Date of the CVA	05/03/2019

Section A. PERSONAL DATA

Name and Surname	Jorge Rubén Cabrera Heredia		
DNI/NIE/Passport		Age	
Researcher's identification number	Researcher ID		
	Scopus Author ID		
	ORCID	0000-0003-4481-0198	

A.1. Current professional situation

Institution	Hospital General Universitario Gregorio Marañon		
Dpt. / Centre	Inmunología / Fundación para la Investigación Biomédica Hospital Gregorio Marañón		
Address			
Phone		Email	
Professional category	Investigador contratado	Start date	2019
UNESCO spec. code	242005 - Neurotropic viruses		
Keywords	Molecular mechanism of disease		

A.2. Academic education (Degrees, institutions, dates)

Bachelor/Master/PhD	University	Year
Biología molecular	Universidad Autónoma de Madrid	2006
Licenciado en Bioquimica	Universidad Complutense de Madrid	2001

A.3. General quality indicators of scientific production

Total Articles in Publication List: **15**
Articles With Citation Data: **14**
Sum of the Times Cited: **351**
Average Citations per Article: **25.1**
h-index: **8**

Section B. SUMMARY OF THE CURRICULUM

To Whom it may concern:

Let me introduce myself, my name is Jorge Rubén Cabrera Heredia, and I am senior researcher at Fundación para la Investigación Biomédica del Hospital Gregorio Marañón. My main interest lies in how Herpes Simplex Viruses (HSV) infect the Nervous System and the long-term consequences of HSV infection in neurons.

During my career I have been trained in Virology by renown experts in the HSV field like Prof. David Leib (Dartmouth College) and Prof. Antonio Alcamí (CBM-Severo Ochoa). Also, I have been trained in Neurobiology by renown experts in the field like Prof. José Ramón Naranjo (Centro Nacional de Biotecnología), Prof. Francisco Wandosell (CBM-Severo Ochoa) and Prof. José Javier Lucas (CBM-Severo Ochoa). Presently, I am developing my work under the guidance of Dr. María Ángeles Muñoz-Fernández (Ph.D. M.D) at the Laboratorio de InmunoBiología Molecular (HGU Gregorio Marañón), a leading laboratory in the study of viral infections and neuroinflammation.

My training in both, Virology and Neurobiology, encourages me to study the complex relationship between Herpes Simplex Viruses (HSV) and neurons. Regarding this relationship, I have made several contributions in the field, such as proposing a mechanism for HSV-2 attracting sensory free nerve endings in the skin (2015), identifying new markers for the study of HSV-1 latency (2018), and more recently, showing how Herpes-associated neuroinflammation

compromises neuronal autophagy (2019). The latter results have driven me to face a relevant and controversial biomedical question such as the putative involvement of HSV in neurodegenerative diseases.

From the technical point of view, I have constantly progressed in the quality and complexity of models I have used for research. I started using cell lines. I switched to more physiological models like primary culture of sensory and sympathetic neurons. Then, I set up culture of explants, compartmentalized culture of neurons and immunohistology techniques. Finally, I worked with human samples (brain samples), mouse genetic models (including behavioral tests) and "omics" technologies like RNA-seq to study splicing alterations in Huntington's disease.

This continuous search of new technologies has taken me to different cities and countries (Spain, France and USA). In all these places, I have acquired technical knowledge demonstrable with relevant publications. In addition to that, working in different countries has given me the opportunity to meet and interact with different people, and to learn different manners of solving biological questions.

I am a passionate, hard-working, highly trained, easy-going researcher. I have successfully developed projects, where I have managed my own grants, led small teams, mentored several students and supervised technicians. I have published in international journals, and these works have been recognized and supported with more than 300 citations.

Section C. MOST RELEVANT MERITS (ordered by typology)

C.1. Publications

1 **Scientific paper**. Jorge Rubén Cabrera Heredia; et al. 2019. The ESCRT-Related ATPase Vps4 Is Modulated by Interferon during Herpes Simplex Virus 1 Infection mBio.
2 **Scientific paper**. Marie Ménard; et al. 2018. The dependence receptor TrkC regulates the number of sensory neurons during DRG development.Developmental Biology. 442-2, pp.249-261.
3 **Scientific paper**. Jorge Rubén Cabrera Heredia; Audra Charron; David Leib. 2018. Neuronal subtype determines HSV-1 Latency-Associated-Transcript (LAT) promoter activity during latency.Journal of Virology.
4 **Scientific paper**. Jorge Rubén Cabrera Heredia; José Javier Lucas Lozano. 2017. MAP2 Splicing is Altered in Huntington's Disease.Brain Pathology. 27-2, pp.181-189.
5 **Scientific paper**. Jorge Rubén Cabrera Heredia; et al. 2016. Secreted herpes simplex virus-2 glycoprotein G alters thermal pain sensitivity by modifying NGF effects on TRPV1.Journal of Neuroinflammation.13-1.
6 **Scientific paper**. Jorge Rubén Cabrera Heredia; et al. 2015. Secreted herpes simplex virus-2 glycoprotein G modifies NGF-TrkA signaling to attract free nerve endings to the site of infection.Plos Pathogens. 11-1.
7 **Scientific paper**. Marta Fernández Nogales; et al. 2014. Huntington's disease is a four-repeat tauopathy with tau-nuclear rods Nature Medicine. 20-8, pp.881-885.
8 **Scientific paper**. Jorge Rubén Cabrera Heredia; et al. 2011. RET Modulates Cell Adhesion via Its Cleavage by Caspase in Sympathetic Neurons Journal of Biological Chemistry. 286-16, pp.14628-14638.
9 **Scientific paper**. Jimena Bouzas-Rodriguez; et al. 2010. Neurotrophin-3 production promotes human neuroblastoma cell survival by inhibiting TrkC-induced apoptosis Journal of Clinical Investigation. 120-3, pp.850-858.
10 **Scientific paper**. Céline Furne; et al. 2009. EphrinB3 is an anti-apoptotic ligand that inhibits the dependence receptor functions of EphA4 receptors during adult neurogenesis.Biochimica et Biophysica Acta - Molecular Cell Research. 1793-2, pp.231-238.

11 **Scientific paper**. Servane Tauszig-Delamasure; et al. 2007. The TrkC receptor induces apoptosis when the dependence receptor notion meets the neurotrophin paradigm.Proceedings of the National Academy of Sciences of the United States of America. 104-33, pp.13361-13366.

12 **Scientific paper**. Jorge Rubén Cabrera Heredia; et al. 2006. Gas1 is related to the glial cell-derived neurotrophic factor family receptors alpha and regulates Ret signaling.Journal of Biological Chemistry. 281-20, pp.14330-14339.

13 **Book chapter**. Sarah Katzenell; et al. 2017. Isolation, Purification, and Culture of Primary Murine Sensory Neurons Methods in Molecular Biology. Innate Antiviral-Immunity, pp.229-251.

14 **Bibliographic review**. Marta Fernández Nogales; et al. 2016. Faulty splicing and cytoskeleton abnormalities in Huntington's disease.Brain Pathology. 26-6, pp.772-778.

15 **Bibliographic review**. Jorge Rubén Cabrera Heredia; Abel Viejo Borbolla. 2015. Herpes Simplex Virus and Neurotrophic Factors Journal of human virology & retrovirology. 2-1.

C.2. Participation in R&D and Innovation projects

1 A new roadmap of herpes infections of the nervous system. Hitchcock Foundation. Jorge Rubén Cabrera Heredia. (Geisel School of Medicine at Dartmouth College). 01/06/2016-31/05/2017. 30.000 €.

2 Nanoparticles for Therapy and Diagnosis of Alzheimer Disease Francisco Wandosell Jurado. (CIBER ENFERMEDADES NEURODEGENERATIVAS (CIBERNED)). 01/11/2009-31/08/2013.

3 Hermione project Patrick Mehlen. (Centre Leon Berard). 01/09/2006-31/08/2009.

4 Ca2+regulated expression of Ca2+transporting systems during neuronal development, survival and death. José Ramón Naranjo Orovio. (Centro Nacional de Biotecnología). 01/01/2002-30/06/2006.

5 Viral and host mechanisms that tilt the HSV litic/latent balance National Institute of Health. David Knipe. (Geisel School of Medicine at Darmouth College). From 01/12/2013.

6 microRNA as novel therapeutic targets and disease biomarkers in Alzheimer's Disease, Frontotemporal dementia and Amyotrophic lateral sclerosis (NEURO-MIR) Network of Centres of Excellence in Neurodegeneration (COEN). Jose Javier Lucas Lozano. (CIBER ENFERMEDADES NEURODEGENERATIVAS (CIBERNED)). From 01/11/2013.

C.3. Participation in R&D and Innovation contracts

C.4. Patents

Jorge Rubén Cabrera Heredia; Abel Viejo Borbolla; Nadia Martínez Martín; Francisco Wandosell Jurado; Antonio Alcamí Pertejo. P201231654. Proteína viral recombinante SgG2 y/o complejos binarios SgG2-FNs para su uso en crecimiento y/o regeneración axonal. Spain. 26/10/2012. Consejo Superior de Investigaciones Científicas y CIBERNED.