ANNA MENINI
CURRICULUM VITAE

Present address:

Anna Menini, Neurobiology Group, SISSA

Education:

1984 "Laurea" in Physics, 110/110 e lode, Universita' di Genova, Italy

1988 "Dottorato di Ricerca" in Physics, Universita' di Genova, Italy

Positions:

2002- Full professor in Physiology, International School for Advanced Studies (SISSA), Trieste, Italy

2001-2002 "Primo Ricercatore", Sezione di Trieste Istituto di Genetica Biochimica ed Evoluzionistica, C.N.R., Trieste, Italy

1997-2000 "Primo Ricercatore", Istituto di Cibernetica e Biofisica, C.N.R., Genova, Italy

1988-1997 "Ricercatore", Istituto di Cibernetica e Biofisica, C.N.R., Genova, Italy

1987-1988 Research Associate, Department of Physiology, Duke University, Durham, U.S.A.

Academic Responsibilities:

2017- 2020 Coordinator of the PhD Program in Neurobiology, SISSA, Trieste.

2016- 2020 Member of the Board of Directors, SISSA, Trieste

2013- 2019 President of the SISSA equal opportunity committee (CUG)

2013- 2019 Director of the Master Course in Science Communication at SISSA, Trieste

2011-2015 Delegate of the Director of SISSA for International Relations

2002-2012 Coordinator of the PhD Program in Neuroscience of the International School for Advanced Studies, SISSA, Trieste.

2005-2012 Member of the Board of Directors, SISSA, Trieste

Editorial Board

2016- 2022 Reviewing Editor, eNeuro

2015- Senior Editor, Oxford Handbooks Online in Neuroscience

2012- Peer Review Board, Journal of Visualized Experiments

2001- 2018 Editorial Advisory Board, Journal of Comparative Physiology A

1995- 2022 Editorial Advisory Board, Journal of General Physiology

Scientific Societies:

2014-2016 Past President of the European Chemoreception Research Organization, ECRO

2012-2014 President of the European Chemoreception Research Organization, ECRO

2010-2012 President Elect of the European Chemoreception Research Organization, ECRO

International Evaluation Committees:

2017 Member of the Expert Review Board for the Evaluation of the Lemanic Neuroscience Doctoral School (LNDS), Geneve, Switzerland.

2015 Member of the Committee for the Evaluation of a Junior Research Group for the Cluster of Excellence and DFG Research Center Nanoscale Microscopy and Molecular Physiology of the Brain, Goettingen, Germany.

2010-2014 Member of the Scientific Advisory Board of the Max-Planck-Institute of Biophysics, Frankfurt, Germany.

2009 Reviewer for the Deutsche Forschungsgemeinschaft Priority Program on "Integrative analysis of olfaction".

2009 Member of the visiting committee for research evaluation of an INRA laboratory for the French Agency for Evaluation of Research and Higher Education (AERES).

National and International Grants:

2021-2024 Scientific Responsible of the SISSA Research Unit of the FVG Project "Progetto di ricerca traslazionale e sviluppo preclinico di strategie terapeutiche innovative e predittive per l'ottimizzazione del trattamento dei tumori cerebrali"

2013-2016 National Coordinator of a PRIN Project involving ten Research Units "Integrated analysis of molecular and cellular mechanisms underlying signal processing by sensory systems in health and disease."

2010-2012 National Coordinator of the PRIN Project: "Calcium-activated chloride channels in olfaction: from genes to behavior"

2007-2009 Scientific Responsible of the SISSA Research Unit of the PRIN Project: "Cellular mechanism regulating neurorigeneration in mammalian olfactory epithelium"

2006-2011 Member of the SISSA Research Unit of the Italian Institute of Technology. Responsible of the project: "Functional and structural genomics of olfaction"

2005-2007 Scientific Responsible of SISSA Research Unit of the PRIN Project: "Cyclic nucleotide and hyperpolarization-activated channels (HCN channels)"

2004-2005 Scientific Supervisor of a Marie Curie European Reintegration Grant EC MERG-CT-2004-505935 "Olfactory coding: temporal patterns of mitral cells responses to odorants"

2003-2007 Coordinator of the Project "Functional genomics of the adult and developing brain" EC "LIFE SCIENCES, GENOMICS and BIOTECHNOLOGY for HEALTH" LSHG-CT-503221 with England, France, Japan.

2001-2003 Scientific Responsible of the SISSA Unit of the NATO Collaborative Linkage Grant LST.CLG.978303 "Olfactory coding in vertebrates" with USA and Slovenia.

1998-2000 Scientific Responsible of the CNR Unit Research on “Chemosensori: sonde molecolari intracellulari” of the Strategic Project CNR-University "Sensori biologici e progettazione di biosensori".

1996-1999 Scientific Responsible of the CNR Unit Research of the EC BIOTECHNOLOGY BIO4 CT96 0593 Project "Molecular Events in Phototransduction and Chemotransduction" with Germany and Switzerland.

1996 Japan Society for the Promotion of Science "Role of calcium ions in the response to odorants of olfactory receptor cells"

1994-1997 Scientific Responsible of the CNR Unit Research of the Human Frontiers Science Program Research Grant RG-62/94B"Sensory Transduction: The cyclic Nucleotide Cascade" with Japan, England, USA.

1992-1995 Scientific Responsible of the CNR Unit Research of the EC ESPRIT Basic Research Action SSS 6961 Project "Smart Sensory Systems" with France and England.

1994-1996 National Science Foundation Cooperative Research Project in collaboration with S. Firestein, USA. "Sensory transduction in olfactory receptor cells"

1992-1994 NATO Collaborative Research Grant CRG-920582 with S. Firestein, USA. "The cellular basis of olfactory transduction"

1992-1993 Bilaterale Project CNR Italy-USA "Caratterizzazione di canali ionici da cilia olfattive" with R. Anholt, USA

1992 Member of the Progetto Coordinato GNCB "Fisica ed applicazioni tecnologiche nei sistemi di trasporto di membrane biologiche"

1989-1991 NATO Collaborative Research Grant CRG-890435 with R. Anholt, USA. "Characterization of odorant-activated ion channels".

Invited speaker at some recent selected National and International Meetings:

2022 ECRO 2022, Plenary Lecture at the Meeting of the European Chemoreception Research Organization, Berlin, Germany

2021 Physiology 2021, Symposium on “TMEM16: New Insights into Transmembrane Proteins of Broad Physiological Relevance in Health and Disease”, Birmingham, UK

2021 8th Mediterranean Neuroscience Society Conference, Symposium on “The Multifaceted Olfactory System: from Bench to Beds”, Dubrovnik, Croatia

2013 67th Annual Meeting and Symposium of the Society of General Physiologists, **“**The Enigmatic Chloride Ion: Transport, Regulation, and Roles in Physiology”, Woodshole, USA

2012 FEPS 2012, Federation of European Physiological Societies Congress, Symposium on “Calcium Activated Cl Channels in Health and Disease”, Santiago De Compostela, Spain

2011 Frankfurt Olfaction MiniSymposium FOMS-2, Frankfurt, Germany

2011 8th World congress of IBRO, Workshop on “Odorants, receptors and glomeruli”, Firenze

2011 Physiology 2011, Symposium on “The anoctamin (TMEM16) gene family: Calcium-activated chloride channels come of age”, Oxford, UK

2010 102nd International Titisee Conference, "Sensory transduction, the gateway to perception: mechanisms and pathology" Titisee, Black Forest, Germany

2010 20th ECRO Congress, Symposium on “Olfactory Transduction Proteins and Genes”, Avignon, France

2010 61st Congresso della Societa’ Italiana di Fisiologia. Symposium on “Molecular physiology of membrane transport systems”. Varese

2010 XV Conferenza Annuale della Associazione Italiana Sensori e Microsistemi (AISEM 2010), Messina

2009 II Hispano-Italian Workshop on the Molecular Biology and Biophysics of Ion Channels, Alicante, Spain

2008 18th ECRO Congress, Symposium on “Transduction in Chemosensory Systems of the Nasal Cavity”, Portorose, Slovenia

2008 Leopoldina Symposium on “Molecular Medicine of Sensory Systems”, Tubingen, Germany

2008 Workshop on “Genes, Development and the Emergence of Behavior, ICTP” Trieste

2006 31st International FEBS Congress. Symposium on “Signaling Through Ion Channels”. Istanbul, Turkey

2005 Joint Meeting of the British and the Italian Physiological Societies. Symposium on “Calcium Signaling: from Physiology to Pathology”. Palermo, Italy

2005 Life Sciences Conference. Symposium on "Sensory Physiology". Lipica, Slovenia

2005 Workshop on “Genes, Development and the Emergence of Behavior, ICTP” Trieste

2003 International School of Pure and Applied Biophysics: “Biophysics of Sensory Transduction”, Venezia, Italy

2002 European Workshop on “Channelomics”, Ulm, Germany

2002 XVI Congresso Nazionale della Societa' Italiana di Biofisica Pura ed Applicata, Simposio "Sensorial Biophysics", Trento

2000 Biophysical Society Meeting. Symposium on "Sensational molecules: Mechanisms of sensory transduction", New Orleans, USA

Organization of International Schools and Meetings:

2019 European Chemoreception Research Organization Meeting, Directors A. Menini, P. Gasparini, A. Celani. 11-14 September 2019, Trieste, Italy.

2017 International Center for Theoretical Physics: Workshop on “Frontiers in Olfaction”, Directors A. Celani, A. Menini, M. Venkatesh, M. Vergassola. 24-28 July 2017, Trieste, Italy.

2012 FENS-IBRO SfN School on “Chemical Senses: Neurobiology and Behavior”, Directors A. Menini and S. Simon, 3-8 June 2012, Bertinoro, Italy.

2002 International Center for Theoretical Physics: School and Conference on “Chemical Senses: Molecules to Perception”, Directors A. Menini and S. Firestein, 20-31 May 2002, Trieste, Italy.

PUBLICATIONS

Guarneri G, Pifferi S, Dibattista M, Reisert J, Menini A. Paradoxical electro-olfactogram responses in TMEM16B knock-out mice. Chem Senses. 2023 Jan 1;48:bjad003. doi: 10.1093/chemse/bjad003.

Boscolo-Rizzo P, Hummel T, Invitto S, Spinato G, Vaira LA, Lechien JR, Menini A, Hopkins C, Tirelli G. Reply to: It is necessary to assess olfactory and gustatory functions in post Covid-19 patients due to the omicron variant infection. Int Forum Allergy Rhinol. 2023 Mar 24. doi: 10.1002/alr.23159.

Boscolo-Rizzo P, Hummel T, Invitto S, Spinato G, Tomasoni M, Emanuelli E, Tofanelli M, Cavicchia A, Grill V, Vaira LA, Lechien JR, Borsetto D, Polesel J, Dibattista M, Menini A, Hopkins C, Tirelli G. Psychophysical assessment of olfactory and gustatory function in post-mild COVID-19 patients: A matched case-control study with 2-year follow-up. Int Forum Allergy Rhinol. 2023 Feb 28. doi: 10.1002/alr.23148. Online ahead of print.

Spelat R, Jihua N, Sánchez Triviño CA, Pifferi S, Pozzi D, Manzati M, Mortal S, Schiavo I, Spada F, Zanchetta ME, Ius T, Manini I, Rolle IG, Parisse P, Millán AP, Bianconi G, Cesca F, Giugliano M, Menini A, Cesselli D, Skrap M, Torre V. The dual action of glioma-derived exosomes on neuronal activity: synchronization and disruption of synchrony. Cell Death Dis. 2022 Aug 13;13(8):705. doi: 10.1038/s41419-022-05144-6.

Xiao M, Li X, Pifferi S, Pastore B, Liu Y, Lazzarino M, Torre V, Yang X, Menini A, Tang M. 2D MXene interfaces preserve the basal electrophysiology of targeted neural circuits. Nanoscale. 2022 Aug 4;14(30):10992-11002. doi: 10.1039/d2nr01542k.

Gonzalez-Velandia KY, Hernandez-Clavijo A, Menini A, Dibattista M, Pifferi S. Expression pattern of Stomatin-domain proteins in the peripheral olfactory system. Sci Rep. 2022 Jul 6;12(1):11447. doi: 10.1038/s41598-022-15572-1.

Boscolo-Rizzo P, Hopkins C, Menini A, Dibattista M, Cancellieri E, Gardenal N, Tofanelli M, Valentinotti R, Lechien JR, Vaira LA, Tirelli G. Parosmia assessment with structured questions and its functional impact in patients with long-term COVID-19-related olfactory dysfunction.Int Forum Allergy Rhinol. 2022 Dec;12(12):1570-1574. doi: 10.1002/alr.23054. Epub 2022 Jul 11.

Hernandez-Clavijo A, Gonzalez-Velandia KY, Rangaswamy U, Guarneri G, Boscolo-Rizzo P, Tofanelli M, Gardenal N, Sanges R, Dibattista M, Tirelli G, Menini A. Supporting Cells of the Human Olfactory Epithelium Co-Express the Lipid Scramblase TMEM16F and ACE2 and May Cause Smell Loss by SARS-CoV-2 Spike-Induced Syncytia. Cell Physiol Biochem. 2022 Jun 7;56(3):254-269. doi: 10.33594/000000531.

Sarno N, Hernandez-Clavijo A, Boccaccio A, Menini A, Pifferi S. Slow Inactivation of Sodium Channels Contributes to Short-Term Adaptation in Vomeronasal Sensory Neurons. eNeuro. 2022 May 17;9(3):ENEURO.0471-21.2022. doi: 10.1523/ENEURO.0471-21.2022. Print 2022 May-Jun.

Boscolo-Rizzo P, Hummel T, Hopkins C, D'Alessandro A, Menini A, Dibattista M, Tirelli G. Comprehensive Chemosensory Psychophysical Evaluation of Self-reported Gustatory Dysfunction in Patients With Long-term COVID-19: A Cross-sectional Study. JAMA Otolaryngol Head Neck Surg. 2022 Mar 1;148(3):281-282. doi: 10.1001/jamaoto.2021.3993.

Pifferi S, Menini A. Paving the way for designing drugs targeting TMEM16A. Trends Pharmacol Sci. 2021 Dec;42(12):979-980. doi: 10.1016/j.tips.2021.10.005. Epub 2021 Oct 22.

Boscolo-Rizzo P, Hummel T, Hopkins C, Dibattista M, Menini A, Spinato G, Fabbris C, Emanuelli E, D'Alessandro A, Marzolino R, Zanelli E, Cancellieri E, Cargnelutti K, Fadda S, Borsetto D, Vaira LA, Gardenal N, Polesel J, Tirelli G. High prevalence of long-term olfactory, gustatory, and chemesthesis dysfunction in post-COVID-19 patients: a matched case-control study with one-year follow-up using a comprehensive psychophysical evaluation. Rhinology. 2021 Dec 1;59(6):517-527. doi: 10.4193/Rhin21.249.

Cecchetto C, Di Pizio A, Genovese F, Calcinoni O, Macchi A, Dunkel A, Ohla K, Spinelli S, Farruggia MC, Joseph PV, Menini A, Cantone E, Dinnella C, Cecchini MP, D'Errico A, Mucignat-Caretta C, Parma V, Dibattista M. Assessing the extent and timing of chemosensory impairments during COVID-19 pandemic. Sci Rep. 2021 Sep 1;11(1):17504. doi: 10.1038/s41598-021-96987-0.

Stabilini S, Menini A, Pifferi S. Anion and Cation Permeability of the Mouse TMEM16F Calcium-Activated Channel. Int J Mol Sci. 2021 Aug 9;22(16):8578. doi: 10.3390/ijms22168578.

Agostinelli E, Gonzalez-Velandia KY, Hernandez-Clavijo A, Kumar Maurya D, Xerxa E, Lewin GR, Dibattista M, Menini A, Pifferi S. (2021) A Role for STOML3 in Olfactory Sensory Transduction. eNeuro. 2021 Mar 12;8(2): ENEURO.0565-20.2021. doi: 10.1523/ENEURO.0565-20.2021. Print 2021 Mar-Apr.

Boscolo-Rizzo P, Menegaldo A, Fabbris C, Spinato G, Borsetto D, Vaira LA, Calvanese L, Pettorelli A, Sonego M, Frezza D, Bertolin A, Cestaro W, Rigoli R, D'Alessandro A, Tirelli G, Da Mosto MC, Menini A, Polesel J, Hopkins C. (2021) Six-month psychophysical evaluation of olfactory dysfunction in patients with COVID-19 Chem Senses. 2021 Feb 12:bjab006. doi: 10.1093/chemse/bjab006.

Hernandez-Clavijo A, Sarno N, Gonzalez-Velandia KY, Degen R, Fleck D, Rock JR, Spehr M, Menini A, Pifferi S. TMEM16A and TMEM16B Modulate Pheromone-Evoked Action Potential Firing in Mouse Vomeronasal Sensory Neurons. eNeuro. 2021 Sep 15;8(5):ENEURO.0179-21.2021. doi: 10.1523/ENEURO.0179-21.2021. Print 2021

Guarascio DM, Gonzalez-Velandia KY, Hernandez-Clavijo A, Menini A, Pifferi S. Functional expression of TMEM16A in taste bud cells. J Physiol. 2021 Aug;599(15):3697-3714. doi: 10.1113/JP281645. Epub 2021 Jun 28.

Boccaccio A, Menini A, Pifferi S. (2021) The cyclic AMP signaling pathway in the rodent main olfactory system. Cell Tissue Res. 2021 Jan 15; 383(1):429-443.. doi: 10.1007/s00441-020-03391-7.

Gerkin RC, Ohla K, Veldhuizen MG, Joseph PV, [et al. including Menini A.] GCCR Group Author. (2021) Recent smell loss is the best predictor of COVID-19 among individuals with recent respiratory symptoms. Chem Senses. 2021an 1;46:bjaa081. doi:10.1093/chemse/bjaa081.

Song Q, Pifferi S, Shi L, Chen C, Proietti Zaccaria R, Menini A, Cao J, Zhang Q, Torre V. (2020) Textured nanofibrils drive microglial phenotype. Biomaterials. Jul 3;257:120177. doi: 10.1016/j.biomaterials.2020.120177. Epub 2020 Jul 3.

Parma V, Ohla K, Veldhuizen MG, Niv MY, [et al. including Menini A.] GCCR Group Author. (2020) More than smell - COVID-19 is associated with severe impairment of smell, taste, and chemesthesis. Chem Senses. 2020 Oct 9;45(7):609-622

Dibattista M, Pifferi S, Menini A, Reisert J. (2020) Alzheimer's Disease: What Can We Learn From the Peripheral Olfactory System? Front Neurosci. 2020 May 19;14:440.

Lasconi C, Pifferi S, Hernandez-Clavijo A, Merigo F, Cecchini MP, Gonzalez-Velandia KY, Agostinelli E, Sbarbati A, Menini A**.** (2019) Bitter tastants and artificial sweeteners activate a subset of epithelial cells in acute tissue slices of the rat trachea. Sci Rep. 2019 Jun 20;9(1):8834.

Henriques T, Agostinelli E, Hernandez-Clavijo A, Maurya DK, Rock JR, Harfe BD, Menini A, Pifferi S. (2019) TMEM16A calcium-activated chloride currents in supporting cells of the mouse olfactory epithelium. J Gen Physiol. 2019 Jul 1;151(7):954-966.

Wong WM, Nagel M, Hernandez-Clavijo A, Pifferi S, Menini A, Spehr M, Meeks JP. (2018) Sensory Adaptation to Chemical Cues by Vomeronasal Sensory Neurons. eNeuro. Aug 13;5(4). pii: ENEURO.0223-18.2018

Dibattista M, Pifferi S, Boccaccio A, Menini A, Reisert J. (2017) . The long tale of the calcium activated Cl- channels in olfactory transduction. Channels (Austin). 11(5):399-414.

Pietra G, Dibattista M, Menini A, Reisert J, Boccaccio A. (2016) The Ca2+-activated Cl- channel TMEM16B regulates action potential firing and axonal targeting in olfactory sensory neurons. J Gen Physiol. 148(4):293-311.

Amjad A, Hernandez-Clavijo A, Pifferi S, Maurya DK, Boccaccio A, Franzot J, Rock J, Menini A. (2015) Conditional knockout of TMEM16A/anoctamin1 abolishes the calcium-activated chloride current in mouse vomeronasal sensory neurons. J Gen Physiol. 145(4):285-301.

Maurya DK, Henriques T, Marini M, Pedemonte N, Galietta LJ, Rock JR, Harfe BD, Menini A. (2015) Development of the Olfactory Epithelium and Nasal Glands in TMEM16A-/- and TMEM16A+/+ Mice. PLoS One 10(6):e0129171.

Lorenzon P, Redolfi N, Podolsky MJ, Zamparo I, Franchi SA, Pietra G, Boccaccio A, Menini A, Murthy VN, Lodovichi C. (2015) Circuit formation and function in the olfactory bulb of mice with reduced spontaneous activity. Journal of Neuroscience 35(1):146-60.

Cenedese V, Mezzavilla M, Morgan A, Marino R, Ettorre CP, Margaglione M, Gasparini P, Menini A. (2015)) Assessment of the olfactory function in Italian patients with type 3 von Willebrand disease caused by a homozygous 253 Kb deletion involving VWF and TMEM16B/ANO2. PLoS One 10(1):e0116483.

Cherian OL, Menini A, Boccaccio A. (2015) Multiple effects of anthracene-9-carboxylic acid on the TMEM16B/anoctamin2 calcium-activated chloride channel. Biochim Biophys Acta 1848(4):1005-13.

Maurya DK, Menini A (2014) Developmental expression of the calcium-activated chloride channels TMEM16A and TMEM16B in the mouse olfactory epithelium. Dev Neurobiol. Jul;74(7):657-75.

Franceschini V, Bettini S, Pifferi S, Menini A, Siciliano G, Ognio E, Brini AT, Di Oto E, Revoltella RP. (2014) Transplanted human adipose tissue-derived stem cells engraft and induce regeneration in mice olfactory neuroepithelium in response to dichlobenil subministration. Chemical Senses 39(7):617-29. 23.

Betto G, Cherian OL, Pifferi S, Cenedese V, Boccaccio A, Menini A. (2014) Interactions between permeation and gating in the TMEM16B/anoctamin2 calcium-activated chloride channel. J Gen Physiol. 143(6):703-18.

De Palo G, Facchetti G, Mazzolini M, Menini A, Torre V, Altafini C. (2013) Common dynamical features of sensory adaptation in photoreceptors and olfactory sensory neurons. Scientific Reports 2013;3:1251. doi: 10.1038/srep01251.

Bergami M, Vignoli B, Motori E, Pifferi S, Zuccaro E, Menini A, and Canossa M. (2013) TrkB signaling directs the incorporation of newly-generated periglomerular cells in the adult olfactory bulb. Journal of Neuroscience 33(28):11464-78.

Celsi F, D'Errico A, Menini A. (2012)) Responses to sulfated steroids of female mouse vomeronasal sensory neurons. Chemical Senses 37(9):849-58.

Pifferi S, Cenedese V, Menini A. (2012). Anoctamin 2/TMEM16B: a calcium-activated chloride channel in olfactory transduction. Exp Physiol. 97(2):193-199.

Cenedese V, Betto G, Celsi F, Cherian OL, Pifferi S, Menini A. (2012) The voltage dependence of the TMEM16B/anoctamin2 calcium-activated chloride channel is modified by mutations in the first putative intracellular loop. J Gen Physiol. 139(4):285-94.

De Palo G, Boccaccio A, Miri A, Menini A, Altafini C. (2012) A dynamical feedback model for adaptation in the olfactory transduction pathway. Biophys J. 102(12):2677-86.

Dibattista M, Amjad A, Maurya DK, Sagheddu C, Montani G, Tirindelli R, Menini A. (2012) Calcium-activated chloride channels in the apical region of mouse vomeronasal sensory neurons. J Gen Physiol. 140(1):3-15.

Dibattista M, Massimino ML, Maurya DK, Menini A, Bertoli A, Sorgato MC. (2011) The cellular prion protein is expressed in olfactory sensory neurons of adult mice but does not affect the early events of the olfactory transduction pathway. Chem Senses. 36(9):791-797.

Boccaccio A, Sagheddu C, Menini A. (2011). Flash photolysis of caged compounds in the cilia of olfactory sensory neurons. J. Vis. Exp. 29;(55):e3195. doi: 10.3791/3195.

Sagheddu C, Boccaccio A, Dibattista M, Montani G, Tirindelli R, Menini A. (2010) Calcium concentration jumps reveal dynamic ion selectivity of calcium-activated chloride currents in mouse olfactory sensory neurons and TMEM16B/anoctamin2-transfected HEK 293T cells. Journal of Physiology 588:4189-4204.

Kranjc A, Grillo FW, Rievaj J, Boccaccio A, Pietrucci F, Menini A, Carloni P, Anselmi C. (2009) Regulation of Bestrophins by Ca^{2+}: a Theoretical and Experimental Study. PLoS ONE 4(3):e4672

Franceschini V, Bettini S, Pifferi S, Rosellini A, Menini A, Saccardi R, Ognio E, Jeffery R, Poulsom R, Revoltella RP (2009) Human cord blood CD133+ stem cells transplanted to *nod-scid* mice provide conditions for regeneration of olfactory neuroepithelium after permanent damage induced by dichlobenil. Stem Cells. 27(4):825-835.

Pifferi S, Dibattista M, Sagheddu C, Boccaccio A, Al Qteishat A, Ghirardi F, Tirindelli R, Menini A. (2009) Calcium-activated chloride currents in olfactory sensory neurons from mice lacking bestrophin-2. Journal of Physiology 587:4265-4279.

Tirindelli R, Dibattista M, Pifferi S, Menini A. (2009) From pheromones to behavior. Physiological Reviews 89(3):921-956.

Pifferi S, Dibattista M, Menini A. (2009) TMEM16B induces chloride currents activated by calcium in mammalian cells. Europ. J. Physiol., Pflugers Arch. 458(6):1023-1038.

Menini A and Pifferi S. (2008) New Whiffs About Chemesthesis. Focus on "TRPM5-Expressing Solitary Chemosensory Cells Respond to Odorous Irritants". Journal of Neurophysiology 99(3):1055-6.

Pinato G, Rievaj J, Pifferi S, Dibattista M, Masten L and Menini A. (2008) Electroolfactogram Responses from Organotypic Cultures of the Olfactory Epithelium from Postnatal Mice. Chemical Senses 33(4):397-404.

Dibattista M, Mazzatenta A, Grassi F, Tirindelli R, Menini A. (2008) Hyperpolarization activated cyclic nucleotide-gated channels in mouse vomeronasal sensory neurons. Journal of Neurophysiology 100(2): 576-586.

Khafizov K., Anselmi C., Menini A and Carloni P. (2007) Ligand specificity of odorant receptors. Journal of Molecular Modeling 13(3):401-409.

Boccaccio A. and Menini A. (2007) Temporal development of CNG and Ca2+-activated Cl- currents in isolated mouse olfactory sensory neurons. Journal of Neurophysiology 98(1):153-160.

Shimazaki R., Boccaccio A., Mazzatenta A., Pinato G., Migliore M. and Menini A. (2006) Electrophysiological properties and modeling of murine vomeronasal sensory neurons in acute slice preparations. Chemical Senses 31: 425-435.

Pifferi S., Boccaccio A. and Menini A. (2006) Cyclic nucleotide gated channels in sensory systems. FEBS Letters 580:2853-2859.

Boccaccio A., Lagostena L., Hagen V. and Menini A. (2006) Fast adaptation in mouse olfactory sensory neurons does not require the activity of phosphodiesterase. Journal of General Physiology 128: 171-184.

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Gavazzo P., Picco C. & Menini A. (1997). Mechanisms of modulation by internal protons of cyclic nucleotide-gated channels cloned from sensory receptor cells. Proc. R. Soc. Lond. B 264, 1157-1165.

Picco C. Sanfilippo C., Gavazzo P. & Menini A. (1996). Modulation by internal protons of native cyclic nucleotide-gated channels from retinal rods. J. Gen. Physiol. 108, 265-276.

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