

CURRICULUM VITAE

Name STEFANO FERRARI
Date and place of birth 9th June 1970, Verona, Italy
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EDUCATION & QUALIFICATIONS

1984-1989 Liceo Scientifico, Verona, Italy: maturità scientifica with final mark of 60/60
1989-1995 Faculty of Biological Science, University of Padova, Italy: laurea (Italian degree) in Biological Science with final mark of 110/110 *cum laude*
1996-1999 Ph.D studentship (title: Sciences of Development) at the Department of Paediatrics/CRIBI, University of Padova, Italy

WORK EXPERIENCES

March 2003 to now: research scientist at the Fondazione Banca degli Occhi del Veneto (<http://research.fbov.org>, Venice, Italy); **June 1999-March 2003**: research associate at the Department of Gene Therapy, NHLI, Imperial College Faculty of Medicine, London, UK; **March-December 1998**: Recipient of two short-term fellowships from the Cystic Fibrosis Trust to work at the Department of Gene Therapy, NHLI (Imperial College School of Medicine) directed by Prof. Eric Alton in London, UK; **November 1996-October 1999**: PhD studentship (tutor: Dr Maurizio Scarpa) at the Department of Paediatrics/CRIBI, Padova, Italy with a thesis on “Investigating The Use Of Linear Polyethylenimine As A New Synthetic Vector For Gene Therapy Of Cystic Fibrosis”; **February-May 1996**: recipient of a short term fellowship from the Association Française pour la Lutte contre la Mucoviscidose (AFLM) to work in the "genetic chemistry" laboratory directed by Prof. JP Behr in Strasbourg, France; **March 1995-November 1996**: post-graduate position at the Department of Paediatrics/CRIBI Padova, Italy; **October 1989-March 1995**: student at the Faculty

of Biological Science, University of Padova, Italy. Thesis on “Nonviral vector-mediated CFTR cDNA transfer to airway epithelial cells derived from patients with Cystic Fibrosis” (supervisors: Dr Maurizio Scarpa & Prof Gerolamo Lanfranchi) at the Department of Paediatrics/CRIBI Biotechnology Centre, Padova.

TECHNICAL SKILLS

- A variety of gene transfer techniques mediated by synthetic (PEI, Lipofectamine, DOSPER, GL-67, DOTAP, etc) and viral vectors (adenovirus, Sendai virus, retrovirus, lentivirus, herpes virus) and physical methods (ultrasound, magnetofection, electroporation) both *in vitro*, *ex vivo* and *in vivo* (mice, rats, rabbits, ferrets) to lung, nose, muscle;
- Reporter gene assays (luciferase, β -galactosidase, CAT, GFP) from *in vitro* cells and animal tissues (lung, muscle, heart, etc);
- Cell Biology (cell culture of primary cells and cell lines, stable and transient transduction of primary cells, cell lines, *ex vivo* tissues);
- Molecular Biology (PCR, RT-PCR, cloning of cDNAs into plasmid vectors, DNA preps);
- Biochemical assays (western blotting, immunofluorescence, immunoprecipitation, immunohistochemistry);
- Virology (virus propagation in embryonated chicken eggs, haemagglutination assay, determination of virus titre, detection of neutralising antibodies);
- Previous holder of a Personal Licence to work with laboratory animals (mouse, rat, rabbit, ferret) released by UK Home Office (PIL 70/15528).
- Fully familiar with PC and Macintosh systems and with most common computer programs (Microsoft Excel, Word, Power Point);
- Fluent English (written and spoken);

SCIENTIFIC ACTIVITY & MEMBERSHIP

- Member of the American Society of Gene Therapy (2000-2006);
- Former member of the UK Cystic Fibrosis Gene Therapy Consortium (www.cfgenetherapy.org.uk);
- External reviewer for Gene Therapy, Human Gene Therapy, Journal of Gene Medicine;

- Member of the Scientific Advisory Board of GENEGRAFT (project 261392, FP7-HEALTH-2010-single-stage coordinated by Alain Hovnanian) – for the years 2011-2012.
- Supervisor of a Marie Curie fellowship awardee, Dr Hossein Elbadawy, as part of the I-MOVE-2012-2 call (proposal 12002024002202412417, Cx43EyeTherapy: Targeting connexin 43 by gene therapy for scar reduction and regenerative healing of human cornea).
- Member of the Scientific & Organizing Committees of the 2nd European Conference on Aniridia (Venice, Italy, 19-20 September 2014; <http://2014.aniridiaconference.org>).
- Member of the Scientific Committee of the 2015 *European Eye Bank Association* Conference (Venice, Italy, 16-17th January 2015).
- MC Substitute for Italy to EU-COST Action BM1302 “Joining Forces in Corneal Regeneration Research” (from February 2014 to 2017).
- External examiner for PhD VIVA of Charles Osei-Bempong (16th September 2014, Newcastle University, UK).
- Member of the European Eye Bank Association (01/07/2014 – 30/06/2015).
- Supervisor of a Boehringer Ingelheim Fonds travel grant awardee, Dr Zala Luznik (19.01.2015 – 10.04.2015).

PATENTS

1. **“Paramyxovirus vector for gene transfer to the cardiovascular system”**. Patent application Number: TOKUGAN 2000-339942. Patent filed in Japan. Inventors: Eric Alton (Imperial College), Duncan Geddes (IC), Stefano Ferrari (IC), Uta Griesenbach (IC), Mamoru Hasegawa (DNAVEC Research Inc), Xiaogang Hou (DNAVEC Research Inc).
2. **“Minus strand RNA viral vectors carrying a gene with altered hypermutable regions”**. Patent application number: WO05001082. Filed by DNAVEC in 2003 and notified to Imperial Innovations Limited. Inventors: Eric Alton (Imperial College), Stefano Ferrari (IC), Uta Griesenbach (IC), Steve Hyde (Oxford University), Mamoru Hasegawa (DNAVEC), You Jun (DNAVEC), Akihiro Iida (DNAVEC).

EDITORIAL ACTIVITY

- Editor with Prof E Alton and Dr U Griesenbach of the “Progress & Prospects” review series published monthly in *Gene Therapy* (October 2002 – August 2011).

- Progress and Prospects: Gene Therapy Clinical Trials (Part 1). Topics and list of authors developed by E Alton, **S Ferrari**, U Griesenbach – Progress and Prospects Series Editors. *Gene Therapy* 2007; **14**: 1439-1447.
- Progress and Prospects: Gene Therapy Clinical Trials (Part 2). Topics and list of authors developed by E Alton, **S Ferrari**, U Griesenbach – Progress and Prospects Series Editors. *Gene Therapy* 2007; **14**: 1555-1563.
- “Mucopolysaccharidosis (MPS) and the Eye: what do we know and how can we treat?”. Conference proceedings, 7-9 October 2009, Venice, Italy. Published in “Clinical and Experimental Ophthalmology”, Volume 38, Supplement 1, 62 pages, August 2010. Editors: Ponzin D, **Ferrari S**, Harmatz P, Scarpa M. Sponsored by BioMarin Europe Ltd.

LIST OF PUBLICATIONS

Peer-Reviewed Papers

1997

1. **Ferrari S**. Approaches to gene therapy of cystic fibrosis. *Minerva Biotechnologica* 1997; **9**: 242-253.
2. **Ferrari S**, Moro E, Pettenazzo A, Behr JP, Zacchello F, Scarpa M. ExGen 500 is an efficient vector for gene delivery to lung epithelial cells *in vitro* and *in vivo*. *Gene Therapy* 1997; **4**: 1100-1106.

1999

3. **Ferrari S**, Pettenazzo A, Garbati N, Zacchello F, Behr JP, Scarpa M. Polyethylenimine shows properties of interest for cystic fibrosis gene therapy. *Biochimica et Biophysica Acta* 1999; **1447**: 219-225.

2000

4. Yonemitsu Y, Kitson C, **Ferrari S**, Farley R, Griesenbach U, Judd D, Steel R, Scheid P, Zhu J, Jeffery PK, Kato A, Hasan MK, Nagai Y, Masaki I, Fukumura M, Hasegawa M, Geddes DM, Alton EFW. Efficient gene transfer to airway epithelium using recombinant Sendai virus. *Nature Biotechnology* 2000; **18**: 970-973.

2001

5. **Ferrari S**, Kitson C, Farley R, Steel R, Marriott C, Parkins DA, Scarpa M, Wainwright B, Evans MJ, Colledge WH, Geddes DM, Alton EFWF. Mucus altering agents as adjuncts for nonviral gene transfer to airway epithelium. *Gene Therapy* 2001; **8**: 1380-1386.

2002

6. Griesenbach U, Cassady RL, **Ferrari S**, Fukumura M, Mueller C, Schmitt E, Zhu J, Jeffery PK, Nagai Y, Geddes DM, Hasegawa M, Alton EW. The Nasal Epithelium as a Factory for Systemic Protein Delivery. *Molecular Therapy* 2002; **5**: 98-103.
7. **Ferrari S**, Geddes DM, Alton EFWF. Barriers to and new approaches for gene therapy and gene delivery in cystic fibrosis. *Advanced Drug Delivery Reviews* 2002; **54**: 1373-1393.
8. Griesenbach U, **Ferrari S**, Geddes DM, Alton EFWF. Gene Therapy Progress and Prospects: Cystic Fibrosis. *Gene Therapy* 2002; **9**: 1344-1350.

2003

9. **Ferrari S**, Griesenbach U, Geddes DM, Alton EFWF. Immunological hurdles to lung gene therapy. *Clinical and Experimental Immunology* 2003; **132**: 1-8.

2004

10. Radke PW, Heintz-Green A, Frass OM, Griesenbach U, **Ferrari S**, Geddes DM, Alton EFWF. Effects of intramyocardial pVEGF165 delivery on regional myocardial blood flow: evidence for a spatial "delivery-efficacy" mismatch. *Gene Therapy* 2004; **11**: 1249-1255.
11. **Ferrari S**, Griesenbach U, Shiraki-Iida T, Shu T, Hironaka T, Hou X, Williams J, Zhu J, Jeffery PK, Geddes DM, Hasegawa M, Alton EFWF. A defective non-transmissible recombinant Sendai virus mediates efficient gene transfer to airway epithelium *in vivo*. *Gene Therapy* 2004; **11**: 1659-1664.

2005

12. **Ferrari S**, Pellegrini G, Mavilio F, De Luca M. Gene therapy approaches for epidermolysis bullosa. *Clinics in Dermatology* 2005, **23**: 430-436.
13. Volpi N, Maccari F, **Ferrari S**, De Luca M, Pellegrini G. Separation of keratan-sulfate-derived disaccharides by high-performance liquid chromatography and postcolumn derivatization with 2-cyanoacetamide and fluorimetric detection. *Analytical Biochemistry* 2005, **342**: 200-205.

2006

14. Griesenbach U, Boyton RJ, Somerton L, Escudero Garcia S, **Ferrari S**, Owaki T, Ya-Fen Z, Geddes DM, Hasegawa M, Altmann DM, Alton EFWF. Effect of tolerance induction to

immunodominant T-cell epitopes of Sendai virus on gene expression following repeat administration to lung. *Gene Therapy*, 2006; **13**: 449-456. [IF 2006: 4,782](#)

15. Xenariou S, Griesenbach U, **Ferrari S**, Dean P, Scheule RK, Cheng SH, Geddes DM, Plank C, Alton EFWF. Using magnetic forces to enhance non-viral gene transfer to airway epithelium *in vivo*. *Gene Therapy* 2006; **13**: 1545-1552. [IF 2006: 4,782](#)
16. **Ferrari S**, Pellegrini G, Matsui T, Mavilio F, De Luca M. Towards a gene therapy clinical trial for epidermolysis bullosa. *Reviews on Recent Clinical Trials* 2006; **1 (issue 2)**: 155-161.
17. **Ferrari S**, Pellegrini G, Matsui T, Mavilio F, De Luca M. Gene therapy in combination with tissue engineering to treat epidermolysis bullosa. *Expert Opinion on Biological Therapy*, 2006; **6**: 367-378.
18. Di Iorio E, Barbaro V, **Ferrari S**, Ortolani C, De Luca M, Pellegrini G. Q-FIHC: Quantification of fluorescence immunohistochemistry to analyse p63 isoforms and cell cycle phases in human limbal stem cells. *Microscopy Research and Technique* 2006; **69**: 983-991.
19. Barbaro V, Di Iorio E, **Ferrari S**, Bisceglia L, Ruzza A, De Luca M, Pellegrini G. Expression of *VSI1* in human keratocytes during differentiation to myofibroblasts in response to wound healing. *Investigative Ophthalmology & Visual Science* 2006; **47**: 5243-5250.
20. Mavilio F, Pellegrini G, **Ferrari S**, Di Nunzio F, Di Iorio E, Recchia A, Maruggi G, Ferrari G, Provasi E, Bonini C, Capurro S, Conti A, Magnoni C, Magnoni C, Giannetti A, De Luca M. Correction of junctional epidermolysis bullosa by transplantation of genetically modified epidermal stem cells. *Nature Medicine* 2006; **12**: 1397-1402. [IF 2006: 28,588](#)

2007

21. Xenariou S, Griesenbach U, Liang H, Zhu J, Farley R, Somerton L; Singh C, Jeffery PK, **Ferrari S**, Scheule RK, Cheng SH, Geddes DM, Blomley M, Alton EFWF. Use of ultrasound to enhance non-viral lung gene transfer *in vivo*. *Gene Therapy* 2007; **14**: 768-774.
22. **Ferrari S**, Griesenbach U, Iida A, Farley R, Wright AM, Zhu J, Munkonge F, Smith SN, You J, Ban H, Inoue M, Chan M, Singh C, Verdon B, Argent BE, Wainwright B, Jeffery PK, Geddes DM, Porteous DJ, Hyde S, Gray MA, Hasegawa M, Alton EFWF. Sendai virus-mediated CFTR gene transfer to the airway epithelium. *Gene Therapy* 2007; **14**: 1371-1379.

2008

23. Di Nunzio F, Maruggi G, **Ferrari S**, Di Iorio E, Poletti V, Garcia M, Del Rio M, De Luca M, Larcher F, Pellegrini G, Mavilio F. Correction of laminin-5 deficiency in human epidermal stem cells by transcriptionally targeted lentiviral vectors. *Molecular Therapy* 2008; **16**: 1977-1985.

2009

24. **Ferrari S**, Barbaro V, Di Iorio E, Fasolo A, Ponzin D. Advances in corneal surgery and cell therapy: challenges and perspectives for eye banks. *Expert Review of Ophthalmology* 2009; **4** (3): 317-329.

25. Camposampiero D, Caramello G, Indemini P, Gerten G, Franch A, Birattari F, Donisi PM, Paolin A, **Ferrari S**, Ponzin D. Two red eyes and one asymptomatic donor. *The Lancet* 2009; **374**:1792. IF 2009: 30,758

26. Barbaro V*, **Ferrari S***, Fasolo A, Ponzin D, Di Iorio E. Reconstruction of a human hemicornea through natural scaffolds compatible with the growth of corneal epithelial stem cells and stromal keratocytes. *Molecular Vision* 2009; **15**: 2084-2093. (* **equal contribution**). IF 2009: 2,541

2010

27. Barbaro V, Di Iorio E, **Ferrari S**. Effects of NGF on conjunctival goblet cell differentiation. E-letter to *Investigative Ophthalmology & Visual Science*; 8 January 2010. Published online on www.iovs.org.

28. Picci L, Cameran M, Marangon O, Marzenta D, **Ferrari S**, Frigo AC, Scarpa M. A 10-year large-scale cystic fibrosis carrier screening in the Italian population. *Journal of Cystic Fibrosis* 2010; **9** (issue 1): 29-35. doi:10.1016/j.jcf.2009.10.003

29. Barbaro V, **Ferrari S**, Fasolo A, Pedrotti E, Marchini G, Sbabo A, Nettis N, Ponzin D, Di Iorio E. Evaluation Of Ocular Surface Disorders: A New Diagnostic Tool Based On Impression Cytology And Confocal Laser Scanning Microscopy. *British Journal of Ophthalmology* 2010; **94**: 926-932. doi:10.1136/bjo.2009.164152.

30. Barbaro V, **Ferrari S**, Fasolo A, Pedrotti E, Marchini G, Sbabo A, Nettis N, Ponzin D, Di Iorio E. MUC1 biosynthesis in human corneal and conjunctival epithelia. Author's reply. *British Journal of Ophthalmology* 2010; **94**: 957-958. doi: 10.1136/bjo.2009.178533

31. Di Iorio E, **Ferrari S**, Fasolo A, Böhm E, Ponzin D, Barbaro V. Techniques for culture and assessment of limbal stem cell grafts. *The Ocular Surface* 2010; **8** (3): 146-153.

32. Di Iorio E, Barbaro V, Volpi N, Bertolin M, Ferrari B, Fasolo A, Arnaldi R, Brusini P, Prosdocimo G, Ponzin D, **Ferrari S**. Localization and expression of CHST6 and keratan sulfate

proteoglycans in the human cornea. *Experimental Eye Research* 2010; **91**: 293-299. doi: 10.1016/j.exer.2010.06.001.

33. Ponzin D, **Ferrari S**, Harmatz P, Scarpa M. Ocular manifestations in patients with mucopolysaccharidosis: what do we know and how can we treat? *Clinical and Experimental Ophthalmology* 2010; **38** (Supplement 1): 1-1.
34. Willoughby C, Ponzin D, **Ferrari S**, Lobo A, Landau K, Omidi Y. Anatomy and physiology of the human eye: effects of mucopolysaccharidosis disease on structure and function – a review. *Clinical and Experimental Ophthalmology* 2010; **38** (Supplement 1): 2-11.
35. Mora P, Montanini L, **Ferrari S**. Correspondence. *Retina-The Journal of Retinal and Vitreous Diseases* 2010; **30** (9): 1555.

2011

36. **Ferrari S**, Ponzin D, Ashworth JL, Fahnehjelm KT, Summers CG, Harmatz PR, Scarpa M. Diagnosis and management of ophthalmologic features in patients with mucopolysaccharidosis. *British Journal of Ophthalmology* 2011; **95**: 613-619. doi: 10.1136/bjo.2010.179937.
37. **Ferrari S**, Di Iorio E, Barbaro V, Ponzin D, Sorrentino FS, Parmeggiani F. Retinitis pigmentosa: genes and disease mechanisms. *Current Genomics* 2011, **12** (4): 238-249.

2012

38. Marchini G, Pedrotti E, Pedrotti M, Barbaro V, Di Iorio E, **Ferrari S**, Bertolin M, Ferrari B, Passilongo M, Fasolo A, Ponzin D. Long-term effectiveness of autologous cultured limbal stem cell grafts in patients with limbal stem cell deficiency due to chemical burns. *Clinical and Experimental Ophthalmology* 2012; **4**: 255-267. DOI: 10.1111/j.1442-9071.2011.02609.x.
39. Barbaro V, Confalonieri L, Vallini I, **Ferrari S**, Ponzin D, Mantero G, Willoughby CE, Parekh M, Di Iorio E. Development of an allele-specific real-time PCR assay for discrimination and quantification of p63 R279H mutation in EEC syndrome. *The Journal of Molecular Diagnostics* 2012; **14** (1): 38-45. DOI: 10.1016/j.jmoldx.2011.07.008
40. Di Iorio E, Kaye SB, Ponzin D, Barbaro V, **Ferrari S**, Böhm E, Nardiello P, Castaldo G, McGrath JA, Willoughby CE. Limbal Stem Cell Deficiency and Ocular Phenotype in Ectrodactyly-Ectodermal Dysplasia-Clefting Syndrome caused by p63 Mutations. *Ophthalmology* 2012; **119** (1): 74-83.
41. Parekh M, **Ferrari S**, Di Iorio E, Barbaro V, Camposampiero D, Karali M, Ponzin D, Salvalaio G. A simplified technique for *in situ* excision of cornea and evisceration of retinal tissue from

human ocular globe. *J Vis Exp* 2012; **64**: e3765; DOI: 10.3791/3765. URL for video: www.jove.com/video/3765/

42. Barbaro V, Nardiello P, Castaldo G, Willoughby CE, **Ferrari S**, Ponzin D, Amato F, Bonifazi E, Parekh M, Calistri A, Parolin C, Di Iorio E. A novel de novo missense mutation in TP63 underlying germline mosaicism in AEC syndrome: implications for recurrence risk and prenatal diagnosis. *American Journal of Medical Genetics Part A* 2012; **158A** (8): 1957-1961. DOI: 10.1002/ajmg.a.35414.
43. Parekh M, **Ferrari S**, Di Iorio E, Barbaro V, Bertolin M, Ferrari B, Ponzin D. Targeting corneal disorders using gene therapy. *Expert Review of Ophthalmology* 2012; **7** (4): 351-362.
44. Elbadawy HM, Gailledrat M, Desseaux C, Ponzin D, **Ferrari S**. Targeting herpetic keratitis by gene therapy. *Journal of Ophthalmology* 2012; **2012**: 594869. DOI: 10.1155/2012/594869

2013

45. Montanini L, **Ferrari S**, Crafa P, Ghirardini S, Ponzin D, Orsoni JG, Mora P. Human RNA integrity after postmortem retinal tissue recovery. *Ophthalmic Genetics* 2013; **34** (1-2): 27-31.
46. Parekh M, Salvalaio G, **Ferrari S**, Frigo AC, Griffoni C, Grassetto A, Ruzza A, Camposampiero D, Ponzin D. Effect of postmortem interval on the graft endothelium during preservation and after transplantation for keratoconus. *Cornea* 2013; **32**(6): 842-6.
47. Parekh M, Salvalaio G, Ruzza A, Camposampiero D, Griffoni C, Zampini A, Ponzin D, **Ferrari S**. Posterior Lamellar Graft Preparation: A prospective review from an eye bank on current and future aspects. *Journal of Ophthalmology* 2013; **2013**: ID 769860. <http://dx.doi.org/10.1155/2013/769860>
48. Parekh M*, Graceffa V*, Bertolin M, Elbadawy H, Salvalaio G, Ruzza A, Camposampiero D, Almarza D, Barbaro V, Ferrari B, Breda C, Ponzin D and **Ferrari S**. Reconstruction and regeneration of corneal endothelium: A review on current methods and future aspects. *Journal of Cell Science and Therapy*, 2013; **4**: 146. doi: 10.4172/2157-7013.1000146.

2014

49. Elbadawy HM, Gailledrat M, Desseaux C, Salvalaio G, Di Iorio E, Ferrari B, Bertolin M, Barbaro V, Parekh M, Gayon R, Munegato D, Franchin E, Calistri A, Palù G, Parolin C, Ponzin D, **Ferrari S**. Gene transfer of integration defective anti HSV-1 meganuclease to human corneas *ex vivo*. *Gene Therapy* 2014; **21**(3): 272-281.

50. Parekh M, **Ferrari S**, Ruzza A, Pugliese M, Ponzin D, Salvalaio G. A portable device for measuring donor corneal transparency in eye banks. *Cell and Tissue Banking* 2014; **15(1)**: 7-13.
51. Parekh M, Ruzza A, Salvalaio G, **Ferrari S**, Camposampiero D, Busin M, Ponzin D. Descemet Membrane Endothelial Keratoplasty tissue preparation from donor corneas using a standardized submerged hydro-separation method. *American Journal of Ophthalmology* 2014; **158(2)**: 277-285.e1
52. Salvalaio G, Parekh M, Ruzza A, **Ferrari S**, Camposampiero D, Ponzin D. DMEK lenticule preparation from donor corneas using a novel 'SubHyS' technique followed by anterior corneal dissection. *British Journal of Ophthalmology* 2014; **98**: 1120-1125.
53. M Parekh, L Montanini, P Crafa, G Salvalaio, A Ruzza, A Aaspöllu, P Mora, J Orsoni, D Ponzin and **S Ferrari**. A validated biorepository of retina and choroid tissues for gene expression studies. *Biopreservation and Biobanking* 2014; **12(4)**: 255-258.
54. Parekh M, Salvalaio G, **Ferrari S**, Amoureux MC, Albrecht C, Fortier D, Ponzin D. A quantitative method to evaluate the donor corneal tissue quality used in a comparative study between two hypothermic preservation media. *Cell and Tissue Banking* 2014; **15 (4)**: 543-554.

2015

55. Ruzza A, Parekh M, Salvalaio G, **Ferrari S**, Camposampiero D, Amoureux MC, Busin M, Ponzin D. Bubble technique for Descemet membrane endothelial keratoplasty tissue preparation in an eye bank: air or liquid? *Acta Ophthalmologica* 2015; **93(2)**: e129-34.
56. Parekh M, **Ferrari S**, Salvalaio G, Ponzin D. Synthetic versus serum-based medium for corneal preservation in organ culture: a comparative study between 2 different media. *European Journal of Ophthalmology* 2015; **25(2)**: 96-100.
57. Elbadawy HM, Ruzza A, Parekh M, Camposampiero D, De Rossi M, Sbordon S, **Ferrari S**, Ponzin D. Optical coherence tomography for the identification of a rare case of keratoconus in albino donor cornea. *Journal of Clinical Research and Ophthalmology* 2015; **2 (2)**: 114.
58. Ruzza A, Parekh M, **Ferrari S**, Salvalaio G, Nahum Y, Bovone C, Ponzin D, Busin M. Preloaded donor corneal lenticules in a new validated 3D printed smart storage glide for Descemet stripping automated endothelial keratoplasty. *British Journal of Ophthalmology* 2015; **99**: 1388-1395.
59. Lužnik Z, Parekh M, Bertolin M, Griffoni C, Ponzin D and **Ferrari S**. Biobanking of human retinas: the next big leap for eye banks? *Stem Cells Translational Medicine* 2015; **4 (8)**: 868-872.

60. Elbadawy HE, Salvalaio G, Parekh M, Ruzza A, Baruzzo M, Cagini C, Ponzin D, **Ferrari S**. A superfusion apparatus for *ex vivo* human eye irritation investigations. *Toxicology In Vitro* 2015; **29** (7): 1619-1627.
61. Lužnik Z, **Ferrari S**, Ponzin D. The advances of corneal preparation - What is to come? *Expert Review of Ophthalmology* 2015; **10**(4): 321-324.
62. Ruzza A, Parekh M, Salvalaio G, **Ferrari S**, Ponzin D. Development of a new superficial punch for Descemet's Membrane Endothelial Keratoplasty donor tissue preparation. *British Journal of Ophthalmology*, doi: 10.1136/bjophthalmol-2015-306635.
63. Franch A, Birattari F, Dal Mas G, Luznik Z, Parekh M, **Ferrari S**, Ponzin D. Evaluation of intrastromal riboflavin concentration in human corneas after three corneal cross-linking imbibition procedures: A pilot study. *Journal of Ophthalmology*; 2015; **2015**: Article ID 794256, DOI: 10.1155/2015/794256.

2016

64. Parekh M, **Ferrari S**, Sheridan C, Kaye S and Ahmad S. Concise review: An update on the culture of human corneal endothelial cells for transplantation. *Stem Cells Translational Medicine* 2016; **5** (2): 258-264.
65. Parekh M, Ruzza A, Elbadawy H, **Ferrari S**, Salvalaio G, Camposampiero D, Ponzin D. Transplantation failure due to inadvertent reversal of human donor corneas. *European Journal of Ophthalmology* 2016; **26** (2): e21-23.
66. Marianthi K, Persico M, Mutarelli M, Carissimo A, Pizzo M, Singh Marwah V, Ambrosio C, Pinelli M, Carrella D, **Ferrari S**, Ponzin D, Nigro V, Di Bernardo D, Banfi S. High-resolution analysis of the human retina miRNome reveals isomiR variations and novel microRNAs. *Nucleic Acid Research* 2016; **44** (4): 1525-1540.
67. Barbaro V, Nasti AA, Del Vecchio C, **Ferrari S**, Migliorati A, Raffa P, Lariccia V, Nespeca P, Biasolo M, Willoughby CE, Ponzin D, Palù G, Parolin C, Di Iorio E. Correction of mutant p63 in EEC syndrome using siRNA mediated allele specific silencing restores defective stem cell function. *Stem Cells* 2016; *in press*. DOI: 10.1002/stem.2343
68. Parekh M, Ruzza A, **Ferrari S**, Salvalaio G, Elbadawy H, Ponzin D, Lipari E. Polarization of human donor corneas. *Cell & Tissue Banking* 2016; *in press*.

Books & Book Chapters

- 1 Moro E, **Ferrari S**, Pettenazzo A, Garbati N, Zacchello F, Scarpa M. Gene therapy of cystic fibrosis. In: Pozzi E (ed). *La fibrosi cistica dell'adulto*. EDIMES: Pavia (Italy), 1998, 159-172.
- 2 **Ferrari S**, Jones G, Griffoni C, Ponzin D. Procurement and distribution of ocular tissues for non-clinical purposes: a new donation and application option. In: “BIOBANKS IN THE MEDITERRANEAN AREA”. Edited by L Caenazzo and R Pegoraro. Proget Edizioni (Padova, Italy) 2011: 151-170 (ISBN 978-88-88785-25-7).
- 3 Ponzin D, **Ferrari S**, Holland EJ, Biber JM. The use of allograft corneas and cells in ophthalmic surgery. In: “Tissue and Cell Clinical Use: An Essential Guide”. Edited by RM Warwick and SA Brubaker. Blackwell Publishing Ltd 2012; Chapter 13: 278-301 (ISBN 978-1-4051-9825-7).
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- (b) *Chapter 8* - Pre-Loaded Tissue for DSAEK/UT-DSAEK (Ruzza A, Parekh M, Elbadawy H, **Ferrari S**, Nahum Y, Bovone C, Busin M and Ponzin D); 103-111.
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Abstracts

More than 30 abstracts presented at international meetings such as the American Society of Gene Therapy conference, the European Society of Gene Therapy conference and the North American Cystic Fibrosis conference with abstracts published on special supplements of Molecular Therapy, Journal of Gene Medicine, Thorax, Pediatric Pulmonology and IOVS.

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