Part A. Personal Information

DATE	22/11/2021

Surname(s)	Carreiras Valiña	
Forename	Manuel	
Social Security, Passport, ID number	33840635E (DNI)	
Sex	male	
Age	60	
Researcher codes	WoS Researcher ID *(*)*	
	SCOPUS Author ID*(*)*	7004292600
	Open Researcher and Contributor ID (ORCID)	0000-0001-6726-7613

(*) At least one of these is mandatory

A.1. Current position

Post/ Professional Category	Scientific Director/Ikerbasque Professor	
UNESCO Code		
Key Words	Reading, bilingualism, visual word recognition, sentence processing, sign language, language neurodegeneration	
Name of the University/Institution	SOC BCBL BASQUE CENTER ON COGNITION BRAIN AND LANGUAGE	
	Department/Centre	BCBL – Basque Center on Cognition, Brain and Language
	Full Address	Paseo Mikeletegi 69, 2ª planta, 20009 DONOSTIA
	Email Address	m.carreiras@bcbl.eu
	Phone Number	+34 943 309 300
Start date	01/09/2008	

A.2. Education *(title, institution, date)*

Year	University	Degree	Title
1981	Universidad de Santiago de Compostela	First degree	Graduate in Psychology
1982	Universidad de Santiago de Compostela	Masters	Master of Psychology
1984	Universidad de La Laguna	PhD	PhD in Psychology

A.3. Indicators of Quality in Scientific Production *(See the instructions)*

Scientific impact according to Scopus:

Total number of citations: 10046
Average citations per year in the last 5 years: 960
Number of articles in Q1 journals: 222
Number of articles in D1 journals: 153
H index: 53
Updated: November 22, 2021

Research six-year terms (sexenios): 6, most recent granted 2017

Number of supervised Ph.D. dissertations in the last 5 years: 12
(1) Camila Zugarramurdi, PhD in Linguistics, UPV/EHU, Spain (2015-2021)
(2) Kshipra Gurunandan, PhD in Cognitive Neuroscience, UPV/EHU, Spain (2017-2021)
(3) Saúl Villameriel, PhD in Linguistics, UPV/EHU, Spain (2014-2021)
(4) Iria de Dios Flores, PhD in Linguistics. Universidad Santiago de Compostela, Spain (2021
(5) Patricia Alves Dias, PhD in Linguistics, UPV/EHU, Spain (2014-2020)

(6) Alexia Antzaka, PhD in Linguistics, UPV/EHU, Spain (2013-2018)
(7) Mirian Sanchez Morán, PhD in Molecular Biology and Biomedicine UPV/EHU, Spain (2010-2017)
(8) Noemí Fariña Diaz, PhD in Psychology, Universidad de La Laguna (2013-2017)
(9) Jui-Ju Su, PhD in Linguistics, UPV/EHU, Spain (2013-2017)
(10) Eneko Antón Ustaritz, PhD in Linguistics, UPV/EHU, Spain (2013-2017)
(11) Garikoitz Lerma-Usabiaga, PhD in Linguistics, UPV/EHU, Spain (2013-2017)
(12) Lorna García Pentón, PhD in Linguistics, UPV/EHU, Spain (2013-2017)

Part B. Free Summary of CV *(Max. of 3.500 characters, including spaces)*

Manuel Carreiras, Ikerbasque Professor and Scientific Director of the BCBL, is a leading international figure in the field of reading and language processing. His work revolves around three central activities: research, supervision and dissemination.

Research: Carreiras is the author of over 250 scientific papers in prestigious journals such as Nature, Cerebral Cortex, Journal of Cognitive Neuroscience and Neuroimage, as well as four books. He is Editor-in-Chief of *Frontiers in Language Sciences*, Associate Editor of *Language and Cognitive Neuroscience*, and *Brain and Language* and Senior Editor of *Neurobiology of Language*. He has been an invited speaker at various international conferences. He has raised funding for research in competitive calls, most notably: the COEDUCA project (4M€) of the CONSOLIDER INGENIO2010 program of the MICINN; BILITERACY (2.5M€), an ERC Advanced Grant funded by the European Research Council; and a project within the Basque Government's BERC scheme to set up an excellence research centre (14M€), the BCBL, which has become one of the best of its kind in the world within a decade. He has been and is also the PI of the Severo Ochoa award to the BCBL (8M€).

Carreiras' scientific career began at the University of La Laguna (ULL) which, at the time, offered little research infrastructure and few opportunities to publish internationally. He therefore combined his teaching duties with visits to leading laboratories, where he was exposed to new ideas and able to learn advanced research techniques (EEG, fMRI, MEG). This enabled him to build a network of international collaborations and adopt a multidisciplinary research focus, which has proved to be of great value in the international research community. Since 2006, he has been an Honorary Professor at the University College of London and was appointed to found and direct the BCBL in 2008. The BCBL has been guided by his multidisciplinary vision and mission to forge and test new theoretical perspectives using the most advanced experimental techniques.

Supervision: Carreiras has a great ability to inspire and train young researchers, having supervised 31 doctoral theses and more than 40 postdoctoral researchers. Many of these researchers have published in the most important journals in the field and currently hold influential positions at various Spanish and international universities. He created a PhD program (Cognitive Neuroscience) at the ULL, which was granted quality certification by the Ministry of Education. Subsequently, he set up a Master program (Cognitive Neuroscience of Language) and a PhD program (Cognitive Neuroscience) at the UPV/EHU. Both programs enjoy a strong international profile and attract top students from the best universities in the world.

Scientific outreach: In the last 10 years, Carreiras has organized 15 international scientific conferences to promote the exchange of ideas and research results. As Dean of the Faculty of Psychology he took science to the streets to celebrate the 25th anniversary of the psychology degree program at the ULL. He has also initiated various scientific dissemination activities funded by the Spanish Foundation for Science and Technology (FECYT) and the Basque Government. He participated as a speaker at TEDx Río de la Plata 2015 on Education.

He is the recipient of the Euskadi Research prize 2015, the Spanish National Research Award Pascual Madoz in Social Sciences 2019 and the Radio San Sebastián Prize for Excellence in Research 2019.

Part C. Relevant accomplishments

C.1. Publications

1. Aurtenetxe, S., Molinaro, N., Davidson, D., & **Carreiras, M.** (2020). Early dissociation of numbers and letters in the human brain. *Cortex, 130*, 192-202.

2. Cespón, J., & **Carreiras, M.** (2020). Is there electrophysiological *evidence for a bilingual advantage in neural processes related to executive functions?. Neuroscience and Biobehavioral Reviews*, 118, 315-330. Doi:10.1016/j.neubiorev.2020.07.030

3. Correia, J.M., Caballero-Gaudes, C., Guediche, S., & **Carreiras, M.** (2020). Phonatory and articulatory representations of speech production in cortical and subcortical fMRI responses. *Scientific Reports*, 10(1).

4. Villameriel, S., Costello, B., Dias, P., Giezen, M., & **Carreiras, M.** (2019). Language modality shapes the dynamics of word and sign recognition. Cognition, 191.

5. Lerma-Usabiaga, G., **Carreiras, M.,** & Paz-Alonso, P.M. (2018). Converging evidence for functional and structural segregation within the left ventral occipitotemporal cortex in reading. *PNAS, 115* (42), E9981-E9990.

6. Fariña, N., Duñabeitia, J.A., & **Carreiras, M.** (2017). Phonological and orthographic coding in deaf skilled readers. *Cognition,* 168, 27-33.

7. Lallier, M., Molinaro, N., Lizarazu, M., Bourguignon, M., & **Carreiras, M**. (2017). Amodal Atypical Neural Oscillatory Activity in Dyslexia: A Cross-Linguistic Perspective. *Clinical Psychological Science,* 5(2), 379-401.

8. Martin, C.D., Molnar, M., & **Carreiras, M.** (2016). The proactive bilingual brain: Using interlocutor identity to generate predictions for language processing. *Scientific Reports, 6:26171*.

9. Lallier, M., Acha, J., & **Carreiras, M.** (2016). Cross-linguistic interactions influence reading development in bilinguals: A comparison between early balanced French-Basque and Spanish-Basque bilingual children. *Developmental Science, 19*:1, 76–89.

10. Molinaro, N., Lizarazu, M., Lallier, M., Bourguignon, M., & **Carreiras, M.** (2016) Out-of-synchrony speech entrainment in developmental dyslexia. *Human Brain Mapping, 37*, 2767-2783.

C.2. Research Projects and Grants

1. Biomarcadores de recuperación cognitiva postquirúrgica en tumores cerebrales. **PROYE20005CARR**. Fundación AECC. (2020-2023). 300.000 €. Principal Investigator (PI): Manuel Carreiras.

2. DYSTHAL. Dyslexia and the thalamus: Integrating anatomy and function in a mechanistic account of the reading brain. **HR18-00178.** La Caixa Foundation (2019-2022). 500.000 €. PI: Manuel Carreiras.

3. LangConn. Is the brain connectome a good predictor for the language network functional malleability? **RTI2018-093547-B-I00.** MINECO. PLAN NACIONAL. (2019-2021). 169.400 €. PI: Manuel Carreiras.

4. OsciLang: A neurofeedback system based on oscillatory activity for diagnosis and intervention in language and reading impairments. **ERC-2017-PoC-787487.** European Commission. ERC Proof-of-Concept. (2018-2019). 150.000 €. PI: Manuel Carreiras.

5. READEAF. Mecanismos neurales de lectura en buenos lectores sordos. **PSI2015-67353-R.** MINECO. PLAN NACIONAL. (2016-2018). 108.900 €. PI: Manuel Carreiras.

6. MULTILATERAL. Análisis Integral multi-nivel de la lateralización cerebral del Lenguaje. **PCIN-2015-061.** Human brain project-MINECO. FLAG-ERA. (2016-2018). 279.510 €. PI: Manuel Carreiras.

7. Learning to read in two alphabets. **NPRP 6-378-0-035.** Qatar Foundation. (2014-2017). $1,000,000 €. PI: Manuel Carreiras.

C.3. Contracts

Acreditación Centro de Excelencia Severo Ochoa: CEX2020-001010-S. MINECO (2022-2025). 4.000.000€

Basque Excellence Research Centres (BERC) Program, Basque Government (2018-2021). 5.420.493 €.

Acreditación Centro de Excelencia Severo Ochoa. SEV-2015-0490. MINECO (2016-2019). 4.000.000€.

BERC, Basque Government (2014-2017). 6.801.601 €.

C.4. Member of evaluation committees

Evaluation Panel, SH4 "The Human Mind and its complexity", ERC Consolidator Grants. European Research Council. 2014, 2016, 2018, 2020.

ESF Review Panel for evaluation of VLIR iBOF projects, European Science Foundation. 2020.

Expert Reviewer, "ERC SHS" Initiative, Ministry of Higher Education, Research and Innovation France / RFIEA Foundation. 2020.

Expert Reviewer, Grant proposal for the Research Council of Norway. 2019.

C.5. Steering Committees and Elected Board membership

Member of the Advisory Board of CLUL, Centro de Linguística da Universidade de Lisboa (2021-present)

Chair, International Scientific Board, Instituto Universitario de Tecnologías Biomédicas, University of La Laguna (2019-2022).

Member, International Scientific Board, Max Planck Institute for Psycholinguistics, Nijmegen (2016-2024).

Member, Academia Europaea (2019-present).

Chair of the Society for the Neurobiology of Language (2017-2018 Chair elect; 2018-2019 Chair; 2019-2020 Past Chair).

Elected Member, International Neuropsychological Symposium (2018-present).

Steering Committee, SOMMA, Alliance of Severo Ochoa Centres and María de Maeztu Units (2017-2020).

C.6. Scientific awards

Spanish National Research Award *Pascual Madoz* in Social Sciences 2019. Spanish Ministry of Science, Innovation and Universities.

Radio San Sebastian Award for Excellence in Research, 2019.

Award for the Best Health Technology Innovation 2019 promoted by an autonomous community, granted by "Fundación Tecnología y Salud" (Technology and Health Foundation) and "Federación Española de Empresas de Tecnología Sanitaria" (Spanish Federation of Healthcare Technology Companies). Project on brain surgery with awake patients. Osakidetza, Biocruces Bizkaia Health Research Institute (PI. Iñigo Pomposo), BCBL (PI. Manuel Carreiras).

Euskadi Research Prize 2015. Basque Government