

DAVIDE ANTONIO RAGOZZINO

Curriculum Vitae

Place ROMA
Date 4/4/2017

Part I – General Information

Full Name	DAVIDE ANTONIO RAGOZZINO
Date of Birth	=====
Place of Birth	=====
Citizenship	ITALIAN
Permanent Address	=====
Mobile Phone Number	=====
E-mail	=====
Spoken Languages	English, French

Part II – Education

Type	Year	Institution	Notes (Degree, Experience,...)
University graduation	1990	University Tor Vergata Roma	Biology, 110/110 cum Laude
Post-graduate studies			
PhD	1995	University of l'Aquila	Biotechnology
Specialty			
Pre-doctorate training			
Licensure 01			
Licensure 02			

Part III – Appointments

IIIA – Academic Appointments

Start	End	Institution	Position
2006	present	University La Sapienza Roma	Associate Professor/ Group leader
1995	2006	University La Sapienza Roma	Assistant Professor
1993	1994	Inserm U29-Paris	Research fellow
1990	1993	Lab of Biophysics, Istituto Regina Elena Rome	Predocctoral fellow
1994	1995		

IIIB – Other Appointments

Start	End	Institution	Position
2017		Doctorat en Neurosciences- Faculty of	-

		Medicine, Aix-Marseille University - Bogomoletz Institute of Physiology	President of the final evaluation Board -
2010	2016	University La Sapienza	Academic Senate Member (2 terms)
		Doctorate in Neurophysiology "Sapienza" University of Rome	Board Member
2011	2014	University La Sapienza Faculty of Pharmacy and Medicine	Council Member
2006	2012	University La Sapienza-CdL Applied Pharmaceutical Sciences (SFA)	Secretary CdL
2003		l'Institut de Neurobiologie de la Méditerranée, Marseille, 09/03.	Scientific Exchange CNR-Inserm 2003-2004
2002		l'Institut de Neurobiologie de la Méditerranée Marseille, 7-8/02.	Scientific Exchange CNR-Inserm 2002-2003

President of final commission of evaluation of the Doctorat: Neurosciences- Faculty of Medicine of Aix-Marseille University -Bogomoletz Institute of Physiology, Kiev, January the 31th 2017.

Part IV – Teaching experience

Year	Institution	Lecture/Course
2016-	University La Sapienza-Faculty of Pharmacy and Medicine	Human Physiology, DU Nurse S.Spirito
2012-	University La Sapienza-Faculty of Medicine	Human Physiology, CdL Medicine and Surgery «B» , Coordinator
2013-	University La Sapienza-Faculty of Pharmacy and Medicine	Human Physiology, CdL Biotechnology, Coordinator (until 2015)
2014-	University La Sapienza-Faculty of Pharmacy and Medicine	Physiology, CdL Orthoptics
2010-2012	University La Sapienza-Faculty of Pharmacy and Medicine	Physiology-CdL SFA, CdL Biotechnology, Coordinator
2006-2010	University La Sapienza-Faculty of Pharmacy	Physiology-CdL ISF, CdL Biotechnology
2001-2005	University La Sapienza- II Faculty of Medicine and Surgery	Human Physiology-CdL Medicine and Surgery
2000-2001	University La Sapienza- II Faculty of Medicine and Surgery	Human Physiology- DU Nurse, Lab technician, Physiotherapist
1999-2000	University La Sapienza- Istituto Regina Elena	Human Physiology, DU Nurse
1995-1999	University La Sapienza, Faculty of Medicine and Surgery, DU Nurse S. Camillo; Forlanini; Istituto Regina Elena, Roma	Human Physiology and Biophysics: exercises, tutorials and teaching support to students; participation as a member of the examination committee.

Students and pupils

Post docs

- Silvia Di Angelantonio, 2001-2005, present position Research Assistant Physiology University Sapienza
- Sonia Piccinin, 2008-2009; present position postdoc EBRI foundation, Rome
- Cristina Bertollini, 2009-2011; present position post doc Geneva University
- Francesca Pagani, 2011-2013; present position post doc IIT, Rome

Students:

- Bernadette Basilico PhD Neuroscience University Sapienza, 2014-2017
- Emanuele Murana Neurobiology 2010-2011; PhD Neurophysiology University Sapienza 2011-2014, present position post doc University of Verona
- Massimiliano Renzi, PhD Neurophysiology University Sapienza, 2000-2002; present position Research Assistant Physiology University Sapienza
- Eloisa Pellegrino, Neurobiology, University Sapienza 2014-2015, present position, postgraduate fellowship, Faculty of Medicine, University Paris Descartes.
- Nike Giordano, Biotechnology, University Sapienza 2014-2015
- Caterina Giordano, Neurobiology, University Sapienza 2012-2013
- Valentina Zambito ISF, University Sapienza 2009-2010
- Emanuele Zurolo, Neurobiology, University Sapienza 2007-2008, present position: PhD Academic Medical Center (AMC) Amsterdam 2009-2013: The role of astrocytes in the etiopathology of epilepsy.
- Valentina Tesori, Biological sciences, University Roma Tre

Trainees

- Auguste Valdisiute, Vilnius University, Erasmus+ mobility, 2016
- Sarah Garnier, Université de Poitiers - Faculté des Sciences Fondamentales et Appliquées, training agreement, 2014
- Antonietta Sucapane, Università Sapienza, postdoc training 2007

Part V - Society memberships, Awards and Honors

Year	Title
2003-	Italian Physiological Society (SIF)

Part VI - Funding Information [grants as PI-principal investigator or I-investigator]

Year	Title	Program	Grant value
2015	Neuronal-microglial signaling in synaptic development	Sapienza Grandi progetti 12 mesi	28.000 euro
2009	Studio degli effetti comportamentali, biochimici ed elettrofisiologici dell'espressione del frammento neurotossico 26-230 della proteina Tau	PRIN (Responsabile Unità operativa; 24 mesi)	64.500 euro
2001	Analisi biochimica, elettrofisiologica, anatomica e	FIRB Progetti Negoziali 2001 (Responsabile Unità)	182.800 euro

	comportamentale di topi geneticamente modificati nella via di trasduzione del segnale sinaptico Ras/MAPK	operativa; 36 mesi)	
Other projects			
2014	Neuroplasticità: dalle molecole al comportamento	Sapienza Congressi e convegni	2000 euro
2011	Microglial functional properties in development and aging	Sapienza <i>FARI</i>	7000 euro
2009	Regolazione delle proprietà della elettrofisiologiche e funzionali della microglia nell'ippocampo di topo da parte della chemochina CX3CL1 e del suo recettore CX3CR1	Sapienza Ateneo Federato SPPS	1100 euro
2008	Regulation of microglial properties by fractalkine	Sapienza Ateneo Federato SPPS	1000 euro
2007	Regulation of glutamatergic synaptic transmission by fractalkine	Sapienza Ateneo Federato SPPS	950 euro
2006	Gutierrez Rafael	Visiting Professor	3800 euro
2006	Regolazione della trasmissione sinaptica glutamatergica nel sistema nervoso centrale da parte di chemochine	Sapienza Facoltà di Farmacia	500 euro
2005	Ruolo delle chemochine nella regolazione della trasmissione sinaptica glutamatergica	Sapienza Facoltà di Farmacia	1500 euro
2003	Analisi elettrofisiologica e comportamentale di topi geneticamente modificati nella via di trasduzione Ras/MAPK	Sapienza Facoltà di Farmacia	3100 euro
2001	Ruolo funzionale dei recettori nicotinici nella trasmissione sinaptica centrale	Sapienza progetto Facoltà	7.000.000 lire

Part VII – Research Activities

Personal Statement

One of my long-standing interests lies in the modulatory role of chemokines in synaptic transmission. More particularly, I am coordinating a small research group with extensive experience in studying the role CX3CL1 signaling in synaptic plasticity and using this expertise to address questions related to microglia physiology and to the impact of microglia on neurodevelopment and synaptic function. This interest and my experience in synaptic physiology allowed the study of microglia-mediated pruning in hippocampal development. I am using advanced electrophysiological, fluorescence and confocal analysis in hippocampal slices from mice defective in neuron-microglia signaling, to understand the contribution of microglia-neuron interactions to the maturation of synaptic transmission.

Current Research Interests

- Chemokines and neuron-glia interactions in the central nervous system

- Microglia functional properties and synaptic circuit development and plasticity
- Microglial ionic channels
- Microglia functions in disease

Keywords	Brief Description
Synaptic transmission	Study of synaptic physiology in rodent and human slices
GABA/glutamate -	Gabaergic and glutamatergic neurotransmission: neurotransmitters, receptors and synapses
Chemokines	Neuromodulatory role of chemokines in the central nervous system
Fractalkine/CX3CL1	CX3CL1/CX3CR1 axis in neuron microglia signaling
Microglia -	Microglia functional properties in health and disease; role of microglia in synaptic development and plasticity

Main contribution to Science

Microglial role in synaptic pruning during development. The applicant contributed to the understanding of microglia developmental pruning in hippocampal development. Studies on CX3CR1 ko mice contributed to highlight of CX3CL1/CX3CR1 signaling on microglial physiology and its impact on postnatal synaptic refinement in mice. The absence of CX3CR1 causes profound changes in synaptic properties which do not recover in the adult and are associated to impairment in social behavior.

- Batti L et al. TMEM16F Regulates Spinal Microglial Function in Neuropathic Pain States. *Cell Reports*. Jun 21; 15(12):2608-15, 2016
- Pagani F et al. Defective microglial development in the hippocampus of CX3CR1 deficient mice. *Front Cell Neurosci*. Mar 31; 9:111, 2015.
- Zhan Y et al. Deficient neuron-microglia signaling results in impaired functional brain connectivity and social behavior. *Nat Neurosci*. 17(3):400-6, 2014.
- Paolicelli RC et al. Synaptic pruning by microglia is necessary for normal brain development. *Science*. 333(6048):1456-8, 2011.

Role of neuronal chloride equilibrium in neuronal hyperexcitability.

The applicant contributed to the determination of the role of chloride disequilibrium, and in particular of chloride transporter dysfunction, in epileptogenesis. Studies on glioma-neuron interactions provided an explanation of the unknown mechanisms by which glioma cells affect neuronal chloride equilibrium, suggesting a sequence of events leading to the development of epileptic seizures in the brain of glioma patients. Glutamate released by glioma cells causes the increase of neuronal intracellular zinc, leading to KCC2 dysfunction in neurons, consequent change in the chloride equilibrium and impairing the inhibitory transmission in the peritumoral region.

- Di Angelantonio S et al. A role for intracellular zinc in glioma alteration of neuronal chloride equilibrium. *Cell Death Dis*. 48(11):1300-10, 2014.
- Bertollini C et al. Transient increase in neuronal chloride concentration by neuroactive aminoacids released from glioma cells. *Front Mol Neurosci*. 5:100, 2012.
- Palma E et al. Anomalous levels of Cl⁻ transporters in the hippocampal subiculum from temporal lobe epilepsy patients make GABA excitatory. *Proc. Natl. Acad Sci. USA* 103(22): 8465-8, 2006.

Characterization of neuromodulatory and neuroprotective action of fractalkine in the rat hippocampus

The applicant significantly contributed to the establishment and characterization of the role of CX3CL1 (fractalkine) as a neuromodulatory messenger in the brain. In particular electrophysiological studies in hippocampal slices and cultures lead to the understanding of the actions of soluble fractalkine on glutamatergic transmission, disclosing a complex pathway involving the release of adenosine from microglial cells and opening a new avenue of multiple postsynaptic modulation by adenosine receptor stimulation.

- Di Angelantonio S et al. Basal adenosine modulates the functional properties of AMPA receptors in mouse hippocampal neurons through the activation of A1R A2AR and A3R. *Front Cell Neurosci.* 9:409, 2015.
- Piccinin S et al. CX3CL1-induced modulation at CA1 synapses reveals multiple mechanisms of EPSC modulation involving adenosine receptor subtypes. *Journal of Neuroimmunology* 224(1-2):85-92, 2010.
- Lauro C et al. Activity of adenosine receptors type 1 is required for CX3CL1-mediated neuroprotection and neuromodulation in hippocampal neurons. *Journal of Immunology.* 180(11):7590-6, 2008.
- Ragozzino D et al. Chemokine Fractalkine/CX3CL1 negatively modulates active glutamatergic synapses in rat hippocampal neurons. *Journal of Neuroscience* 26: 10488-10498, 2006.
- Bertollini C et al. Fractalkine/CX3CL1 depresses central synaptic transmission in mouse hippocampal slices. *Neuropharmacology* 51(4): 816-21, 2006.

Electrophysiological properties of GABAA receptors in brain slices from patients suffering from temporal lobe epilepsy (TLE).

The applicant contributed to the understanding of GABAAR dysfunction in TLE patients. This research line allowed to correlate the basal mechanisms of GABAergic neurotransmission with clinical aspects. The functional properties of GABAA receptors in neurons and glial cells, and particularly the use-dependent rundown of GABA current and its regulation by phosphatases has been characterized (run-down) (20, 21, 24, 25, 28), by means of pioneering applying studies patch clamp technique on acute slices from human cerebral tissue from surgical resection, in TLE patients.

- Palma E et al. The antiepileptic drug levetiracetam stabilizes the human epileptic GABAA receptors upon repetitive activation. *Epilepsia* 48(10):1842-9, 2007.
- Ragozzino D et al. Run-down of GABAA-receptors is a dysfunction associated with human drug-resistant mesial temporal lobe epilepsy. *Proc. Natl. Acad. Sci. USA* 102(42):15219-23, 2005.
- Palma E et al. Abnormal GABAA receptors from the human epileptic hippocampal subiculum microtransplanted to *Xenopus* oocytes. *Proc Natl Acad Sci U S A* 102(7):2514-8, 2005.
- Palma E et al. Phosphatase inhibitors remove the run-down of γ -aminobutyric acid type A receptors in the human epileptic brain. *Proc. Natl. Acad. Sci. USA* 101:10183-88, 2004.

Neuromodulation and synaptic plasticity in the CNS: the role of chemokines

The applicant significantly contributed to the first studies on the neuromodulatory role of chemokines, which were carried out mainly by electrophysiological and fluorescence using acute slice of cerebral tissue or neuronal cultures leading to the following results:

Effects of cytokines and chemokines on plasticity mechanisms in the hippocampus; Characterization of the presence and functionality of chemokines receptors in the cerebellum. Effects of GRO α , GRO β , SDF-1, CXCL16: functional modulation of glutamate receptors, basal synaptic activity and plasticity and neuroprotection.

- Di Castro MA et al. The chemokine CXCL16 modulates neurotransmitter release in hippocampal CA1 area. *Scientific Reports.* 6:34633, 2016.

- Ragozzino, D. et al. Stimulation of chemokine CXC receptor 4 induces synaptic depression of evoked parallel fibers inputs onto Purkinje neurons in mouse cerebellum. *Journal of Neuroimmunology* 127(1-2):30-6, 2002.
- Limatola, C. et al. The chemokine growth-related gene product protects rat cerebellar granule cells from apoptotic cell death through α -amino-3-hydroxy-5-methyl-4-isoxazolepropionate receptors. *Proc. Natl. Acad. Sci. USA.* 97.11: 6197-6201, 2000.
- Limatola, C. et al. SDF-1 α -mediated modulation of synaptic transmission in rat cerebellum. *European Journal of Neuroscience.* 12: 1-8, 2000.
- Giovannelli, A. et al. CXC chemokines interleukin-8 (IL-8) and growth-related gene product (GRO) modulate Purkinje neuron activity in mouse cerebellum. *Journal of Neuroimmunology*, 92: 122-132, 1998.

Invited presentations

Microglia shape presynaptic properties at glutamatergic CA1 synapses. 23rd Scientific Conference, Society for Neuroimmune Pharmacology, SNIP, Philadelphia, march 29- april 1 2017.

Involvement of microglia and CX3CL1/CX3CR1 signaling in hippocampal synaptic development, september 2016, 67th SIF National Congress Italian Physiological Society, Catania.

CX3CL1-CX3CR1 signaling and microglial regulation of glutamatergic synapses in mouse hippocampus, March 2016, Istituto di Neuroscienze CNR, Via Vanvitelli, Milano

Microglia and brain development. PhD Program in Neuroscience Doctoral School in Life and Health Sciences, NENS Course, Department of Life Sciences and Systems Biology Torino, september 22-26 2014

CX3CL1-CX3CR1 signaling and microglial regulation of glutamatergic synapses in mouse hippocampus, Humanitas, Milano 11 July 2014

Teaching at "Live cell imaging and electrophysiology workshop". Hellenic Pasteur Institute Athens 1-4 october 2013

Glioma cells alter neuronal chloride equilibrium through glutamate release.

INSERM U 1106, Epilepsy and Cognition, Brain Dynamics Institute, Aix-Marseille University, Marseille 23 may 2013

Effects of CX3CL1 on the properties of microglial cells in mouse hippocampus 2nd Workshop "chemokines and Chemokine receptors in the Nervous System" Roma, 24-25 October 2009.

Effects of CX3CL1-CX3CR1 signaling on the functional properties of microglial cells in hippocampal acute slices from developing mice. Società Italiana di Fisiologia, Siena 23-25 september 2009

Chemokine fractalkine/CX3CL1 negatively modulates active glutamatergic synapses in rat hippocampal neurons. Seminario su invito, Dipartimento di Scienze Biomediche, University of Modena and Reggio Emilia, June 2007.

Modulation of synapses in rat hippocampal neurons by fractalkine/CX3CL1. Seminario su invito, Dipartimento di Genetica e Biologia Molecolare "Charles Darwin", University Sapienza, Roma, december 2006.

Regulation of glutamatergic transmission by chemokines. Congresso della Società Italiana di Fisiologia, Ravenna 25-27 september 2006.

Depolarization-induced Ca²⁺ influx modulates glycinergic synaptic current in rat hypoglossal motoneurons. Meeting of the Physiological Society, London december 2002; Proceedings of the Physiological Society 547.P: 19P, 2003.

Ca²⁺ permeability of nicotinic acetylcholine receptors expressed in transiently transfected human cells. Neuronal Nicotinic receptors: from structure to therapeutics. Venezia, october 1-4 1999.

Part VIII – Summary of Scientific Achievements

Product type	Number	Data Base	Start	End
Papers [international]	47	ISIweb; Scopus; Pubmed	1991	2016
Papers [national]				
Books [scientific]	1*		2009	
Books [teaching]				

Book chapters:

*Ragozzino D, Lauro C, Limatola C. Role of CX3CL1 in synaptic activity and neuroprotection in Chemokine receptors and neuroAIDS: Beyond the co-receptor function and links to other neuropathologies, Olimpia Meucci Ed. Springer, 2009

<https://www.ncbi.nlm.nih.gov/pubmed/?term=ragozzino+D>

H10 (papers of the last 10 years)	10°
Hirsch (H) index	28°
Number of indexed papers in last 12 years	27°
Impact factor last 12 years	198,793
Total Citations	2534°
Total Impact factor	282,02
Average Citations per Product	53.9
Normalized H index*	1.08

*H index divided by the academic seniority.

°**Web of Science april 2017**

Part IX– Full list of the Publications (1991-2016)

- 1) Electrophysiological Properties of CA1 Pyramidal Neurons along the Longitudinal Axis of the Mouse Hippocampus. Milior G, Castro MA, Sciarria LP, Garofalo S, Branchi I, **Ragozzino D**, Limatola C, Maggi L. *Scientific Reports*. 2016 Dec 6;6:38242. **I.F. 5.47**
- 2) The chemokine CXCL16 modulates neurotransmitter release in hippocampal CA1 area. Di Castro MA, Trettel F, Milior G, Maggi L, **Ragozzino D**, Limatola C. *Scientific Reports*. 2016 Oct 10;6:34633. doi: 10.1038/srep34633. **I.F. 5.47**
- 3) TMEM16F Regulates Spinal Microglial Function in Neuropathic Pain States. Batti L, Sundukova M, Murana E, Pimpinella S, De Castro Reis F, Pagani F, Wang H, Pellegrino E, Perlas E, Di Angelantonio S, **Ragozzino D**, Heppenstall PA. *Cell Reports*. 2016 Jun 21; 15(12):2608-15. doi: 10.1016/j.celrep.2016.05.039. **I.F. 7.87**

- 4) KCa3.1 channel inhibition sensitizes malignant gliomas to temozolomide treatment. D'Alessandro G, Grimaldi A, Chece G, Porzia A, Esposito V, Santoro A, Salvati M, Mainiero F, **Ragozzino D**, Di Angelantonio S, Wulff H, Catalano M, Limatola C. *Oncotarget*. 2016 May 24;7(21):30781-96. doi: 10.18632/oncotarget.8761. **I.F. 6.359**
- 5) KCa3.1 inhibition switches the phenotype of glioma-infiltrating microglia/macrophages. Grimaldi A, D'Alessandro G, Golia MT, Grössinger EM, Di Angelantonio S, **Ragozzino D**, Santoro A, Esposito V, Wulff H, Catalano M, Limatola C. *Cell Death and Disease*. 2016 Apr 7; 7:e2174. doi: 10.1038/cddis.2016.73. **I.F. 5.378** **1 citation**
- 6) Di Angelantonio S, Bertollini C, Piccinin S, Rosito M, Trettel F, Pagani F, Limatola, **Ragozzino D**. Basal adenosine modulates the functional properties of AMPA receptors in mouse hippocampal neurons through the activation of A1R A2AR and A3R. *Front Cell Neurosci*. 9:409, 2015. doi:0.3389/fncel.2015.00409. **IF 4.29** **1 citation**
- 7) Pagani F, Paolicelli RC, Murana E, Cortese B, Angelantonio SD, Zurolo E, Guiducci E, Ferreira TA, Garofalo S, Catalano M, D'Alessandra G, Porzia A, Peruzzi G, Mainiero F, Limatola C, Gross CT, **Ragozzino D**. Defective microglial development in the hippocampus of Cx3cr1 deficient mice. *Front Cell Neurosci*. 2015 Mar 31; 9:111. doi: 10.3389/fncel.2015.00111. **I.F. 4.2** **3 citations**
- 8) Di Angelantonio S, Murana E, Cocco S, Scala F, Bertollini C, Molinari MG, Lauro C, Bregestovski P, Limatola C, **Ragozzino D**. A role for intracellular zinc in glioma alteration of neuronal chloride equilibrium. *Cell Death Dis*. 2014 Oct 30;5:e1501. **I.F. 5.117** **4 citations**
- 9) Zhan Y, Paolicelli RC, Sforazzini F, Weinhard L, Bolasco G, Pagani F, Vyssotski AL, Bifone A, Gozzi A, **Ragozzino D**, Gross CT. Deficient neuron-microglia signaling results in impaired functional brain connectivity and social behavior. *Nat Neurosci*. 2014;17(3):400-6. doi: 10.1038/nn.364. **IF 14.976** **151 citations**
- 10) Silva BA, Mattucci C, Krzywkowski P, Murana E, Illarionova A, Grinevich V, Canteras NS, **Ragozzino D**, Gross CT. Independent hypothalamic circuits for social and predator fear. *Nat Neurosci*. 2016(12):1731-3, 2013. **IF 14.976** **40 citations**
- 11) Catalano M, Lauro C, Cipriani R, Chece G, Ponzetta A, Di Angelantonio S, **Ragozzino D**, Limatola C. CX3CL1 protects neurons against excitotoxicity enhancing GLT-1 activity on astrocytes. *J Neuroimmunol*. 263(1-2):75-82. 2013. **IF 2.786** **10 citations**
- 12) Bertollini C, Murana E, Mosca L, D'Erme M, Scala F, Francioso A, Catalano M, Limatola C, Bregestovski P, Di Angelantonio S, **Ragozzino D**. Transient increase in neuronal chloride concentration by neuroactive aminoacids released from glioma cells. *Front Mol Neurosci*.5:100, 2012. **I.F. 4.1** **4 citations**
- 13) Paolicelli RC, Bolasco G, Pagani F, Maggi L, Scianni M, Panzanelli P, Giustetto M, Ferreira TA, Guiducci E, Dumas L, **Ragozzino D**, Gross CT. Synaptic pruning by microglia is necessary for normal brain development. *Science*. 333(6048):1456-8, 2011. **I.F. 31.201** **584 citations ****
- 14) Gozzi A, Jain A, Giovannelli A, Bertollini C, Crestan V., Schwarz AJ, Tsetsenis T, Ragozzino D, Gross CT, Bifone A. A neural switch for active and passive fear. Neuron Gozzi A, Jain A, Giovannelli A, Bertollini C, Crestan V, Schwarz AJ, Tsetsenis T, **Ragozzino D**, Gross CT, Bifone A. *Neuron* 67(4):656-666, 2010. **I.F. 14.027** **67 citations**
- 15) Piccinin S, Di Angelantonio S, Piccioni A, Volpini R, Cristalli G, Fredholm BB, Limatola C, Eusebi F, **Ragozzino D**. CX3CL1-induced modulation at CA1 synapses reveals multiple mechanisms of EPSC modulation involving adenosine receptor subtypes. *Journal of Neuroimmunology* 224(1-2):85-92, 2010. **I.F. 2.901** **24 citations**
- 16) Sciacaluga M, Fioretti B, Catacuzzeno L, Pagani F, Bertollini C, Rosito M, Catalano M, D'Alessandro G, Santoro A, Cantore G, **Ragozzino D**, Castigli E, Franciolini F, and Limatola C. CXCL12-induced glioblastoma cell migration requires intermediate-conductance Ca²⁺-activated K⁺ channel activity. *American Journal of Physiology* 299(1):C175-84, 2010. **I.F. 4.068** **51 citations**

- 17) Fioretti B, Catacuzzeno L, Sforza L, Aiello F, Pagani F, **Ragozzino D**, Castigli E, Franciolini F. Histamine hyperpolarizes human glioblastoma cells by activating the intermediate-conductance Ca²⁺-activated K⁺ channel. *American Journal of Physiology* 297(1): C102-10, 2009. I.F. **4.013**
17 citations
- 18) Griguoli M, Scuri R, **Ragozzino D**, Cherubini E. Activation of nicotinic acetylcholine receptors enhances a slow calcium-dependent potassium conductance and reduces the firing of stratum oriens interneurons. *European Journal of Neuroscience* 30(6):1011-22, 2009 I.F. **3.418** **7 citations**
- 19) Lauro C, Di Angelantonio S, Cipriani R, Sobrero F, Antonilli L, Brusadin V, **Ragozzino D**, Limatola C. Activity of adenosine receptors type 1 Is required for CX3CL1-mediated neuroprotection and neuromodulation in hippocampal neurons. *Journal of Immunology*. 180(11):7590-6, 2008 I.F. **6.0** **53 citations**
- 20) Palma E, **Ragozzino D**, Di Angelantonio S, Mascia A, Maiolino F, Manfredi M, Cantore G, Esposito V, Di Gennaro G, Quarato P, Miledi R, Eusebi F. The antiepileptic drug levetiracetam stabilizes the human epileptic GABAA receptors upon repetitive activation. *Epilepsia* 48(10):1842-9, 2007. I.F. **3.569** **24 citations**
- 21) **Ragozzino D**, Di Angelantonio S, Trettel F, Bertollini C, Maggi L, Gross C, Charo IF, Limatola C & Eusebi, F. Chemokine Fractalkine/CX3CL1 Negatively Modulates Active Glutamatergic Synapses in Rat Hippocampal Neurons. *Journal of Neuroscience* 26: 10488-10498, 2006. I.F. **7.453**
52 citations
- 22) Bertollini C, **Ragozzino D**, Gross C, Limatola C & Eusebi F. Fractalkine/CX3CL1 depresses central synaptic transmission in mouse hippocampal slices. *Neuropharmacology* 51(4): 816-21, 2006. I.F. **3.86** **34 citations**
- 23) Palma E, Amici M, Sobrero F, Spinelli G, Di Angelantonio S, **Ragozzino D**, Mascia A, Scoppetta C, Esposito V, Miledi R & Eusebi F. Anomalous levels of Cl⁻ transporters in the hippocampal subiculum from temporal lobe epilepsy patients make GABA excitatory. *Proc. Natl. Acad Sci. USA* 103(22): 8465-8, 2006. I.F. **9.643** **139 citations**
- 24) **Ragozzino D**, Palma E, Di Angelantonio S, Amici M, Mascia A, Arcella A, Giangaspero F, Cantore G, Di Gennaro G, Manfredi M, Esposito V, Quarato PP, Miledi R & Eusebi F. Run-down of GABAA-receptors is a dysfunction associated with human drug-resistant mesial temporal lobe epilepsy. *Proc. Natl. Acad Sci. USA* 102(42):15219-23, 2005. I.F. **10.231** **30 citations**
- 25) °°Mukhtarov, M., °°**Ragozzino, D.**, Bregestovski Dual Ca²⁺ modulation of glycinergic synaptic currents in rodent hypoglossal motoneurons. *Journal of Physiology* 569.3: 817-831, 2005. I.F. **4.272** °° Equal contribution **32 citations**
- 26) Limatola C, Lauro C, Catalano M, Ciotti MT, Bertollini C, Di Angelantonio S, **Ragozzino D**, Eusebi F. Chemokine CX3CL1 protects rat hippocampal neurons against glutamate-mediated excitotoxicity. *Journal of Neuroimmunology*. 166(1-2):19-28, 2005. I.F. **2.824** **84 citations**
- 27) Palma E, Spinelli G, Torchia G, Martinez-Torres A, **Ragozzino D**, Miledi R, Eusebi F. Abnormal GABAA receptors from the human epileptic hippocampal subiculum microtransplanted to Xenopus oocytes. *Proc Natl Acad Sci U S A* 102(7):2514-8, 2005. I.F. **10.231** **27 citations**
- 28) Palma E., **Ragozzino D.** A., Di Angelantonio S., Spinelli G., Trettel F., Martinez-Torres A., Torchia G., Arcella A., Di Gennaro G., Quarato P. P., Esposito V., Cantore G., Miledi R., and Eusebi F. Phosphatase inhibitors remove the run-down of γ -aminobutyric acid type A receptors in the human epileptic brain. *Proc. Natl. Acad Sci. USA* 101:10183-88, 2004. I.F. **10.452** **30 citations**
- 29) **Ragozzino, D.** CXC chemokine receptors in the CNS: role in cerebellar neuromodulation and development. *Journal of Neurovirol.* 8:559-572, 2002. I.F. **1.858** **35 citations**
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1991-2016 47 papers Total IF 282,02 Total citations 2534 H-index 28

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