

Pubblicazioni:

47) 2015 – Articolo in rivista

Pennucci R, Talpo F, Astro V, Montinaro V, Morè L, Corsi M, Castoldi V, Chiaretti S, Bianchi V, Marenga S, Cambiaghi M, Tonoli D, Leocani L, Biella G, D'Adamo P, de Curtis I. Loss of Either Rac1 or Rac3 GTPase Differentially Affects the Behavior of Mutant Mice and the Development of Functional GABAergic Networks. *Cereb Cortex*. 2016 Feb;26(2):873-90. doi: 10.1093/cercor/bhv274. Epub 2015 Nov 17. PubMed PMID: 26582364; PubMed Central PMCID: PMC4712809.

46) 2015 – Articolo in rivista

Valenza M, Marullo M, Di Paolo E, Cesana E, Zuccato C, Biella G, Cattaneo E. Disruption of astrocyte-neuron cholesterol cross talk affects neuronal function in Huntington's disease. *Cell Death Differ*. 2015 Apr;22(4):690-702. doi: 10.1038/cdd.2014.162. Epub 2014 Oct 10. PubMed PMID: 25301063; PubMed Central PMCID: PMC4356339.

45) 2014 – Articolo in rivista

Onorati M., Castiglioni V., Biasci D., Cesana E., Menon R., Vuono R., Talpo F., Goya R.L., Lyons P.A., Bulfamante G.P., Muzio L., Martino G., Toselli M., Farina C., Barker R.A., Biella G., Cattaneo E. (2014) Molecular and Functional Definition of the Developing Human Striatum. *NATURE NEUROSCIENCE*; 2014 Dec;17(12):1804-15. doi: 10.1038/nn.3860. Epub 2014 Nov 10

44) 2014 - Articolo in rivista

M Valenza, M Marullo, E Di Paolo, E Cesana, C Zuccato, G Biella, E Cattaneo. Disruption of astrocyte-neuron cholesterol cross talk affects neuronal function in Huntington's disease. *CELL DEATH AND DIFFERENTIATION*, advance online publication 10 october 2014, doi: 10.1038/cdd.2014.162

43) 2014 - Articolo in rivista

Vaghi V, Pennucci R, Talpo F, Corbetta S, Montinaro V, Barone C, Croci L, Spaiardi P, Consalez GG, Biella G, de Curtis I. Rac1 and rac3 GTPases control synergistically the development of cortical and hippocampal GABAergic interneurons. *Cereb Cortex*. 2014 May;24(5):1247-58. doi: 10.1093/cercor/bhs402. Epub 2012 Dec 20. PubMed PMID: 23258346; PubMed Central PMCID: PMC3977619.

42) 2013 - Articolo in rivista

Carri AD, Onorati M, Lelos MJ, Castiglioni V, Faedo A, Menon R, Camnasio S, Vuono R, Spaiardi P, Talpo F, Toselli M, Martino G, Barker RA, Dunnett SB, Biella G, Cattaneo E. Developmentally coordinated extrinsic signals drive human pluripotent stem cell differentiation toward authentic DARPP-32+ medium-sized spiny neurons. *Development*. 2013 Jan 15;140(2):301-12. doi: 10.1242/dev.084608. PubMed PMID: 23250204.

41) 2013 - Articolo in rivista

Delli Carri A, Onorati M, Castiglioni V, Faedo A, Camnasio S, Toselli M, Biella G, Cattaneo E. Human pluripotent stem cell differentiation into authentic striatal projection neurons. *Stem Cell Rev*. 2013 Aug;9(4):461-74. doi: 10.1007/s12015-013-9441-8. PubMed PMID: 23625190.

40) 2012 - Articolo in rivista

Mauri Mario, Lentini Daniela, Gravati Marta, Foudah Dana, Biella Gerardo, Costa Barbara, Toselli Mauro, Parenti Marco, Coco Silvia. (2012). Mesenchymal stem cells enhance GABAergic transmission in co-cultured hippocampal neurons. MOLECULAR AND CELLULAR NEUROSCIENCES, vol. 49, p. 395-405, ISSN: 1044-7431, doi: 10.1016/j.mcn.2012.02.004

39) 2012 - Articolo in rivista

DiFebo Francesca, Curti Daniela, Botti Francesca, Biella Gerardo, Bigini Paolo, Mennini Tiziana, Toselli Mauro (2012). Neural precursors (NPCs) from adult L967Q mice display early commitment to "in vitro" neuronal differentiation and hyperexcitability. EXPERIMENTAL NEUROLOGY, vol. 236, p. 307-318, ISSN: 0014-4886, doi: 10.1016/j.expneurol.2012.05.010

38) 2011 - Articolo in rivista

Onorati Marco, Binetti Maurizio, Conti Luciano, Camnasio Stefano, Calabrese Giovanna, Albieri Ilaria, Di Febo Francesca, Toselli Mauro, Biella Gerardo, Martynoga Ben, Guillemot Francois, Consalez Giacomo, Cattaneo Elena (2011). Preservation of positional identity in fetal-derived neural stem (NS) cells from different mouse central nervous system compartments.. CELLULAR AND MOLECULAR LIFE SCIENCES, vol. 68, p. 1769-1783, ISSN: 1420-9071, doi: 10.1007/s00018-010-0548-7

37) 2010 - Articolo in rivista

Biella G, Spaiardi P, Toselli M, de Curtis M, Gnatkovsky V (2010). Functional interactions within the parahippocampal region revealed by voltage-sensitive dye imaging in the isolated guinea pig brain. JOURNAL OF NEUROPHYSIOLOGY, vol. 103, p. 725-732, ISSN: 0022-3077, doi:10.1152/jn.00722.2009

36) 2010 - Contributo in Atti di convegno

Spaiardi P., Talpo F., Toselli M., Biella G., Marinoni A., Savazzi P., Favalli L. (2010). Analysis of the noise associated to the muscarinic modulation of the mouse perirhinal cortex. In: -. proceedings of The 3rd International Symposium on Applied Sciences in Biomedical and Communication Technologies. Roma, 7-10 novembre, p. 1-5, Roma:CTIF , IEEE, ISBN: 9781424481316, doi:10.1109/ISABEL.2010.5702765

35) 2009 - Articolo in rivista

Spiliotopoulos D, Goffredo D, Conti Luciano, Di Febo Francesca, Biella Gerardo, Toselli Mauro, Cattaneo Elena (2009). An optimized experimental strategy for efficient conversion of embryonic stem (ES)-derived mouse neural stem (NS) cells into a nearly homogeneous mature neuronal population.. NEUROBIOLOGY OF DISEASE, vol. 34, p. 320-331, ISSN: 0969-9961, doi:10.1016/j.nbd.2009.02.007

34) 2008 - Articolo in rivista

Sun Y, Pollard S, Conti L, Toselli M, Biella G, Parkin G, Willatt L, Falk A, Cattaneo E, Smith A (2008). Long-term tripotent differentiation capacity of human neural stem (NS) cells in adherent culture. MOLECULAR AND CELLULAR NEUROSCIENCES, vol. 38, p. 245-258, ISSN: 1044-7431, doi:10.1016/j.mcn.2008.02.014

33) 2008 - Articolo in rivista

Goffredo D., Conti L., Di Febo F., Biella G., Tosoni A., Vago G., Moiana A., Bolognini D., Toselli M., Cattaneo E. (2008). Setting the conditions for efficient, robust and reproducible generation of functionally active neurons from adult subventricular zone-derived neural stem cells. CELL DEATH AND DIFFERENTIATION, vol. 15, p. 1847-1856, ISSN: 1350-9047, doi: 10.1038/cdd.2008.118

32) 2008 - Articolo in rivista

D'Orlando C., Guzzi F., Gravati M., Biella G., Toselli M., Meneveri R., Barisani D., Parenti M. (2008). Retinoic acid- and phorbol ester-induced neuronal differentiation down-regulates caveolin expression in GnRH neurons. *JOURNAL OF NEUROCHEMISTRY*, vol. 104, p. 1577-1587, ISSN: 0022-3042, doi:10.1111/j.1471-4159.2007.05109.x

31) 2007 - Articolo in rivista

Biella Gerardo, Di Febo Francesca, Goffredo D, Moiana A, Taglietti Vanni, Conti Luciano, Cattaneo Elena, Toselli Mauro (2007). Differentiating embryonic stem-derived neural stem cells show a maturation-dependent pattern of voltage-gated sodium current expression and graded action potentials. *NEUROSCIENCE*, vol. 149, p. 38-52, ISSN: 0306-4522

30) 2007 - Articolo in rivista

Castelli Loretta, Biella Gerardo, Toselli Mauro, Magistretti Jacopo (2007). Resurgent Na<sup>+</sup> current in pyramidal neurones of rat perirhinal cortex: axonal location of channels and contribution to depolarizing drive during repetitive firing.. *THE JOURNAL OF PHYSIOLOGY*, vol. 582, p. 1179-1193, ISSN: 1469-7793, doi: 10.1113/jphysiol.2007.135350

29) 2007 - Articolo in rivista

Biella Gerardo, Spaiardi Paolo, Jimenez-Moreno Ramòn, Magistretti Jacopo, Taglietti Vanni, Toselli Mauro (2007). A fast transient outward current in layer II/III neurons of rat perirhinal cortex. *PFLUGERS ARCHIV*, vol. 455, p. 515-525, ISSN: 0031-6768, doi: 10.1007/s00424-007-0299-y

28) 2006 - Articolo in rivista

Hofmann UG, Folkers A, Moesch F, Malina T, Menne KML, Biella Gerardo, Fagerstaedt P, De Schutter E, Jensen W, Yoshida K, Hoehl D, Thomas U, Kindlundh MG, Norlin P, de Curtis Marco (2006). A novel high channel-count system for acute multi-site neuronal recordings. *IEEE TRANSACTIONS ON BIOMEDICAL ENGINEERING*, vol. 53, p. 1672-1677, ISSN: 0018-9294, doi:10.1109/TBME.2006.877807

27) 2005 - Articolo in rivista

Toselli Mauro, Biella Gerardo, Taglietti Vanni, Cazzaniga E., Parenti M. (2005). Caveolin-1 expression and membrane cholesterol content modulate N-type calcium channel activity in NG108-15 cells.. *BIOPHYSICAL JOURNAL*, vol. 89, p. 2443-2457, ISSN: 0006-3495

26) 2005 - Articolo in rivista

Conti L, Pollard Sm, Gorba T, Reitano E, Toselli Mauro, Biella Gerardo, Sun Y, Sanzone S, Ying QI, Cattaneo E, Smith A (2005). Niche-independent symmetrical self-renewal of a mammalian tissue stem cell.. *PLOS BIOLOGY*, vol. 3, p. 1594-1606, ISSN: 1544-9173, doi: 10.1371/journal.pbio.0030283

25) 2004 - Articolo in rivista

Uva Laura, Gruschke S, Biella Gerardo, de Curtis Marco, Witter Menno (2004). Cytoarchitectonic characterization of the parahippocampal region of the guinea pig. *JOURNAL OF COMPARATIVE NEUROLOGY*, vol. 474, p. 289-303, ISSN: 0021-9967, doi: 10.1002/cne.20121

24) 2003 - Articolo in rivista

DICKSON CT, G. BIELLA, DE CURTIS M. (2003). Slow periodic events and their transition to gamma oscillations in the entorhinal cortex of the isolated Guinea pig brain. JOURNAL OF NEUROPHYSIOLOGY, vol. 90, p. 39-46, ISSN: 0022-3077, doi: 10.1152/jn.01063.2002

23) 2003 - Articolo in rivista

BIELLA G., GNATKOVSKY V., TAKASHIMA I., KAJIWARA R., IJIMA T., DE CURTIS M. (2003). Olfactory input to the parahippocampal region of the isolated guinea pig brain reveals weak

entorhinal-to-perirhinal interactions. EUROPEAN JOURNAL OF NEUROSCIENCE, vol. 18, p. 95-101, ISSN: 0953-816X, doi: 10.1046/j.1460-9568.2003.02730.x

22) 2002 - Articolo in rivista

BIELLA G., UVA L., DE CURTIS M. (2002). Propagation of neuronal activity along the

neocortical-perirhinal-entorhinal pathway in the guinea pig. THE JOURNAL OF NEUROSCIENCE, vol.

22, p. 9972-9979, ISSN: 0270-6474

21) 2002 - Articolo in rivista

BIELLA G., UVA L., HOFFMAN U.G., DE CURTIS M. (2002). Associative interactions within the superficial layers of the entorhinal cortex of the guinea pig. JOURNAL OF NEUROPHYSIOLOGY, vol. 88, p. 1159-1165, ISSN: 0022-3077, doi: 10.1152/jn.00022.2002

20) 2001 - Articolo in rivista

G. BIELLA, UVA L., DE CURTIS M (2001). Network activity evoked by neocortical stimulation in area 36 of the guinea pig perirhinal cortex.. JOURNAL OF NEUROPHYSIOLOGY, vol. 86, p. 164-172, ISSN:

0022-3077

19) 2001 - Articolo in rivista

DE CURTIS M., LIBRIZZI L., G. BIELLA (2001). Discharge threshold is enhanced for several seconds after a single interictal spike in a model of focal epileptogenesis. EUROPEAN JOURNAL OF NEUROSCIENCE, vol. 14, p. 1-6, ISSN: 0953-816X, doi: 10.1046/j.0953-816x.2001.01637.x

18) 2001 - Articolo in rivista

G. BIELLA, MEIS S, PAPE HC (2001). Modulation of a CA2+-dependent K+ current by intracellular cAMP in rat thalamocortical relay neurons.. THALAMUS AND RELATED SYSTEMS, vol. 1, p. 157-167, ISSN: 1472-9288, doi: 10.1017/S1472928801000152

17) 2000 - Articolo in rivista

DICKSON CT, G. BIELLA, DE CURTIS M. (2000). Evidence for spatial modules mediated by temporal synchronization of carbachol-induced gamma rhythm in medial entorhinal cortex.. THE JOURNAL OF NEUROSCIENCE, vol. 20, p. 7846-7854, ISSN: 0270-6474

16) 2000 - Articolo in rivista

G. BIELLA, DE CURTIS M (2000). Olfactory inputs activate the medial entorhinal cortex via the hippocampus.. JOURNAL OF NEUROPHYSIOLOGY, vol. 83, p. 1924-1931, ISSN: 0022-3077

15) 2000 - Articolo in rivista

Hofmann U.G., Folkers A., Malina T., Biella G., de Curtis M., DeSchutter R., Yoshida K., Thomas U., Höhl D., Norlin P (2000). TOWARDS A VERSATILE SYSTEM FOR ADVANCED NEURONAL RECORDINGS USING SILICON MULTISITE MICROELECTRODES. BIOMEDIZINISCHE TECHNIK, vol. 45, p. 169-170, ISSN: 0013-5585

14) 1999 - Articolo in rivista

LIBRIZZI L, G. BIELLA, CIMINO C, DE CURTIS M. (1999). Arterial supply of limbic structures in the guinea pig.. JOURNAL OF COMPARATIVE NEUROLOGY, vol. 411, p. 674-682, ISSN: 0021-9967, doi:

10.1002/(SICI)1096-9861(19990906)411:4<674::AID-CNE11>3.0.CO;2-O

13) 1998 - Articolo in rivista

DE CURTIS M, G. BIELLA, BUCCELLATI C, FOLCO G (1998). Simultaneous investigation of the neuronal and vascular compartments in the guinea pig brain isolated in vitro.. BRAIN RESEARCH PROTOCOLS, vol. 3, p. 221-228, ISSN: 1385-299X, doi: 10.1016/S1385-299X(98)00044-0

12) 1998 - Articolo in rivista

DE CURTIS M, MANFRIDI A, G. BIELLA (1998). Activity-dependent pH shifts and periodic recurrence of spontaneous interictal spikes in a model of focal epileptogenesis.. THE JOURNAL OF NEUROSCIENCE, vol. 18, p. 7543-7551, ISSN: 0270-6474

11) 1997 - Articolo in rivista

BUDDE T, G. BIELLA, MUNSCH T, PAPE HC (1997). Lack of regulation by intracellular Ca<sup>2+</sup> of the hyperpolarization-activated cation current in rat thalamic neurones.. THE JOURNAL OF PHYSIOLOGY, vol. 503, p. 79-85, ISSN: 1469-7793, doi: 10.1111/j.1469-7793.1997.079bi.x

10) 1997 - Articolo in rivista

FORTI M, BIELLA G., CACCIA S, DE CURTIS M (1997). Persistent excitability changes in the piriform cortex of the isolated guinea-pig brain after transient exposure to bicuculline. EUROPEAN JOURNAL OF NEUROSCIENCE, vol. 9, p. 435-451, ISSN: 0953-816X

9) 1996 - Articolo in rivista

DE CURTIS M, G. BIELLA, FORTI M (1996). Epileptiform activity in the piriform cortex of the in vitro isolated guinea pig brain preparation.. EPILEPSY RESEARCH, vol. 26, p. 75-80, ISSN: 0920-1211, doi:

10.1016/S0920-1211(96)00042-3

8) 1996 - Articolo in rivista

MEIS S, G. BIELLA, PAPE HC. (1996). Interaction between low voltage-activated currents in reticular thalamic neurons in a rat model of absence epilepsy.. EUROPEAN JOURNAL OF NEUROSCIENCE, vol.

10, p. 2090-2097, ISSN: 0953-816X

7) 1996 - Articolo in rivista

G. BIELLA, FORTI M, DE CURTIS M (1996). Propagation of epileptiform potentials in the guinea-pig piriform cortex is sustained by associative fibres.. EPILEPSY RESEARCH, vol. 24, p. 137-146, ISSN:

0920-1211, doi: 10.1016/0920-1211(96)00014-9

6) 1996 - Articolo in rivista

BIELLA G., PANZICA F, DE CURTIS M (1996). Interactions between associative synaptic potentials in the piriform cortex of the in vitro isolated guinea pig brain. EUROPEAN JOURNAL OF NEUROSCIENCE, vol. 8, p. 1350-1357, ISSN: 0953-816X

5) 1995 - Articolo in rivista

BIELLA G., DE CURTIS M. (1995). Associative synaptic potentials in the piriform cortex of the isolated guinea-pig brain in vitro. EUROPEAN JOURNAL OF NEUROSCIENCE, vol. 7, p. 54-64, ISSN: 0953-816X

4) 1994 - Articolo in rivista

DE CURTIS M, BIELLA G., FORTI M, PANZICA F (1994). Multifocal spontaneous epileptic activity induced by restricted bicuculline ejection in the piriform cortex of the isolated guinea pig brain. JOURNAL OF NEUROPHYSIOLOGY, vol. 71, p. 2463-2476, ISSN: 0022-3077

3) 1994 - Articolo in rivista

BERTOLLINI L, BIELLA G., WANKE E, AVANZINI G, DE CURTIS M. (1994). Fluoride reversibly blocks HVA calcium current in mammalian thalamic neurones. NEUROREPORT, vol. 5, p. 2463-2476, ISSN: 0959-4965

2) 1993 - Articolo in rivista

PANZICA F., DE CURTIS M., G. BIELLA, AVANZINI G. (1993). Applicazione della metodica della "current source density analysis" nello studio della generazione di risposte evocate nelle strutture limbiche. RIVISTA DI NEUROBIOLOGIA, vol. 39, p. 299-302, ISSN: 0035-6336

1) 1992 - Articolo in rivista

WANKE E., BECCHETTI A., G. BIELLA, DEL BO R., FERRONI A (1992). A quantitative description of low- and high-threshold Ca<sup>2+</sup> spikes in rat sensory neurons: a perforated-patch study.. EUROPEAN JOURNAL OF NEUROSCIENCE, vol. 4, p. 723-732, ISSN: 0953-816X, doi:10.1111/j.1460-9568.1992.tb00181.x

Da Google Scholar

Citations 2080

h-index 22

i10-index 31

### **Capitoli di libro:**

3) 2011 - Contributo in volume (Capitolo o Saggio)

Egidio Ugo D'Angelo, Antonio Perese, Rita Bardoni, Gerardo Rosario Biella, Albertino Bigiani, Marianna Crispino, Egidio D'Angelo, Maria Egle De Stefano, Carla Distasi, Riccardo Fesce, Fabio Franciolini, Stefania Fulle, Renzo Levi, Guido Li Volsi, Maria Giulia Lionetto, Vincenzo Lombardi, Emilio Macchi, Daniela Negrini, Silvio Palmero, Antonio Peres, Paola Perin, Corrado Poggesi, Giorgio Rispoli, Paola Rossi, Vellea Franca Sacchi, Trifone Schettino, Rosa Serio, Giovanna Valenti, Vittorio Vellani, Antonio Zaza, Michele Zoli (2011). Fisiologia - Cap 14 Funzioni nervose centrali. In: Egidio D'Angelo, Antonio Peres. Fisiologia. p. 421-483, milano:EdiErmes, ISBN: 9788870513783

2) 2006 - Contributo in volume (Capitolo o Saggio)

Anna Maria Angioy, Rita Bardoni, Albertino Bigiani, Marcello Brunelli, Antonio Contestabile, Marianna Crispino, Egidio D'Angelo, Fabio Franciolini, Emilia Fugassa, Stefania Fulle, Antonio Giuditta, Renzo Levi, Maria Giulia Lionetto, Vincenzo Lombardi, Emilio Macchi, Daniela Negrini, Paola Paggi, Silvio Palmero, Antonio Peres, Marco Piccolino, Corrado Poggesi, Giorgio Rispoli, Paola Rossi, Vellea Franca Sacchi, Trifone Schettino, Rosa Serio, Giovanna Valenti, Vittorio Vellani, Antonio Zaza, Gerardo Rosario Biella (2006). Fisiologia - Molecole, cellule e sistemi Cap 20 Funzioni nervose centrali. In: Egidio D'Angelo, Antonio Peres. Fisiologia - Molecole, cellule e sistemi. vol. 2, p. 245-342, MILANO:EDIERMES, ISBN: 8870512983

1) 2002 - Contributo in volume (Capitolo o Saggio)

de Curtis Marco, Biella Gerardo (2002). Communication between subregions of the parahippocampal region. In: Witter Menno, Wouterlood Floris. The Parahippocampal Region Organization and Role in Cognitive Function. p. 107-126, OXFORD:Oxford University Press, ISBN: 9780198509172, doi:

10.1093/acprof:oso/9780198509172.003.0006