



Antonio Castellano Orozco

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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.

Teaching activity:

- Lecturer in the subject "Fisiología General" in the School of Medicine since 1997.
- Lecturer and coordinator of several subjects in the PhD Program and Master in Biomedical Research at the Universidad de Sevilla, since 2003.

Management positions:

- Coordinator of the PhD Program in Biomedical Research at the Universidad de Sevilla from 2003 to 2006.
- Coordinador of the Master in Biomedical Research at the Universidad de Sevilla from 2006 to 2014

Research activity:

- 1985-1989 PhD student – FISs fellowship (Universidad de Sevilla). Research in Cellular biophysics: electrophysiological characterization of neurons and other cell types. Analysis of ionic currents in different cell types using the patch clamp technique.
- 1989-1992 Postdoctoral researcher - MEC/Fulbright fellowship (Baylor College of Medicine): Structure-function studies on voltage-dependent Ca²⁺ channels. Cloning and functional studies using recombinant Ca²⁺ channel subunits. Demonstration of the existence of several genes and splice variants in the alpha1 and beta subunits of the voltage-dependent Ca²⁺ channels
- 1992-1995 Postdoctoral researcher – “Reincorporation” Program of the Spanish ministry of Education and Science (MEC); Universidad de Sevilla): Structure-function studies on voltage-dependent K⁺ channels. Cloning, molecular studies and functional expression of a “silent” alpha subunit of a neuronal voltage-dependent K⁺ channel.



- 1995-1997 Associate Professor at the Universidad de Barcelona: Electrophysiological studies of the trabecular meshwork cells.

- 1997-2017 Associate Professor at the Universidad de Sevilla: -Structure-function studies on voltage-dependent K⁺ channels.

-Analysis of the sensitivity to hypoglycemia of the carotid body glomus cells: functional studies(electrophysiology, amperometry and microfluorimetry) of the response to hypoglycemia.

-Analysis of regulation of the expression of ion channels in cardiac myocytes: effects of hypoxia on the expression of the beta1 subunit of the maxi-K potassium channel and the T-type Cav3.2 alpha1 subunit. Effects of glucocorticoids on the expression of the T-type Cav3.2 alpha1 subunit.

-Regulation of the vascular smooth muscle (VSM) contraction. Joined to Dr. Juan Ureña group to analyze the metabotropic role of the L-type voltage-dependent Ca²⁺ channels in VSM cells.

2017-present Professor at the Universidad de Sevilla: -Analysis of the interactions between two signaling pathways involved in vascular smooth muscle tone (PKCalpha con RhoA/ROCK) and their role in arterial vasospasm.

-Study of neuronal and cardiac channelopathies. Molecular and functional studies using heterologous expression systems.



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.

- Number of “ six-year research periods”: 5 (last one granted in 2018)
- PhD thesis directed in the last 10 years: 3 (2012, 2016 and 2017)
- Total number of citations: 2356 (Google Scholar)
- Average number of citations per year during the last 5 years: 87
- Total number of scientific publications: 42
- Total number of publications in first quartile (Q1) journals: 30 (71%)
- H index: 22
- PI of 5 National Plan Research Projects

- Scientific evaluator for the National Research Agency (AEI)
- Reviewer for the journals: Pflügers Archive: European Journal of Physiology, British Journal of Pharmacology, Journal of Applied Physiology, PlosOne, Cellular Physiology and Biochemistry, Canadian Journal of Physiology and Pharmacology

- Member of the CIBERCV (Cardiovascular) of the “Instituto de Salud Carlos III” since 2017

- Scientific coordinator of the PAIDI (Plan Andaluz de Investigación, Desarrollo e Innovación) group: CTS-591

- Prize of the Real Academia de Medicina de Sevilla to Scientific Publication in 2019 to the article Gonzalez-Montelongo et al., Stroke, 49: 1507-1510 (2018)

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Currentprofessionalsituation

Employing entity: Universidad de Sevilla Type of entity: University
 Department: Fisiología Médica y Biofísica, Facultad de Medicina
 Professional category: Catedrático de Universidad
 Start date: 20/01/2017
 Type of contract: Civil servant Dedication regime: Full time
 Primary (UNESCO code): 240000 - Life Science
 Secondary (UNESCO code): 241400 - Microbiology
 Performed tasks: Investigación y Docencia en Fisiología

Previouspositionsandactivities

	Employing entity	Professional category	Start date
1	Universidad de Sevilla	Profesor Titular de Universidad	01/09/1997
2	Universitat de Barcelona	Profesor Titular de Universidad	07/07/1995
3	Universidad de Sevilla	Profesor Asociado	01/02/1995
4	Universidad de Sevilla	Investigador Postdoctoral	01/10/1992
5	Baylor College of Medicine	Investigador Postdoctoral	01/09/1991



	Employing entity	Professional category	Start date
6	Ministerio de Sanidad y Consumo	Becario Postdoctoral	01/11/1989
7	Universidad de Sevilla	Becario Predoctoral	01/01/1985

- 1 Employing entity: Universidad de Sevilla Type of entity: University
Professional category: Profesor Titular de Universidad
Start-End date: 01/09/1997 - 20/01/2017
- 2 Employing entity: Universitat de Barcelona Type of entity: University
Professional category: Profesor Titular de Universidad
Start-End date: 07/07/1995 - 17/01/1997 Duration: 1 year - 7 months
- 3 Employing entity: Universidad de Sevilla Type of entity: University
Professional category: Profesor Asociado
Start-End date: 01/02/1995 - 06/07/1995 Duration: 5 months
- 4 Employing entity: Universidad de Sevilla Type of entity: University
Professional category: Investigador Postdoctoral
Start-End date: 01/10/1992 - 06/07/1995 Duration: 2 years - 9 months
- 5 Employing entity: Baylor College of Medicine
Professional category: Investigador Postdoctoral
Start-End date: 01/09/1991 - 31/08/1992 Duration: 1 year
- 6 Employing entity: Ministerio de Sanidad y Consumo Type of entity: Administrative Body of the National Health System
Professional category: Becario Postdoctoral
Start-End date: 01/11/1989 - 31/08/1991 Duration: 1 year - 10 months
- 7 Employing entity: Universidad de Sevilla Type of entity: University
Professional category: Becario Predoctoral
Start-End date: 01/01/1985 - 30/10/1989 Duration: 4 years



Education

University education

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

University degree: Higher degree

Name of qualification: Licenciado en Biología

Degree awarding entity: Universidad de Sevilla

Type of entity: University

Date of qualification: 1984

Doctorates

Doctorate programme: Programa Oficial de Doctorado en Biología Molecular y Celular

Degree awarding entity: Universidad de Sevilla

Type of entity: University

Date of degree: 1989

Language skills

Language	Listening skills	Reading skills	Spoken interaction	Speaking skills	Writing skills
English	C1	C2	C1	C1	C1

Teaching experience

Experience supervising doctoral thesis and/or final year projects

- Project title: Mutaciones en el gen KCNA1 responsables de ataxia episódica tipo 1

Type of project: End of course project

Entity: Universidad de Sevilla

Student: Clara de la Torre Corona

Date of reading: 10/06/2019

Type of entity: University
- Project title: Análisis y caracterización de RhoA y PKC-alpha en la Hemorragia Subaracnoidea mediante Biología de Sistemas

Type of project: End of course project

Entity: Universidad de Jaén

City of entity: Jaén, Andalusia, Spain

Student: Isabel Trigo Pérez

Date of reading: 20/06/2018

Type of entity: University



- 3 Project title: Caracterización de mutaciones responsables del síndrome de QT largo
Type of project: End of course project
Entity: Universidad de Sevilla Type of entity: University
City of entity: Sevilla, Andalusia, Spain
Student: Alejandro Cortés Gómez
Date of reading: 20/06/2018
- 4 Project title: Mutaciones en los canales KCNQ1/KCNE1 causantes del síndrome del QT largo
Type of project: End of course project
Entity: Universidad de Sevilla Type of entity: University
City of entity: Sevilla, Andalusia, Spain
Student: Enrique García-Serrano Fuertes
Date of reading: 20/06/2018
- 5 Project title: Implicación de los canales de Ca²⁺ tipo L y RhoA/Rho quinasa en el incremento del tono vascular inducido por la despolarización mantenida: posible papel en la hipertensión arterial
Type of project: Doctoral thesis
Entity: Universidad de Sevilla Type of entity: University
City of entity: Sevilla, Andalusia, Spain
Student: Cristina Porrás González
Date of reading: 20/07/2017
- 6 Project title: Vasoespasmismo secundario a la Hemorragia Subaracnoidea Aneurismática
Type of project: End of course project
Entity: Universidad de Sevilla, Facultad de Medicina Type of entity: University
Student: Arfuch León Jorge
Date of reading: 03/07/2017
- 7 Project title: Papel funcional del canal Kv4.3 en patología cardiovascular
Type of project: End of course project
Entity: Universidad de Sevilla Type of entity: University
Student: Marta Bautista Salamanca
Date of reading: 30/06/2016
- 8 Project title: Regulación por dexametasona del canal de Ca²⁺ Tipo T Cav3.2 en cardiomiocitos. Implicaciones en la Hipertrofia cardíaca
Type of project: Doctoral thesis
Entity: Universidad de Sevilla Type of entity: University
City of entity: Sevilla, Andalusia, Spain
Student: Débora Falcón Boyano
Date of reading: 01/06/2016
- 9 Project title: Participación de HIF-1a y RhoA/ROCK en la regulación por la hipoxia crónica de los canales de calcio tipo T en cardiomiocitos. Implicaciones fisiopatológicas
Type of project: Doctoral thesis
Entity: Universidad de Sevilla Type of entity: University
Student: Patricia González Rodríguez
Date of reading: 2012



- 10 Project title: Hipoxia en cardiomiocitos; regulación de la expresión de la subunidad β_1 del canal maxi-k y participación en el acondicionamiento cardíaco
 Type of project: Doctoral thesis
 Entity: Universidad de Sevilla Type of entity: University
 Student: Lucía Bautista Borrego
 Date of reading: 2009
- 11 Project title: La interacción de cationes con aminoácidos cargados en los lazos extracelulares regula las características cinéticas de los canales de potasio
 Type of project: Doctoral thesis
 Entity: Universidad de Sevilla Type of entity: University
 Student: Patricia Ortega Sáenz
 Date of reading: 1998

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: Regulación metabotrópica de RhoA por los canales de Ca^{2+} : papel en la adhesión de leucocitos al endotelio y la vasorreactividad vascular en la hemorragia subaracnoidea aneurismática en humanos
 Entity where project took place: Universidad de Sevilla Type of entity: University
 City of entity: Sevilla, Andalusia, Spain
 N° of researchers: 5
 Start-End date: 01/01/2021 - 31/12/2022
 Total amount: 70.000 €
- 2 Name of the project: Regulación de RhoA/Rho quinasa por los canales de Ca^{2+} tipo L y PKC?: papel en la microcirculación en la hemorragia subaracnoidea espontánea
 Entity where project took place: Universidad de Sevilla Type of entity: University
 City of entity: Sevilla, Andalusia, Spain
 Name principal investigator (PI, Co-PI....): Antonio Castellano Orozco; Juan Ureña López; Rosario Amaya Villar
 N° of researchers: 3
 Funding entity or bodies: Ministerio de Ciencia e Innovación y Universidades Type of entity: State agency
 City funding entity: Madrid, Spain
 Start-End date: 01/01/2018 - 31/12/2020
 Total amount: 145.200 €
- 3 Name of the project: Estudio Sobre Los Moduladores Genéticos del Fenotipo en el Síndrome de Qt Largo Tipo 1
 Entity where project took place: INSTITUTO DE BIOMEDICINA DE SEVILLA Type of entity: State agency



City of entity: Sevilla, Andalusia, Spain

Name principal investigator (PI, Co-PI...): Eduardo Arana Rueda; M^a Luisa Peña Peña; Manuel Frutos López; Juan Acosta Martínez; Marta Navarro; Alonso Pedrote Martínez; Jesús Fierro; Antonio Castellano Orozco; Castellano A

N^o of researchers: 8

Start-End date: 01/01/2018 - 31/12/2019

Total amount: 48,41 €

- 4 Name of the project: Regulacion metabotropica de rhoa/rho quinasa por los canales de Ca²⁺ tipo L: papel en la fisiopatología arterial

Entity where project took place: Universidad de Sevilla Type of entity: University

Funding entity or bodies:

MINECO Type of entity: State agency

Start-End date: 01/01/2014 - 31/12/2016

Total amount: 110.000€

- 5 Name of the project: Canales de calcio tipo T en cardiomiocitos: regulacion por la hipoxia y por la ruta Rho-ROCK

Entity where project took place: Universidad de Sevilla Type of entity: University

Funding entity or bodies:

Consejería de Economía, Innovación y Ciencia Type of entity: Junta de Andalucía

Start-End date: 01/01/2013 - 31/12/2016

Total amount: 195.893 €

- 6 Name of the project: Canales de calcio tipo T en cardiomiocitos: regulacion por la hipoxia y por la ruta Rho-ROCK

Funding entity or bodies:

MCIINN Type of entity: State agency

Start-End date: 01/01/2011 - 31/12/2013

Total amount: 180.290€

- 7 Name of the project: Sensibilidad al oxígeno y neurodegeneración

Entity where project took place: Universidad de Sevilla Type of entity: University

Funding entity or bodies:

Fundación Marcelino Botín Type of entity: Foundation

Start-End date: 01/01/2007 - 31/12/2012

Total amount: 1.000.000€

- 8 Name of the project: Nuevo papel de los canales de Ca²⁺ en el control del tono vascular y su relacion con mecanismos de sensibilizacion a Ca²⁺ de la contracción

Funding entity or bodies:

Consejería de Innovación Ciencia y Empresa

Start-End date: 01/01/2008 - 31/12/2011



- 9 Name of the project: Pulmonary Hypertension: Functional Genomics and Therapy of Lung Vascular Remodelling (PULMOTENSION)
Entity where project took place: Universidad de Sevilla Type of entity: University
Funding entity or bodies:
Comunidad Europea
Start-End date: 01/01/2006 - 31/12/2009
- 10 Name of the project: Regulación metabotrópica del tono vascular por los canales de Ca²⁺: Relación con mecanismos de sensibilización al Ca²⁺ y su modulación por hipoxia
Entity where project took place: Universidad de Sevilla Type of entity: University
Funding entity or bodies:
Instituto de Salud Carlos III Type of entity: Administrative Body of the National Health System
Start-End date: 01/01/2006 - 31/12/2009
Total amount: 107.690 €
- 11 Name of the project: Regulación metabotrópica del tono vascular por los canales de Ca²⁺: posibles implicaciones fisiopatológicas
Entity where project took place: Universidad de Sevilla Type of entity: University
Funding entity or bodies:
Consejería de Salud de la Junta de Andalucía Type of entity: Junta de Andalucía
City funding entity: Sevilla, Andalusia, Spain
Start-End date: 01/01/2006 - 31/12/2007
Total amount: 12.000 €
- 12 Name of the project: Caracterización del mecanismo sensor de glucosa en el cuerpo carotídeo de rata y su modificación en condiciones de hiperglucemia crónica
Entity where project took place: Universidad de Sevilla Type of entity: University
Funding entity or bodies:
MCYT Type of entity: State agency
City funding entity: Spain
Start-End date: 01/12/2003 - 30/11/2006
Total amount: 200.250 €
- 13 Name of the project: Homeostasis del Ca²⁺ citosólico en los miocitos de arteria cerebral y coronaria
Entity where project took place: Universidad de Sevilla Type of entity: University
Funding entity or bodies:
Consejería de Salud Type of entity: Junta de Andalucía
Start-End date: 01/01/2004 - 31/12/2005
Total amount: 9.000 €
- 14 Name of the project: Subunit structure analysis of the cardiac L-type calcium channel
Entity where project took place: Baylor College of Medicine Type of entity: University Research Institute
City of entity: Houston, TX, United States of America





Funding entity or bodies:

American Heart Association

Type of entity: Foundation

City funding entity: United States of America

Start-End date: 1991 - 1992

15 Name of the project: Modulación de canales iónicos

Entity where project took place: Universidad de Sevilla

Type of entity: University

City of entity: Sevilla, Andalusia, Spain

Funding entity or bodies:

DGICYT

Type of entity: State agency

City funding entity: Spain

Start-End date: 1988 - 1991

16 Name of the project: Electrofisiología de células paratiroides

Entity where project took place: Universidad de Sevilla

Type of entity: University

City of entity: Sevilla, Andalusia, Spain

Name principal investigator (PI, Co-PI...): 1

Nº of researchers: 4

Funding entity or bodies:

Comité Conjunto Hispano Norteamericano para la Cooperación Científica y Técnica

Type of entity: State agency

City funding entity: Spain

Start-End date: 1985 - 1987

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

1 Name of the project: ESTUDIO DE MUTACIONES EN AKAP9 Y KCNH2 COMO MODIFICADORES GENETICOS DEL SINDROME DE QT LARGO TIPO 1

Degree of contribution: Researcher

Name principal investigator (PI, Co-PI...): Eduardo arana Rueda; Antonio Castellano Orozco; MLuisa Peña Peña; Manuel Frutos López; Juan Acosta Martínez; ALONSO PEDROTE

Nº of researchers: 6

Funding entity or bodies:

Sociedad Española de Cardiología

Type of entity: Associations and Groups

City funding entity: Madrid, Community of Madrid, Spain

Start date: 01/05/2017

Duration: 1 year - 6 months

Total amount: 18 €

2 Name of the project: Investigación dentro de las líneas de Investigación del Laboratorio de Investigaciones Biomédicas

Degree of contribution: Scientific coordinator

Start date: 01/01/2002

Duration: 10 years

subarachnoid hemorrhage and vasospasm. Stroke. 49 - 6, pp. 1507 - 1510. Lippincott Williams & Wilkins, 01/06/2018.

Type of production: Scientific paper

Format: Journal

Corresponding author: No

- 8 Débora Falcón Boyano; Rafaela González Montelongo; Eva Sánxchez de Rojas de Pedro; Antonio Ordóñez Fernández; Juan Ureña López; Antonio Castellano Orozco. Dexamethasone-induced upregulation of CaV3.2 T-type Ca²⁺ channels in rat cardiac myocytes. The Journal of Steroid Biochemistry and Molecular Biology. 178, pp. 193 - 202. Elsevier, 01/04/2018.

Type of production: Scientific paper

Format: Journal

Corresponding author: Yes

- 9 Cristina Porrás González; Antonio Ordóñez Fernández; Antonio Castellano Orozco; Juan Ureña López. Regulation of RhoA/ROCK and sustained arterial contraction by low cytosolic Ca²⁺ levels during prolonged depolarization of arterial smooth muscle. Vascular Pharmacology. Elsevier, 01/07/2017.

Type of production: Scientific paper

Format: Journal

Corresponding author: Yes

- 10 Enriqueta Tristán Clavijo; Francisco Gómez Scholl; Alfons Macaya; Gemma Iglesias; Ana Rojas; Miguel Lucas; Antonio Castellano Orozco; Amalia Martínez Mir. Dominant-negative mutation p.Arg324Thr in KCNA1 impairs Kv1.1 channel function in episodic ataxia. Movement Disorders. 31 - 11, pp. 1743 - 1748. 01/11/2016.

Type of production: Scientific paper

Format: Journal

- 11 Javier Ávila Medina; Eva Calderón Sánchez; Patricia González Rodríguez; Francisco Monje Quiroga; Juan Antonio Rosado Dionisio; Antonio Castellano Orozco; Antonio Ordóñez Fernández; Tarik Smani Hajami. Orail and TRPC1 colocalize with CaV1.2 channels to form a signal complex in vascular smooth muscle cells. The Journal of Biological Chemistry. 291, pp. 21148 - 21159. 30/09/2016.

Type of production: Scientific paper

Format: Journal

- 12 Patricia González Rodríguez; Débora Falcón Boyano; M^a José Castro Pérez; Juan Ureña López; José López Barneo; Antonio Castellano Orozco. Hypoxic induction of T-type Ca²⁺ channels in rat cardiac myocytes: Role of HIF-1 α and RhoA/ROCK signaling. The Journal of Physiology. 593, pp. 64 - 72. 01/11/2015.

Type of production: Scientific paper

Corresponding author: Yes

- 13 N. Dionisio; T. Smani; G. E. Woodard; A. Castellano; G. M. Salido; J. A. Rosado. Homer proteins mediate the interaction between STIM1 and Cav1.2 channels. Biochim Biophys Acta. 1853 - 5, pp. 1145 - 53. 2015.

Type of production: Scientific paper

Format: Journal

- 14 J.J. Egea-Guerrero; F. Murillo-Cabezas; M.T. Muñoz-Sánchez; A. Vilches-Arenas; C. Porrás-González; A. Castellano; J. Ureña; M.D.C. González-Montelongo. Role of L-type Ca²⁺ channels, sarcoplasmic reticulum and Rho kinase in rat basilar artery contractile properties in a new model of subarachnoid hemorrhage. Vascular Pharmacology. 72, pp. 64 - 72. 2015. Available on-line at: <<http://www.scopus.com/inward/record.url?eid=2-s2.0-84939575025&partnerID=MN8TOARS>>.

Type of production: Scientific paper

Format: Journal

- 15 Juan Urena; Miguel Fernandez-Tenorio; Cristina Porrás-Gonzalez; Patricia Gonzalez-Rodriguez; Antonio Castellano; Jose Lopez-Barneo. A New Metabotropic Role for L-type Ca²⁺ Channels in Vascular Smooth Muscle Contraction. Current Vascular Pharmacology. 11 - 4, pp. 490 - 496. 2013. Available on-line at: <http://gateway.webofknowledge.com/gateway/Gateway.cgi?GWVersion=2&SrcAuth=ORCID&SrcApp=OrcidOrg&DestLinkType=FullRecord&DestApp=WOS_CPL&KeyUT=WOS:0>

Type of production: Scientific paper

Format: Journal

- 16 A. Romero-Ruiz; L. Bautista; V. Navarro; A. Heras-Garvín; R. March-Díaz; A. Castellano; R. Gómez-Díaz; M.J. Castro; E. Berra; J. López-Barneo; A. Pascual. Prolyl hydroxylase-dependent modulation of eukaryotic elongation factor 2 activity and protein translation under acute hypoxia. *Journal of Biological Chemistry*. 287 - 12, pp. 9651 - 9658. 2012. Available on-line at: <<http://www.scopus.com/inward/record.url?eid=2-s2.0-84858603465&partnerID=MN8TOARS>>. Type of production: Scientific paper Format: Journal
- 17 M. Fernández-Tenorio; C. Porras-González; A. Castellano; J. López-Barneo; J. Ureña. Tonic arterial contraction mediated by L-type Ca²⁺ channels requires sustained Ca²⁺ influx, G protein-associated Ca²⁺ release, and RhoA/ROCK activation. *European Journal of Pharmacology*. 697 - 1-3, pp. 88 - 96. 2012. Available on-line at: <<http://www.scopus.com/inward/record.url?eid=2-s2.0-84869505805&partnerID=MN8TOARS>>. Type of production: Scientific paper Format: Journal
- 18 A.I. Fernández-Mariño; C. Porras-González; P. González-Rodríguez; J. Selent; M. Pastor; J. Ureña; A. Castellano; M.A. Valverde; J.M. Fernández-Fernández. Tungstate activates BK channels in a γ subunit-and Mg²⁺-dependent manner: Relevance for arterial vasodilatation. *Cardiovascular Research*. 95 - 1, pp. 29 - 38. 2012. Available on-line at: <<http://www.scopus.com/inward/record.url?eid=2-s2.0-84862846088&partnerID=MN8TOARS>>. Type of production: Scientific paper Format: Journal
- 19 M. Fernández-Tenorio; C. Porras-González; A. Castellano; A. Del Valle-Rodríguez; J. López-Barneo; J. Ureña. Metabotropic regulation of RhoA/Rho-associated kinase by l-type Ca²⁺ Channels: New Mechanism for Depolarization-Evoked Mammalian Arterial Contraction. *Circulation Research*. 108 - 11, pp. 1348 - 1357. 2011. Available on-line at: <<http://www.scopus.com/inward/record.url?eid=2-s2.0-79958156026&partnerID=MN8TOARS>>. Type of production: Scientific paper Format: Journal
- 20 M FERNANDEZ-TENORIO; P GONZALEZ-RODRIGUEZ; C PORRAS; A CASTELLANO; S MOOSMANG; F HOFMANN; J URENA; J LOPEZ-BARNEO. Genetic Ablation of L-Type Ca²⁺ Channels Abolishes Depolarization-Induced Ca²⁺ Release in Arterial Smooth Muscle. *Circulation Research*. 106 - 7, pp. 1285 - 1289. 2010. Available on-line at: <http://gateway.webofknowledge.com/gateway/Gateway.cgi?GWVersion=2&SrcAuth=ORCID&SrcApp=OrcidOrg&DestLinkType=FullRecord&DestApp=WOS_CPL&KeyUT=WOS:0>. Type of production: Scientific paper Format: Journal
- 21 L. Bautista; M.J. Castro; J. López-Barneo; A. Castellano. Hypoxia inducible factor-2 β stabilization and maxi-K⁺ channel γ 1-subunit gene repression by hypoxia in cardiac myocytes: Role in preconditioning. *Circulation Research*. 104 - 12, pp. 1364 - 1372. 2009. Available on-line at: <<http://www.scopus.com/inward/record.url?eid=2-s2.0-67650218185&partnerID=MN8TOARS>>. Type of production: Scientific paper Format: Journal
- 22 M. García-Fernández; P. Ortega-Sáenz; A. Castellano; J. López-Barneo. Mechanisms of low-glucose sensitivity in carotid body glomus cells. *Diabetes*. 56 - 12, pp. 2893 - 2900. 2007. Available on-line at: <<http://www.scopus.com/inward/record.url?eid=2-s2.0-36849012058&partnerID=MN8TOARS>>. Type of production: Scientific paper Format: Journal
- 23 J. López-Barneo; A. Castellano. Multiple facets of maxi-K⁺ channels: The heme connection. *Journal of General Physiology*. 126 - 1, pp. 1 - 5. 2005. Available on-line at: <<http://www.scopus.com/inward/record.url?eid=2-s2.0-22244474648&partnerID=MN8TOARS>>. Type of production: Scientific paper Format: Journal
- 24 X. Gasull; E. Ferrer; A. Llobet; A. Castellano; J.M. Nicolás; J. Palés; A. Gual. Cell membrane stretch modulates the high-conductance Ca²⁺-activated K⁺ channel in bovine trabecular meshwork cells. *Investigative Ophthalmology and Visual Science*. 44 - 2, pp. 706 - 714. 2003. Available on-line at: <<http://www.scopus.com/inward/record.url?eid=2-s2.0-0037308501&partnerID=MN8TOARS>>. Type of production: Scientific paper Format: Journal

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Organising entity: SOCIEDAD ESPAÑOLA DE NEUROCIENCIA

- 8 Title of the work: Effects of norepinephrine, epinephrine, prostaglandin E2, bradykinin, neuropeptide Y, and substance P on $[Ca^{2+}]_i$ in bovine trabecular meshwork cells, and on outflow facility in anterior segments in vitro
Name of the conference: ARVO 1997
City of event: Fort Lauderdale, United States of America
Date of event: 1997
- 9 Title of the work: A neural K^+ channel transcript encodes for a regulatory ? subunit
Name of the conference: The 2nd meeting of European Neuroscience
City of event: Strasbourg, France
Date of event: 1996
- 10 Title of the work: Cationes extracelulares y propiedades cinéticas en mutantes del poro de canales de potasio ShakerShaker potassium channels
Name of the conference: VI Congreso de la SENC
City of event: Valladolid, Spain
Date of event: 1995
Organising entity: SOCIEDAD ESPAÑOLA DE NEUROCIENCIA
City organizing entity: Spain
- 11 Title of the work: Mecanismos de inactivación de los canales de potasio
Name of the conference: VI Congreso de la SENC
City of event: Valladolid, Spain
Date of event: 1995
Organising entity: SOCIEDAD ESPAÑOLA DE NEUROCIENCIA
City organizing entity: Spain
- 12 Title of the work: Regulación por la tensión de O_2 de canales de K^+ recombinantes
Name of the conference: V Congreso de la Sociedad de Biofísica de España
City of event: Lisboa, Portugal
Date of event: 1995
Organising entity: SOCIEDAD DE BIOFISICA DE ESPAÑA
City organizing entity: Spain
- 13 Title of the work: Clonado y expresión de subunidades beta de canales de calcio
Name of the conference: IV Congreso de la Sociedad de Biofísica de España
City of event: Caceres, Spain
Date of event: 1994
Organising entity: Sociedad de Biofísica de España
City organizing entity: Spain
- 14 Title of the work: Interaction of tetraethylammonium and external monovalent cations with Shaker potassium channels
Name of the conference: XIIIth International symposium on Bioelectrochemistry and Bioenergetics
City of event: Sevilla, Spain
Date of event: 1994
City organizing entity: Spain



- 15 Title of the work: T-type and N-type calcium channels of *Xenopus* oocytes: evidence for specific interactions with beta subunits
Name of the conference: 38th Biophysical Society Meeting
City of event: New Orleans, United States of America
Date of event: 1994
Organising entity: Biophysical Society
City organizing entity: United States of America
- 16 Title of the work: Cloning and expression of a fourth neuronal calcium channel beta subunit
Name of the conference: 16th Annual Meeting of the European Neuroscience Association
City of event: Madrid, Spain
Date of event: 1993
Organising entity: European Neuroscience Association
- 17 Title of the work: Cloning and expression of a fourth neuronal calcium channel beta subunit
Name of the conference: 1993 Biophysical Society Meeting
City of event: Houston, United States of America
Date of event: 1993
Organising entity: Biophysical Society
City organizing entity: United States of America
- 18 Title of the work: Alternative splicing of beta subunit genes contributes to molecular diversity of calcium channels
Cloning and expression of a novel beta subunit of the calcium channel from brain and heart
Name of the conference: 1992 ASBMB/Biophysical Society Meeting
City of event: Houston, United States of America
Date of event: 1992
Organising entity: Biophysical Society
City organizing entity: United States of America
- 19 Title of the work: Cloning and expression of a novel beta subunit of the calcium channel from brain and heart
Name of the conference: 1992 ASBMB/Biophysical Society Meeting
City of event: Houston, United States of America
Date of event: 1992
Organising entity: Biophysical Society
City organizing entity: United States of America
- 20 Title of the work: Cloning and expression of a cardiac/brain beta subunit of the L-type calcium channel
Name of the conference: 5th International Symposium on calcium antagonists: Pharmacology and clinical research
City of event: Houston, United States of America
Date of event: 1991
- 21 Title of the work: Studies on the subunit structure of the skeletal muscle dihydropyridine-sensitive calcium channel by stable and transient expression in mammalian cells
Name of the conference: 5th International Symposium on calcium antagonists: Pharmacology and clinical research
City of event: Houston, United States of America
Date of event: 1991
City organizing entity: United States of America



- 22 Title of the work: Corrientes iónicas en neuronas septales: efecto de TRH
Name of the conference: III Congreso de la Sociedad Española de Neurociencia
City of event: Spain
Date of event: 1989
Organising entity: Sociedad Española de Biofísica
City organizing entity: Spain
- 23 Title of the work: Efecto de TRH sobre las corrientes iónicas de neuronas septales. Estudio mediante la técnica de "patch-clamp"
Name of the conference: I Congreso Iberoamericano de Biofísica
City of event: Spain
Date of event: 1989
Organising entity: Sociedad Española de Biofísica
City organizing entity: Spain
- 24 Title of the work: Ionic currents in septal neurons and inhibition of sodium current by Thyrotropin-releasing hormone (TRH)
Name of the conference: 33rd Annual Meeting of the Biophysical Society
City of event: United States of America
Date of event: 1989
Organising entity: Biophysical Society
City organizing entity: United States of America
- 25 Title of the work: Caracterización de dos tipos de corrientes de potasio en células de la glándula pineal en cultivo
Name of the conference: II Congreso de la Sociedad Española de Neurociencia
City of event: Spain
Date of event: 1987
Organising entity: Sociedad Española de Neurociencia
Type of entity: Associations and Groups
City organizing entity: Spain
- 26 Title of the work: Characterization of two types of potassium currents in cells of the pineal gland
Name of the conference: Second World Congress of Neuroscience
City of event: Hungary
Date of event: 1987
City organizing entity: Spain
- 27 Title of the work: Corrientes de potasio en células de la glándula pineal en cultivo primario
Name of the conference: I Reunión de la Sociedad Española de Biofísica
Date of event: 1986
Organising entity: Sociedad Española de Biofísica
City organizing entity: Spain



R&D management and participation in scientific committees

Organization of R&D activities

Title of the activity: XXXIII Congress of the Spanish Society of Physiological Sciences
 Type of activity: Comité organizador Congreso Geographical area: European Union
 Convening entity: SOCIEDAD ESPAÑOLA DE CIENCIAS FISIOLÓGICAS
 City convening entity: Sevilla, Andalusia, Spain
 Start-End date: 10/02/2005 - 13/02/2005 Duration: 4 days

R&D management

- 1 Name of the activity: Doctorado en Biología Molecular y Biomedicina
 Type of management: Programa de Doctorado
 Performed tasks: Miembro de la Comisión Académica
 Entity: Universidad de Sevilla Type of entity: University
 Start date: 01/09/2009 Duration: 5 years
- 2 Name of the activity: Máster en Investigación Biomédica
 Type of management: Management of body
 Performed tasks: Coordinador del Máster
 Entity: Universidad de Sevilla Type of entity: University
 Start date: 01/09/2006 Duration: 9 years

Other achievements

Stays in public or private R&D centres

- 1 Entity: Universidad de Sevilla Type of entity: University
 Start-End date: 01/10/1992 - 07/07/1995 Duration: 3 years
 Goals of the stay: Contracted
- 2 Entity: Baylor College of Medicine
 City of entity: Houston, United States of America
 Start-End date: 01/01/1989 - 31/08/1992 Duration: 3 years
 Goals of the stay: Post-doctoral
- 3 Entity: Universidad de Sevilla Type of entity: University
 Start-End date: 01/01/1985 - 31/10/1989 Duration: 4 years
 Goals of the stay: Doctorate