GRUPO PAIDI: BIO-368 (Junta de Andalucía, España)
"NEUROCIENCIA TRASLACIONAL"

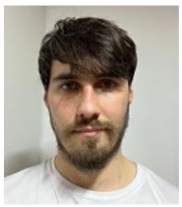
NEURODINÁMICA COGNITIVA Y CIENCIA DE DATOS NEURALES

PORTAL UPO: https://www.upo.es/profesorado/rsancam/

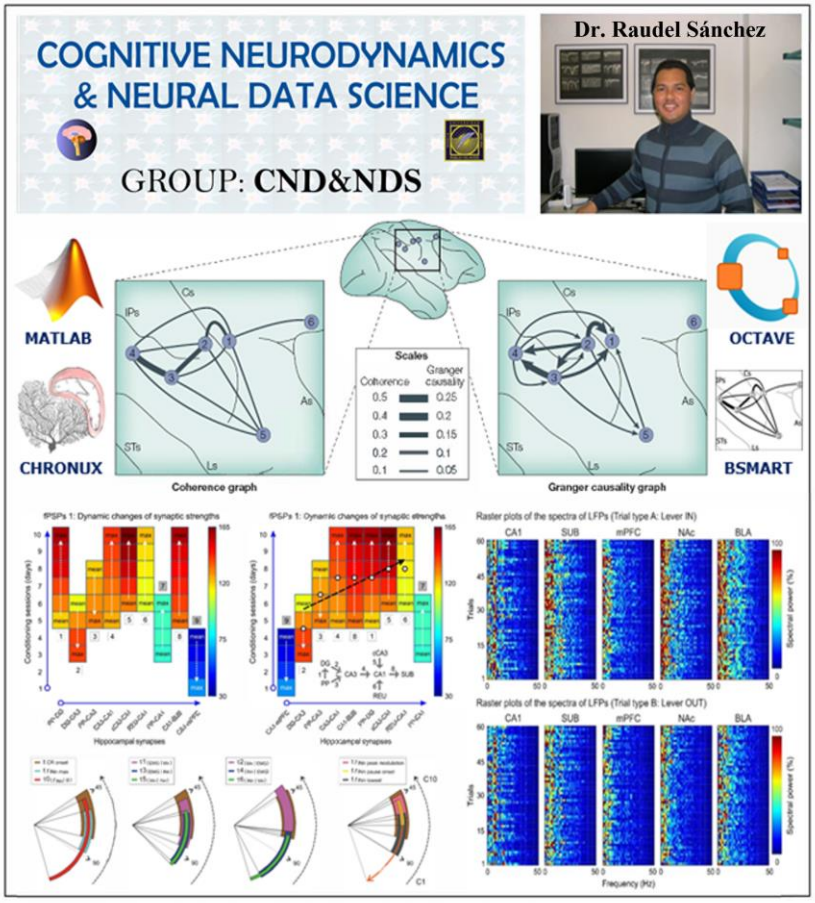
PhD. Students	***RAUDEL SÁNCHEZ CAMPUSANO (Principal Investigator)***	***Collaborators***

Víctor de Castro
Brain Modeling & Maching Learning

Laura C. Espitia
Functional & Effective Brain Connectivity



Alejandro Consuegra
Hyperconnectivity & Social Interaction



Dr. Steven Bressler
Center for Complex Systems & Brain Science – Florida Atlantic Univ. (USA)

Dr. Alejandro Pérez & Dr. Lorna García
MRC Cognition & Brain Science Unit. Univ. Cambridge (UK)

Dr. Jorge Bernal
Boston Children's Hospital – Harvard Medical School & Mayo Clinic (USA)

Dr. Miguel Valencia
Centro de Inv. Médicas Aplicadas (CIMA) – Universidad de Navarra (España)

Drs. Lydia Jiménez & Juan D. Navarro
Facultad de Medicina – Univ. de Castilla La Mancha (UCLM)

Dr. Humberto Brito
Grupo de Matemática y Biomedicina – Univ. Tecnológica Metropol. de Chile (UTEM)

VISMAX | ViSSOR | VIOFEK

SOFTWARE: for Visual Pathway assessment | *PATENT: CU 22941 A1. Int. Cl7: A 61B 3/10* | *SOFTWARE: for Spike Sorting & for Optimal Fitting*

CV date	January 22, 2024

Part A. PERSONAL INFORMATION

First and Last Name	RAUDEL SÁNCHEZ CAMPUSANO	Gender	Male
ID number / DNI	49527274V	Nationality	Cuban / Spanish
E-mail	rsancam@upo.es	URL Web	
ORCID code	https://orcid.org/0000-0003-3132-2769	Researcher ID	K-9254-2014

A.1. Current position

Position (Full time)	University Professor / PTU (Tenured Faculty)			Start Date	December 22, 2023
Institution/University	University Pablo de Olavide / Universidad Pablo de Olavide (UPO)				
Department/Center	Physiology, Anatomy and Cell Biology / Faculty of Experimental Sciences				
Country	Spain	Telephone number	(+34) 954 978 013	Internal calls Ext.	68013
Keywords	Neuroscience, Neurophysiology, Neurophysics, Medical Physics, Biophysics				

A.2. Previous positions (research activity interruptions, art. 14.2.b)

Period	**Position/Institution/Country**
2018-2023	Assistant Professor / PAD / PCD / University Pablo de Olavide / Spain
2017-2018	Contract as Doctor associate to project / University Pablo de Olavide / Spain
2016-2016	Fulbright Postdoctoral Fellowship / Florida Atlantic University / U.S.A.
2014-2016	Postdoctoral Fellowship / Andalusian Government - UPO / Spain
2007-2013	Contract as Doctor associate to project / University Pablo de Olavide / Spain
2003-2007	PhD Student / University Pablo de Olavide / Spain
2001-2002	Third Cycle (DEA) Doctoral Program / University Pablo de Olavide / Spain
1998-2002	Junior Researcher / Biophysics and Medical Physics Center / Cuba

A.3. Education

PhD / Licensed / Graduate	**University/Country**	**Year**
Licensed (Degree) in Physics	University of Santiago de Cuba / CUBA	1998
Doctorate (PhD.) in Neuroscience	University Pablo de Olavide / SPAIN	2007

Part B. CURRICULUM VITAE SUMMARY *(max. 5000 characters, including spaces)*

My main scientific contributions and their relevance are summarized below:

VISUAL System contributions: I began my professional career at the Biophysics and Medical Physics Center of Cuba, working on the multimodal integration of brain images and signals. During this period, I participated as principal coordinator in a R&D&I Project of the Ministry of Public Health of Cuba, whose main results were the registration of an **Invention Patent** (SYSTEM AND METHOD FOR THE DYNAMIC QUANTIFICATION OF VISUAL EVOKED POTENTIALS. No. CU 22941 A1. Int. Cl[7]: A 61B 3/10), an **Intellectual Property Software [*VISMAX* (*VIS*ual *MAX*imal *analysis*).** CLASS 09: MEDICAL SOFTWARE OF APPLICATION FOR THE PHYSIOPATHOLOGICAL ASSESSMENT OF THE VISUAL PATHWAY, Res. No. 4168/2004; Trademark No. 2002-1107], as well as the clinical tests and exploitation trials of the invention; obtaining in 2005 the **Annual Health Award to "The Best Basic Research"**, granted by the Health Scientific Societies of Cuba.

CEREBELLAR Functioning contributions: I attended the Neuroscience Doctorate Program at the University Pablo de Olavide (UPO, Seville, Spain), where I obtained the **Diploma of Advanced Studies**. Then, I was granted a "Doctoral Fellowship for Foreigners" and I developed my **Doctoral Thesis in Neurosciences** (OPTIMIZATION OF ANALYTICAL AND EXPERIMENTAL METHODS FOR THE NEURAL AND MUSCULAR CONTROL OF LEARNED MOTOR RESPONSES: THE EYELID MOTOR SYSTEM, 11/23/2007) in the Neuroscience Division at UPO. In this period, my key contributions were the characterization of kinetic neural commands in the cerebellar/interpositus-red nucleus-motoneurons pathway and of the dynamic control of the eyelid kinematics. In this topic, I have made 6 highlighted articles as a principal author [*J. Neurosci.*, 27(25):6620-6632, 2007*; J. Neurosci.*, 29(34):10750-10763, 2009; *J. Neurophysiol.* 104(1):346-365, 2010; *Cerebellum* 10(4):702-710, 2011; *Front. Integr. Neurosci.*, 5(A39):1-28, 2011; *Front. Neuroanat.*, 6(A8):1-18, 2012], rounding my cerebellar contribution off with a seminal Consensus Paper [CURRENT VIEWS ON THE ROLE OF CEREBELLAR INTERPOSITUS NUCLEUS IN MOVEMENT CONTROL AND EMOTION. *Cerebellum* 12(5):738-757, 2013].

PATTERN Recognition and Spike-Sorting contributions: In this topic, I have **supervised a Doctoral Thesis** (C.R. Caro-Martín. PATTERNS RECOGNITION OF NEURAL DATA: METHODS AND ALGORITHMS FOR SPIKE SORTING AND THEIR OPTIMAL PERFORMANCE IN PREFRONTAL CORTEX RECORDINGS, 06/26/2017). The main outcomes were: the development and registration of another **Biomedical Software** [***VISSOR*** (***V****iability of* ***I****ntegrated* ***S****pike* ***S****orting of* ***O****ffline* ***R****ecordings*), No. 04-2018-941 / SE-386-17, Trademark No. M3664133]; a book chapter about the descriptive/structural/operational features of ***VISSOR*** software [IN: *ADVANCES IN COGNITIVE NEURODYNAMICS (VI) - Book from Springer* [ISBN 978-981-10-8853-7], Chapter 30: 235-242, 2018]; a relevant article on experimental applications of the ***VISSOR*** software to measure the time intervals in the rostral medial prefrontal cortex [*J Neurosci.*, 35(44): 14809-14821, 2015]; and finally, a highlighted article [*Sci. Rep.*, 8(A17796):1-28, 2018] where for the first time we propose a method/algorithm called K-TOPS, alluding to the combination of the well-known K-means method with the new Template Optimization in Phase Space (TOPS) method, which is a novel contribution in the field of Spike Sorting, to classify both single-unit spikes and overlapping waveforms.

BRAIN Connectivity contributions: I have a solid experience in the determination of neurophysiological markers by means of the spectral, synchrony, causality and connectivity analyses between neural recordings acquired from different brain sites and several experimental conditions [*Sci. Rep.*, 11(A2970):1-16, 2021; *Cereb. Cortex* 31(1):281-300, 2021; *Prog. Neurobiol.*, 183(A101692:1-13, 2019; *Sci. Rep.*, 6(A37650):1-17, 2016; *PLoS ONE* 11(2): e0148800, 2016; *Cereb. Cortex* 25(9):2542-2555, 2015; *J. Neurosci.*, 33(6):2293-2304, 2013].

BRAIN Stimulation contributions: I have also obtained some results in the brain stimulation, including both the experimental approach [*Proc. Natl. Acad. Sci. U.S.A.*, 109(17):6710-6715, 2012] and the computational model [*Brain Stimul.* 6(1):25-39, 2013], which have been recurrently cited in this specialized field of neuroscience due to their relevance.

In summary, I have made a total of **37 peer-reviewed publications**, of which 28 are of recognized prestige, and 20 of these are original scientific papers indexed in PubMed, with an **average impact factor of 5.27 points** [D1 (9), D2 (1), Q1 (4), Q2 (5), Q3 (1)]. I was part of the research team of **17 R&D&I projects** in which I was responsible for the optimization of the analytical-experimental design. Finally, I have also participated in undergraduate and postgraduate teaching [**12 Official Qualifications / Degrees**, and have supervised 7 Graduate Degree Thesis, 6 Master of Sciences Thesis and 1 Doctoral Thesis. I am currently the scientific supervisor of another 3 Doctoral Thesis projects registered and in progress. I have participated with scientific contributions in **69 Congresses**.

Part C. RELEVANT MERITS (sorted by typology)

C.1. Publications - C.1.1. Publications (with ISSN) / Scientific Articles – Papers (*last 10 years*)

http://www.ncbi.nlm.nih.gov/pubmed/?term=Sanchez-Campusano+R

1. A. Lintas*, **R. Sánchez-Campusano***, et al. (2021) OPERANT CONDITIONING DEFICITS AND MODIFIED LOCAL FIELD POTENTIAL ACTIVITIES IN PARVALBUMIN-DEFICIENT MICE. ***Scientific Reports 11(Article 2970): 1-16, 2021.*** *These authors contributed equally. **[2019 IF: 3.998].**
2. M Mar Reus-García, **R. Sánchez-Campusano**, et al. (2021) THE CLAUSTRUM IS INVOLVED IN COGNITIVE PROCESSES RELATED TO THE CLASSICAL CONDITIONING OF EYELID RESPONSES IN BEHAVING RABBITS. ***Cerebral Cortex 31(1): 281-300, 2021.*** **[2020 IF: 5.210].**
3. A.R. Conde-Moro, F. Rocha-Almeida, **R. Sánchez-Campusano**, et al. (2019) THE ACTIVITY OF THE PRELIMBIC CORTEX IN RATS IS ENHANCED DURING THE COOPERATIVE ACQUISITION OF AN INSTRUMENTAL LEARNING TASK. ***Progress in Neurobiology 183(Article 101692): 1-13, 2019.*** **[2018 IF: 10.658].**
4. C.R. Caro-Martín, J.M. Delgado-García, A. Gruart, **R. Sánchez-Campusano** (2018) SPIKE SORTING BASED ON SHAPE, PHASE, AND DISTRIBUTION FEATURES, AND *K*-TOPS CLUSTERING WITH VALIDITY AND ERROR INDICES. ***Scientific Reports 8(Article 17796): 1-28, 2018.*** **[2016 IF: 4.259].**
5. A. Medrano-Fernández, J.M. Delgado-García, B. Del-Blanco, M. Llinares, **R. Sánchez-Campusano**, et al. (2018). THE EPIGENETIC FACTOR CBP IS REQUIRED FOR THE DIFFERENTIATION AND FUNCTION OF MEDIAL GANGLIONIC EMINENCE-DERIVED INTERNEURONS. ***Molecular Neurobiology 56(6): 4440-4454, 2019.*** **[2016 IF: 5.076].**
6. I. Fernández-Lamo, **R. Sánchez-Campusano**, et al. (2016) FUNCTIONAL STATES OF RATS CORTICAL CIRCUITS DURING UNPREDICTABLE AVAILABILITY OF A REWARD-RELATED CUE. ***Scientific Reports 6(Article 37650): 1-17, 2016.*** **[2015 IF: 5.228].**
7. M.T. Jurado-Parras, J.M. Delgado-García, **R. Sánchez-Campusano**, et al. (2016) PRESYNAPTIC $GABA_B$ RECEPTORS REGULATE HIPPOCAMPAL SYNAPSES DURING ASSOCIATIVE LEARNING IN BEHAVING MICE. ***PLoS ONE 11(2): e0148800, 2016.*** **[2015 IF: 3.057].**

8. C.R. Caro-Martín, R. Leal-Campanario, **R. Sánchez-Campusano**, et al. (2015) A VARIABLE OSCILLATOR UNDERLIES THE MEASUREMENT OF TIME INTERVALS IN THE ROSTRAL MEDIAL PREFRONTAL CORTEX DURING CLASSICAL EYEBLINK CONDITIONING IN RABBITS. ***Journal of Neuroscience 35(44): 14809-14821, 2015*. [2015 IF: 5.924].**
9. A. Gruart, **R. Sánchez-Campusano**, et al. (2014). DIFFERENTIAL AND TIMED CONTRIBUTIONS OF IDENTIFIED HIPPOCAMPAL SYNAPSES TO ASSOCIATIVE LEARNING IN MICE. ***Cerebral Cortex 25(9): 2542-2555, 2015*. [2015 IF: 8.665].**
10. V. Perciavalle, R. Apps, V. Bracha, J.M. Delgado-García, A.R. Gibson, M. Leggio, A.J. Carrel, N. Cerminara, M. Coco, A. Gruart, and **R. Sánchez-Campusano** (2013) A CONSENSUS PAPER: CURRENT VIEWS ON THE ROLE OF CEREBELLAR INTERPOSITUS NUCLEUS IN MOVEMENT CONTROL AND EMOTION. ***Cerebellum 12(5): 738-757, 2013.* [2013 IF: 2.864].**
11. B. Molaee-Ardekani, J. Márquez-Ruiz, I. Merlet, R. Leal-Campanario, A. Gruart, **R. Sánchez-Campusano**, et al. (2013). EFFECTS OF TRANSCRANIAL DIRECT CURRENT STIMULATION (tDCS) ON CORTICAL ACTIVITY: A COMPUTATIONAL MODELING STUDY. ***Brain Stimulation 6(1): 25-39, 2013.* [2013 IF: 5.432].**
12. M.T. Jurado-Parras, **R. Sánchez-Campusano**, et al. (2012). DIFFERENTIAL CONTRIBUTION OF HIPPOCAMPAL CIRCUITS TO APPETITIVE AND CONSUMMATORY BEHAVIORS DURING OPERANT CONDITIONING OF BEHAVING MICE. ***Journal of Neuroscience 33(6): 2293-2304, 2013.* [2013 IF: 6.747].**
13. J. Márquez-Ruiz, R. Leal-Campanario, **R. Sánchez-Campusano**, et al. (2012) TRANSCRANIAL DIRECT-CURRENT STIMULATION MODULATES SYNAPTIC MECHANISMS INVOLVED IN ASSOCIATIVE LEARNING IN BEHAVING RABBITS. ***Proceedings of the National Academy of Sciences of the United States of America 109(17): 6710-6715, 2012.* [2012 IF: 9.737].**
14. **R. Sánchez-Campusano**, et al. (2012) AN AGONIST-ANTAGONIST CEREBELLAR NUCLEAR SYSTEM CONTROLLING EYELID KINEMATICS DURING MOTOR LEARNING. ***Frontiers in Neuroanatomy 6(8): 1-18, 2012*. [2012 IF: 4.058].**
15. **R. Sánchez-Campusano**, et al. (2011) DYNAMIC CHANGES IN THE CEREBELLAR-INTERPOSITUS/RED-NUCLEUS-MOTONEURON PATHWAY DURING MOTOR LEARNING. ***Cerebellum 10(4): 702-710, 2011*. [2011 IF: 3.207].**
16. **R. Sánchez-Campusano**, et al. (2011) TIMING AND CAUSALITY IN THE GENERATION OF LEARNED EYELID RESPONSES. ***Frontiers in Integrative Neuroscience [ISSN 1662-5145], doi: 10.3389/fnint.2011.00039, Vol. 5, Article 39: 1-28, 2011.* [2011 IF: 2.890].**

C.1. Publications - C.1.2. Publications (with ISBN) / Book Chapters

17. C.R. Caro-Martín, J.M. Delgado-García, A. Gruart, and **R. Sánchez-Campusano** (2018). "*VISSOR*: AN ALGORITHM FOR THE DETECTION, IDENTIFICATION, AND CLASSIFICATION OF THE ACTION POTENTIALS DISTRIBUTED ACROSS ELECTROPHYSIOLOGICAL RECORDINGS", IN *ADVANCES IN COGNITIVE NEURODYNAMICS (VI) - Proceedings of the Sixth International Conference on Cognitive Neurodynamics ICCN-2017*. Eds.: J.M Delgado-García, X. Pan, R. Sánchez-Campusano, and R. Wang (Springer Nature Singapore). ***Book from Springer 2018, [ISBN 978-981-10-8853-7], doi: 10.1007/978-981-10-8854-4, Part III. Neuroengineering, Neuroinformation and Brain Computer Interaction, Chapter 30: 235-242, 2018.***
18. J.M. Delgado-García, **R. Sánchez-Campusano**, et al. (2016). "DYNAMIC PATTERNS OF CORTICAL ACTIVATION DURING DIFFERENT TYPES OF LEARNING TASKS AND UNPREDICTABLE SITUATIONS", IN *ADVANCES IN COGNITIVE NEURODYNAMICS (V)*. Eds.: R. Wang and X. Pan (Springer Singapore). ***ISBN 978-981-10-0205-2, Chapter 18: 119-125, 2016.***
19. J.M. Delgado-García, **R. Sánchez-Campusano**, et al. (2015). "MULTISYNAPTIC STATE FUNCTIONS CHARACTERIZING THE ACQUISITION OF NEW MOTOR AND COGNITIVE SKILLS", IN *ADVANCES IN COGNITIVE NEURODYNAMICS (IV)*. Ed.: H. Liljenström (Dordrecht, NL: Springer Netherlands). ***ISBN 978-94-017-9547-0, Chapter 61: 435-440, 2015.***
20. **R. Sánchez-Campusano**, et al. (2014). "THE TIMING OF LEARNED EYELID RESPONSES DEPENDS ON CAUSALITY IN THE CEREBELLAR-RED-NUCLEUS-MOTONEURON NETWORK", IN *PROCEDIA SOCIAL AND BEHAVIORAL SCIENCES* Ed.: A. Vatakis (Corfu, Greece: Elsevier Ltd.). ***ISSN 1877-0428, Vol. 126, Chapter 110: 259-268, 2014.***
21. J.M. Delgado-García, **R. Sánchez-Campusano**, et al. (2013). "LEARNING AND DECISIONS AS FUNCTIONAL STATES OF CORTICAL CIRCUITS", IN *ADVANCES IN COGNITIVE NEURODYNAMICS (III)*. Ed.: Y. Yamaguchi (Dordrecht, NL: Springer Netherlands). ***ISBN 978-94-007-4791-3, Chapter 66: 491-497, 2013.***
22. **R. Sánchez-Campusano**, et al. (2012). "TIMING AND CAUSALITY IN THE GENERATION OF LEARNED EYELID RESPONSES", IN *INTERVAL TIMING AND TIME-BASED DECISION MAKING*. Eds.: W.H. Meck, V. Doyere and A. Gruart (Epalinges, Switzerland: Frontiers Media SA). ***ISBN 978-2-88919-034-8, Chapter 33: 253-280, 2012.***

C.1. Publications - C.1.3. Publications (with ISBN) / Books

23. **R. Sánchez-Campusano** et al. (*CEREBELO, APRENDIZAJE MOTOR Y BIOMECÁNICA PALPEBRAL: UNA APROXIMACIÓN ANALÍTICO-EXPERIMENTAL (Spanish Edition)*. ***Saarbrücken, SB: EAE–LAP LAMBERT Academic Publishing GmbH & Co. KG [ISBN 978-3-8473-6740-6]: 364 pages, 2012.***
24. J.M Delgado-García, X. Pan, **R. Sánchez-Campusano**, and R. Wang (**Eds.**) *ADVANCES IN COGNITIVE NEURODYNAMICS (VI) - Proceedings of the Sixth International Conference on Cognitive Neurodynamics ICCN-2017* (Springer Nature Singapore). ***Book from Springer 2018, [ISBN 978-981-10-8853-7], doi: 10.1007/978-981-10-8854-4, 51 Chapters, 407 pages, 125 illustrations (77 in color), 2018.*** All submitted book chapters were peer-reviewed by experts in the field based on originality, significance, quality, and clarity, under the coordination of the contact volume editor **Dr. Raudel Sánchez-Campusano**.

C.2. / C.3. Participation in R&D&I Projects (the *7 most recent* of a total of 16 projects)

1. **Project Title:** DESIGN AND DEVELOPMENT OF AN OPTIMIZED ANALYTICAL-EXPERIMENTAL APPROACH TO EVALUATE THE SYNAPTIC STRENGTH AND THE FLOW OF NEURAL ACTIVITY IN CORTICAL AND SUBCORTICAL CIRCUITS. **Reference Code:** FEDER/UPO-1380660. **Principal Investigators:** Dr. Raudel Sánchez-Campusano. University Pablo de Olavide of Seville, SPAIN. **Financial Support:** 25.000,00 € - Under the Call for R&D&I Projects of 2020. **Supported by Grant from:** "European Regional Development Fund (ERDF)" / ERDF-ANDALUSIA Operative Program. **Period:** from 01/06/2021 to 30/06/2023.
2. **Project Title:** BRAIN/ENVIRONMENT INTERFACE USEFUL IN MEDULLARY LESIONS AND IN NEURODEGENERATIVE DISEASES. **Principal Investigators:** Agnès Gruart (PhD). University Pablo de Olavide of Seville, SPAIN. **Financial Support:** 82.500,00 € - Under the II Edition of the Call for Research Projects on Neuroscience of the Tatiana Foundation - 2016. **Supported by Grant from:** "Foundation: Tatiana Pérez de Guzmán el Bueno". **Period:** from 09-12-2016 to 09-12-2019.
3. **Project Title:** LEARNING AS A FUNCTIONAL STATE OF THE BRAIN: STUDIES IN WILD-TYPE AND GENETICALLY MANIPULATED MAMMALS. **Reference Code:** BFU2014-56692-R. **Principal Investigators:** Agnès Gruart (PhD) and José M. Delgado-García (MD, PhD). University Pablo de Olavide of Seville, SPAIN. **Financial Support:** 400.000,00 € - Under the Call for Research Projects of 2014. **Supported by Grant from:** "Spanish Ministry of Economy and Competitiveness (*MINECO*) - State Program for Research, Development and Innovation Oriented to the Challenges of Society". R&D&I Project co-financed by the European Regional Dev. Fund (ERDF). **Period:** from 01-01-2015 to 31-12-2017.
4. **Project Title:** CORTICAL AND SUBCORTICAL PROCESSES THAT MAKE POSSIBLE THE ACQUISITION OF NEW MOTOR AND COGNITIVE SKILLS. **Reference Code:** BIO-1388. Dr. José M. Delgado-García (MD, PhD). University Pablo de Olavide of Seville, SPAIN. **Financial Support:** 145.000,00 € - Under the Call for Research Projects of 2012. **Supported by Grant from:** "Andalusian Government - Research Projects of Excellence of the Andalusian Office of Innovation, Science and Business". **Period:** from 30-12-2013 to 30-06-2017.
5. **Project Title:** FUNCTIONAL NEURONAL STATES THAT MAKE THE LEARNING AND MEMORY: STUDIES IN WILD TYPE AND TRANSGENICS MICE. **Reference Code:** P11-CVI-7222. **Principal Investigator:** Agnès Gruart (PhD). University Pablo de Olavide of Seville, SPAIN. **Financial Support:** 156.089,50 € - Under the Call for Research Projects of 2011. **Supported by Grant from:** "Andalusian Government - Incentives for Research Projects of Excellence of the Universities and Research Organizations of Andalusia". **Period:** from 27-02-2013 to 27-02-2016.
6. **Project Title:** STATE FUNCTIONS UNDERLYING THE GENERATION OF LEARNED MOTOR RESPONSES. **Reference Code:** BFU2011-29286. **Principal Investigator:** Agnès Gruart (PhD). University Pablo de Olavide of Seville, SPAIN. **Financial Support:** 258.000,00 € - Under the Call for Research Projects of 2011. **Supported by Grant from:** "Spanish Ministry of Economy and Competitiveness (*MINECO*) - National Plan of R&D&I". **Period:** from 01-01-2012 to 31-12-2014.
7. **Project Title:** HYPER INTERACTION VIABILITY EXPERIMENTS (HIVE). **Reference Code:** EU-RP7-222079-2. **Principal Investigator:** Giulio Ruffini (PhD). Starlab Barcelona SL, SPAIN. **Team Coordinator:** José M Delgado-García (MD, PhD). University Pablo de Olavide of Seville, SPAIN. **Financial Support:** 2.299.998,00 € (Grupo UPO: 283.329,00 €) - Under the Call for Research Projects of 2008. **Supported by Grant from:** "Seventh Framework Programme for Research of the European Commission - Theme 3: Inf. & Communication Technologies". **Period:** from 01-09-2008 to 31-08-2012.

C.4. Patents / Software

1. A. Montoya, **R. Sánchez-Campusano**, J.M. Martínez, E.A. Milán-Garcés. **PATENT Number: CU 22941 A1. Int. Cl[7]: A 61B 3/10.** SYSTEM AND METHOD FOR THE DYNAMIC QUANTIFICATION OF VISUAL EVOKED POTENTIALS. **Inscription Number:** 2000-0292. **Resolution No.** 2700/2003, **Date:** 18/11/2003. ***Publication No. 22941, 13/04/2004. WIPO PATENTSCOPE_CU22941: 88 pages.***
2. **R. Sánchez-Campusano. BIOMEDICAL PROGRAMS:** SOFTWARE ***VISMAX*** (No. CU-4168/2004). SOFTWARE ***VISSOR*** (No. 04-2018-941/*SE-386-17*). SOFTWARE ***VIOFEK*** (No. IPRUPO2023-011).