

## **Egidio D'Angelo– CV**

### ***Publications –last 5 years***

1. Jonathan Mapelli, Egidio D'Angelo. (2007) The Spatial Organization of Long-Term Synaptic Plasticity at the Input Stage of Cerebellum. **J. Neuroscience** 27(6): 1285-1296.
2. Goldfarb M, Schoorlemmer J, Williams A, Mukundanunny SD, Huang X, Giza J, Tchetchik D, Kelley K, Vega A, Matthews G, Rossi P, Ornitz D, and D'Angelo E (2007) Fibroblast growth factor homologous factors control neuronal excitability through modulation of voltage-gated sodium channels. **Neuron**,55:449-463
3. Sergio Solinas, Lia Forti, Elisabetta Cesana, Jonathan Mapelli, Erik De Schutter, Egidio D'Angelo. (2007) Computational reconstruction of pacemaking and intrinsic electroresponsiveness in cerebellar Golgi cells. **Frontiers in Cellular Neuroscience** 1-2:1-12.
4. Sergio Solinas, Lia Forti, Elisabetta Cesana, Jonathan Mapelli, Erik De Schutter, Egidio D'Angelo. (2007) Fast-reset of pacemaking and theta-frequency resonance patterns in cerebellar Golgi cells. **Frontiers in Cellular Neuroscience** 1-4:1-9 .
5. Roggeri L, Rivieccio B, Rossi P, D'Angelo E (2008) Tactile stimulation evokes long-term synaptic plasticity in the granular layer of cerebellum". **J Neuroscience**, 28:6354-6359
6. Francesca Prestori, Paola Rossi, Bertrand Bearzatto, Jeanne Lainé, Daniela Necchi, Shyam Diwakar, Serge N. Schiffmann, Herbert Axelrad, Egidio D'Angelo (2008) Altered neuron excitability and synaptic plasticity in the cerebellar granular layer of juvenile prion protein knock-out mice with impaired motor control. **J Neuroscience**, 28:7091-2103.
7. E. D'Angelo. The critical role of Golgi cells in regulating spatio-temporal integration and plasticity at the cerebellum input stage. **Frontiers in Cellular Neuroscience**, **2**: 35-46.
8. L. Sacconi, J. Mapelli, D. Gandolfi, J. Lotti, R. P. O'Connor, E. D'Angelo and F. S. Pavone. Optical recording of electrical activity in intact neuronal networks with random access second-harmonic generation microscopy. **Opt. Express** 16, 14910-1492
9. D'Angelo, E., DeZeeuw, C (2008). Timing and plasticity in the cerebellum: focus on the granular layer. **TINS**, 32(1):30-40.
10. R Carillo, E Ros, S Tolu, T Nieuw, E D'Angelo. (2008) Event-driven simulation of cerebellar granule cells, **Biosystems** 94:10-7.

11. Bastianello S, Pezzella FR, D'Angelo E. (2008) Non-invasive imaging of brain structure and function in neural connectivity analysis. **Funct Neurol** 23:169-170
12. Shyam Diwakar, Jacopo Magistretti, Mitchell Goldfarb, Giovanni Naldi, Egidio D'Angelo. Axonal Na<sup>+</sup> channels ensure fast spike activation and back-propagation in cerebellar granule cells. **J Neurophysiology** 101(2):519-32
13. Mapelli L, Rossi P, Nieuwenhuis T, D'Angelo E. Tonic activation of GABA-B receptors reduces release probability at inhibitory connections in the cerebellar glomerulus. **J Neurophysiology**. 101:3089-3099
14. D'Angelo E, Koekkoek SK, Lombardo P, Solinas S, Ros E, Garrido J, Schonewille M, De Zeeuw CI. (2009) Timing in the cerebellum: oscillations and resonance in the granular layer. **Neuroscience**. PMID: 19409229
15. Anna D'Errico, Francesca Prestori and Egidio D'Angelo (2009) Differential induction of bidirectional long-term changes in neurotransmitter release by frequency-coded patterns at the cerebellar input. **J Physiology**, 2009, pp 1–15.
16. Sergio Solinas, Thierry Nieuwenhuis and Egidio D'Angelo (2010). A realistic large-scale model of the cerebellum granular layer predicts circuit spatio-temporal filtering properties. **Frontiers in Cellular Neuroscience**, April 2010, volume 4, article 12.
17. Egidio D'Angelo. (2010) on "Homeostasis of intrinsic excitability: making the point". **J Physiol** 588.6 (2010) pp 901–902
18. Jonathan Mapelli, Daniela Gandolfi, and Egidio D'Angelo. (2010) Combinatorial Responses Controlled by Synaptic Inhibition in the Cerebellum Granular Layer. **J Neurophysiol** 103: 250 – 261.
19. Arleo A, Nieuwenhuis T, Bezzi M, D'Errico A, D'Angelo E, Coenen OJ.. How synaptic release probability shapes neuronal transmission: information-theoretic analysis in a cerebellar granule cell. **Neural Comput**. 2010 Aug;22(8):2031-58.
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21. Galliano E, Mazzarello P, D'Angelo E. Discovery and rediscoveries of Golgi cells. **J Physiol**. 2010 Jun 25.

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23. Katarzyna Dover, Sergio Solinas, Egidio D'Angelo and Mitchell Goldfarb. Long-Term Inactivation Particle for Voltage-Gated Sodium Channels (2010). **J Physiol** October 1, 2010 588 (19) 3695-3711
24. Joanna Giza, Michael J. Urbanski, Francesca Prestori, Bhaswati Bandyopadhyay, Annie Yam, Victor Friedrich, Kevin Kelley, Egidio D'Angelo, and Mitchell Goldfarb. Behavioral and Cerebellar Transmission Deficits in Mice Lacking the Autism- Linked Gene Islet Brain-2 (2010). **The Journal of Neuroscience**, November 3, 2010 • 30(44):14805–14816
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27. D'Angelo E (2011) Neural circuits of the cerebellum: hypothesis for function. **J Integr Neurosci.** 2011 Sep;10(3):317-52.
28. Diwakar S, Lombardo P, Solinas S, Naldi G, D'Angelo E. (2011) Local field potential modeling predicts dense activation in cerebellar granule cells clusters under LTP and LTD control. **PLoS One.** 2011;6(7):e21928. Epub 2011 Jul 19.
29. Colnaghi S, Ramat S, D'Angelo E, Cortese A, Beltrami G, Moglia A, Versino M. (2011) Theta-burst stimulation of the cerebellum interferes with internal representations of sensory-motor information related to eye movements in humans. **Cerebellum.** 2011 Dec;10(4):711-9.
30. Colnaghi S, Ramat S, D'Angelo E, Versino M. (2011) Transcranial magnetic stimulation over the cerebellum and eye movements: state of the art. **Funct Neurol.** 2010 Jul-Sep;25(3):165-71. Review.
31. D'Angelo E. (2011) Neuronal circuit function and dysfunction in the cerebellum: from neurons to integrated control. **Funct Neurol.** 2010 Jul-Sep;25(3):125-7.