

Queridos/as soci@s de la Sociedad Española de Neurociencia,

Me dirijo a vosotr@s con entusiasmo y responsabilidad para presentar mi candidatura a la presidencia de la SENC. Esta decisión nace de un profundo compromiso con la Comunidad Neurocientífica que tanto aprecio y que ha sido clave en mi desarrollo profesional.

Como muchos sabéis, he dedicado mi carrera al estudio de la Generación y Regeneración del Sistema Nervioso, compaginando la investigación con la participación activa en iniciativas científicas tanto a nivel nacional como internacional. Esta trayectoria me ha permitido consolidar una red de colaboración sólida y una proyección internacional que me gustaría poner al servicio de la SENC para reforzar su visibilidad y presencia en foros científicos globales.

Si resulto elegida, me comprometo a continuar impulsando la investigación y la divulgación de la Neurociencia Española, promoviendo la colaboración con el Consejo Español del Cerebro y su correspondiente europeo, a fomentar la colaboración entre l@s investigador@s de nuestra sociedad, y a asegurar que la SENC tenga una representación constructiva y muy visible dentro de FENS. También me gustaría impulsar iniciativas que den mayor protagonismo a nuestr@s jóvenes investigador@s, ofreciéndoles más espacios de participación, formación y visibilidad.

Creo que mi perfil, centrado en la ciencia internacional, la gestión estratégica, la representación institucional y la construcción de comunidad, puede contribuir a consolidar y ampliar el excelente trabajo realizado por quienes han liderado la SENC hasta ahora. Mi propósito es sumar nuevas perspectivas y herramientas para afrontar juntos los retos actuales y futuros, manteniendo el espíritu integrador que siempre ha caracterizado a nuestra sociedad.

Acompaño a esta carta un breve biosketch por si queréis conocer con más detalle mi trayectoria y mis motivaciones. Espero que os resulte útil para decidir con conocimiento y confianza vuestro voto.

Quiero aprovechar para agradecer sinceramente a las demás personas que han aceptado su candidatura para ocupar distintos cargos en SENC por su generosidad y disposición para trabajar al servicio de la Comunidad Neurocientífica.

Os animo a tod@s a participar en estas elecciones que se cierran el 23 de Junio.

Con afecto y gratitud,



Eloisa Herrera
Profesora de Investigación del CSIC
Instituto de Neurociencias (Alicante)

Eloísa Herrera Short Biosketch

Eloísa Herrera is a Research Professor at the Spanish National Research Council (CSIC), based at the Institute of Neurosciences (UMH-CSIC) in Alicante, where she leads a research line focused on the Generation and Regeneration of Neural Circuits. Her work has achieved wide international visibility, both through her scientific output and through leadership roles in major European and global neuroscience organizations. A hallmark of Dr Herrera's career is her commitment to international collaboration and research governance.

She has secured highly competitive funding, including among others, an ERC Consolidator Grant, a Human Frontier Science Program Career Development Award, grants from ERA-Net or "La Caixa Foundation". She frequently reviews proposals for agencies such as CNRS/ANR (France), FWO (Belgium), FCT (Portugal), the Norway Research Council, etc. From 2015 to 2018 she served as Scientific Area Manager for Biomedicine (Neuroscience Section) at the Spanish State Research Agency (AEI). In 2020 she contributed to high-level strategic planning at CSIC, coordinating thematic initiatives and co-authoring Spain's White Paper on Neuroscience.

Dr Herrera is also very active in scientific training and events organization. She co-directed the FENS-IBRO Cajal Course "Developmental Neurobiology and Pathologies" (Bordeaux, 2018) and has organized or chaired symposia at the FENS Forum (2014, 2024), ISN-ASN (2013) and Cold Spring Harbor Laboratory (2016). She was on the Local Organizing Committee for IBRO 2024 (Granada), has been part of the Scientific Program Committee for FENS-2024 (Vienna) and is currently serving in the Local Committee of the FENS Forum 2026 (Barcelona). She has co-organized the International AXON-meeting Series (2021 and 2023 in Alicante, 2025 in Rotterdam) and the upcoming joint GfE-DSDB-SEBD meeting on Developmental Biology (Potsdam 2026). In 2021 she chaired the Program Committee for the 19th SENC Meeting in Lleida. Her editorial contributions include serving as Senior Editor of the *European Journal of Neuroscience* (the official FENS Journal).

Currently President of the Spanish Society for Developmental Biology (SEBD) (2023-26), Dr Herrera continues to promote excellence and international cooperation in developmental neuroscience through her research, mentorship and leadership.

List of 15 Selected Publications

(For a complete list of my articles please visit:

<https://eloisahgm.wixsite.com/herrerelab/publications>)

1. Perez-Ferrer I and **Herrera E*** (2025). Novel Insights into the Mechanisms of Growth Cone Dynamics during Axon Pathfinding. *Current Opinion in Neurobiology*. In press.
2. Murcia-Belmonte V, Chauvin G, Coca Y, Escalante A, Klein R, **Herrera E*** (2025). EphA4 mediates EphrinB1-dependent adhesion in retinal ganglion cells. *Journal of Neuroscience* 45(4):e0043242024. doi: 10.1523/JNEUROSCI.0043-24.2024 PMID: 39622649. Cover caption
3. Negueruela S, Morenilla-Palao C, Herrera M, Coca Y, Florez-Paz D, López-Cascales MT, Gomis A, **Herrera E*** (2024). Proper frequency of perinatal retinal waves is essential for the precise wiring of visual axons in nonimage-forming nuclei. *Journal of Neuroscience* 44(40):e1408232024. doi: 10.1523/JNEUROSCI.1408-23.2024

4. Barnada SM, Giner de Gracia A, Morenilla-Palao C, López-Cascales MT, Scopa C, Waltrich FJ Jr, Mikkers HMM, Cicardi ME, Karlin J, Trotti D, Peterson KA, Brugmann SA, Santen GWE, McMahon SB, **Herrera E***, Trizzino M* (2024). ARID1A-BAF coordinates ZIC2 genomic occupancy for epithelial-to-mesenchymal transition in cranial neural crest specification.
American Journal of Human Genetics doi: 10.1016/j.ajhg.2024.07.022
5. **Herrera E**, Chédotal A, Mason C (2024). Development of the binocular circuit.
Annual Review of Neuroscience. doi: 10.1146/annurev-neuro-111020-093230
6. Fernández-Nogales M, López-Cascales MT, Murcia-Belmonte V, Escalante A, Fernández-Albert J, Muñoz-Viana R, Barco A, **Herrera E*** (2022). Multiomic analysis of neurons with divergent projection patterns identifies novel regulators of axon pathfinding.
Advanced Science. doi: 10.1002/adv.202200615
7. Morenilla-Palao C, López-Cascales MT, López-Atalaya JP, Baeza D, Calvo L, Barco A, **Herrera E*** (2020). A Zic2-regulated switch in a non-canonical Wnt/ β -catenin pathway is essential for the formation of bilateral circuits.
Science Advances 6(46):eaaz8797. doi: 10.1126/sciadv.aaz8797
8. Murcia-Belmonte V, Coca Y, Vegar C, Negueruela S, de Juan Romero C, Valiño A, Sala S, DaSilva R, Kania A, Borrell V, Martinez LM, Erskine L, **Herrera E*** (2019). A Retino-retinal projection guided by Unc5c emerged in species with retinal waves.
Current Biology 29(7):1149–1160. doi: 10.1016/j.cub.2019.02.052
9. Marcucci F, Murcia-Belmonte V, Wang Q, Coca Y, Ferreiro-Galve S, Kuwajima T, Khalid S, Ross ME, Mason C, **Herrera E*** (2016). The ciliary margin zone of the mammalian retina generates retinal ganglion cells.
Cell Reports 1(12):3152–3164. Cover caption
10. Ruiz-Reig N, Andrés B, Huilgol D, Grove E, Tissir F, Tole S, Theil T, **Herrera E***, Fairén A* (2016). Lateral thalamic eminence: A novel origin for mGluR1/Lot cells.
Cerebral Cortex 26(6).
11. Escalante A, Murillo B, Morenilla-Palao C, Klar A, **Herrera E*** (2013). Zic2-dependent axon midline avoidance controls the formation of major ipsilateral tracts in the CNS.
Neuron 80(6):1392–1406.
12. Benjumeda I, Escalante A, Law C, Morales D, Chauvin G, Muca G, Coca Y, López-Bendito G, Kania A, Martínez-Otero L, **Herrera E*** (2013). Uncoupling of EphA/ephrinA signaling and spontaneous activity in neural circuit wiring.
Journal of Neuroscience 33(46):18208–18218. Cover caption
13. Carreres MI, Escalante A, Murillo B, Chauvin G, Gaspar P, Vegar C, **Herrera E*** (2011). The transcription factor Foxd1 is required for the specification of the temporal retina in mammals. *Journal of Neuroscience* 31(15):5673–5681.
14. García-Frigola C, **Herrera E*** (2010). Zic2 regulates the expression of Sert to modulate eye-specific refinement at the visual targets.
EMBO Journal 29(18):3037–3038.
15. **Herrera E**, Brown L, Aruga J, Rachel R, Dolen G, Mikoshiba K, Brown S, Mason CA (2003). The transcription factor Zic2 designates the uncrossed retinal ganglion cell axon projection.
Cell 114:545–557. Cover caption