curriculum vitae

Personal information

Surname(s) / First name(s)	**Strettoi Enrica**
Address(es)	Via Pietro Cuppari 28, 56124 Pisa, Italy
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E-mail(s)	**enrica.strettoi@in.cnr.it**
Nationality(-ies)	Italian
Date of birth	30/04/1959
Gender	Female

Desired employment / Occupational field

Enrolment as an expert in research project management. Fields of competence: Medicine and Biology. Neuroscience.

Work experience

Dates	2001-present: Primo Ricercatore, Istituto di Neuroscienze del CNR, Pisa 1988-2001: Ricercatore, Istituto di Neurofisiologia/Neuroscienze del CNR, Pisa 1994, 2000, 2001, 2005: Professor at the University of Pisa, for the Laurea degree in Biology, Pharmacy, Pharmaceutical Chemistry; recently, University Professor for the course in Neurobiology and Molecular Biotechnology. 1999-present: member of the advisory board of the Dottorato di Ricerca "Neuroscienze di Base e dello Sviluppo", Dipartimento di Fisiologia e Biochimica, Università di Pisa.
Occupation or position held	2001-present: Primo Ricercatore CNR 1988-2001: Ricercatore CNR 1994, 2000, 2001, 2005: University Professor
Main activities and responsibilities	1) Scientific Research in the field of neuroscience, with particular expertise in the anatomy, physiology and pathology of the retina. 2) Management and responsibility of the laboratory of electron microscopy. 3) Principal Investigator and coordinator of multidisciplinary research projects, both national (Telethon Project E. 0833 and international (NIH NEI Project R01 12654; several Italy-USA bilateral projects). Collaboration to numerous international project as external consultant. 4) 1998-2005: Responsible of the animal facility of the Istituto di Neuroscienze. Responsible of the proper application of national rules governing the use of vertebrate animals in scientific research. 5) University and post-University teaching activity. 6) Member of the experts of the Italian Ministry of education (MIUR), with an experience as project referee. Evaluator of scientific projects for international organizations, such as the National Science Foundation, Wellcome Trust etc.).
Name and address of employer	**Istituto di Neuroscienze del CNR; Area della Ricerca CNR, Via Giuseppe Moruzzi 1, 56100 Pisa, Italy**
Type of business or sector	Scientific Research (both basic and applied) in the field of Neuroscience

Education and training

Dates	1) 1978-83: University course, Biological Science, University of Pisa
	2) 1984-89: PhD School in Neuroscience, Faculty of Medicine, University of Pisa
	3) 1986-88: Postdoctoral Fellow, Department of Anatomy and Cellular Biology, Harvard Medical School, Boston, USA
	4) Various specialized courses and schools to learn experimental procedures and advanced techniques in Neurosciences
Title of qualification awarded	1) 1983: Laurea “cum laude” in Biological Sciences
	2) 1990: PhD in Neurosciences
	3) Harvard Medical School certificate
	4) Certificates (International ETP school in cell culture; Course in Image Analysis and Quantification; Molecular Biology and Neurology; Immunocytochemistry; etc.).
Principal subjects/Occupational skills covered	Subjects: Neuroscience. Neuroanatomy. Anatomy and Physiology of the retina. Clinical retinal electrophysiology. Physiopathology of inherited retinal disorders.
	Occupational skills: Microscopy. Electron Microscopy. Confocal Microscopy. Quantitative image analysis. Immunocytochemistry. Clinical retinal electrophysiology.
Name and type of organisation providing education and training	Istituto di Neurofisiologia of the Italian National Research Council, Pisa (Governamental, non-profit, research Institution)
	Department of Anatomy and Cellular Biology, Harvard Medical School, Boston, USA (Medical School)
	Massachusetts General Hospital, Neurosurgery laboratory, Harvard Medical School, Boston, USA (Research Laboratory within a large Hospital Facility)
Level in national or international classification	ISCED 6, 1st Qualification

Personal skills and competences

Mother tongue(s) **Italian**

Other language(s)

Self-assessment European level (*)	Understanding		Speaking		Writing
	Listening	Reading	Spoken interaction	Spoken production	
Language	Alte C2	Alte C2	Alte C2	Alte C2	Alte C2
Language					

(*) *Common European Framework of Reference (CEF) level*

Social skills and competences

Excellent capability of social interaction with collaborators and students, thanks to the working experience in international laboratories, university teaching (also experienced in international contexts) and the direct training of young PhD students in the laboratory.

Excellent social interactions developed with vision-impaired patients, because of frequent meetings with them and participation to symposia organized by their associations. Dr. Strettoi is a member of the scientific committee of Retina Italia and ATRI Toscana and a referee scientist for information on ocular diseases for TeleThon.

Organisational skills and competences

Organization and coordination of research project involving several laboratories (Pisa, Rome, Boston)
Organization of Scientific Meetings (Meeting of the Istituto Neuroscienze CNR, 2000; Meeting of the Italian Society for Neuroscience, 2004; etc.)
Organization of specialized courses and schools (Confocal Microscopy course, 2007, Pisa, ITALY)

Technical skills and competences

Experience in design and management of articulated and long-standing research projects. Dr. Strettoi is one of the few foreign investigators funded by the National Institute of Health, the most important agency sponsoring research in the USA. The NIH has funded a project to Dr. Strettoi for five years (2001-2005) and has recently approved funding the continuation of that research (2005-2009).

Competence in the scientific evaluation of international research projects (external referee of various national and international organizations, including NSF, MIUR etc.).

Experience in elaborating and peer reviewing scientific manuscripts, (as a collaborator of several specialized journals, including the Journal of Neuroscience, the Journal of Comparative Neurology, Visual Neuroscience etc.).

Experience in international scientific communication, thanks to the invited participations to numerous international symposia (such as the XX Taniguchi sysmposium in Japan, The Vision Conference in the USA and the l XXIV ISER Conference, to be held in Buenos Aires in 2006.

Computer skills and competences

General use of the main programs of the Office package (Word, Power Point, Excel).
Professional use of programs for image editing and quantitative analysis (Adobe Photoshop, Metamorph, Nikonview etc.), used to elaborate microscopic image data.
This expertise has been achieved through specialized courses as well as through the routine laboratory use.

Artistic skills and competences

Polyphonic coral singing, learnt from local singing masters.

Other skills and competences

Driving licence(s)

Regular driving licence for cars, since 1978

Additional information

For additional information, plase contact:

- Prof. Lamberto Maffei, Scuola Normale Superiore, Pisa **maffei@in.cnr.it**
- Prof. Elio Raviola, Bullard Professor of Anatomy, Department of Neurobiology, Harvard Medical School, Boston, USA **eraviola@hms.harvard.edu**
- Prof. Richard H. Masland, Howard Hughes Medical Institute
Massachusetts General Hospital, Boston, USA **masland@helix.mgh.harvard.edu**
- Prof. Constance C. Cepko, Professor of Genetics, Harvard Medical School, Boston, USA
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- Prof. Heinz Waessle, Max-Planck-Institut fuer Hirnforschung, Frankfurt/Main, Germany
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Annexes

The following is a complete list of the full papers published by Dr. Enrica Strettoi

Publications
Dr. Enrica Strettoi

Book chapters:

1. Marchiafava PL, R Weiler, E Strettoi (1983). Intracellular recording with horseradish-peroxidase electrodes reveals distinct functional roles of retinal plexiform layers. The Physiology of Excitable Cells. Alan R. Liss, Inc. New York: 549-556.

2. Kusmic C, PL Marchiafava, E Strettoi (1990). The photoresponse of the trout pineal cells. Sensory Transduction. A. Borsellino et al., Ed. Plenum Press: 257-262.

3. Strettoi E (2001) La retina: organizzazione strutturale e condizioni patologiche. In: Fisiopatologia del Sistema Visivo. Collana "I quaderni del CNR", Ed. Primula Multimedia (PI).

4. Strettoi E (2008). Mammalian rod pathways. In: A Basbaum, A Kaneko, G Sheperd, G Westheimer, editors. The Senses: a Comprehensive Reference. Vol.1, Vision I, R Masland and T Albright. San Diego: Academic Press; 2008. pp-303-311. (Encyclopedia).

5. Strettoi E (2008). Synaptic organization of the mouse retina. In: Eye, Retina, and Visual System of the Mouse. L Chalupa and R Williams editors. MIT Press., 2008. pp-157-164.

Full papers:

5. Marchiafava PL, E Strettoi, V Alpigiani (1985) Intracellular recording from single and double cone cells isolated from the fish retina (Tinca tinca). Exp Biol 44: 173-180.

6. Cantino D, PL Marchiafava, E Strettoi, E Strobbia (1986) Subsurface cisternae in retinal double cones. J Submicrosc Cytol 18 (3): 559-564.

7. Baldridge WH, PL Marchiafava, RG Miller, E Strettoi (1987) Coupling in the absence of gap junctions in fish double cone: a dye diffusion and freeze-fracture study. J Submicrosc Cytol 19 (4): 545-554.

8. Piccolino M, E Strettoi, E Laurenzi (1989) Santiago Ramon y Cajal, the neuron theory and the retina. Doc Ophtalmol 71:123-141.

9. Strettoi E, RF Dacheux, E Raviola (1990) Synaptic connections of rod bipolar cells in the inner plexiform layer of the rabbit retina. J Comp Neurol 294: 449-466.

10. Piccolino M, GC Demontis, P Witkowsky, E Strettoi, GC Cappagli, ML Porceddu, MG De Montis, S Pepitoni, G Biggio, E Meller, K Bohmaker (1990) Involvment of D1 and D2 Dopamine receptors in the control of horizontal cell electrical coupling in the turtle retina. Europ J Neurosci 1 (3): 247-257.

11. Kusmic, C, PL Marchiafava, E Strettoi (1992) Photoresponse and light adaptation of pineal photoreceptors in the trout. Proc R Soc Lond B 248: 149-157.

12. Strettoi E, E Raviola, RF Dacheux (1992) Synaptic connections of the narrow-field, bistratified rod amacrine cell (AII) in the rabbit retina. J Comp Neurol 325: 152-168.

13. Colombaioni L, E Strettoi (1993) Appearance of cGMP-phosphodiesterase immunoreactivity parallels the morphological differentiation of photoreceptor outer segments in the rat retina. Visual Neurosci 10: 395-402.

14. Giannaccini G, C Martini, A Lucacchini, E Strettoi, M Piccolino (1993) [3H] Ro 5-4864 and [3H] PK

11195 bind to the retina of the rabbit, but not of turtle. J Neurochem 61, 1263-1269.

15. Strettoi E, RF Dacheux, E Raviola (1994) Cone bipolar cells as interneurons in the rod pathway of the rabbit retina. J Comp Neurol 347:139-149.

16. Strettoi E, RH Masland (1995) The organization of the inner nuclear layer of the rabbit retina. J Neurosci 15(1): 875-888.

17. Cenni MC, Bonfanti L, Martinou JC, Ratto GM, Strettoi E, Maffei L (1996) Long-term survival of retinal ganglion cells following optic nerve section in adult bcl-2 transgenic mice. Eur J Neurosci 8(8):1735-45.

18. Strettoi E, Masland RH (1996) The number of unidentified amacrine cells in the mammalian retina. Proc Natl Acad Sci U S A 93(25):14906-11.

19. Bonfanti L, Strettoi E, Chierzi S, Cenni MC, Liu XH, Martinou J-C, Maffei L, Rabacchi SA (1996) Protection of retinal ganglion cells from natural and axotomy-induced cell death in neonatal transgenic mice overexpressing bcl-2. J Neurosci 16(13):4186-94.

20. Chierzi S, Cenni MC, Maffei L, Pizzorusso T, Porciatti V, Ratto GM, Strettoi E (1997) Protection of retinal ganglion cells and preservation of function after optic nerve lesion in bcl-2 transgenic mice. Vision Res 38(10):1537-43.

21. Fagiolini M, Caleo M, Strettoi E, Maffei L (1997) Axonal transport blockade in the neonatal rat optic nerve induces limited retinal ganglion cell death. J Neurosci 17(18):7045-52.

22. Marchiafava PL, Kusmic C, Longoni B, Strettoi E (1997) Cell physiology of the pineal body. Arch Ital Biol 135(2):183-94.

23. Ratto GM, Bonfanti L, Cenni MC, Pizzorusso T, Porciatti V, Rabacchi SA, Strettoi E, Maffei L (1997) Retinal ganglion cell anatomy and physiology after section of the optic nerve in mice overexpressing bcl-2. Adv Neurol 72:87-94.

24. Jeon CJ, Strettoi E, Masland RH (1998) The major cell populations of the mouse retina. J Neurosci 18: 8936-46.

25. Chierzi S, Strettoi E, Cenni MC, Maffei L (1999) Optic nerve crush: axonal responses in wild-type and bcl-2 transgenic mice. J Neurosci 19(19):8367-76.

26. Strettoi E, Pignatelli V (2000) Modification of retinal neurons in a mouse model of retinitis pigmentosa. Proc Natl Acad Sci USA 97(20):11020-11025.

27. Galli-Resta L, Novelli E, Volpini M, Strettoi E (2000) The spatial organization of the cholinergic mosaics in the adult mouse retina. Europ J Neurosci (12):1-4.

28. Strettoi E, Volpini M (2002) Retinal organization in the bcl-2 overexpressing transgenic mouse. J Comp Neurol 446(1):1-10.

29. Strettoi E Porciatti V, Falsini B, Pignatelli V, Rossi C, Morphological and functional abnormalities in the inner retina of the rd/rd mouse. J Neurosci 22(13):5492-5504.

30. Jeon CJ, Kong JH, Strettoi E, Rockhill R, Stasheff SF, Masland RH (2002) Pattern of synaptic excitation and inhibition upon direction-selective retinal ganglion cells. J Comp Neurol 449(2):195-205.

31. Strettoi E, Pignatelli V, Rossi C, Porciatti V, Falsini B. (2003) Remodeling of second-order neurons in the retina of rd/rd mutant mice. Vision Res 43(8):867-77.

32. Marc RE, Jones BW, Watt CB, Strettoi E (2003) Neural remodeling in retinal degenerations. Progr Ret Eye Res 22(5):607-55. Review.

33. Rossi C, Strettoi E, Galli-Resta L (2003) The spatial order of horizontal cells is not affected by massive alterations in the organization of other retinal cells. J Neurosci 23(30):9924-8.

34. Pignatelli V, Cepko CL, Strettoi E. (2004) Inner retinal abnormalities in a mouse model of Leber's congenital amaurosis. J Comp Neurol 469(3):351-9.

35. Pignatelli V, Strettoi E (2004) Bipolar cells of the mouse retina: a gene-gun, morphological study. J Comp Neurol 476(3):254-66.

36. Strettoi E, Mears AJ, Swaroop A (2004) Recruitment of the rod pathway by cones in the absence of rods. J Neurosci 24(34):7576-82.

37. Oh EC, Khan N, Novelli E, Khanna H, Strettoi E, Swaroop A (2007). Transformation of cone precursors to functional rod photoreceptors by bZIP transcription factor NRL. Proc Natl Acad Sci U S A 104(5):1679-84.

38. Gargini C, Terzibasi E, Mazzoni F, Strettoi E (2007). Retinal organization in the retinal degeneration 10 (rd10) mutant mouse: a morphological and ERG study. J Comp Neurol 500(2):222-38.

39. Damiani D, Alexander JJ, O'Rourke JR, McManus M, Jadhav AP, Cepko CL, Hauswirth WW, Harfe BD, Strettoi E (2008). Dicer inactivation leads to progressive functional and structural degeneration of the mouse retina. J Neurosci 28(19):4878-87.