant and anti-platelet aggregation effects of aqueous *Ocimum basilicum* extract. *Journal of ethnopharmacology*. 125 - 1, pp. 157 - 219. 17/08/2009. ISSN 1872-7573
- 92** Javier Inserte; Belén Molla; Rio Aguilar; Paqui G Través; Ignasi Barba; Paloma Martín Sanz; Lisardo Boscá; Marta Casado; David Garcia Dorado. Constitutive COX-2 activity in cardiomyocytes confers permanent cardioprotection. Constitutive COX-2 expression and cardioprotection. *Journal of molecular and cellular cardiology*. 46 - 2, pp. 160 - 168. 02/2009. ISSN 1095-8584
- 93** Rafael Mayoral; Belen Mollá; Juana Maria Flores; Lisardo Boscá; Marta Casado; Paloma Martín Sanz. Constitutive expression of cyclo-oxygenase 2 transgene in hepatocytes protects against liver injury. *The Biochemical journal*. 416 - 3, pp. 337 - 383. 15/12/2008. ISSN 1470-8728
- 94** Natalia Girón; Paqui G Través; Benjamín Rodríguez; Raquel López Fontal; Lisardo Boscá; Sonsoles Hortelano; Beatriz de las Heras. Suppression of inflammatory responses by labdane-type diterpenoids. *Toxicology and applied pharmacology*. 228 - 2, pp. 179 - 268. 15/04/2008. ISSN 0041-008X



- 95** Rafael Mayoral; Amalia Fernández Martínez; Rosa Roy; Lisardo Boscá; Paloma Martín Sanz. Dispensability and dynamics of caveolin-1 during liver regeneration and in isolated hepatic cells. *Hepatology*. 46 - 3, pp. 813 - 835. 09/2007. ISSN 0270-9139
- 96** B de las Heras; S Hortelano; N Girón; P Bermejo; B Rodríguez; L Boscá. Kaurane diterpenes protect against apoptosis and inhibition of phagocytosis in activated macrophages. *British journal of pharmacology*. 152 - 2, pp. 249 - 304. 09/2007. ISSN 0007-1188
- 97** Jimena Cuenca; Nora Goren; Patricia Prieto; Paloma Martín Sanz; Lisardo Boscá. Selective impairment of nuclear factor-kappaB-dependent gene transcription in adult cardiomyocytes: relevance for the regulation of the inflammatory response in the heart. *The American journal of pathology*. 171 - 3, pp. 820 - 828. 09/2007. ISSN 0002-9440
Corresponding author: Yes
- 98** Paqui G Traves; Sonsoles Hortelano; Miriam Zeini; Ta-Hsiang Chao; Thanh Lam; Saskia T Neuteboom; Emmanuel A Theodorakis; Michael A Palladino; Antonio Castrillo; Lisardo Bosca. Selective activation of liver X receptors by acanthoic acid-related diterpenes. *Molecular pharmacology*. 71 - 6, pp. 1545 - 1598. 06/2007. ISSN 0026-895X
- 99** Eleuterio Lombardo; Alberto Alvarez Barrientos; Beatriz Maroto; Lisardo Boscá; Ulla G Knaus. TLR4-mediated survival of macrophages is MyD88 dependent and requires TNF-alpha autocrine signalling. *Journal of immunology*. 178 - 6, pp. 3731 - 3740. 15/03/2007. ISSN 0022-1767
- 100** Marta Casado; Belén Mollá; Rosa Roy; Amalia Fernández Martínez; Carme Cucarella; Rafael Mayoral; Lisardo Boscá; Paloma Martín Sanz. Protection against Fas-induced liver apoptosis in transgenic mice expressing cyclooxygenase 2 in hepatocytes. *Hepatology*. 45 - 3, pp. 631 - 639. 03/2007. ISSN 0270-9139
- 101** Sonsoles Hortelano; Miriam Zeini; Marta Casado; Paloma Martín Sanz; Lisardo Boscá. Animal models for the study of liver regeneration: role of nitric oxide and prostaglandins. *Frontiers in bioscience*. 12, pp. 13 - 34. 2007. ISSN 1093-4715
- 102** Daniel Rico; Juan M Vaquerizas; Hernán Dopazo; Lisardo Boscá. Identification of conserved domains in the promoter regions of nitric oxide synthase 2: implications for the species-specific transcription and evolutionary differences. *BMC genomics*. 8, pp. 271. 2007. ISSN 1471-2164
- 103** Jimena Cuenca; Paloma Martín Sanz; Alberto M Alvarez Barrientos; Lisardo Boscá; Nora Goren. Infiltration of inflammatory cells plays an important role in matrix metalloproteinase expression and activation in the heart during sepsis. *The American journal of pathology*. 169 - 5, pp. 1567 - 1643. 11/2006. ISSN 0002-9440
- 104** Amalia Fernández Martínez; Belén Mollá; Rafael Mayoral; Lisardo Boscá; Marta Casado; Paloma Martín Sanz. Cyclo-oxygenase 2 expression impairs serum-withdrawal-induced apoptosis in liver cells. *The Biochemical journal*. 398 - 3, pp. 371 - 451. 15/09/2006. ISSN 1470-8728
- 105** Miriam Zeini; Paqui G Través; Raquel López Fontal; Cristina Pantoja; Ander Matheu; Manuel Serrano; Lisardo Boscá; Sonsoles Hortelano. Specific contribution of p19(ARF) to nitric oxide-dependent apoptosis. *Journal of immunology*. 177 - 5, pp. 3327 - 3363. 01/09/2006. ISSN 0022-1767
- 106** Francisco Perez Vizcaino; David Bishop Bailey; Federica Lodi; Juan Duarte; Angel Cogolludo; Laura Moreno; Lisardo Bosca; Jane A Mitchell; Timothy D Warner. The flavonoid quercetin induces apoptosis and inhibits JNK activation in intimal vascular smooth muscle cells. *Biochemical and biophysical research communications*. 346 - 3, pp. 919 - 944. 04/08/2006. ISSN 0006-291X

- 107** Olga Millán; Daniel Rico; Héctor Peinado; Natasha Zarich; Konstantinos Stamatakis; Dolores Pérez Sala; José M Rojas; Amparo Cano; Lisardo Boscá. Potentiation of tumor formation by topical administration of 15-deoxy-delta12,14-prostaglandin J2 in a model of skin carcinogenesis. *Carcinogenesis*. 27 - 2, pp. 328 - 364. 02/2006. ISSN 0143-3334
- 108** Marta P Pereira; Olivia Hurtado; Antonio Cárdenas; Lisardo Boscá; José Castillo; Antoni Dávalos; José Vivancos; Joaquín Serena; Pedro Lorenzo; Ignacio Lizasoain; María A Moro. Rosiglitazone and 15-deoxy-Delta12,14-prostaglandin J2 cause potent neuroprotection after experimental stroke through noncompletely overlapping mechanisms. *Journal of cerebral blood flow and metabolism*. 26 - 2, pp. 218 - 247. 02/2006. ISSN 0271-678X
- 109** Paloma Martín Sanz; Sonsoles Hortelano; Lisardo Boscá; Marta Casado. Cyclooxygenase 2: understanding the pathophysiological role through genetically altered mouse models. *Frontiers in bioscience*. 11, pp. 2876 - 2964. 2006. ISSN 1093-4715
- 110** Mercedes Fernandez Pascual; M Mercedes Lucas; Maria Rosario de Felipe; Lisardo Boscá; Heribert Hirt; Maria Pilar Golvano. Involvement of mitogen-activated protein kinases in the symbiosis *Bradyrhizobium-Lupinus*. *Journal of experimental botany*. 57 - 11, pp. 2735 - 2777. 2006. ISSN 0022-0957
- 111** Marta P Pereira; Olivia Hurtado; Antonio Cárdenas; David Alonso Escolano; Lisardo Boscá; José Vivancos; Florentino Nombela; Juan C Leza; Pedro Lorenzo; Ignacio Lizasoain; María A Moro. The nonthiazolidinedione PPARgamma agonist L-796,449 is neuroprotective in experimental stroke. *Journal of neuropathology and experimental neurology*. 64 - 9, pp. 797 - 1602. 09/2005. ISSN 0022-3069
- 112** Lisardo Boscá; Santiago Lamas; Juan Miguel Redondo. Madrid center not quite in limbo. *Science*. 309 - 5737, pp. 1017. 12/08/2005. ISSN 1095-9203
- 113** Miriam Zeini; Sonsoles Hortelano; Paqui G Través; Alicia G Gómez Valadés; Anna Pujol; José C Perales; Ramón Bartrons; Lisardo Boscá. Assessment of a dual regulatory role for NO in liver regeneration after partial hepatectomy: protection against apoptosis and retardation of hepatocyte proliferation. *FASEB journal*. 19 - 8, pp. 995 - 1002. 06/2005. ISSN 1530-6860
- 114** Rafael Mayoral; Amalia Fernández Martínez; Lisardo Boscá; Paloma Martín Sanz. Prostaglandin E2 promotes migration and adhesion in hepatocellular carcinoma cells. *Carcinogenesis*. 26 - 4, pp. 753 - 814. 04/2005. ISSN 0143-3334
- 115** Lisardo Boscá; Miriam Zeini; Paqui G Través; Sonsoles Hortelano. Nitric oxide and cell viability in inflammatory cells: a role for NO in macrophage function and fate. *Toxicology*. 208 - 2, pp. 249 - 307. 15/03/2005. ISSN 0300-483X
- 116** Ta-Hsiang Chao; Thanh Lam; Binh G Vong; Paqui G Través; Sonsoles Hortelano; Chinmay Chowdhury; F Rena Bahjat; G Kenneth Lloyd; Lyle L Moldawer; Lisardo Boscá; Michael A Palladino; Emmanuel A Theodorakis. A new family of synthetic diterpenes that regulates cytokine synthesis by inhibiting I κ B phosphorylation. *Chembiochem*. 6 - 1, pp. 133 - 177. (Germany): 01/2005. ISSN 1439-4227
- 117** Sonsoles Hortelano; Miriam Zeini; Paqui G Través; Lisardo Boscá. Nitric oxide and cell signaling: in vivo evaluation of NO-dependent apoptosis by MRI and not NMR techniques. *Methods in enzymology*. 396, pp. 579 - 663. 2005. ISSN 0076-6879
- 118** Emilio Siendones; Dalia Fouad; María José M Díaz Guerra; Manuel de la Mata; Lisardo Boscá; Jordi Muntané. PGE1-induced NO reduces apoptosis by D-galactosamine through attenuation of NF- κ B and NOS-2 expression in rat hepatocytes. *Hepatology*. 40 - 6, pp. 1295 - 1598. 12/2004. ISSN 0270-9139



- 119** Nora Goren; Jimena Cuenca; Paloma Martín Sanz; Lisardo Boscá. Attenuation of NF-kappaB signalling in rat cardiomyocytes at birth restricts the induction of inflammatory genes. *Cardiovascular research*. 64 - 2, pp. 289 - 386. 01/11/2004. ISSN 0008-6363
- 120** O Núñez; A Fernández Martínez; P L Majano; A Apolinario; M Gómez Gonzalo; I Benedicto; M López Cabrera; L Boscá; G Clemente; C García Monzón; P Martín Sanz. Increased intrahepatic cyclooxygenase 2, matrix metalloproteinase 2, and matrix metalloproteinase 9 expression is associated with progressive liver disease in chronic hepatitis C virus infection: role of viral core and NS5A proteins. *Gut*. 53 - 11, pp. 1665 - 1737. 11/2004. ISSN 0017-5749
- 121** José Luis Oliva; Natasha Zarich; Natalia Martínez; Rocío Jorge; Antonio Castrillo; Marta Azañedo; Susana García Vargas; Silvia Gutiérrez Eisman; Angeles Juarranz; Lisardo Boscá; J Silvio Gutkind; José M Rojas. The P34G mutation reduces the transforming activity of K-Ras and N-Ras in NIH 3T3 cells but not of H-Ras. *The Journal of biological chemistry*. 279 - 32, pp. 33480 - 33571. 06/08/2004. ISSN 0021-9258
- 122** Miriam Zeini; Sonsoles Hortelano; Paqui G Través; Paloma Martín Sanz; Lisardo Boscá. Simultaneous abrogation of NOS-2 and COX-2 activities is lethal in partially hepatectomised mice. *Journal of hepatology*. 40 - 6, pp. 926 - 959. 06/2004. ISSN 0168-8278
- 123** Amalia Fernández Martínez; Nuria A Callejas; Marta Casado; Lisardo Boscá; Paloma Martín Sanz. Thioacetamide-induced liver regeneration involves the expression of cyclooxygenase 2 and nitric oxide synthase 2 in hepatocytes. *Journal of hepatology*. 40 - 6, pp. 963 - 1033. 06/2004. ISSN 0168-8278
- 124** Inmaculada Navarro Lérida; María Teresa Portolés; Alberto Alvarez Barrientos; Francisco Gavilanes; Lisardo Boscá; Ignacio Rodríguez Crespo. Induction of nitric oxide synthase-2 proceeds with the concomitant downregulation of the endogenous caveolin levels. *Journal of cell science*. 117 - Pt 9, pp. 1687 - 1784. 01/04/2004. ISSN 0021-9533
- 125** María Fernández Velasco; Nora Goren; Gemma Benito; Javier Blanco Rivero; Lisardo Boscá; Carmen Delgado. Regional distribution of hyperpolarization-activated current (I_f) and hyperpolarization-activated cyclic nucleotide-gated channel mRNA expression in ventricular cells from control and hypertrophied rat hearts. *The Journal of physiology*. 553 - Pt 2, pp. 395 - 800. 01/12/2003. ISSN 0022-3751
- 126** Sonsoles Hortelano; Paqui G Través; Miriam Zeini; Alberto M Alvarez; Lisardo Boscá. Sustained nitric oxide delivery delays nitric oxide-dependent apoptosis in macrophages: contribution to the physiological function of activated macrophages. *Journal of immunology*. 171 - 11, pp. 6059 - 6123. 01/12/2003. ISSN 0022-1767
- 127** Angel Cogolludo; Laura Moreno; Lisardo Bosca; Juan Tamargo; Francisco Perez Vizcaino. Thromboxane A₂-induced inhibition of voltage-gated K⁺ channels and pulmonary vasoconstriction: role of protein kinase C ζ . *Circulation research*. 93 - 7, pp. 656 - 719. 03/10/2003. ISSN 1524-4571
- 128** José L M Madrigal; María A Moro; Ignacio Lizasoain; Pedro Lorenzo; A Patricia Fernández; José Rodrigo; Lisardo Boscá; Juan C Leza. Induction of cyclooxygenase-2 accounts for restraint stress-induced oxidative status in rat brain. *Neuropsychopharmacology*. 28 - 9, pp. 1579 - 1667. 09/2003. ISSN 0893-133X
- 129** Jose Luis Oliva; Dolores Pérez Sala; Antonio Castrillo; Natalia Martínez; F Javier Cañada; Lisardo Boscá; José M Rojas. The cyclopentenone 15-deoxy-delta 12,14-prostaglandin J₂ binds to and activates H-Ras. *Proceedings of the National Academy of Sciences of the United States of America*. 100 - 8, pp. 4772 - 4779. 15/04/2003. ISSN 0027-8424
- 130** Johanna Ivaska; Lisardo Bosca; Peter J Parker. PKCepsilon is a permissive link in integrin-dependent IFN-gamma signalling that facilitates JAK phosphorylation of STAT1. *Nature cell biology*. 5 - 4, pp. 363 - 372. 04/2003. ISSN 1465-7392



- 131** Veronica Sanchez; Miriam Zeini; Jorge Camarero; Esther O'Shea; Lisardo Bosca; A Richard Green; M Isabel Colado. The nNOS inhibitor, AR-R17477AR, prevents the loss of NF68 immunoreactivity induced by methamphetamine in the mouse striatum. *Journal of neurochemistry*. 85 - 2, pp. 515 - 539. 04/2003. ISSN 0022-3042
- 132** Nuria A Callejas; Amalia Fernández Martínez; Antonio Castrillo; Lisardo Boscá; Paloma Martín Sanz. Selective inhibitors of cyclooxygenase-2 delay the activation of nuclear factor kappa B and attenuate the expression of inflammatory genes in murine macrophages treated with lipopolysaccharide. *Molecular pharmacology*. 63 - 3, pp. 671 - 678. 03/2003. ISSN 0026-895X
- 133** Antonio Castrillo; Paqui G Través; Paloma Martín Sanz; Scott Parkinson; Peter J Parker; Lisardo Boscá. Potentiation of protein kinase C zeta activity by 15-deoxy-delta(12,14)-prostaglandin J(2) induces an imbalance between mitogen-activated protein kinases and NF-kappa B that promotes apoptosis in macrophages. *Molecular and cellular biology*. 23 - 4, pp. 1196 - 1404. 02/2003. ISSN 0270-7306
- 134** Olga Millán; Alicia Ballester; Antonio Castrillo; José Luis de la Oliva; Paqui G Través; José María Rojas; Lisardo Boscá. H-Ras-specific activation of NF-kappaB protects NIH 3T3 cells against stimulus-dependent apoptosis. *Oncogene*. 22 - 4, pp. 477 - 560. 30/01/2003. ISSN 0950-9232
- 135** Paloma Martín Sanz; Luis Olmedilla; Elena Dulin; Marta Casado; Nuria A Callejas; José Pérez Peña; Ignacio Garutti; Javier Sanz; Javier Calleja; Santos Barrigón; Lisardo Boscá. Presence of methylated arginine derivatives in orthotopic human liver transplantation: relevance for liver function. *Liver transplantation : official publication of the American Association for the Study of Liver Diseases and the International Liver Transplantation Society*. 9 - 1, pp. 40 - 48. 01/2003. ISSN 1527-6465
- 136** M Llansola; L Boscá; V Felipo; S Hortelano. Ammonia prevents glutamate-induced but not low K(+)-induced apoptosis in cerebellar neurons in culture. *Neuroscience*. 117 - 4, pp. 899 - 1806. 2003. ISSN 0306-4522
- 137** B de las Heras; B Rodríguez; L Boscá; A M Villar. Terpenoids: sources, structure elucidation and therapeutic potential in inflammation. *Current topics in medicinal chemistry*. 3 - 2, pp. 171 - 256. 2003. ISSN 1568-0266
- 138** Paloma Martin Sanz; Sonsoles Hortelano; Nuria A Callejas; Nora Goren; Marta Casado; Miriam Zeini; Lisardo Boscá. Nitric oxide in liver inflammation and regeneration. *Metabolic brain disease*. 17 - 4, pp. 325 - 359. 12/2002. ISSN 0885-7490
- 139** S Hortelano; M Zeini; A Castrillo; A M Alvarez; L Boscá. Induction of apoptosis by nitric oxide in macrophages is independent of apoptotic volume decrease. *Cell death and differentiation*. 9 - 6, pp. 643 - 693. 06/2002. ISSN 1350-9047
- 140** Eduardo Molina Holgado; Angel Arévalo Martín; Antonio Castrillo; Lisardo Boscá; José M Vela; Carmen Guaza. Interleukin-4 and interleukin-10 modulate nuclear factor kappaB activity and nitric oxide synthase-2 expression in Theiler's virus-infected brain astrocytes. *Journal of neurochemistry*. 81 - 6, pp. 1242 - 1294. 06/2002. ISSN 0022-3042
- 141** Nuria A Callejas; Marta Casado; Lisardo Boscá; Paloma Martín Sanz. Absence of nuclear factor kappaB inhibition by NSAIDs in hepatocytes. *Hepatology*. 35 - 2, pp. 341 - 349. 02/2002. ISSN 0270-9139
- 142** D Alonso; J M Encinas; L O Utenthal; L Boscá; J Serrano; A P Fernández; S Castro Blanco; M Santacana; M L Bentura; A Richart; P Fernández Vizarra; J Rodrigo. Coexistence of translocated cytochrome c and nitrated protein in neurons of the rat cerebral cortex after oxygen and glucose deprivation. *Neuroscience*. 111 - 1, pp. 47 - 103. 2002. ISSN 0306-4522



- 143** Sonsoles Hortelano; Miriam Zeini; Lisardo Boscá. Nitric oxide and resolution of inflammation. *Methods in enzymology*. 359, pp. 459 - 524. 2002. ISSN 0076-6879
- 144** A Castrillo; D J Pennington; F Otto; P J Parker; M J Owen; L Boscá. Protein kinase Cepsilon is required for macrophage activation and defense against bacterial infection. *The Journal of experimental medicine*. 194 - 9, pp. 1231 - 1273. 05/11/2001. ISSN 0022-1007
- 145** S Hortelano; M L García Martín; S Cerdán; A Castrillo; A M Alvarez; L Boscá. Intracellular water motion decreases in apoptotic macrophages after caspase activation. *Cell death and differentiation*. 8 - 10, pp. 1022 - 1030. 10/2001. ISSN 1350-9047
- 146** A Castrillo; M Mojena; S Hortelano; L Boscá. Peroxisome proliferator-activated receptor-gamma-independent inhibition of macrophage activation by the non-thiazolidinedione agonist L-796,449. Comparison with the effects of 15-deoxy-delta(12,14)-prostaglandin J(2). *The Journal of biological chemistry*. 276 - 36, pp. 34082 - 34090. 07/09/2001. ISSN 0021-9258
- 147** M Casado; N A Callejas; J Rodrigo; X Zhao; S K Dey; L Boscá; P Martín Sanz. Contribution of cyclooxygenase 2 to liver regeneration after partial hepatectomy. *FASEB journal*. 15 - 11, pp. 2016 - 2024. 09/2001. ISSN 0892-6638
- 148** O Hurtado; A Cárdenas; I Lizasoain; L Boscá; J C Leza; P Lorenzo; M A Moro. Up-regulation of TNF-alpha convertase (TACE/ADAM17) after oxygen-glucose deprivation in rat forebrain slices. *Neuropharmacology*. 40 - 8, pp. 1094 - 1196. 06/2001. ISSN 0028-3908
- 149** A Castrillo; B de Las Heras; S Hortelano; B Rodriguez; A Villar; L Bosca. Inhibition of the nuclear factor kappa B (NF-kappa B) pathway by tetracyclic kaurene diterpenes in macrophages. Specific effects on NF-kappa B-inducing kinase activity and on the coordinate activation of ERK and p38 MAPK. *The Journal of biological chemistry*. 276 - 19, pp. 15854 - 15914. 11/05/2001. ISSN 0021-9258
- 150** N A Callejas; M Casado; M J Díaz Guerra; L Boscá; P Martín Sanz. Expression of cyclooxygenase-2 promotes the release of matrix metalloproteinase-2 and -9 in fetal rat hepatocytes. *Hepatology*. 33 - 4, pp. 860 - 867. 04/2001. ISSN 0270-9139
- 151** M Mojena; S Hortelano; A Castrillo; M J Diaz Guerra; M J Garcia Barchino; G T Saez; L Bosca. Protection by nitric oxide against liver inflammatory injury in animals carrying a nitric oxide synthase-2 transgene. *FASEB journal*. 15 - 3, pp. 583 - 588. 03/2001. ISSN 0892-6638
- 152** J L Madrigal; M A Moro; I Lizasoain; P Lorenzo; A Castrillo; L Boscá; J C Leza. Inducible nitric oxide synthase expression in brain cortex after acute restraint stress is regulated by nuclear factor kappaB-mediated mechanisms. *Journal of neurochemistry*. 76 - 2, pp. 532 - 540. 01/2001. ISSN 0022-3042
- 153** S Hortelano; M Castilla; A M Torres; A Tejedor; L Boscá. Potentiation by nitric oxide of cyclosporin A and FK506-induced apoptosis in renal proximal tubule cells. *Journal of the American Society of Nephrology : JASN*. 11 - 12, pp. 2315 - 2338. 12/2000. ISSN 1046-6673
- 154** N A Callejas; L Boscá; C S Williams; R N DuBOIS; P Martín Sanz. Regulation of cyclooxygenase 2 expression in hepatocytes by CCAAT/enhancer-binding proteins. *Gastroenterology*. 119 - 2, pp. 493 - 994. 08/2000. ISSN 0016-5085
- 155** L Boscá; O G Bodelón; S Hortelano; A Casellas; F Bosch. Anti-inflammatory action of type I interferons deduced from mice expressing interferon beta. *Gene therapy*. 7 - 10, pp. 817 - 842. 05/2000. ISSN 0969-7128



- 156** A Cárdenas; M A Moro; O Hurtado; J C Leza; P Lorenzo; A Castrillo; O G Bodelón; L Boscá; I Lizasoain. Implication of glutamate in the expression of inducible nitric oxide synthase after oxygen and glucose deprivation in rat forebrain slices. *Journal of neurochemistry*. 74 - 5, pp. 2041 - 2049. 05/2000. ISSN 0022-3042
- 157** M A Moro; J De Alba; A Cárdenas; J De Cristóbal; J C Leza; I Lizasoain; M J Díaz Guerra; L Boscá; P Lorenzo. Mechanisms of the neuroprotective effect of aspirin after oxygen and glucose deprivation in rat forebrain slices. *Neuropharmacology*. 39 - 7, pp. 1309 - 1327. 27/04/2000. ISSN 0028-3908
- 158** A Castrillo; M J Díaz Guerra; S Hortelano; P Martín Sanz; L Boscá. Inhibition of I κ B kinase and I κ B phosphorylation by 15-deoxy-Delta(12,14)-prostaglandin J(2) in activated murine macrophages. *Molecular and cellular biology*. 20 - 5, pp. 1692 - 1700. 03/2000. ISSN 0270-7306
- 159** R Olivenza; M A Moro; I Lizasoain; P Lorenzo; A P Fernández; J Rodrigo; L Boscá; J C Leza. Chronic stress induces the expression of inducible nitric oxide synthase in rat brain cortex. *Journal of neurochemistry*. 74 - 2, pp. 785 - 876. 02/2000. ISSN 0022-3042
- 160** A Castrillo; O G Bodelón; L Boscá. Inhibitory effect of IGF-I on type 2 nitric oxide synthase expression in Ins-1 cells and protection against activation-dependent apoptosis: involvement of phosphatidylinositol 3-kinase. *Diabetes*. 49 - 2, pp. 209 - 226. 02/2000. ISSN 0012-1797
- 161** S Hortelano; A M Alvarez; L Boscá. Nitric oxide induces tyrosine nitration and release of cytochrome c preceding an increase of mitochondrial transmembrane potential in macrophages. *FASEB journal*. 13 - 15, pp. 2311 - 2318. 12/1999. ISSN 0892-6638
- 162** B de las Heras; A Navarro; M J Díaz Guerra; P Bermejo; A Castrillo; L Boscá; A Villar. Inhibition of NOS-2 expression in macrophages through the inactivation of NF- κ B by andalusol. *British journal of pharmacology*. 128 - 3, pp. 605 - 617. 10/1999. ISSN 0007-1188
- 163** N A Callejas; M Casado; L Boscá; P Martín Sanz. Requirement of nuclear factor κ B for the constitutive expression of nitric oxide synthase-2 and cyclooxygenase-2 in rat trophoblasts. *Journal of cell science*. 112 Pt 18, pp. 3147 - 3202. 09/1999. ISSN 0021-9533
- 164** P Martín Sanz; L Boscá; L Olmedilla; J Perez Peña; I Garutti; J Sanz; J Calleja; M Avellanal; A Ortega; A Aleixandre; S Barrigón. Presence of a nitric oxide synthase inhibitor in the graft efflux during reperfusion in human liver transplantation. *Clinical transplantation*. 13 - 3, pp. 221 - 251. (Denmark): 06/1999. ISSN 0902-0063
- 165** L Boscá; S Hortelano. Mechanisms of nitric oxide-dependent apoptosis: involvement of mitochondrial mediators. *Cellular signalling*. 11 - 4, pp. 239 - 283. 04/1999. ISSN 0898-6568
- 166** N A Callejas; A Castrillo; L Boscá; P Martín Sanz. Inhibition of prostaglandin synthesis up-regulates cyclooxygenase-2 induced by lipopolysaccharide and peroxisomal proliferators. *The Journal of pharmacology and experimental therapeutics*. 288 - 3, pp. 1235 - 1276. 03/1999. ISSN 0022-3565
- 167** S Hortelano; E López Collazo; L Boscá. Protective effect of cyclosporin A and FK506 from nitric oxide-dependent apoptosis in activated macrophages. *British journal of pharmacology*. 126 - 5, pp. 1139 - 1185. 03/1999. ISSN 0007-1188
- 168** J De Alba; A Cárdenas; M A Moro; J C Leza; P Lorenzo; L Boscá; I Lizasoain. Down-regulation of neuronal nitric oxide synthase by nitric oxide after oxygen-glucose deprivation in rat forebrain slices. *Journal of neurochemistry*. 72 - 1, pp. 248 - 302. 01/1999. ISSN 0022-3042



- 169** P Martín Sanz; N A Callejas; M Casado; M J Díaz Guerra; L Boscá. Expression of cyclooxygenase-2 in foetal rat hepatocytes stimulated with lipopolysaccharide and pro-inflammatory cytokines. *British journal of pharmacology*. 125 - 6, pp. 1313 - 1322. 11/1998. ISSN 0007-1188
- 170** E López Collazo; S Hortelano; L Boscá. Interferon-alpha/beta inhibits the apoptosis induced by lipopolysaccharide and interferon-gamma in murine peritoneal macrophages. *Journal of interferon & cytokine research : the official journal of the International Society for Interferon and Cytokine Research*. 18 - 7, pp. 461 - 468. 07/1998. ISSN 1079-9907
- 171** S Llanos; C Caelles; I Azorín; J Renau Piqueras; J L Fernández Luna; L Boscá; A Muñoz. The c-erbA alpha protooncogene induces apoptosis in glial cells via a protein kinase C- and bcl-2-suppressible mechanism. *Journal of neurochemistry*. 70 - 6, pp. 2315 - 2341. 06/1998. ISSN 0022-3042
- 172** M A Moro; J De Alba; J C Leza; P Lorenzo; A P Fernández; M L Bentura; L Boscá; J Rodrigo; I Lizasoain. Neuronal expression of inducible nitric oxide synthase after oxygen and glucose deprivation in rat forebrain slices. *The European journal of neuroscience*. 10 - 2, pp. 445 - 501. (France): 02/1998. ISSN 0953-816X
- 173** M Casado; M J Díaz Guerra; L Boscá; P Martín Sanz. Differential regulation of nitric oxide synthase mRNA expression by lipopolysaccharide and pro-inflammatory cytokines in fetal hepatocytes treated with cycloheximide. *The Biochemical journal*. 327 (Pt 3), pp. 819 - 842. 01/11/1997. ISSN 0264-6021
- 174** M J Díaz Guerra; M Velasco; P Martín Sanz; L Boscá. Nuclear factor kappaB is required for the transcriptional control of type II NO synthase in regenerating liver. *The Biochemical journal*. 326 (Pt 3), pp. 791 - 798. 15/09/1997. ISSN 0264-6021
- 175** M Velasco; M J Díaz Guerra; P Martín Sanz; A Alvarez; L Boscá. Rapid Up-regulation of IkappaBbeta and abrogation of NF-kappaB activity in peritoneal macrophages stimulated with lipopolysaccharide. *The Journal of biological chemistry*. 272 - 37, pp. 23025 - 23055. 12/09/1997. ISSN 0021-9258
- 176** E López Collazo; J Mateo; M T Miras Portugal; L Boscá. Requirement of nitric oxide and calcium mobilization for the induction of apoptosis in adrenal vascular endothelial cells. *FEBS letters*. 413 - 1, pp. 124 - 132. 11/08/1997. ISSN 0014-5793
- 177** S Hortelano; B Dallaporta; N Zamzami; T Hirsch; S A Susin; I Marzo; L Boscá; G Kroemer. Nitric oxide induces apoptosis via triggering mitochondrial permeability transition. *FEBS letters*. 410 - 2-3, pp. 373 - 380. 30/06/1997. ISSN 0014-5793
- 178** M Casado; M Velasco; L Boscá; P Martín Sanz. Absence of NO synthase type II expression in fetal liver from pregnant rats under septic shock conditions. *Hepatology*. 25 - 6, pp. 1406 - 1417. 06/1997. ISSN 0270-9139
- 179** C Díez Fernández; N Sanz; L Boscá; S Hortelano; M Cascales. Involvement of nitric oxide synthesis in hepatic perturbations induced in rats by a necrogenic dose of thioacetamide. *British journal of pharmacology*. 121 - 4, pp. 820 - 826. 06/1997. ISSN 0007-1188
- 180** M Casado; M J Díaz Guerra; J Rodrigo; A P Fernández; L Boscá; P Martín Sanz. Expression of the calcium-independent cytokine-inducible (iNOS) isoform of nitric oxide synthase in rat placenta. *The Biochemical journal*. 324 (Pt 1), pp. 201 - 208. 15/05/1997. ISSN 0264-6021
- 181** S Hortelano; L Boscá. 6-Mercaptopurine decreases the Bcl-2/Bax ratio and induces apoptosis in activated splenic B lymphocytes. *Molecular pharmacology*. 51 - 3, pp. 414 - 435. 03/1997. ISSN 0026-895X



- 182** M A Avila; J Mingorance; M L Martínez Chantar; M Casado; P Martín Sanz; L Boscá; J M Mato. Regulation of rat liver S-adenosylmethionine synthetase during septic shock: role of nitric oxide. *Hepatology*. 25 - 2, pp. 391 - 397. 02/1997. ISSN 0270-9139
- 183** M J Díaz Guerra; O G Bodelón; M Velasco; R Whelan; P J Parker; L Boscá. Up-regulation of protein kinase C-epsilon promotes the expression of cytokine-inducible nitric oxide synthase in RAW 264.7 cells. *The Journal of biological chemistry*. 271 - 50, pp. 32028 - 32061. 13/12/1996. ISSN 0021-9258
- 184** M J Díaz Guerra; M Velasco; P Martín Sanz; L Boscá. Evidence for common mechanisms in the transcriptional control of type II nitric oxide synthase in isolated hepatocytes. Requirement of NF-kappaB activation after stimulation with bacterial cell wall products and phorbol esters. *The Journal of biological chemistry*. 271 - 47, pp. 30114 - 30134. 22/11/1996. ISSN 0021-9258
- 185** R Barcia; S García Vargas; L Boscá; P A Lazo. CD53 antigen and epidermal growth factor induce similar changes in the pattern of phorbol ester binding in a B cell lymphoma. *Cellular immunology*. 169 - 1, pp. 107 - 119. 10/04/1996. ISSN 0008-8749
- 186** M Casado; L Boscá; P Martín Sanz. Multiple forms of 6-phosphofructo-2-kinase/fructose-2,6-bisphosphatase are expressed in perinatal rat liver. *The American journal of physiology*. 270 - 2 Pt 1, pp. E244. 02/1996. ISSN 0002-9513
- 187** M Casada; M J Díaz Guerra; L Boscá; P Martín Sanz. Characterization of nitric oxide dependent changes in carbohydrate hepatic metabolism during septic shock. *Life sciences*. 58 - 7, pp. 561 - 633. 1996. ISSN 0024-3205
- 188** M Casado; L Boscá; P Martín Sanz. Differential regulation of the expression of 6-phosphofructo-2-kinase/fructose-2,6-bisphosphatase and pyruvate kinase by cyclic adenosine 3',5'-monophosphate in fetal and adult hepatocytes. *Journal of cellular physiology*. 165 - 3, pp. 630 - 638. 12/1995. ISSN 0021-9541
- 189** F Terenzi; M Casado; P Martín Sanz; L Boscá. Epidermal growth factor inhibits cytokine-dependent nitric oxide synthase expression in hepatocytes. *FEBS letters*. 368 - 1, pp. 193 - 199. 10/07/1995. ISSN 0014-5793
- 190** A M Genaro; S Hortelano; A Alvarez; C Martínez; L Boscá. Splenic B lymphocyte programmed cell death is prevented by nitric oxide release through mechanisms involving sustained Bcl-2 levels. *The Journal of clinical investigation*. 95 - 4, pp. 1884 - 1974. 04/1995. ISSN 0021-9738
- 191** F Terenzi; M J Díaz Guerra; M Casado; S Hortelano; S Leoni; L Boscá. Bacterial lipopeptides induce nitric oxide synthase and promote apoptosis through nitric oxide-independent pathways in rat macrophages. *The Journal of biological chemistry*. 270 - 11, pp. 6017 - 6038. 17/03/1995. ISSN 0021-9258
- 192** A A Steil; M C Garcia Rodriguez; A Alonso; M S Crespo; L Bosca. Platelet-activating factor: the effector of protein-rich plasma extravasation and nitric oxide synthase induction in rat immune complex peritonitis. *British journal of pharmacology*. 114 - 4, pp. 895 - 1796. 02/1995. ISSN 0007-1188
- 193** P J Parker; L Bosca; L Dekker; N T Goode; N Hajibagheri; G Hansra. Protein kinase C (PKC)-induced PKC degradation: a model for down-regulation. *Biochemical Society transactions*. 23 - 1, pp. 153 - 158. 02/1995. ISSN 0300-5127
- 194** L Bosca; C Stauber; S Hortelano; E Baixeras; C Martinez. Characterization of signals leading to clonal expansion or to cell death during lymphocyte B cell activation. *Current topics in microbiology and immunology*. 200, pp. 39 - 89. (Germany): 1995. ISSN 0070-217X



- 195** E Baixeras; L Bosca; C Stauber; A Gonzalez; A C Carrera; J A Gonzalo; C Martinez. From apoptosis to autoimmunity: insights from the signaling pathways leading to proliferation or to programmed cell death. *Immunological reviews*. 142, pp. 53 - 144. (Denmark): 12/1994. ISSN 0105-2896
- 196** M J Oset Gasque; M Parramón; S Hortelano; L Boscá; M P González. Nitric oxide implication in the control of neurosecretion by chromaffin cells. *Journal of neurochemistry*. 63 - 5, pp. 1693 - 2393. 11/1994. ISSN 0022-3042
- 197** A M Genaro; J A Gonzalo; L Bosca; C Martinez. CD2-CD48 interaction prevents apoptosis in murine B lymphocytes by up-regulating bcl-2 expression. *European journal of immunology*. 24 - 10, pp. 2515 - 2536. (Germany): 10/1994. ISSN 0014-2980
- 198** M Junco; C Webster; C Crawford; L Bosca; P J Parker. Protein kinase C V3 domain mutants with differential sensitivities to m-calpain are not resistant to phorbol-ester-induced down-regulation. *European journal of biochemistry / FEBS*. 223 - 1, pp. 259 - 322. (Germany): 01/07/1994. ISSN 0014-2956
- 199** L Boscá; P A Lazo. Induction of nitric oxide release by MRC OX-44 (anti-CD53) through a protein kinase C-dependent pathway in rat macrophages. *The Journal of experimental medicine*. 179 - 4, pp. 1119 - 1145. 01/04/1994. ISSN 0022-1007
- 200** M Casado; L Boscá; P Martín Sanz. Rat liver messenger ribonucleic acid and enzyme activity of 6-phosphofructo 2-kinase/fructose 2,6-bisphosphatase impairment during the late period of pregnancy. *Endocrinology*. 133 - 3, pp. 1044 - 1094. 09/1993. ISSN 0013-7227
- 201** L López Alarcón; E Melián; M J Muñoz Alonso; C Guijarro; L Boscá; J E Felíu. Sulfonylureas activate glycogen phosphorylase and increase cytosolic free-Ca²⁺ levels in isolated rat hepatocytes. *Metabolism: clinical and experimental*. 42 - 5, pp. 624 - 654. 05/1993. ISSN 0026-0495
- 202** S Hortelano; A M Genaro; L Boscá. Phorbol esters induce nitric oxide synthase and increase arginine influx in cultured peritoneal macrophages. *FEBS letters*. 320 - 2, pp. 135 - 144. 05/04/1993. ISSN 0014-5793
- 203** E Baixeras; G Kroemer; E Cuende; C Márquez; L Boscá; J E Alés Martínez; C Martínez. Signal transduction pathways involved in B-cell induction. *Immunological reviews*. 132, pp. 5 - 52. (Denmark): 04/1993. ISSN 0105-2896
- 204** L Boscá; F Morán. Circular dichroism analysis of ligand-induced conformational changes in protein kinase C. Mechanism of translocation of the enzyme from the cytosol to the membranes and its implications. *The Biochemical journal*. 290 (Pt 3), pp. 827 - 859. 15/03/1993. ISSN 0264-6021
- 205** M Junco; M J Díaz Guerra; L Boscá. Differential calcium mobilization by vasopressin, angiotensin II, gastrin-releasing peptide, and adenosine triphosphate in adult and fetal hepatocytes. Relevance for the activation of calcium-dependent enzymes. *Endocrinology*. 132 - 1, pp. 309 - 327. 01/1993. ISSN 0013-7227
- 206** S Hortelano; A M Genaro; L Boscá. Phorbol esters induce nitric oxide synthase activity in rat hepatocytes. Antagonism with the induction elicited by lipopolysaccharide. *The Journal of biological chemistry*. 267 - 35, pp. 24937 - 24977. 15/12/1992. ISSN 0021-9258
- 207** M Cascales; P Martín Sanz; L Bosca. Phorbol esters, bombesin and insulin elicit differential responses on the 6-phosphofructo-2-kinase/fructose-2,6-bisphosphatase system in primary cultures of foetal and adult rat hepatocytes. *European journal of biochemistry / FEBS*. 207 - 1, pp. 391 - 398. (Germany): 01/07/1992. ISSN 0014-2956



- 208** M Mojena; L Bosca; M H Rider; G G Rousseau; L Hue. Inhibition of 6-phosphofructo-2-kinase activity by mercaptopurines. *Biochemical pharmacology*. 43 - 4, pp. 671 - 679. 18/02/1992. ISSN 0006-2952
- 209** P Martín Sanz; M Cascales; L Boscá. Characterization of 6-phosphofructo-2-kinase from foetal-rat liver. *The Biochemical journal*. 281 (Pt 2), pp. 457 - 520. 15/01/1992. ISSN 0264-6021
- 210** M J Díaz Guerra; M Junco; L Boscá. Oleic acid promotes changes in the subcellular distribution of protein kinase C in isolated hepatocytes. *The Journal of biological chemistry*. 266 - 35, pp. 23568 - 23644. 15/12/1991. ISSN 0021-9258
- 211** L Boscá; C Márquez; C Martínez. B cell triggering by bacterial lipopeptide involves both translocation and activation of the membrane-bound form of protein kinase C. *Journal of immunology*. 147 - 5, pp. 1463 - 1472. 01/09/1991. ISSN 0022-1767
- 212** L Bosca; K B Storey. Inactivation of 6-phosphofructo-2-kinase during anaerobiosis in the marine whelk *Busycon canaliculatum*. *The American journal of physiology*. 260 - 6 Pt 2, pp. R1168. 06/1991. ISSN 0002-9513
- 213** L Boscá; M Junco; M J Díaz Guerra. Substrate specificity of protein kinase C inhibitors. *Trends in pharmacological sciences*. 11 - 12, pp. 477. 12/1990. ISSN 0165-6147
- 214** M J Díaz Guerra; L Boscá. Lack of translocation of protein kinase C from the cytosol to the membranes in vasopressin-stimulated hepatocytes. *The Biochemical journal*. 269 - 1, pp. 163 - 171. 01/07/1990. ISSN 0264-6021
- 215** M Junco; M J Díaz Guerra; L Boscá. Substrate-dependent inhibition of protein kinase C by specific inhibitors. *FEBS letters*. 263 - 1, pp. 169 - 240. 09/04/1990. ISSN 0014-5793
- 216** M Mojena; L Boscá. Identification of an anti-A and anti-B blood group glycosyltransferase antibody after incompatible bone marrow transplant. *Blood*. 74 - 3, pp. 1134 - 1142. 15/08/1989. ISSN 0006-4971
- 217** L Boscá; C Márquez; C Martínez. Lack of correlation between translocation and biological effects mediated by protein kinase C: an appraisal. *Immunology today*. 10 - 7, pp. 223 - 227. 07/1989. ISSN 0167-5699
- 218** L Boscá; M J Díaz Guerra; M Mojena. Oleate-induced translocation of protein kinase C to hepatic microsomal membranes. *Biochemical and biophysical research communications*. 160 - 3, pp. 1243 - 1252. 15/05/1989. ISSN 0006-291X
- 219** C Cascales; L Boscá; P Martín Sanz; D N Brindley; M Cascales. Translocation of phosphatidate phosphohydrolase from the cytosol to microsomal membranes in thioacetamide-induced liver tumours in rats. *Toxicology letters*. 47 - 1, pp. 9 - 25. 04/1989. ISSN 0378-4274
- 220** P Martín Sanz; M Cascales; L Boscá. Glucagon-induced changes in fructose 2,6-bisphosphate and 6-phosphofructo-2-kinase in cultured rat foetal hepatocytes. *The Biochemical journal*. 257 - 3, pp. 795 - 804. 01/02/1989. ISSN 0264-6021
- 221** L Barbolla; M Mojena; L Boscá. Presence of antibody to A- and B-transferases in minor incompatible bone marrow transplant. *British journal of haematology*. 70 - 4, pp. 471 - 477. 12/1988. ISSN 0007-1048



- 222** C Cascales; L Boscá; A Martín; D N Brindley; M Cascales. Age-related changes in the translocation of phosphatidate phosphohydrolase from the cytosol to microsomal membranes in rat liver. *Biochimica et biophysica acta*. 963 - 2, pp. 384 - 392. 25/11/1988. ISSN 0006-3002
- 223** L Bosca; M Mojena; J M Díaz Guerra; C Marquez. Phorbol 12,13-dibutyrate and mitogens increase fructose 2,6-bisphosphate in lymphocytes. Comparison of lymphocyte and rat-liver 6-phosphofructo-2-kinase. *European journal of biochemistry / FEBS*. 175 - 2, pp. 317 - 340. 01/08/1988. ISSN 0014-2956
- 224** M J Díaz Guerra; J Sánchez Prieto; L Bosca; J Pocock; A Barrie; D Nicholls. Phorbol ester translocation of protein kinase C in guinea-pig synaptosomes and the potentiation of calcium-dependent glutamate release. *Biochimica et biophysica acta*. 970 - 2, pp. 157 - 222. 30/06/1988. ISSN 0006-3002
- 225** L Boscá; M J Díaz Guerra. Activation of protein kinase C from B lymphocytes by lipid A. *Biochemical and biophysical research communications*. 152 - 1, pp. 149 - 203. 15/04/1988. ISSN 0006-291X
- 226** P Martín Sanz; M Cascales; L Boscá. Fructose 2,6-bisphosphate in isolated foetal hepatocytes. *FEBS letters*. 225 - 1-2, pp. 37 - 79. 10/12/1987. ISSN 0014-5793
- 227** L Bosca; M Mojena; J Ghysdael; G G Rousseau; L Hue. Expression of the v-src or v-fps oncogene increases fructose 2,6-bisphosphate in chick-embryo fibroblasts. Novel mechanism for the stimulation of glycolysis by retroviruses. *The Biochemical journal*. 236 - 2, pp. 595 - 604. 01/06/1986. ISSN 0264-6021
- 228** M Mojena; L Bosca; L Hue. Effect of glutamine on fructose 2,6-bisphosphate and on glucose metabolism in HeLa cells and in chick-embryo fibroblasts. *The Biochemical journal*. 232 - 2, pp. 521 - 528. 01/12/1985. ISSN 0264-6021
- 229** L Bosca; G G Rousseau; L Hue. Phorbol 12-myristate 13-acetate and insulin increase the concentration of fructose 2,6-bisphosphate and stimulate glycolysis in chicken embryo fibroblasts. *Proceedings of the National Academy of Sciences of the United States of America*. 82 - 19, pp. 6440 - 6444. 10/1985. ISSN 0027-8424
- 230** L Bosca; R A Challiss; E A Newsholme. The effect of fructose 2,6-bisphosphate on muscle fructose-1,6-bisphosphatase activity. *Biochimica et biophysica acta*. 828 - 2, pp. 151 - 155. 05/04/1985. ISSN 0006-3002
- 231** L Boscá; J J Aragón; A Sols. Modulation of muscle phosphofructokinase at physiological concentration of enzyme. *The Journal of biological chemistry*. 260 - 4, pp. 2100 - 2107. 25/02/1985. ISSN 0021-9258
- 232** L Boscá; J J Aragón; A Sols. Fructose 2,6-bisphosphate and enzymatic activities for its metabolism in ascites tumor. *Current topics in cellular regulation*. 27, pp. 411 - 419. 1985. ISSN 0070-2137
- 233** L Hue; F Sobrino; L Bosca. Difference in glucose sensitivity of liver glycolysis and glycogen synthesis. Relationship between lactate production and fructose 2,6-bisphosphate concentration. *The Biochemical journal*. 224 - 3, pp. 779 - 865. 15/12/1984. ISSN 0264-6021
- 234** C Corredor; L Boscá; A Sols. Biphasic effect of fructose 2,6-bisphosphate on the liver fructose-1,6-bisphosphatase: mechanistic and physiological implications. *FEBS letters*. 167 - 2, pp. 199 - 401. 27/02/1984. ISSN 0014-5793
- 235** L Boscá; J J Aragón; A Sols. Specific activation by fructose 2,6-bisphosphate and inhibition by P-enolpyruvate of ascites tumor phosphofructokinase. *Biochemical and biophysical research communications*. 106 - 2, pp. 486 - 577. 31/05/1982. ISSN 0006-291X



- 236** S R Paludan; L Malmgaard; S Ellermann Eriksen; L Boscá; S C Mogensen. Interferon (IFN)-gamma and Herpes simplex virus/tumor necrosis factor-alpha synergistically induce nitric oxide synthase 2 in macrophages through cooperative action of nuclear factor-kappa B and IFN regulatory factor-1. European cytokine network. 12 - 2, pp. 297 - 605. (France): ISSN 1148-5493

Works submitted to national or international conferences

Title of the work: 25years of oxidative stress. The elixir of youth

Name of the conference: 25-years of ROS

Corresponding author: Yes

City of event: Valencia,

Date of event: 2010

R&D management and participation in scientific committees

R&D management

Name of the activity: Gestor del Plan Nacional de Biomedicina

Type of management: Programme management

Performed tasks: Gestor

Entity: Ministerio de Ciencia e Innovación

Start date: 01/01/2106

Type of entity: PUBLICO

Duration: 5 years

Other achievements

Periods of research activity

N° of recognized periods: 5

Certifying entity: MINECO

Date of recognition: 01/01/2010

Type of entity: Public Research Body