



Profolio of Researchers and Research Teams

CELLULAR AND MOLECULAR PHYSIOLOGY

(Last update 03/04/2013)

Code: GI-1862

Department: Fisioloxía

Web: www.usc.es/fisio/gl/investigacion.html

Contact:

Arce Vázquez, Víctor Manuel

victor.arce@usc.es

Telf. 981-563100 ext.12291

Center of Innovation and Thecnology Transfer

cittinfo@usc.es

Telf.: 981-547000

Research field

- Growth factors in endocrine cancer
- Neuroendocrinology and metabolism.
- Neurodegeneration and neuroncology
- Cell cycle regulation.

Technology services

- Mouse and human cell cultures. Tumour repository.
- Flow cytometry.
- Genetically engineered mice.

Key words

Cancer, Cell cycle Neuroendocrinology, metabolism, neurodegeneration.

Researchers

Name	Position
Arce Vázquez, V.M.	Coordinator
Anadón Álvarez, R.	Member
Costoya Puente, J.A.	Member
García García, M.d.	Member
Lima Rodríguez, L.	Member
Rodicio Rodicio, M.C.	Member
Señarís Rodríguez, R.M.	Member
Cornide Petronio, M.E.	IFP
Fernández López, B.	IFP
Golán Cancela, I.	IFP
González López del Castillo, C.	IFP
González Mosquera, T.	IFP
Iglesias Vázquez, P.	IFP
Navía Ruíz, M.	IFP
Orozco Morales, M.	IFP
REMUÑEZ DUBRA, A.	IFP
Senra Viñas, A.	PA
Vázquez González, P.	PA
Vigo Ramos, E.	PA

RTD PROJECTS (period: 2009 - 2013)

Title:

Papel de los canales de frío TRPM8 en la patogenia y fisiopatología de la obesidad. Búsqueda de nuevas dianas terapéuticas.

Tipology: (PN) Plan Nacional

Duration: 01/01/2013 - 31/12/2015

Main investigator: Señarís Rodríguez, Rosa María

Title:

Estudio de los cambios en los sistemas de neurotransmisores durante la regeneración espinal en lampreas

Tipology: Plan Nacional

Duration: 01/01/2011 - 31/12/2013

Main investigator: Rodicio Rodicio, María Celina

Title:

Función de TRPM8 y TRPA1 en la homeostasis térmica y metabólica

Tipology: Plan Nacional

Duration: 01/01/2010 - 31/12/2012

Main investigator: Señarís Rodríguez, Rosa María

Title:

Caracterización molecular de los mecanismos implicados en la transición de gliomas de bajo a alto grado

Tipology: Plan Nacional

Duration: 01/01/2010 - 31/12/2012

Main investigator: Costoya Puente, José Antonio

Title:

Targeted nanomaterials for discovery of biomarkers, tumors and metastasis imaging to diagnose cancer and for drug targeting (or delivery)

Tipology: Proxectos Xunta

Duration: 01/01/2009 - 01/12/2009

Main investigator: Costoya Puente, José Antonio

Technological customers and partners

- ABF Pharmaceutical Services GmbH
- Helmholtz Zentrum München
- Midatech Biogune, S.L.

SCIENTIFIC PRODUCTION (period: 2007 - 2011)

Articles in scientific journals

Article:

Muscle Myostatin Expression in Children with Muscle Diseases

Journal: JOURNAL OF CHILD NEUROLOGY, ISSN: 0883-0738

2007

Article:

The dependence receptor Ret induces apoptosis in somatotrophs through a Pit/P53 pathway preventing tumor growth

Journal: EMBO JOURNAL, ISSN: 0261-4189

2007

Article:

The GCK II and III subfamilies of the STE20 group kinases

Journal: Frontiers in Bioscience-Landmark, ISSN: 1093-9946

2007

Article:

Of mice without pockets: mouse models to study the function of the Rb family

Journal: Frontiers in Bioscience-Landmark, ISSN: 1093-9946

2007

Article:

Perinatal overfeeding in rats induces adulthood obesity and a hypothalamic leptin resistance state based in saturation of the leptin transport

Journal: INTERNATIONAL JOURNAL OF OBESITY, ISSN: 0307-0565

2007

Article:

Cooperation between p27 and p107 during endochondral ossification suggests a genetic pathway controlled by p27 and p130

Journal: MOLECULAR AND CELLULAR BIOLOGY, ISSN: 0270-7306

2007

Article:

Interweaving the cell cycle machinery with cell differentiation

Journal: CELL CYCLE, ISSN: 1538-4101
2007

Article:

Perinatal overfeeding in rats results in increased levels of plasma leptin but unchanged cerebrospinal leptin in adulthood

Journal: INTERNATIONAL JOURNAL OF OBESITY, ISSN: 0307-0565
2007

Article:

Mechanisms of interferon-beta induced survival in fetal and neonatal primary astrocytes

Journal: NEUROIMMUNOMODULATION, ISSN: 1021-7401
2007

Article:

Muscle myostatin expression in children with muscle diseases

Journal: JOURNAL OF CHILD NEUROLOGY, ISSN: 0883-0738
2007

Article:

Role of ghrelin in reproduction

Journal: REPRODUCTION, ISSN: 1470-1626
2007

Article:

Prevalence of mutations in TSHR, GNAS, PRKAR1A and RAS genes in a large series of toxic thyroid adenomas from Galicia, an iodine-deficient area in NW Spain.

Journal: EUROPEAN JOURNAL OF ENDOCRINOLOGY, ISSN: 0804-4643
2008

Article:

Hypothyroidism is associated with increased myostatin expression in rats.

Journal: JOURNAL OF ENDOCRINOLOGICAL INVESTIGATION, ISSN: 0391-4097
2008

Article:

Interferon-beta protects astrocytes against tumour necrosis factor-induced apoptosis via activation of p38 mitogen-activated protein kinase

Journal: EXPERIMENTAL CELL RESEARCH, ISSN: 0014-4827
2008

Article:

Cyclin-dependent kinase antagonizes promyelocytic leukemia zinc finger through phosphorylation

Journal: ONCOGENE, ISSN: 0950-9232
2008

Article:

Grelin localization in the medulla of rat and human adrenal gland and in pheochromocytomas

Journal: PEPTIDES, ISSN: 0196-9781
2008

Article:

Hypothalamic fatty acid metabolism mediates the orexigenic action of ghrelin

Journal: Cell Metabolism, ISSN: 1550-4131
2008

Article:

Food-intake-regulating-neuropeptides are expressed and regulated through pregnancy and following food restriction in rat placenta

Journal: Reproductive Biology and Endocrinology, ISSN: 1477-7827
2008

Article:

Expression of neuropeptide W in rat stomach mucosa: regulation by nutritional status, glucocorticoids and thyroid hormones

Journal: REGULATORY PEPTIDES, ISSN: 0167-0115
2008

Article:

Hypothyroidism increases myostatin expression in rats

Journal: JOURNAL OF ENDOCRINOLOGICAL INVESTIGATION, ISSN: 0391-4097
2008

Article:

Interferon- β protects astrocytes against tumour necrosis factor-induced apoptosis via activation of p38 mitogen-activated protein kinase increases myostatin expression in rats

Journal: EXPERIMENTAL CELL RESEARCH, ISSN: 0014-4827
2008

Article:

Pendred Syndrome in two Galician Families: insights into clinical phenotypes through cellular, genetic, and molecular studies

Journal: JOURNAL OF CLINICAL ENDOCRINOLOGY & METABOLISM, ISSN: 0021-972X
2008

Article:

GHRH proliferative action on somatotrophs is cell-type specific and dependent on Pit-1/GHF-1 expression

Journal: JOURNAL OF CELLULAR PHYSIOLOGY, ISSN: 0021-9541
2008

Article:

SOK1 translocates from the Golgi to the nucleus upon oxidative stress and induces apoptotic cell death

Journal: JOURNAL OF BIOLOGICAL CHEMISTRY, ISSN: 0021-9258
2008

Article:

Cdk redundancy guarantees cell cycle progression in Rb-negative tumor cells independently of their p16 status

Journal: CELL CYCLE, ISSN: 1538-4101
2008

Article:

A highly efficient system to delivery taxanes into tumor cells: Docetaxel-loaded chitosan oligomer nanocapsules.

Journal: BIOMACROMOLECULES, ISSN: 1525-7797
2008

Article:

Hypochondroplasia and acanthosis nigricans: a new syndrome due to the p.Lys650Thr mutation in the FGFR3 gene?

Journal: EUROPEAN JOURNAL OF ENDOCRINOLOGY, ISSN: 0804-4643
2008

Article:

Cyclin A probes by means of intermolecular sensitization of terbium-chelating peptides

Journal: JOURNAL OF THE AMERICAN CHEMICAL SOCIETY, ISSN: 0002-7863
2008

Article:

A novel BRET-based genetically encoded biosensor for functional imaging of hypoxia

Journal: BIOSENSORS & BIOELECTRONICS, ISSN: 0956-5663
2009

Article:

Vaspin and amylin are expressed in human and rat placenta and regulated by nutritional status.

Journal: HISTOLOGY AND HISTOPATHOLOGY, ISSN: 0213-3911
2009

Article:

Regulation of visceral adipose tissue-derived serine protease inhibitor by nutritional status, metformin, gender and pituitary factors in rat white adipose tissue

Journal: JOURNAL OF PHYSIOLOGY-LONDON, ISSN: 0022-3751
2009

Article:

Reduced adipogenic gene expression in fibroblasts from a patient with type 2 congenital generalized lipodystrophy.

Journal: DIABETIC MEDICINE, ISSN: 0742-3071
2010

Article:

A GRFa2/Prop1/stem (GPS) cell niche in the pituitary.

Journal: PLoS One, ISSN: 1932-6203
2009

Article:

Bimodal effect of interferon- γ on astrocyte proliferation and survival: Importance of nuclear factor- κ B.

Journal: JOURNAL OF NEUROIMMUNOLOGY, ISSN: 0165-5728
2010

Article:

Peripheral endocannabinoid system-mediated actions of rimonabant on growth hormone secretion are ghrelin-dependent.

Journal: JOURNAL OF NEUROENDOCRINOLOGY, ISSN: 0953-8194
2010

Article:

Resistance of neonatal primary astrocytes against Fas-induced apoptosis depends on silencing of caspase 8.

Journal: NEUROSCIENCE LETTERS, ISSN: 0304-3940
2010

Article:

Activation of NF- κ B Pathway by Virus Infection Requires Rb Expression.

Journal: PLoS One, ISSN: 1932-6203
2009

Article:

CCM3/PDCD10 stabilizes GCKIII proteins to promote Golgi assembly and cell orientation.

Journal: JOURNAL OF CELL SCIENCE, ISSN: 0021-9533
2010

Article:

Identification of a paired box gene 8-peroxisome proliferator-activated receptor gamma (PAX8-PPARgamma) rearrangement mosaicism in a patient with an autonomous functioning follicular thyroid carcinoma bearing an activating mutation in the TSH receptor.

Journal: ENDOCRINE-RELATED CANCER, ISSN: 1351-0088
2010

Article:

New insights into thyroglobulin pathophysiology revealed by the study of a family with congenital goiter.

Journal: JOURNAL OF CLINICAL ENDOCRINOLOGY & METABOLISM, ISSN: 0021-972X
2010

Article:

Expression of exogenous proteins and short hairpin RNAs in human primary thyrocytes.

Journal: ANALYTICAL BIOCHEMISTRY, ISSN: 0003-2697
2010

Article:

Functional role of the RET dependence receptor, GFRa co-receptors and ligands in the pituitary.

Journal: Frontiers of Hormone Research, ISSN: 0301-3073
2010

Article:

Differential bulbar and extrabulbar projections of diverse olfactory receptor neuron populations in the adult zebrafish (*Danio rerio*)

Journal: JOURNAL OF COMPARATIVE NEUROLOGY, ISSN: 0021-9967
2011

Article:

Doublecortin is expressed in trigeminal motoneurons that innervate the velar musculature of developing lampreys: implications for trigeminal evolution and development

Journal: DEVELOPMENT GENES AND EVOLUTION, ISSN: 0949-944X
2011

Article:

Distribution of glycine immunoreactivity in the brain of the Siberian sturgeon (*Acipenser baeri*). Comparison with gamma-aminobutyric acid (GABA)

Journal: JOURNAL OF COMPARATIVE NEUROLOGY, ISSN: 0021-9967
2011

Article:

Glutamatergic neuronal populations in the forebrain of the sea lamprey, *Petromyzon marinus*. An in situ hybridization and immunocytochemical study.

Journal: JOURNAL OF COMPARATIVE NEUROLOGY, ISSN: 0021-9967
2011

Article:

Retinotopy of visual projections to the optic tectum and pretectum in larval sea lamprey

Journal: EXPERIMENTAL EYE RESEARCH, ISSN: 0014-4835
2011

Article:

Regionalization of the shark hindbrain: a survey of an ancestral organization

Journal: Frontiers in Neuroanatomy, ISSN: 1662-5129
2011

Article:

Connections of the terminal nerve and the olfactory system in two galeomorph sharks: an experimental study using a carbocyanine dye

Journal: JOURNAL OF COMPARATIVE NEUROLOGY, ISSN: 0021-9967
2011

Article:

Inhibitory descending rhombencephalic projections in larval sea lamprey.

Journal: NEUROSCIENCE, ISSN: 0306-4522
2011

Article:

Spontaneous regeneration of the serotonergic descending innervation in the sea lamprey after spinal cord injury.

Journal: JOURNAL OF NEUROTRAUMA, ISSN: 0897-7151
2011

Article:

Analytical aspects of microRNA in diagnostics: a review.

Journal: ANALYTICA CHIMICA ACTA, ISSN: 0003-2670
2011

Article:

The Mitochondrial Genome is a 'Genetic Sanctuary' during the Oncogenic Process.

Journal: PLoS One, ISSN: 1932-6203
2011

Article:

Interlukin-6 Regulates the Expression of Hypothalamic Neuropeptides Involved in Body Weight in a Gender-Dependent Way

Journal: JOURNAL OF NEUROENDOCRINOLOGY, ISSN: 0953-8194
2011

Article:

Hyperphagia and Central Mechanisms for Leptin Resistance during Pregnancy

Journal: ENDOCRINOLOGY, ISSN: 0013-7227
2011

Article:

Oleoylethanolamide: Effects on hypothalamic transmitters and gut peptides regulating food intake.

Journal: NEUROPHARMACOLOGY, ISSN: 0028-3908
2011

Article:

Growth hormone (GH) treatment may cooperate with locally-produced GH in increasing the proliferative response of hippocampal progenitors to kainate-induced injury

Journal: BRAIN INJURY, ISSN: 0269-9052
2011

Chapter:

Title:

Fisiología del tiroides

Book:

Tiroides

(84-481-5705-0)Publicación: 2007

Editorial: MCGRAW-HILL INTERAMERICANA DE ESPAÑA

Title:

Mecanismo de acción celular de los glucocorticoides y de los mineralocorticoides

Book:

Actualizaciones en endocrinología: Glándulas suprarrenales

(84-481-6865-8)Publicación: 2008

Editorial: MCGRAW-HILL/INTERAMERICANA

Title:

Uncovering the role of POK transcriptional repressors in oncogenesis, development and stem cell biology

Book:

Focus on Zinc Finger Protein Research

(978-81-308-0320-3)Publicación: 2009

Editorial: RESEARCH SIGNPOST

Title:

Evidence of the efficacy of herbal medicinal products used for conditions associated with inflammation

Book:

Evaluation of Herbal Medicines

(978-0-85369-751-0)Publicación: 2009

Editorial: Pharmaceutical Press

Title:

Fundamentos de genética, genómica, proteómica y bioinformática.

Book:

Tratado de Endocrinología Pediátrica

(978-84-481-6387-7)Publicación: 2009

Editorial:McGraw Hill - Interamericana

Title:

Consenso sobre el uso del adhesivo de fibrina en la cirugía de la pared abdominal.

Book:

Técnicas quirúrgicas, consenso y evidencia científica en el uso de adhesivo de fibrina en cirugía de la pared abdominal.

(978-84-86671-82-2)Publicación: 2010

Editorial:Pulso Ediciones

Title:

Hernia inguinal indirecta recidivada resuelta con tapón y malla con adhesivo de fibrina.

Book:

Técnicas quirúrgicas, consenso y evidencia científica en el uso de adhesivo de fibrina en cirugía de la pared abdominal.

(978-84-86671-82-2)Publicación: 2010

Editorial:Pulso Ediciones

Title:

Integración neuroendocrina.

Book:

Fisiología Humana

(978-607-15-0349-7)Publicación: 2010

Editorial:McGRAW-HILL INTERAMERICANA

Title:

Hormona de crecimiento.

Book:

Fisiología Humana

(978-607-15-0349-7)Publicación: 2010

Editorial:McGRAW-HILL INTERAMERICANA

Title:

Molecular optical imaging of hypoxia using genetic biosensors

Book:

Computational Vision and Medical Image Processing - Recent Trends, Computational Methods in Applied Sciences Series.

(978-94-007-0010-9)Publicación: 2011

Editorial:Springer

Title:

Bioluminescence Resonant Energy Transfer as a Basis for a Novel Hypoxia Biosensor for in vivo Functional Imaging.

Book:

Bioluminescence: Characteristics, Adaptations and Biotechnology.

(978-1-61209-747-3)Publicación: 2011

Editorial:Nova Science Publishers

Doctoral theses:

Title:

Regulación de la expresión de miostatina

Date of dissertation: 09/05/2007

Director: Jesús Devesa Múgica, Víctor Manuel Arce Vázquez

Author: María Isabel Carneiro Hombre

Title:

Control de la supervivencia astrocitaria por citoquinas implicadas en la Esclerosis Múltiple

Date of dissertation: 29/01/2008

Director: Víctor Manuel Arce Vázquez, Rosa María Señarís Rodríguez

Author: Olga Barca Mayo

Title:

Efectos de la eliminación de p16 en células tumorales RB negativas

Date of dissertation: 28/03/2008

Director: Juan Bautista Zalvide Torrente

Author: Marta Santamariña Pena

Title:

A PERDIDA DE RB1 MODULA A RESPOSTA AO DAÑO NO ADN E A SENESCENCIA INDUCIDA POR ESTRÉS ONCOGÉNICO FAVORECENDO A PROGRESIÓN TUMORAL

Date of dissertation: 04/06/2009

Director: Víctor Manuel Arce Vázquez, Rosa María Señarís Rodríguez, José Antonio Costoya Puente

Author: Marcos Seoane Souto

Title:

Estudo funcional do xen pelota

Date of dissertation: 29/05/2009

Director: Juan Bautista Zalvide Torrente

Author: Marta Cuervo López

Title:

Estudo da función supresora de tumores de p130Rbl2 e p107Rbl1: evidencias xenéticas e mecanismos de acción

Date of dissertation: 27/07/2009

Director: Anxo Vidal Figueroa

Author: Gloria Martínez Río

Title:

CARCINOMA DE MAMA DE TIPO BASAL. Perfil genético, clínico, histológico e inmunohistoquímico.

Date of dissertation: 21/07/2010

Director: Francisco Barreiro Morandeira, Cameselle Teijeiro, Jorge F.

Author: Gonzalo de Castro Parga

Title:

Múltiples mecanismos de resistencia a leptina durante a xestación

Date of dissertation: 17/02/2010

Director: Rosa María Señarís Rodríguez

Author: Martha Liliana Trujillo Güiza

Title:

Estudo funcional da interacción entre SOK-1 e PDCD10.

Date of dissertation: 19/02/2010

Director: Juan Bautista Zalvide Torrente, Celia María Pombo Ramos

Author: Miguel Ángel Fidalgo Pérez

Title:

Papel da miostatina na regulación da hematopoiesis

Date of dissertation: 05/07/2011

Director: Víctor Manuel Arce Vázquez

Author: Susana Fernández Nocelo

Title:

Accions da hormona de crecemento sobre a reparación neural central periférica

Date of dissertation: 22/06/2011

Director: Víctor Manuel Arce Vázquez, Jesús Devesa Múgica

Author: Pablo Devesa Peleteiro
