

6è Premi Ramon Turró, Edició 2024

(publicacions dels anys 1996-97 i 1998-99)



Societat Catalana
de **BIOLOGIA**

L'edició 2024 del Premi Ramon Turró va ser atorgada al Dr. Eduardo Soriano, de la Facultat de Biologia de la Universitat de Barcelona, com a autor principal dels articles

Del Rio, JA; Heimrich, B; Borrell, V; Forster, E; Drakew, A; Alcántara, S; Nakajima, K; Miyata, T; Ogawa, M; Mikoshiba, K; Derer, P; Frotscher, M; Soriano, E (1997) A role for Cajal-Retzius cells and reelin in the development of hippocampal connections. *Nature* 385; 70-74

Alcántara, S; Ruiz, M; D'Arcangelo, G; Ezan, F; de Lecea, L; Curran, T; Sotelo, C; Soriano, E (1998) Regional and cellular patterns of reelin mRNA expression in the forebrain of the developing and adult mouse. *The Journal of Neuroscience* 18; 7779-7799.

En els vint-i-cinc anys posteriors a la seva publicació aquests dos articles foren citats 387 i 461 vegades, respectivament resultant ser els articles més citats publicats en els períodes 1996-97 i 1998-99, respectivament.

A role for Cajal–Retzius cells and reelin in the development of hippocampal connections

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The Journal of Neuroscience, October 1, 1998, 18(19):7779–7799

Regional and Cellular Patterns of reelin mRNA Expression in the Forebrain of the Developing and Adult Mouse

Soledad Alcántara,^{1,2} Mónica Ruiz,¹ Gabriella D'Arcangelo,³ Frederic Ezan,² Luis de Lecea,⁴ Tom Curran,³ Constantino Sotelo,² and Eduardo Soriano¹

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³Department of Developmental Neurobiology, St. Jude Children's Research Hospital, Memphis, Tennessee 38105, and

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Els 3 articles més citats, publicats als anys 1996-97 i que complien els requisits del premi Ramon Turró, van ser:

<p>Del Rio, JA; Heimrich, B; Borrell, V; Forster, E; Drakew, A; Alcantara, S; Nakajima, K; Miyata, T; Ogawa, M; Mikoshiba, K; Derer, P; Frotscher, M; Soriano, E (1997)</p> <p>A role for Cajal-Retzius cells and reelin in the development of hippocampal connections.</p> <p><i>Nature</i> 385; 70-74</p> <p>Department of Animal and Plant Cell Biology, Faculty of Biology, University of Barcelona, Spain.</p>	<p>387 cites</p>
<p>Skolnick, P; Layer, RT; Popik, P; Nowak, G; Paul, IA; Trullas, R (1996)</p> <p>Adaptation of N-methyl-D-aspartate (NMDA) receptors following antidepressant treatment: Implications for the pharmacotherapy of depression.</p> <p><i>Pharmacopsychiatry</i> 29; 23-26</p> <p>Neurobiology Unit, Department Bioanalytical Medicine, CSIC, Barcelona, Spain</p>	<p>296 cites</p>
<p>Graus, F; Dalmau, J; Rene, R; Tora, M; Malats, N; Verschuuren, JJ; Cardenal, F; Vinolas, N; [...] Real, FX (1997).</p> <p>Anti-Hu antibodies in patients with small-cell lung cancer: Association with complete response to therapy and improved survival.</p> <p><i>J Clin Oncol</i> 15; 2866-72</p> <p>Service of Neurology, Hospital Clínic i Provincial, Barcelona, Spain / Institut Municipal d'Investigació Mèdica, Hospital del Mar, Universitat Autònoma de Barcelona, Spain.</p>	<p>290 cites</p>



Els 3 articles més citats, publicats als anys 1998-99 i que complien els requisits del premi Ramon Turró, van ser:

<p>Alcántara, S; Ruiz, M; D'Arcangelo, G; Ezan, F; de Lecea, L; Curran, T; Sotelo, C; Soriano, E (1998)</p> <p>Regional and cellular patterns of reelin mRNA expression in the forebrain of the developing and adult mouse.</p> <p><i>The Journal of Neuroscience</i> 18; 7779-7799.</p> <p>Dept of Animal and Plant Cell Biology, Faculty of Biology, University of Barcelona, Barcelona, Spain.</p>	461 cites
<p>Ferrer, I; Marín, C; Rey, MJ; Ribalta, T; Goutan, E; Blanco, R; Tolosa, E; Martí, E (1999)</p> <p>BDNF and full-length and truncated TrkB expression in Alzheimer disease: Implications in therapeutic strategies.</p> <p><i>J Neuropathol Exp Neurol</i> 58; 729-739</p> <p>Unitat de Neuropatologia, Servei d'Anatomia Patològica, Hospital Prínceps d'Espanya (Hospital Bellvitge), Barcelona, Spain.</p>	323 cites
<p>Dávalos, A; Toni, D; Iweins, F; Lesaffre, E; Bastianello, S; Castillo, J and the ECASS Group (1999).</p> <p>Neurological deterioration in acute ischemic stroke -: Potential predictors and associated factors in the European Cooperative Acute Stroke Study (ECASS).</p> <p><i>Stroke</i> 30; 2631-2636</p> <p>Department of Neurology, Hospital Universitari Doctor Josep Trueta, Girona.</p>	251 cites

L'entrega del 6è Premi Ramon Turró al Dr. Eduardo Soriano es va fer durant el XIII Simposi de Neurobiologia Experimental de la Societat Catalana de Biologia (28-29 maig 2024).



El Dr. Eduardo Soriano, rep el 6è Premi Ramon Turró de mans de la Dra. Ariadna Laguna, coordinadora de la secció de Neurobiologia Experimental de la Societat Catalana de Biologia.



El Dr. Eduardo Soriano imparteix la conferència d'acceptació del 6è Premi Ramon Turró durant el XIII Simposi de Neurobiologia Experimental de la Societat Catalana de Biologia.



L.4. THE 1997/1998 BREAKTHROUGH: FROM REELIN AND CAJAL-RETZIUS CELLS TO ADULT PLASTICITY AND ALZHEIMER'S DISEASE

SORIANO E

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In this presentation I will briefly summarize the previous findings that give rise to the two studies to which this Award refers (Del Río et al., 1997, *Nature*: 385: 70–74; Alcántara et al., *J. Neuroscience*, 1998, 18: 7779–7799). The first study demonstrates for the first time a role for Cajal-Retzius cells and Reelin in establishing circuits. The second study represents the first comprehensive analysis of Reelin expression in the brain, highlighting the high expression of this developmental gene in the adult. In addition to delving into these aspects, the two studies opened the doors to analyze the function of Reelin in the adult brain, particularly in synaptic plasticity and adult neurogenesis, demonstrating that Reelin is an enhancer of plasticity. We later proposed that enhancing plasticity could be beneficial to alleviate some neurodegenerative diseases. We demonstrate that Reelin overexpression reduces symptoms and hallmarks in Alzheimer's Disease mouse models by reducing AB and P-Tau, increasing synaptic potentiation, and enhancing cognitive abilities. These studies demonstrate how a gene originally assigned to neuronal development also controls adult plasticity and may also be useful for neuroprotection against neurodegenerative diseases.