

**Simpósio Internacional: : La biología de las redes proteicas: el interactoma y sus implicaciones patológicas**

*International Symposium: Biology of protein networks: Implications for human disease*

Barcelona, 6 y 7 de octubre de 2015  
*Barcelona, October 6-7, 2015*

**CARMEN ARAGÓN**

Centro de Biología Molecular Severo Ochoa. Universidad Autónoma.

*University Degrees.*

Graduated: Pharmacy, Universidad de Granada, Spain.

MSc: Departamento de Bioquímica. Facultad de Farmacia. Universidad de Granada, Spain.

PhD: Departamento de Fisiología Animal. Facultad de Farmacia. Universidad de Granada, Spain.

Postdoc: Department of Biochemistry. University of Birmingham. U.K.

*Present Position*

Professor of Biochemistry and Molecular Biology. Facultad de Ciencias. Universidad Autónoma de Madrid. Spain.

Group Leader at The Centro de Biología Molecular Severo Ochoa. (UAM-CSIC).

*Major Areas of interest*

Molecular biology of neurotransmitter transporters.

Mainly devoted to the physiopathology of glycine transporters in glycinergic neurotransmission.

*Publications*

He has published more than ninety scientific peer reviewed articles on Biochemistry and Neurobiology.

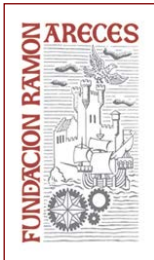
*Some relevant publications (last ten years):*

1.- Arribas-González, E., de Juan Sanz, J., Aragón, C. and López-Corcuera, B (2015).

Molecular basis of the dominant-negative effect of a GlyT2 mutation associated with hyperekplexia. *J Biol Chem* 290:2150-2165.

2.- de Juan-Sanz J, Núñez E, Berrocal M, Corbacho I, Ibáñez I, Arribas-González E, Marcos D, López-Corcuera B, Mata AM and Aragón C (2014). Presynaptic control of glycine transporter 2 by physical and functional association with plasma membrane Ca<sup>2+</sup>-ATPase (PMCA) and Na<sup>+</sup>-Ca<sup>2+</sup> exchanger (NCX). *J Biol Chem* 289:34308–34324.

3.- de Juan-Sanz J, Núñez E, Villarejo-López L, Pérez-Hernández D, Rodríguez-Fraticelli A E, López-Corcuera B, Vázquez J, Aragón C (2013) Na<sup>+</sup>/K<sup>+</sup>-ATPase is a new interacting partner for the neuronal glycine transporter GlyT2 that down-regulates its expression *in vitro* and *in vivo*. *J Neurosci* 33:14269-14281.



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- 4.- de Juan-Sanz J, Núñez E, López-Corcuera B, Aragón C (2013) Constitutive Endocytosis and Turnover of the Neuronal Glycine Transporter GlyT2 Is Dependent on Ubiquitination of a CTerminal Lysine Cluster. PLoS ONE 8(3): e58863.
5. - Giménez C, Pérez-Siles G, Martínez-Villarreal J, Arribas-González E, Jiménez E, Núñez E, de Juan-Sanz J, Fernández-Sánchez E, García-Tardón N, Ibáñez I, Romanelli V, Nevado J, James VM, Topf M, Chung SK, Thomas RH, Desviat LR, Aragón C, Zafra F, Rees MI, Lapunzina P, Harvey RJ, López-Corcuera B (2012). A novel dominant hyperekplexia mutation Y705C alters trafficking and biochemical properties of the presynaptic glycine transporter GlyT2. J Biol Chem. 287:28986-9002.
6. - de Juan-Sanz J, Zafra F, López-Corcuera B, Aragón C (2011) Endocytosis of the Neuronal Glycine Transporter GLYT2: Role of Membrane Rafts and Protein Kinase Dependent Ubiquitination. Traffic 12:1850–1867.
- 7.- Núñez E, Pérez-Siles G, Rodenstein L, Alonso-Torres P, Zafra F, Jiménez E, Aragón C\*, López-Corcuera B\* (2009) Subcellular Localization of the Neuronal Glycine Transporter GLYT2 in brainstem Traffic 10:829–843 (. \* These authors share last authorship)
8. - Aragón C. López-Corcuera B. (2005) Glycine transporters: crucial roles of pharmacological interest revealed by gene deletion. Trends Pharmacol. Sci. 26:283-286.