MINISTERIO DE CIENCIA E INNOVACIÓN

CURRICULUM VITAE (maximum 4 pages)

AGENCIA ESTATAL DE INVESTIGACIÓN

CV date	10/12/2022

Part A. PERSONAL INFORMATION

First and Family name	NEREA MORENO GARCÍA		
Social Security, Passport, ID number	05403416A	Age	45
Researcher codes	Open Researcher and Contributor ID (ORCID**)	https://orcid.org/0000-0002-5578-192X	
	SCOPUS Author ID (*)	7005585971	
	WoS Researcher ID (*)	H-2086-2015	

(*) Optional
(**) Mandatory

A.1. Current position

Name of University/Institution	Universidad Complutense of Madrid		
Department	Cell Biology		
Address and Country	Jose Antonio Novais, 12		
Phone number	0034913944972	E-mail	nerea@bio.ucm.es
Current position	Associated profesor (profesor Titular)	From	30/06/2010
Key words	Neuroanatomy, Neurobiology, Nervous System, Development, Evolution, EVODEVO		

A.2. Education

PhD, Licensed, Graduate	University	Year
Doctora en Biología (PhD)	Complutense of Madrid	2005

A.3. General indicators of quality of scientific production *(see instructions)*

- ✓ Number of "**sexenios**" (research 6 years' periods): 3 (last 06/06/2018).
- ✓ Number of **doctoral theses** directed (from 2010): 3.
- ✓ **Total of publications** (JCR indexed) in WOS: 68.
- ✓ Total of publications in the **first quartile** (Q1), from 2010: 25.
- ✓ **Book Sections** (chapters): 5 (from 2010).
- ✓ Total cites: 1719 (Wos).
- ✓ **Cite average** per item: 25 (Wos).
- ✓ **H Index**: 25 (Wos).

Part B. CV SUMMARY *(max. 3500 characters, including spaces)*

University Teacher/Researcher in the area of Cell Biology with full dedication since 2006, with the categories of Temporary professor (2006-2008; UAM), Contracted Lecturer ("professor contratado doctor" 2008-2010; Faculty of Medicine; UCM), associated (2010- present; Faculty of Biology; UCM). Positive evaluation of 2 quinquennia of teaching.

- Research Staff Training Grant (FPI), Ministry of Education and Science, 2001-2005.
- Post-doctoral research grant in the Department of Developmental Biology. Institut A. Fessard. CNRS. (Paris, France) by the Fondation Fyssen (Francia), 2005-2006.
- **Awarded** by the "Royal Academy of Doctors". 2005 Research Prize.
- **Extraordinary Doctorate Award** Complutense University of Madrid. 2006
- **Principal Investigator (PI)** of 2 financed Research Projects and participant in 16 in competitive calls, uninterrupted since 2000.
- **Evaluator of international Research Projects** for 5 different countries.
- Director of 9 Final Degree Projects (Bachelor in Biology, UCM) and 3 Final Master Projects (Master in Neuroscience, UCM).

Since the beginning of my research career, I have focused my research on the evolution and development of the nervous system (neuro-evo-devo), using the anuran amphibian *Xenopus laevis* as the main model. Specifically, during my period of predoctoral training I focused on the study of the formation and evolution of the amygdala complex, key structure in the control of emotions and social behavior, based on its neurochemical, hodological and genoarquitecture. These results gave rise to 14 publications as the first signatory in indexed journals (12 of them in Q1). From that moment I have continued my research, both in Spain, and in my period in France, in the development and evolution of the brain, but especially the forebrain region. In particular, the first thesis of which I was director, qualified with outstanding cum laude, focused on the analysis of the hypothalamic region in the anamnio-amniota transition. These results gave rise to 6 publications as the last signatory in indexed journals (5 of them in Q1). In addition, during these years the animal models, as well as the experimental techniques used, have been changing giving rise to a second direction of doctoral thesis, qualified with outstanding cum laude European model, focused on the analysis of the expression of the transcription factors of the Pax family. These results gave rise to 3 publications as the last signatory in indexed journals (all of them in Q1). The last thesis under my direction started during the last financed project in which I was principal investigator. In addition to the aspects outlined in other sections of this CVA, as a summary of my scientific productivity it is worth mentioning: 8 conferences to which I have been invited in specialized congresses, about 80 communications in specialized national and international scientific congresses, 5 chapters in scientific books and 69 research articles published in journals with an impact index and a peer review system.
Currently my research is focused on the evolutionary analysis of the pallial region of vertebrates, the histogenic domain that gives rise to the cerebral cortex. In particular, through the evolutionary study of the genoarchitectonic patterns underlying pallial organization, and its analysis during development. Using amphibians as the main model, we recently identified the existence of intermediate progenitors in the amniotic pallium and we described the conserved interneuron arrangement found in the pallium of distant evolutionary models. Additionally, we have demonstrated the usefulness use of MRI in amphibians that we plan to extend to distinct species.
In my opinion, all these merits demonstrate my solvency in the direction of doctoral theses, final master and degree projects and in the independence and leadership capacity of a research laboratory.

Part C. RELEVANT MERITS *(sorted by typology)*

C.1. Publications *(see instructions).*

The 10 publications listed below are selected to illustrate the research carried out currently and in the last years and the journals in which we publish.

1. López JM, Lozano, D., Morona R, **Moreno N**. 2021. Analysis of Islet-1, Nkx2.1, Pax6 and Orthopedia in the forebrain of the sturgeon Acipenser ruthenus identifies conserved prosomeric characteristics. Journal of Comparative Neurology. 2022. DOI: 10.1002/cne.25249.
2. Jiménez, S., **Moreno, N**. 2021. Analysis of the Expression Pattern of Cajal-Retzius Cell Markers in the Xenopus laevis Forebrain.Brain, behavior and evolution. 2021. DOI: 10.1159/000519025.
3. Jiménez, S., López J.M., Lozano, D., Morona, R., **Moreno, N**. 2020. Analysis of pallial/cortical interneurons in key vertebrate models of Testudines, Anurans and Polypteriform fishes. Brain Structure and Function volume 225, pages2239–2269(2020).
4. Ruiz-Fernández, M.J.; Jiménez, S.; Fernández-Valle, E.; García-Real, M.I.; Castejón, D.; **Moreno, N**.; Ardiaca, M.; Montesinos, A.; Ariza, S.; González-Soriano, J. Sex Determination in Two Species of Anuran Amphibians by Magnetic Resonance Imaging and Ultrasound Techniques. *Animals* 2020, *10*, 2142.
5. Morona R, Bandín S, López JM, **Moreno N**, González A. Amphibian thalamic nuclear organization during larval development and in the adult frog Xenopus laevis: Genoarchitecture and hodological analysis. J Comp Neurol. 2020 Oct;528(14):2361-2403. doi: 10.1002/cne.24899.
6. **Moreno, N**., Lopez, J.M., Morona, R., Lozano, D., Jiménez, S., González, A. 2018. Comparative analysis of Nkx2.1 and Islet-1 expression in urodele amphibians and lungfishes highlights the pattern of forebrain organization in early tetrapods. Front Neuroanat. 18;12:42. doi: 10.3389/fnana.2018.00042. eCollection 2018
7. **Moreno, N**., González, A. 2017. Pattern of neurogenesis and identification of neuronal progenitor subtypes during pallial development in Xenopus laevis. Front Neuroanat.
8. Domínguez L, González A, **Moreno N**. 2015. Patterns of hypothalamic regionalization in amphibians and reptiles: common traits revealed by a genoarchitectonic approach. Front Neuroanat. 3;9:3. doi: 10.3389/fnana.2015.00003.
9. Domínguez L, Morona R, González A, **Moreno N**. 2013. Characterization of the hypothalamus of Xenopus laevis during development. I. The alar regions. J Comp Neurol 521:725-759. Selected for Journal cover.
10. Joven A, Morona R, **Moreno N**, González A. 2012. Regional distribution of calretinin and calbindin-D28k expression in the brain of the urodele amphibian Pleurodeles waltl during embryonic and larval development. Brain Struct Funct. doi:10.1007/s00429-012-0442-1

Because of its importance, the **chapters** written by the members of the research group and published in the outstanding book on "***Evolution of Nervous Systems***" (Kaas, J. ed.), are cited below: Chapter 7: The Organization of the Central Nervous System of Lungfishes: An Immunohistochemical Approach (121-139). Chapter 8: The Organization of the Central Nervous System of Amphibians (pp 141-170), Chapter 22: The Diencephalon and Hypothalamus of Nonmammalian Vertebrates: Evolutionary

and Developmental Traits (pp 409-436). in: Kaas, J. (Eds.), Evolution of Nervous Systems, Second Edition, Academic Press, Oxford.

C.2. Research projects

Participant of 12 competitive projects of the MEC (or equivalent at the time), 4 of them as PI, since 2000. The last two are listed below:

- ✓ Project title: Origen evolutivo de la corteza cerebral de vertebrados. Main research names: **NEREA MORENO GARCÍA.** Funding entity / s: MINISTERIO DE CIENCIA E INNOVACIÓN. Start-end date: 01/09/2021 - 31/09/2023 Duration: 3 years Total amount: € 84.700.

- ✓ Project title: Processes of specification and development of genoarchitectural patterns in the prosencefalon: an evo-devo approach. (BFU2015-66041-P). Main research names: **NEREA MORENO GARCÍA** and AGUSTIN GONZALEZ GALLEGOS Funding entity / s: Ministry of Economy and Competitivity. Start-end date: 10/01/2016 - 31/12/2018 Duration: 3 years Total amount: € 142.296,0

PI of the **UCM Research Group (Group 920968)**: EVOLUTION AND DEVELOPMENT OF THE NERVOUS SYSTEM OF THE VERTEBRATES. Evaluated annually and financed by the UCM (average amount: 1000€) in the category of GOOD.

C.3. Institutional responsibilities.

- **Academic secretary** of the Department of Cell Biology. Faculty of Biology, Complutense University of Madrid, from March 2013 to June 2018.
- **ViceDean** of Academic Organization, talent recruitment and Postgraduate. Faculty of Biology, Complutense University of Madrid, since July 2018 to June 2022.

C.5 Memberships of international scientific societies and editor of scientific journals.

- Vocal of the Red of Comparative Neurobiology Pedro Ramón y Cajal (Associated to the Spanish Neuroscience Society).
- Associate editor of Frontiers in Neuroanatomy.
- Member of the Society for Neuroscience (SfN) USA.
- Member of the Spanish Neuroscience Society.