



Europass Curriculum Vitae

Personal information

First name(s) / Surname(s) **Michele Mazzanti**
Address(es) Dept. Bioscience, Via Celoria 26, 20133 Milano
E-mail michele.mazzanti@unimi.it
Nationality Italian
Gender male

Desired employment / Occupational field

Work experience

June 1988 Research Assoc., Dept. of Anatomy & Cell Biology, Emory University, Atlanta, GA, USA.
November 1988 Assistant Professor, Dept. of Anatomy & Cell Biology, Emory University, Atlanta, GA, USA.
June 1989 Associate Professor, Dept. of Anatomy & Cell Biology, Emory University, Atlanta, GA, USA.
February 1990: invited speaker "Ion channels in intracellular membranes", San Francisco, USA.
March 1990 Assistant Professor, Dept. of Physiology and Biochemistry, Milano State University, Milano, Italy.
June 1990: invited speaker Congresso Italiano di Biofisica, Marciana Marina, Isola d'Elba.
August 1990 Visiting Professor, Dept. of Anatomy & Cell Biology, Emory University, Atlanta, GA, USA.
September 1990 Visiting Professor, Dept. of Physiology, Bogolmez Institute, Kiev, Ukraina
April 1992 Physiological Society Award
April 1993: invited speaker: "Ion channel in intracellular membrane". Trieste, Italy. March 1994: invited speaker: "Biophysical Society", New Orleans, USA.
April/May 1995: invited speaker FEBS: "Single cell techniques in signal transduction research", Amsterdam NL.
October 1995 Visiting Professor, Dept. of Anatomy & Cell Biology, Emory University, Atlanta, GA, USA.
June 1996: invited speaker "Methodology in lab research". Modena, Italy.
October-December1996 Visiting Professor, Institute of Physiology, Wuerzburg, Germany
April/May 1997: invited speaker FEBS: "Single cell techniques in signal transduction research", Amsterdam NL July 1997: Histology Seminar, Université de Freiburg, Freiburg, CH.
August 1997-January1998 Visiting Professor, University of South Wales, Sydney, Australia
March 1998: International supervisor PhD. Thesis Paukine Liu, Hong Kong University, Hong Kong.
October 1998: Supervisor PhD. Thesis Dr.sa Roberta Assandri, Dept. of Physiology Zurich University, CH.
November 1998 Associate Professor, Dept. of Cell and Dev. Biology, University "La Sapienza" Roma, Italy June 1999: member International Committee II Meeting FEPS, Praga, CK.
November 2001 Full Professor, Dept. of Cell and Dev. Biology, University "La Sapienza" Roma, Italy April 2003: invited speaker Dept. Physiology UCL London UK.
October 2003: invited speaker of Botany Darmstadt University of Technology, Germany
May 2004: invited speaker Dip di Scienze Biomolecolari e Biotecnologie, Università di Milano Italy
March 2005: invited speaker Center for Neurodegenerative Disease, Emory University, Atlanta USA
November 2006: Full Professor Dip di Scienze Biomolecolari e Biotecnologie, Università di Milano Italy
October 2006-dicember 2007 Visiting Professor Dept. Physiology UCL London UK
October 2007: Joint Italian-Spanish Summer School in Biophys. and Biomol. Bertinoro , Italy
September 201 Visiting Scientist IFOM, Milano, Italy

Occupation or position held	<p>2011- Visiting Scientist IFOM Campus, Milan</p> <p>2007-208 Visiting Professor Dept. of Physiology, UCL, London, UK</p> <p>2006- Present. Full Professor. Dept. of Life Science, University of Milano, Italy</p> <p>2001 Full Professor, Dept. of Cell and Dev. Biology, University "La Sapienza" Roma, Italy</p> <p>1998 Associate Professor, Dept. of Cell and Dev. Biology, University "La Sapienza" Roma, Italy</p> <p>1997 Visiting Professor, University of South Wales and St. Vincent Hospital, Sydney, Australia</p> <p>1996 Visiting Professor, Institute of Physiology, Wuerzburg, Germany</p> <p>1994 Visiting Professor, Dept. of Anatomy & Cell Biology, Emory University, Atlanta, GA, USA.</p> <p>1992 Visiting Professor, Dept. of Anatomy & Cell Biology, Emory University, Atlanta, GA, USA.</p> <p>1991 Asst. Professor, Dept. of Physiology and Biochemistry, Milano State University, Milano, Italy.</p> <p>1990 Visiting Professor, Dept. of Anatomy & Cell Biology, Emory University, Atlanta, GA, USA.</p> <p>1990 Visiting Professor, Dept. of Physiology, Bogolmez Institute, Kiev, Ukraine.</p> <p>1989-90 Asst. Professor, Dept. of Anatomy & Cell Biology, Emory University, Atlanta, GA, USA.</p> <p>1988-89 Research Assoc., Dept. of Anatomy & Cell Biology, Emory University, Atlanta, GA, USA. 1987-88 Research Assoc., Dept. of Physiology, State Univ. of Milan, Milan, Italy.</p> <p>1985-87 Research Assoc., Dept. of Anatomy & Cell Biology, Emory University, Atlanta, GA, USA.</p> <p>1984-85 Research Assoc., Dept. of Physiology, State University of Milan, Milan, Italy.</p> <p>1984 Research Assoc., Inst. of Human Physiology, Milan Medical School, Milan, Italy.</p>
Education and training	<p>March 1984: BS Physiological Science</p> <p>March/September 1984: Research Assoc., Milan Medical School, Milan, Italy</p> <p>October 1984-January 85. Research Assoc., Dept. of Physiology, Milan, Italy.</p> <p>February 1985: Research Assoc., Dept. of Anatomy & Cell Biology, Emory University, Atlanta, GA, USA.</p> <p>November 1985-October 1988: Graduate Student Physiological Science</p> <p>March 1986: Biophysical and Neuronal Function. Marine Biological Laboratory, Woods Hole, Massachusetts.</p> <p>January 1986: Research Assoc. Dept. of Anatomy & Cell Biology, Emory University, Atlanta GA U.S.A.</p> <p>March 1987-August 1988 Research Assoc., Dept. of Physiology, State Univ. of Milan, Milan, Italy.</p> <p>June 1988 PhD. In Physiological Science</p>
Financial Supports	<p>1992-1994 CNR Nuclear Permeability</p> <p>1995-1996 CNR Development and expression of genes in neuronal cells. Stimulation frequency effects.</p> <p>1995-1996 Pharmacia-Upjon: Electrophysiological effect of anticonvulsive compounds.</p> <p>1995 -1996 Pharmacia-Upjon: NMDA receptors in dissociated hippocampal cells and in xenopus oocyte.</p> <p>1996-1998 CNR Development and expression of genes in neuronal cells. Stimulation frequency effects.</p> <p>1998-1999 CNR: Expression of genes in neuronal cells: effect of stimulation frequency effects.</p> <p>1998-2000 PRIN "Physiopathology of ion channels"</p> <p>1999-2000 CNR Gene expression in neuronal cells. Stimulation frequency effects.</p> <p>1999-2001 PRIN "Physiopathology of ion channels"</p> <p>2001-2003 PRIN "Channalopathies properties of ionic channel activated by neurotransmitter and voltage".</p> <p>2000-2002 PRIN "Electromagnetic field on ion channel protein properties"</p> <p>2003-2005 PRIN "Channelopathies properties of ionic channel activated by neurotransmitter and voltage".</p> <p>2004-2005 Ministero della Sanità: Intracranial electrodes function and information transfer.</p> <p>2005-2007 PRIN: Membrane ionic permeability during neurodegenerative process.</p> <p>2007-2010 PRIN: Membrane ionic permeability during neurodegenerative process.</p> <p>2007-2010 PRIN: Cellular and molecular mechanisms of amyloid peptides: oxidative stress</p> <p>2010-2012 Merz Biotechnology: Neurodegeneration in Retina Ganglion Cells induced by beta-amyloid</p> <p>2012-2013 AXXAM Pharmaceutic: microglia activation mechanism</p> <p>2014-2015 GBPharma: CFTR regulation and pharmacology.</p> <p>2016-2018 AIRC: CLIC1 Protein role in Glioblastoma cancer stem cells proliferation and migration</p> <p>2021-2025 AIRC Combining metformin administration with transcranial stimulation as a novel pharmacotherapy against glioblastoma</p>

Personal skills and competences	Cell and Molecular Biophysics, Membrane Permeability, Ion Channels, Cellular and Molecular Mechanisms of Neurodegenerative Process, Cellular and Molecular Mechanisms of Brain Tumors development																					
Mother tongue(s)	Italian																					
Other language(s)	(1) English (2) French																					
Self-assessment																						
<i>European level (*)</i>																						
Language	Understanding																					
Language	Speaking																					
	Writing																					
	<table border="1"> <thead> <tr> <th></th> <th>Listening</th> <th>Reading</th> <th>Spoken interaction</th> <th>Spoken production</th> <th></th> <th></th> </tr> </thead> <tbody> <tr> <td>1</td> <td>C1</td> <td>C1</td> <td>C1</td> <td>C1</td> <td>B2</td> <td></td> </tr> <tr> <td>2</td> <td>B1</td> <td>B1</td> <td>A2</td> <td>A2</td> <td>A1</td> <td></td> </tr> </tbody> </table>		Listening	Reading	Spoken interaction	Spoken production			1	C1	C1	C1	C1	B2		2	B1	B1	A2	A2	A1	
	Listening	Reading	Spoken interaction	Spoken production																		
1	C1	C1	C1	C1	B2																	
2	B1	B1	A2	A2	A1																	
(*) Common European Framework of Reference for Languages																						
List of scientific Publications	<ol style="list-style-type: none"> 1. Cavagna, G.A., M. Mazzanti, N. C. Heglund and G. Citterio. 1985. Storage and release of mechanical energy by active muscle: A non-elastic mechanism? <i>J. Exp. Biol.</i> 115:79-87. 2. Cavagna, G. A., M. Mazzanti, N. C. Heglund and G. Citterio. 1986. Mechanical transient energy initiated by ramp stretch and release to PO in frog muscle fibers. <i>Am. J. Physiol.</i> 251:C571-C579. 3. DiFrancesco, D., A. Ferroni, M. Mazzanti and C. Tromba. 1986. Properties of the hyperpolarizing activated current (if) in cells isolated from rabbit sino-atrial node. <i>J. Physiol.</i> 377:6188. 4. Mazzanti, M. and L. J. DeFelice. 1987. Regulation of Na-conducting Ca channel during the cardiac action potential. <i>Biophys. J.</i> 51:115-121. 5. Mazzanti, M. and L. J. DeFelice. 1987. Na channel kinetics during the spontaneous heart beat in embryonic chick ventricle cells. <i>Biophys. J.</i> 52:95-100. 6. Mazzanti, M. and L. J. DeFelice. 1988. K channel kinetics during the spontaneous heart beat in embryonic chick ventricle cells. <i>Biophys. J.</i> 54:1139-1148. 7. Mazzanti, M. and D. DiFrancesco. 1988. Intracellular Ca modulates K-inward rectification in cardiac myocytes. <i>Pflug. Arch.</i> 413:322-324. 8. Mazzanti, M. and L. J. DeFelice. 1990. Ca modulated outward current through IK1 channels. <i>J. Membrane Biology.</i> 116:41-45. 9. DeFelice L.J., Goolsby W.N., Mazzanti M. 1990. Potassium channels and the repolarization of cardiac cells. <i>Annals of The New York Academy of Sciences</i>, vol. 588, p. 174-184, ISSN: 0077-8923 10. Wellis D., L. J. DeFelice and M. Mazzanti. 1989. An outward Na current in beating heart cells. <i>Biophys. J.</i> 57:41-48. 11. Mazzanti, M., L. J. DeFelice, J. Cohen and H. Malter. 1990. Ion channels in the nuclear envelope. <i>Nature</i> 343:764-767. 12. Mazzanti, M. and L. J. DeFelice. 1990. Ca channel gating during cardiac action potentials. <i>Biophys. J.</i> 58:1059-1065. 13. Mazzanti, M., L. J. DeFelice and E. F. Smith. 1991. Ion channels in murine nuclei during early development and fully differentiate adult cells. <i>J. Membrane Biology</i> 121:189-198 14. Mazzanti, M., L. J. DeFelice and Yuan-Mou Liu. 1991. Gating of L-type Ca²⁺ channels in embryonic chick ventricle cells: dependence on voltage, current and channel density. <i>J. Physiol.</i> 443:307334. 15. Tabares, L., Mazzanti, M. and Clapham, D.E. 1991. Chloride channels in the nuclear membrane. <i>J. Membrane Biology.</i> 123:49-54. 16. Yuan-Mou Liu, De Felice L.J. and Mazzanti, M. 1992. Na channels that remain open throughout the cardiac action potential plateau. <i>Biophys. J.</i> 63:654-662. 17. Mazzanti, M., Galli, A. and A. Ferroni. 1992. Effect of firing rate on the calcium permeability in adult neurons during spontaneous action potentials. <i>Biophys. J.</i> 63:926-934. 18. Innocenti, B. and M. Mazzanti. 1993. Identification of a nucleo-cytoplasmic ionic pathway by osmotic shock in isolated mouse liver nuclei. <i>J. Membrane Biology.</i> 131/2:137-142. 19. Galli, A., Ferroni, A., Bertolini, L. and Mazzanti, M. 1994. Inactivation of single Ca²⁺ channels in rat sensory neuron by extracellular Ca²⁺. <i>J. Physiol.</i> 477.1:15-26. 20. Mazzanti, M. Innocenti, B. and Rigatelli, M. 1994. ATP dependent ionic permeability of nuclear envelope in in-situ nuclei of xenopus oocyte. <i>FASEB J.</i> 8/2:231-236. 																					

21. Mazzanti, M., Ferroni A., Assandri R. and D. DiFrancesco. 1996. Cytoskeletal control of rectification and expression of four substates in cardiac inward rectifier K-channels. *FASEB J.* 10:357-361.
22. Ferroni A., Galli, A. and M. Mazzanti. 1996. Functional role of low-voltage-activated dihydropyridine sensitive Ca channels during the action potential in adult rat sensory neurons. *Pflüg. Arch* 431:954-963.
23. Assandri, R., and M. Mazzanti. 1997. Ionic permeability on isolated mouse liver nuclei: influence of ATP and intracellular Ca⁺⁺ levels. *J. Membr. Biol.* 157/3:301-9
24. M. Mazzanti. 1998. Ion permeability of the nuclear envelope. *NIPS* 13:44-50
25. Danker T., Mazzanti M., Tonini R., Rakowska A. and Oberleithner H. 1998. Using atomic force microscopy to investigate patch-clamped nuclear membrane. *Cell Biology Int.* 21:747-757
26. R. Tonini, E. Mancinelli, M. Mazzanti, M. Balestrini, E. Martegani, A. Ferroni, E. Sturani and R. Zippel. 1999. Expression of Ras GRF in the SK N BE neuroblastoma accelerates retinoic acid induced neuronal differentiation and increases the functional expression of the IRK1 potassium channel. *European J. Neuroscience* 11(3):959-966
27. P. Salvati, C. Caccia, M.A. Cervini, R. Maj, E. Lamberti, P. Pevarello, G.A. Skeen, H.S. White, H.H. Wolf, L. Faravelli, M. Mazzanti, E. Mancinelli, M. Varasi, R.G. Fariello. 1999. Biochemical and electrophysiological studies on the mechanism of action of PNU-151774E, a novel anticonvulsant drug. *J. Pharmacol Exp Ther* 288(3):1151-1159
28. R. Tonini, F. Grohovaz, C. A.M. LaPorta, and M. Mazzanti. 1999. Gating mechanism of the nuclear pore complex channel in isolated neonatal and adult mouse. *FASEB J.* 13:1395-1403
29. S. M. Valenzuela, M. Mazzanti, R. Tonini, M. R. Qiu, K. Warton, E. A. Musgrove, T. J. Campbell, S. N. Breit. 2001. The nuclear chloride ion channel NCC27 is involved in regulation of the cell cycle. *J. Physiol.* 529: 541-551R.
30. Tonini, A. Ferroni, S. M. Valenzuela, K. Warton, T. J. Campbell, S.N. Breit and M. Mazzanti. 2000. Functional characterization of the NCC27 nuclear protein in stable transfected CHO-K1 cells. *FASEB J.* 14, 1171-1178.
31. M. Mazzanti, O. Bustamante and H. Oberleithner. 2001. Electrical dimension of nuclear envelope. *Physiological Review*. 81,1-19
32. R. Tonini, M.D. Baroni E. Masala, M. Micheletti , A. Ferroni, and M. Mazzanti . 2001. Calcium Protects Differentiating Neuroblastoma cells During 50 Hz Electromagnetic Radiation. *Biophysical J.* 81: 2580-2589.
33. Stephen J. Harrop, Matthew Z. DeMaere, W. Douglas Fairlie, Tamara Reztsova, Stella M. Valenzuela, Michele Mazzanti, Raffaella Tonini, Min Ru Qiu, Lucy Jankova, Kristina Wartoni, Asne R. Bauskini, Wan Man Wui, Susan Pankhurst, Terence J. Campbell, Samuel N. Breit, and Paul M. G. Curmi. 2001. Crystal Structure of the Soluble Form of the Intracellular Chloride Channel CLIC1 (NCC27) at 1.4Å Resolution. *Journal of Biological Chemistry*. 276: 4499345000.
34. K. Warton, R. Tonini, W. D. Fairlie, J. M Matthews, S. M. Valenzuela, M. R. Qiu, W. M. Wu, S. Pankhurst, A. R. Bauskin, S. J. Harrop, T. J. Campbell, P. M. G. Curmi, S. N. Breit and M. Mazzanti. 2002. Recombinant CLIC1 (NCC27) assembles in lipid bilayers via a pH-dependent two-state process to form chloride ion channels with identical characteristics to those observed in CHO cells expressing CLIC1. *Journal of Biological Chemistry*. 277: 26003-26011.
35. Dene R. Littler, Stephen J. Harrop, W. Douglas Fairlie, Louise J. Brown, Greg J. Pankhurst, Susan Pankhurst, Matthew Z. DeMaere, Terence J. Campbell, Asne R. Bauskin, Raffaella Tonini, Michele Mazzanti, Samuel N. Breit, and Paul M. Curmi. 2004. The intracellular chloride ion channel protein CLIC1 undergoes a redox-controlled structural transition. *Journal of Biological Chemistry*. 279:9298-9305.
36. G. Novarino, C. Fabrizi, R. Tonini, M. A. Denti, F. Malchiodi-Albedi, G.M. Lauro, B. Sacchetti, S. Paradisi, A. Ferroni , P.M.G. Curmi, S.N. Breit and M. Mazzanti. 2004. Involvement of the intracellular ionic channel CLIC1 in microglia-mediated β-amyloid induced neurotoxicity. *J. Neuroscience*. 24(23):5322–5330.
37. Littler, D. R., Assaad, N. N., Harrop, S. J., Brown, L. J., Pankhurst, G. J., Luciani, P., Aguilar, M. I., Mazzanti, M., Berryman, M. A., Breit, S. N., & Curmi, P. M. 2005. Crystal structure of the soluble form of the redox-regulated chloride ion channel protein CLIC4. *FEBS J.* 272, 4996-5007.
38. I. Marchionni, A. Paffi, M. Pellegrino, M. Liberti, F. Apollonio, R. Abeti, F. Fontana, G. D'Inzeo and M. Mazzanti. 2006. Comparison between extremely low frequency (50 HZ) and radiofrequency (900 MHZ) electromagnetic field stimulation on single channel ionic current and on firing frequency in isolated neurons of dorsal root ganglion. *Biochem. Biophys . Acta. Biomembranes* 1758(5):597605.
39. R. Tonini, S. Ciardo, M. Cerovic, T. Rubino, D. Parolaro, M. Mazzanti, R. Zippel. 2006. ERKdependent modulation of cerebellar synaptic plasticity following chronic Δ9tetrahydrocannabinol exposure. *J. Neuroscience*. 26(21):5810-5818
40. Cromer, B. A., Gorman, M. A., Hansen, G., Adams, J. J., Coggan, M., Littler, D. R., Brown, L. J., Mazzanti, M., Breit, S. N., Curmi, P. M., Dulhunty, A. F., Board, P. G., & Parker, M. W. 2007. Structure of the Janus Protein Human CLIC2. *J. Mol Biol.* 30:374(3):719-31.

41. D. R. Littler1, S. J. Harrop, L. J. Brown, G. J. Pankhurst, A. V. Mynott1, P. Luciani, R. A. Mandyam, M. Mazzanti, S. Tanda, M. A. Berryman, S. N. Breit, P. M. G. Curmi. 2008. Comparison of vertebrate and invertebrate CLIC proteins: the crystal structures of *Caenorhabditis elegans* EXC4 and *Drosophila melanogaster* DmCLIC. *Protein.* 71(1):364-78.
42. Paradisi S, Matteucci A, Fabrizi C, Denti MA, Abeti R, Breit SN, Malchiodi-Albedi F, Mazzanti M. 2008. Blockade of chloride intracellular ion channel 1 stimulates Abeta phagocytosis. *J. Neurosci Res.* 86(11):2488-98.
43. Milton R.H., Abeti R., Averaimo S., DeBiasi S., Vitellaro L., Jiang L., Curmi P.M.G., Breit S.N., Duchen M.R. and Mazzanti M. 2008. CLIC1 Function Is Required For Beta-Amyloid Induced Generation Of Reactive Oxygen Species By Microglia. *J. Neuroscience* 28(45):11488-11499.
44. Averaimo S, Milton RH, Duchen MR, Mazzanti M. 2010. Chloride intracellular channel 1 (CLIC1): Sensor and effector during oxidative stress. *FEBS Lett.* 584(10):2076-84.
45. Littler DR, Harrop SJ, Goodchild SC, Phang JM, Mynott AV, Jiang L, Valenzuela SM, Mazzanti M, Brown LJ, Breit SN, Curmi PM. 2010. The enigma of the CLIC proteins: Ion channels, redox proteins, enzymes, scaffolding proteins? *FEBS Lett.* 2010 May 17;584(10):2093-101
46. Goodchild SC, Howell MW, Littler DR, Mandyam RA, Sale KL, Mazzanti M, Breit SN, Curmi PM, Brown LJ. 2010. Metamorphic response of the CLIC1 chloride intracellular ion channel protein upon membrane interaction. *Biochemistry.*49(25):5278-89
47. Paulis D, Maras B, Schininià ME, di Francesco L, Principe S, Galeno R, Abdel-Haq H, Cardone F, Florio T, Pocchiari M, Mazzanti. 2011. The pathological prion protein forms ionic conductance in lipid bilayer. *M. Neurochem Int.* Aug;59(2):168-74.
48. Di Francesco L, Correani V, Fabrizi C, Fumagalli L, Mazzanti M, Maras B, Schininià ME 2012. 14-3-3 ϵ marks the amyloid-stimulated microglia long-term activation. *Proteomics.* 12(1):124-34.
49. Mapelli L, Canale C, Pesci D, Averaimo S, Guizzardi F, Fortunati V, Falasca L, Piacentini M, Gliozi A, Relini A, Mazzanti M, Jodice C. 2012. Toxic effects of expanded ataxin-1 involve mechanical instability of the nuclear membrane. *Biochim Biophys Acta.*1822(6):906-17.
50. Stravalaci M, Bastone A, Beeg M, Cagnotto A, Colombo L, Di Fede G, Tagliavini F, Cantu' L, Del Favero E, Mazzanti M, Chiesa R, Salmona M, Diomedè L, Gobbi M. 2012. Specific recognition of biologically active amyloid- β oligomers by a new Surface Plasmon Resonance-based immunoassay and an in vivo assay in *Caenorhabditis elegans*. *J.Biol Chem.*, 287(33): 2779627805
51. Sorrentino S, Bucciarelli T, Corsaro A, Tosatto A, Thellung S, Villa V, Schininià M E, Maras B, Galeno R, Scotti L, Creati C, Marrone A, Re N, Aceto A, Florio T and Mazzanti M. 2012. Calcium Binding Promotes Prion Protein Fragment 90-231 Conformational Change Toward A Membrane Destabilizing And Cytotoxic Structure. *Plos One* , 7(7): e38314. 49
52. Setti M., Savalli N., Osti D., Richichi C., Angelini M., Brescia P., Fornasari L., Carro M. S., Mazzanti M., Pellicci G. (2013) Functional role of CLIC1 ion channel in glioblastoma derived stem/progenitor cells. *J. National Cancer Institute* 105:1644–1655.
53. Averaimo S., Abeti R., Savalli N., Brown L-J., Curmi P.M.G., Breit N.S., Mazzanti M.. (2013) Point mutations in the transmembrane region of the CLIC1 ion channel selectively modify its biophysical properties. *Plos One*, 8(9): e74523.
54. Ferrera D, Canale C, Marotta R, Mazzaro N, Gritti M, Mazzanti M, Capellari S, Cortelli P, Gasparini L. (2014) Lamin B1 overexpression increases nuclear rigidity in autosomal dominant leukodystrophy fibroblasts. *FASEB J.* Sep;28(9):3906-18.
55. Averaimo S, Gritti M, Barini E, Gasparini L, Mazzanti M. (2014). CLIC1 functional expression is required for cAMP-induced neurite elongation in postnatal mouse retinal ganglion cells. *J Neurochem.* Nov;131(4):444-56
56. Kumar A, Mazzanti M, Mistrik M, Kosar M, Bezoussenko GV, Mironov AA, Garrè M, Parazzoli D, Shivashankar GV, Scita G, Bartek J, Fofani M. (2014). ATR Mediates a Checkpoint at the Nuclear Envelope in Response to Mechanical Stress. *Cell.* Jul 31;158(3):633-46.
57. Maraschi A.M., Ciammola A., Folci A., Sassone F., Ronzitti G., Cappelletti G., Silani V., Sato. S., Hattori N., Mazzanti M., Chieregatti E., Mulle C., Passafaro M and Sassone J. (2014). Parkin regulates kainate receptors by interacting with the GluK2 subunit. *Nature Communications* Oct 15;5:5182.
58. Gritti M., Würth, Angelini M., Barbieri F., Peretti M., Pizzi E. Pattarozzi A., Carra E., Sirito R., Daga A., Curmi P.M.G., Mazzanti M. and Florio T. (2014). Metformin repositioning as antitumoral agent: selective antiproliferative effects in human glioblastoma stem cells, via inhibition of CLIC1mediated ion current. *Oncotarget.* Nov 30;5(22):11252-68.
59. Peretti M, Angelini M, Savalli N, Florio T, Yuspa SH, Mazzanti M. (2015). Chloride channels in cancer: Focus on chloride intracellular channel 1 and 4 (CLIC1 AND CLIC4) proteins in tumor development and as novel therapeutic targets. *Biochim Biophys Acta.* 2015 Oct;1848(10 Pt B):2523-31
60. Correani V, Francesco LD, Cera I, Mignogna G, Giorgi A, Mazzanti M, Fumagalli L, Fabrizi C, Maras B, Schininià ME. Reversible redox modifications in the microglial proteome challenged by beta amyloid. (2015). *Mol Biosyst.* 11(6):1584-93.
61. Würth R, Thellung S, Bajetto A, Mazzanti M, Florio T, Barbieri F. Drug-repositioning opportunities for cancer therapy: novel molecular targets for known compounds. (2016). *Drug Discov Today.* 2016 Jan; 21(1):190-9. doi: 10.1016. Review.
62. Leonzino M, Busnelli M, Antonucci F, Verderio C, Mazzanti M, Chini B. The Timing of the Excitatory-to-Inhibitory GABA Switch Is Regulated by the Oxytocin Receptor via KCC2. (2016) *Cell Rep.* 2016 Mar 23. pii: S2211-1247(16)30254-6. doi: 10.1016/j.celrep. 2016.03.013. [Epub ahead of print]

63. Stravalaci M, Tapella L, Beeg M, Rossi A, Joshi P, Pizzi E, Mazzanti M, Balducci C, Forloni G, Biasini E, Salmona M, Diomedè L, Chiesa R, Gobbi M. The Anti-Prion Antibody 15B3 Detects Toxic Amyloid- β Oligomers. *J Alzheimers Dis.* 2016 Jul 6; 53 (2016) 1485–1497. doi:10.3233/JAD-150882.
64. Bassani S, Cwetsch AW, Gerosa L, Serrato GM, Folci A, Hall IF, Mazzanti M, Cancedda L, Passafaro M. (2018) The female epilepsy protein PCDH19 is a new GABAAR binding partner that regulates GABAergic transmission as well as migration and morphological maturation of hippocampal neurons. *Hum Mol Genet.* Jan 17. doi: 10.1093/hmg/ddy019. [Epub ahead of print]
65. Barbieri F, Würth R, Pattarozzi A, Verduci I, Mazzola C, Cattaneo MG, Tonelli M, Solari A, Bajetto A, Daga A, Vicentini LM, Mazzanti M, Florio T. (2018). Inhibition of Chloride Intracellular Channel 1 (CLIC1) as Biguanide Class-Effect to Impair Human Glioblastoma Stem Cell Viability. *Front Pharmacol.* 2018 Aug 21;9:899. doi: 10.3389/fphar.2018.00899. eCollection 2018. PMID: 30135216
66. Imberti R, Garavaglia ML, Verduci I, Cannavale G, Balduzzi G, Papetti S, Mazzanti M. (2018) Antiestrogen- and tamoxifen-induced effects on calcium-activated chloride currents in epithelial cells carrying the Δ F508-CFTR point mutation. *Respir Res.* 2018 Oct 5;19(1):198. doi: 10.1186/s12931-018-0901-1
67. Peretti M, Raciti FM, Carlini V, Verduci I, Sertic S, Barozzi S, Garrè M, Pattarozzi A, Daga A, Barbieri F, Costa A, Florio T, Mazzanti M. (2018) Mutual influence of ROS, pH and CLIC1 membrane protein in the regulation of G1/S phase progression in human glioblastoma stem cells. *Mol Cancer Ther.* 2018 Nov;17(11):2451-2461. doi: 10.1158/1535-7163.MCT-17-1223. Epub 2018 Aug 22. PMID: 30135216
68. Barbieri F, Verduci I, Carlini V, Zona G, Pagano A, Mazzanti M, Florio T. Repurposed biguanide drugs in glioblastoma exert antiproliferative effects via the inhibition of intracellular chloride channel 1 activity. *Front Oncol.* 2019. | doi: 10.3389/fonc.2019.00135
69. A. Nesiu, A.M. Cimpean, R.A. Ceausu, A. Adile, I. Ioiart, C. Porta, M. Mazzanti, T.C. Camerota, M. Raica. (2019) Intracellular Chloride Ion Channel Protein-1 Expression in Clear Cell Renal Cell Carcinoma / - In: Cancer Genomics & Proteomics.. - ISSN 1109-6535. - 16:4, Jul 16, pp. 299-307-307.
70. Thellung S, Corsaro A, Bosio AG, Zambito M, Barbieri F, Mazzanti M, Florio T. Emerging Role of Cellular Prion Protein in the Maintenance and Expansion of Glioma Stem Cells. *Cells.* (2019) Nov 18;8(11). doi: 10.3390/cells8111458. Review.
71. Serrato, G.M., Pizzi, E., Murru, L., Mazzoleni, S., Pelucchi, S., Marcello, E., Mazzanti, M., Passafaro, M., Bassani, S. The Epilepsy-Related Protein PCDH19 Regulates Tonic Inhibition, GABAAR Kinetics, and the Intrinsic Excitability of Hippocampal Neurons (2020) *Molecular Neurobiology,* 57 (12), pp. 5336-5351. doi10.1007/s12035-020-02099-7
72. Adelmann, T.G., Camerota, T.C., Ceausu, A.R., Cimpean, A.M., Mazzanti, M., Raica, M. Chloride intracellular channel protein 1 (CLIC1) Δ s over-expressed in muscle invasive urinary bladder cancer (2020) *Anticancer Research,* 40 (12), pp. 6879-6884. doi: 10.21873/anticanres.14710
73. Carlini V, Verduci I, Cianci F, Cannavale G, Fenoglio C, Galimberti D, Mazzanti M. (2020) CLIC1 Protein Accumulates in Circulating Monocyte Membrane during Neurodegeneration. *Int J Mol Sci.* 2020 Feb 21;21(4). pii: E1484. doi: 10.3390/ijms21041484.
74. Tonoli, E., Verduci, I., Gabrielli, M., Prada, I., Forcaia, G., Coveney, C., Savoca, M.P., Boocock, D.J., Sancini, G., Mazzanti, M., Verderio, C., Verderio, E.A.M. Extracellular transglutaminase-2, nude or associated with astrocytic extracellular vesicles, modulates neuronal calcium homeostasis (2022) *Progress in Neurobiology,* 216, art. no. 102313. doi: 10.1016/j.pneurobio.2022.102313
75. Barbieri, F., Bosio, A.G., Pattarozzi, A., Tonelli, M., Bajetto, A., Verduci, I., Cianci, F., Cannavale, G., Palloni, L.M.G., Francesconi, V., Thellung, S., Fiaschi, P., Mazzetti, S., Schenone, S., Balboni, B., Girotto, S., Malatesta, P., Daga, A., Zona, G., Mazzanti, M., Florio, T. Chloride intracellular channel 1 activity is not required for glioblastoma development but its inhibition dictates glioma stem cell responsivity to novel biguanide derivatives (2022) *Journal of Experimental and Clinical Cancer Research,* 41 (1), art. no. 53. doi: 10.1186/s13046-021-02213-0.
76. Russ, H., Mazzanti, M., Parsons, C., Riemann, K., Gebauer, A., Rammes, G. The Small Molecule GAL-201 Efficiently Detoxifies Soluble Amyloid β Oligomers: New Approach towards Oral Disease-Modifying Treatment of Alzheimer's Disease (2022) *International Journal of Molecular Sciences,* 23 (10), art. no. 5794. doi: 10.3390/ijms23105794.
77. X. Chen, S. Deng, W. Wang, S. Castiglione, Z. Duan, L. Luo, F. Cianci , X. Zhang , J. Xu, H. Li , J. Zhao , P. M. Kamau, Z. Zhang, J. Mwangi, J. Li , Y. Shu, X. Hu, M. Mazzati, and Ren Lai. (2022). Human antimicrobial peptide LL-37 contributes to Alzheimer's disease progression. *Molecular Psychiatry;* <https://doi.org/10.1038/s41380-022-01790-6>
78. Verduci, I., Cianci F., Cazzoli R., et al. Metformin antiproliferative activity is exclusively mediated by the membrane functional expression of the Chloride Intracellular Channel 1 in glioblastoma stem cells. *bioRxiv,* 2022.2012.2031.522371, doi:10.1101/2022.12.31.522371 (2022).