

CURRICULUM VITAE

Name and Surname: Mario Vincenzo Di Iorio

Date and place of birth: 15th August 1975, Lucera, FG (ITALY)

Work Address: Molecular Medicine Department, University of
Padova, Via Gabelli, 63, 35121 Padova

Phone: + 39 3402357372

Email: vincenzo.diiorio@unipd.it;

EDUCATION & QUALIFICATIONS

- 2003** Scuola di Specializzazione in “Genetica Applicata” (3 years post-doctoral degree) at University of Rome “La Sapienza”, Italy (70/70 with honors).
- 1999** Italian degree in Biological Science (5 years course) at University of Rome “La Sapienza”, Italy (110/110 with honors).
- 1994** Maturita’ Classica at Liceo Ginnasio Statale “R. Bonghi” (Lucera, FG).

AWARDS, HONORS, POSITIONS AND WORK EXPERIENCE

- 2021** Associate Professor of Genetic and Microbiology at the Department of Molecular Medicine, University of Padua
- 2020** Managing Biologist (Level I), Clinical Genetics Unit, University Hospital of Padua.

- 2018** Renewal of AFM Grant (20687): “Advanced therapy medicinal products for the treatment of ocular defects in Ectrodactyly-Ectodermal Dysplasia-Clefting (EEC) syndrome”.
- 2018** Recipient of the grant from the Italian Ministry of Health (RF-2016-02361159): “Advanced therapy medicinal products for the treatment of ocular defects in Ectrodactyly-Ectodermal Dysplasia-Clefting (EEC) syndrome”.
- 2017** Award of National Academic Scientific Qualification to the functions of associate professor for “Genetica (05/I1)” and “Scienze delle professioni sanitarie e delle tecnologie mediche applicate (06/N1)”.
- 2017** Recipient of AFM Grant (20687): “Advanced therapy medicinal products for the treatment of ocular defects in Ectrodactyly-Ectodermal Dysplasia-Clefting (EEC) syndrome”.
- 2015-2018** Member of the “Technical and Sanitary Committee” of the Ministry of Health, Roma.
- 2015** Recipient of ex-60% funds (60A07-5935/15): "Accelerated ageing and defects in proliferation, differentiation and stratification of p63-mutant-stem cells are restored through a siRNA-based approach: a promising therapeutic option for corneal disorders in EEC patients".
- 2015** Recipient of the grant “Progetti di Ricerca di Ateneo” (PRAT CPDA159895): “Promising gene-based therapeutic approaches to correct ocular surface disorders in EEC patients”, University of Padova.
- 2014** Recipient of ex-60% funds (60A07-4372/14): "Gene therapy approach through siRNA against p63 mutants to correct ocular surface disorders in Ectrodactyly-Ectodermal dysplasia-Clefting (EEC) syndrome".
- 2014:** Collaborator of the grant “Progetti di Ricerca di Ateneo” (PRAT CPDA132881): “Innovative method for the treatment of total limbal stem

cells deficiency through a tissue-engineered hemicornea: animal model”, University of Padova.

- 2013** Recipient of the grant from the Associazione RP Triveneto: “Retinitis Pigmentosa: clinical and molecular diagnosis of disease genes through Next Generation Sequencing (NGS) and developing of innovative cell and gene therapy strategies.”.
- 2013-present** Member of the Ethics Committee of “Istituto Oncologico Veneto-IRCCS” (IOV), Padova.
- 2013-present** Adjunct professor of Genetic and Microbiology at Molecular Medicine Department, University of Padova.
- 2012-present** Executive Biologist (Level I), Microbiology and Virology Unit, Azienda Ospedaliera, Padova: co-responsible of the Quality Management.
- 2012-2016** Collaborator and Quality Control consultant at the Cell Factory of Fondazione Banca degli Occhi del Veneto-Onlus (Venice, Italy).
- 2012** Recipient of the grant from the Italian Ministry of Health (n.199/GR-2010-2316138): “Innovative method for the treatment of total limbal stem cells deficiency (LSCD) through a tissue-engineered hemicornea”.
- 2012** Renewal of AFM Grant (14899): “Towards an innovative therapy of Ectrodactyly-Ectodermal dysplasia Clefting (EEC) syndrome using allele-specific RNA silencing”.
- 2012-present** Awarding of the comparative evaluation for University Researcher Position at the faculty of Medicine and Surgery, scientific-disciplinary sector MED/07, Molecular Medicine Department, University of Padova.
- 2011** Recipient of the grant from the Italian Ministry of Health (n.106/GR-2009-1555694): “Towards an innovative therapy of Ectrodactyly-Ectodermal dysplasia Clefting (EEC) syndrome using allele-specific RNA silencing”.

- 2010** Recipient of AFM Grant (14899): “Towards an innovative therapy of Ectrodactyly-Ectodermal dysplasia Clefting (EEC) syndrome using allele-specific RNA silencing”.
- 2009** Recipient of the grant “Ricerca Finalizzata Regionale (2009, DGRV 4273): “Verso una terapia innovativa della sindrome EEC (Ectrodactyly-Ectodermal dysplasia Clefting) mediante l’impiego dell’RNA silencing allele-specifico”.
- 2008-2012** Quality Control Head at the Cell Factory of Fondazione Banca degli Occhi del Veneto-Onlus (Venice, Italy).
- 2005** Winner of a support stipend award at Timberline Symposium on Epithelial Cell Biology: “Keratinocyte Stem Cells: Tissue Regeneration, Wound Healing and Environmental Responses”.
- 2003/12** Research Scientist at Fondazione Banca degli Occhi del Veneto-Onlus (Venice, Italy).
- 2002** Research Scientist at Vascular Pathology Department (IDI), Rome.
- 2001/2002** Recipient of a Telethon fellowship at TIGEM (Telethon Institute of Genetic and Medicine), Naples.
- 2001** Qualification to the exercise of Biologist profession.
- 2000/2001** Post-graduate position at Medical Genetics Department of IRCCS in S. Giovanni Rotondo (FG).
- 1994/1999** Student at the faculty of Biological Science, University of Rome, Italy, Department of Genetic and Molecular Biology.

GENERAL SKILLS

Fluent English (written and spoken).

SCIENTIFIC SKILLS

CYTOGENETIC: FISH, In Situ Hybridization on *D. Melanogaster* chromosomes and embryos.

MOLECULAR BIOLOGY AND GENETICS: Nucleic acids (DNA-RNA) extraction and purification from cells and tissues, allele-specific Real-Time PCR, in situ hybridization on tissues, gene sequencing, enzymatic digestion, cloning of cDNA into plasmid vectors, DNA preps, gene mapping (Genome-Wide Search) through linkage analysis, Hammerhead Ribozyme applications in gene therapy, preparation and validation of microbiological, virological and biomolecular assays performed in GMP setting, for the definition of identity, potency, purity and contaminants on grafts of autologous corneal stem cells.

CELL BIOLOGY: experience with primary cultures: human epithelial stem cells of cornea, conjunctiva and skin (life-span, cell and population doublings, colony forming efficiency), clinical application of human corneal epithelial graft for the treatment of Limbal Stem Cell Deficiency (LSCD), Brd-U incorporation in epithelial cells for proliferation assay, wound healing and migration assay.

EXPERIENCE WITH NON VIRAL AND VIRAL GENE TRANSFERS: lipofectamine transfection, transduction and titration with lentiviral particles, siRNAs transfection.

IMMUNOHISTOCHEMISTRY AND MICROSCOPY: very good experience with Confocal and Widefield Microscopy, chromogenic and fluorescence immunohistochemistry on human tissues (cornea, skin, amniotic membrane) and artificial scaffolds (collagen,

polyester, chitosan, foam, film), in situ hybridization on cryopreserved tissues, Q-FIHC and Q-FISH: quantification of the fluorescence immunohistochemistry by laser scanning confocal microscopy, multi-channel fluorescence (double and triple fluorescence staining) with single and multi-track acquisitions, Z-stack acquisition, Time-Lapse analysis through confocal microscope on living cells, immunocytochemistry of clinical markers, experience with Ventana Discovery XT (an automated immunostaining machine for diagnostic and research applications).

PARTICIPATION IN SCIENTIFIC CONFERENCES AS A SPEAKER

2005: Timberline Symposium “Keratinocyte Stem Cells: Tissue Regeneration, Wound Healing and Environmental Responses”. Winner of a support stipend award. Poster presentation: “Expression pattern of p63 in the human limbal-corneal epithelium: implications for epithelial regeneration”, Timberline.

2005: Seminario di Microscopia Confocale e Tecniche Correlate
“Q-FIHC quantification of the fluorescence immunohistochemistry”.
Trieste, ICGEB.

2006: Cellule Staminali: “Presente e Futuro”
“Dai cloni alla clinica: le cellule staminali epiteliali nella medicina rigenerativa”, Foggia.

2008: Terapia Cellulare e Medicina Rigenerativa -Meeting FITOT.
“Use of epithelial cells in regenerative medicine”, Verona.

2008: 88° Congresso Nazionale SOI (Società Oftalmologica Italiana)
“Gli sviluppi della ricerca sulle cellule staminali della superficie oculare”, Roma.

2009: II Meeting Internazionale AIERV
“Attualità delle terapie geniche”, Roma.

2010: Meeting: Occhio e Sindrome EEC: aspetti clinici e sperimentali, Venezia.
 “Coinvolgimento del gene p63 nelle cellule staminali della superficie oculare”.

2010: BIT's 3rd Annual World Congress of Regenerative Medicine & Stem Cells
 Shanghai.

“Gene therapy approach through Stealth SiRNA against p63 to correct ocular surface disorders in Ectrodactyly-Ectodermal dysplasia-Clefting (EEC) syndrome”.

2011: Association for Research in Vision and Ophthalmology (ARVO) Annual Meeting
 Fort-Lauderdale FL. Poster presentation:

“Gene therapy approach through siRNA against p63 to correct ocular surface disorders in Ectrodactyly-Ectodermal Dysplasia Clefting (EEC) syndrome”. Hot topic designation.

PUBLICATIONS

Abstracts

2008: V. Barbaro, **E. Di Iorio**, S. Ferrari, D. Ponzin. (2008). Use of synthetic and natural scaffolds to develop new clinical applications for corneal epithelial stem cells. Presented at the XXXV Annual meeting European Society for Artificial Organs (ESAO, 3-6 September 2008, Geneva-Switzerland.

2010: **E. Di Iorio**, S.B. Kaye, D. Ponzin, V. Barbaro, S. Ferrari et al. “Limbal Stem Cell Deficiency and Ocular Phenotype in Ectrodactyly-Ectodermal Dysplasia-Clefting Syndrome Caused by p63 Mutations”. Presented at the European Society of Cornea & Ocular Surface Disease Specialists (EuCornea), June 17–19, 2010, Venice, Italy,

2010: **E. Di Iorio**, S.B. Kaye, D. Ponzin, V. Barbaro, S. Ferrari et al. “Gene therapy approach through Stealth SiRNA against p63 to correct ocular surface disorders in Ectrodactyly-ectodermal Dysplasia-clefting (EEC) syndrome”. Presented at the BIT Life

Sciences' 3rd Annual World Congress of Regenerative Medicine & Stem Cells, December 5–7, 2010, Shanghai, China.

2011: E. Di Iorio, S.B. Kaye, D. Ponzin, V. Barbaro, S. Ferrari et al. “Gene therapy approach through Stealth SiRNA against p63 to correct ocular surface disorders in Ectrodactyly-ectodermal Dysplasia-clefting (EEC) syndrome”. Presented at: the Association for Research in Vision and Ophthalmology meeting, May 1–5, Fort Lauderdale, Florida;

Peer-Reviewed Articles

1) Melchionda S, Ahituv N, Bisceglia L, Sobe T, Glaser F, Rabionet R, Arbones ML, Notarangelo A, **Di Iorio E**, Carella M, Zelante L, Estivill X, Avraham KB, Gasparini P. MYO6, the human homologue of the gene responsible for deafness in Snell's waltzer mice, is mutated in autosomal dominant nonsyndromic hearing loss.

Am J Hum Genet. 2001;69(3):635-40.

2) Wattenhofer M, **Di Iorio E**, Rabionet R, Dougherty L, Pampanos A, Schwede T, Montserrat-Sentis B, Arbones L, Iliades T, Pasquadibisceglie A, D'Amelio M, Alwan S, Rossier C, Dahl HH, Petersen MB, Estivill X, Gasparini P, Scott HS, Antonarakis SE. Mutations in the TMPRSS3 gene are a rare cause of childhood nonsyndromic deafness in Caucasian patients. *J Mol Med* 2002;80(2):124-31

3) D'Andrea P, Veronesi V, Bicego M, Melchionda S, Zelante L, **Di Iorio E**, Buzzone R, Gasparini P.

Hearing loss: frequency and functional studies of the most common connexin 26 alleles.

Biochem Biophys Res Commun 2002; 296(3):685

4) D'Adamo P, Donaudy F, D'Eustacchio A, **Di Iorio E**, Melchionda S, Gasparini P.

A new locus (DFNA47) for autosomal dominant non-syndromic inherited hearing loss maps to 9p21-22 in a large Italian family. *Eur J Hum Genet.* 2003;11(2):121-4.

5) Di Iorio E*, Barbaro V*, Ruzza A, Ponzin D, Pellegrini G, De Luca M.

Isoforms of $\Delta Np63$ and the migration of ocular limbal cells in human corneal regeneration. *Proc Natl Acad Sci U S A* 2005;102(27):9523-8. *Equal contribution

6) Barbaro V*, **Di Iorio E***, Ferrari S, Bisceglia L, Ruzza A, De Luca M, Pellegrini G.

Expression of VSX1 in human corneal keratocytes during differentiation to myofibroblasts in response to wound healing. *Invest Ophthalmol Vis Sci* 2006; 47(12):5243-5250 *Equal contribution

7) 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". *Micr. Res. Tec.* 2006 ,69: 983-991

8) Mavilio F, Pellegrini G, Ferrari S, Di Nunzio F, **Di Iorio E**, Recchia A, Mareggi G, Ferrari G, Bonini C, Capurro S, Conti A, Magnoni C, Giannetti A, De Luca M.

Correction of Junctional Epidermolysis Bullosa by transplantation of genetically modified epidermal stem cells. *Nat Med.* 2006;12(12):1397-402.

9) Builles N, Bechetoille N, Justin V, André V, Barbaro V, **Di Iorio E**, Auxenfans C, Hulmes DJ, Damour O.

Development of a hemicornea from human primary cell cultures for pharmacotoxicology testing. *Cell Biol.Toxicol.* 2007; 23 (4):279-92.

10) Barbaro V*, Testa A*, **Di Iorio* E**, Mavilio F, Pellegrini G, De Luca M

C/EBP δ regulates cell cycle and self-renewal of human limbal stem cells. *J Cell Biol.* 2007;177(6):1037-49 *Equal contribution

11) Vinciguerra P, Albe'E, Rosetta P, **Di Iorio E**, Pellegrini G.

Custom Phototherapeutic keratectomy and autologous fibrin-cultured limbal stem cell autografting: a combined approach. *J Refract Surg*, 2008; 24(4): 323-4

12) Di Nunzio F, Maruggi G, Ferrari S, **Di Iorio E**, Poletti V, Garcia N, 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. *Mol Ther.* 2008;16(12):1977-85.

13) Ferrari S, Barbaro V, **Di Iorio E**, Fasolo A, Ponzin D.

Advances in corneal surgery and cell therapy: challenges and perspectives for the eye banks. *Expert Rev Ophthalmol* 2009; 4(3), 317-329

14) Barbaro V, Ferrari S, Fasolo A, Ponzin D, **Di Iorio E**.

Reconstruction of human hemicornea through natural scaffolds compatible with the growth of the corneal epithelial cells and stromal keratocytes. *Mol Vis.* 2009; 15:2084-93

15) 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.

16) 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. *Br J Ophthalmol.* 2010;94(7):926-32.

17) Barbaro V, Ferrari S, Fasolo A, Pedrotti E, Marchini G, Sbabo A, Nettis N, Ponzin D, **Di Iorio E**.

Different expression levels of MUC1 in conjunctiva and cornea for the assessment of ocular surface disorders. *Br J Ophthalmol.* 2010; 94: 957-958.

18) **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. *Exp Eye Res.* 2010;91(2):293-9.

19) Di Iorio E, Ferrari S, Fasolo A, Böhm E, Ponzin D, Barbaro V.

Technique for culture and assessment of limbal stem cell grafts. *Ocul Surf.* 2010;8(3):146-53.

20) Marchini G, Pedrotti E, Pedrotti M, Barbaro V, **Di Iorio E**, Ferrari S, Passilongo M, Fasolo A, Ponzin D.

Long-term survival of autologous cultured limbal stem cell grafts in patients with limbal stem cell deficiency due to chemical burns. *Clin Experiment Ophthalmol* 2012;40:255-267.

21) 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 (EEC) syndrome caused by p63 mutations. *Ophthalmology* 2012, 119(1): 74-83.

22) Ferrari S, **Di Iorio E**, Barbaro V, Ponzin D, Sorrentino F S, Parmeggiani F.

Retinitis Pigmentosa: genes and disease mechanisms. *Curr Genomics* 2011, 12(4): 238-249.

23) Barbaro V, Vallini I, Confalonieri L, Ferrari S, Mantero G, Ponzin D, 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. *J Mol Diagn* 2012, 14(1): 38-45.

24) 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). doi: 10.3791/3765.

25) 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. *Am J Med Genet Part A*, 2012, 158A (8): 1957-61

26) Parekh M, Ferrari S, **Di Iorio E**, Barbaro V, Bertolin M, Ferrari B, Ponzin D.

Targeting corneal disorders using gene therapy. *Expert Rev Ophthalmol*, 2012, 7(4), 351-362

27) Saoncella S, Tassone B, Deklic E, Avolio F, Jon C, Tornillo G, De Luca E, **Di Iorio E**, Piva R, Cabodi S, Turco E, Pandolfi P and Calautti E. Nuclear Akt2 opposes limbal keratinocyte stem cell self-renewal by repressing a FOXO-mTORC1 signaling pathway. *Stem Cells*. 2013 Oct 7. doi: 10.1002/stem.1565.

28) 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 Ther*, 2014;21(3):272-81.

29) Pedrotti E., Passilongo M, Fasolo A, Nubile M, Parisi G, Mastropasqua R, Ficial S, Bertolin M, **Di Iorio E**, Ponzin D, Marchini G. In vivo confocal microscopy one year after autologous cultured limbal stem cell grafts. *Ophthalmology*. 2015;122(8):1660-1668.

30) 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;34(6):1588-600.

- 31) Barbaro V, Nasti AA, Raffa P, Migliorati A, Nespeca P, Ferrari S, Palumbo E, Bertolin M, Breda C, Miceli F, Russo A, Caenazzo L, Ponzin D, Palù G, Parolin C, **Di Iorio E**. Personalized stem cell therapy to correct corneal defects due to an unique homozygous-heterozygous mosaicism of EEC Syndrome. *Stem Cells Transl Med.* 2016; 5(8): 1098-105. doi: 10.5966/sctm.2015-0358.
- 32) Fasolo A, Pedrotti E, Passilongo M, Marchini G, Monterosso C, Zampini R, Bohm E, Birattari F, Franch A, Barbaro V, Bertolin M, Breda C, **Di Iorio E**, Ferrari B, Ferrari S, Meneguzzi M, Ponzin D. Safety outcomes and long term effectiveness of ex vivo autologous cultured limbal epithelial transplantation for limbal stem cell deficiency. *Br J Ophthalmol.* 2017 May;101(5):640-649. doi: 10.1136/bjophthalmol-2015-308272.
- 33) Parmeggiani F, Barbaro V, Migliorati A, Raffa P, Nespeca P, De Nadai K, Del Vecchio C, Palù G, Parolin C, **Di Iorio E**. Novel variants of RPGR in X-linked retinitis pigmentosa families and genotype-phenotype correlation. *Eur J Ophthalmol.* 2017 Mar 10;27(2):240-248. doi: 10.5301/ejo.5000879.
- 34) Artusi S, Perrone R, Raffa P, **Di Iorio E**, Palù G, Lansdorp PM, Richter SN. Visualization of DNA G-quadruplexes in cells during herpes simplex virus 1 infection. *Nucleic Acids Res.* 2016;44(21):10343-10353.
- 35) Parmeggiani F, Barbaro V, De Nadai K, Lavezzo E, Toppo S, Chizzolini M, Perri P, Palù G, Parolin C, **Di Iorio E**. Identification of novel X-linked gain-of-function RPGR-ORF15 mutation in Italian family with retinitis pigmentosa and pathologic myopia. *Sci Rep.* 2016; 20;6:39179. doi: 10.1038/srep39179.
- 36) Lužnik Z*, Breda C*, Barbaro V, Ferrari S, Migliorati A, **Di Iorio E**, Ferrari B, Elbadawy HM, Bertolin M. Towards xeno-free cultures of human limbal stem cells for ocular surface reconstruction. *Cell and Tissue Banking*, 2017, doi: 10.1007/s10561-017-9632-7.

37) Perazzi A, Bonsembiante F, Gelain M, Patruno M, **Di Iorio E**, Migliorati A, Iacopetti I. Cytology of the healthy canine and feline ocular surface: comparison between cytobrush and impression technique. *Vet Clin Pathol*. 2017 Mar;46(1):164-171. doi: 10.1111/vcp.12450.

38) Patruno M, Perazzi A, Martinello T, Blaseotto A, **Di Iorio E**, Migliorati A, Iacopetti I. Morphological description of limbal epithelium: searching for stem cells crypts in the dog, cat, pig, cow, sheep and horse. *Vet Res Commun*. 2017 Jun;41(2):169-173. doi: 10.1007/s11259-017-9676-y.

39) Parekh M, Elbadawy H, Salvalaio G, Amoureux MC, **Di Iorio E**, Fortier D, Ponzin D, Ferrari S, Ruzza A. Recombinant human serum albumin for corneal preservation. *Acta Ophthalmol*. 2017. doi: 10.1111/aos.13498.

40) Lombardo M, Serrao S, Barbaro V, **Di Iorio E**, Lombardo G. Multimodal imaging quality control of epithelia regenerated with cultured human donor corneal limbal epithelial stem cells. *Sci Rep*. 2017. 7(1):5154. doi: 10.1038/s41598-017-05486-8.

41) Parekh M, Elbadawy H, Salvalaio G, Amoureux MC, **Di Iorio E**, Fortier D, Ponzin D, Ferrari S, Ruzza A. Recombinant human serum albumin for corneal preservation. *Acta Ophthalmol*. 2018; 96(1): e79-e86. doi: 10.1111/aos.13498.

42) Trevisan M, Barbaro V, Riccetti S, Masi G, Barzon L, Nespeca P, Alvisi G, **Di Iorio E**, Palù G. Generation of a transgene-free induced pluripotent stem cells line (UNIPDi002-A) from oral mucosa epithelial stem cells carrying the R304Q mutation in TP63 gene. *Stem Cell Res*. 2018; 16; 28:149-152. doi: 10.1016/j.scr.2018.02.006.

43) Trevisan M, **Di Iorio E**, Masi G, Riccetti S, Barzon L, Alvisi G, Caenazzo L, Barbaro V, Palù G. Induced pluripotent stem cells line (UNIPDi003-A) from a patient

affected by EEC syndrome carrying the R279H mutation in TP63 gene. *Stem Cell Res.* 2018; 28:141-144. doi: 10.1016/j.scr.2018.02.008.

44) Alvisi G, Trevisan M, Masi G, Canel V, Caenazzo L, Nespeca P, Barzon L, **Di Iorio E**, Barbaro V, Palù G. Generation of a transgene-free human induced pluripotent stem cell line (UNIPDi001-A) from oral mucosa epithelial stem cells. *Stem Cell Res.* 2018; 28:177-180. doi: 10.1016/j.scr.2018.02.007.

45) Trevisan M, Alvisi G, Barbaro V, Barzon L, Raffa P, Migliorati A, Desole G, Ruzittu S, Masi G, **Di Iorio E**, Palù G. Oral mucosa-derived induced pluripotent stem cells from patients with Ectrodactyly-Ectodermal dysplasia-Clefting syndrome. *Cell Reprogram.* 2018;20(4):215-224. doi: 10.1089/cell.2017.0064.

46) Bertolin M, Breda C, Ferrari S, Van Acker SI, Zakaria N, **Di Iorio E**, Migliorati A, Ponzin D, Ferrari B, Luznik Z, Barbaro V. Optimized protocol for regeneration of the conjunctival epithelium using the cell suspension technique. *Cornea.* 2018; doi: 10.1097/ICO.0000000000001670.

47) **Di Iorio E**, Barbaro V, Alvisi G, Trevisan M, Ferrari S, Masi G, Nespeca P, Ghassabian H, Ponzin D, Palu G. New frontiers of corneal gene therapy. *Hum Gene Ther.* 2019; doi: 10.1089/hum.2019.026.

48) Pecere T, Ponterio E, **Di Iorio E**, Carli M, Fassan M, Santoro L, Bissaro M, Bernabè G, Moro S, Castagliuolo I, Palu G. On the mechanism of tumor cell entry of aloemoidin, a natural compound with anticancer activity. *Int J Cancer* 2021; doi: 10.1002/ijc.33686.

BOOK CHAPTERS

2004: Gasparini P, **Di Iorio E**, Melchionda S. Malattie genetiche. Molecole e geni. Diagnosi, prevenzione e terapia.“Sordità.” In Cao A, Dallapiccola B, Notarangelo L.D. (ed.). PICCIN: Padova, 2004, pp 759-773

2013: Barbaro V*, Ferrari S*, Parekh M, Ponzin D, Parolin C, **Di Iorio E**. Laser Scanning Confocal Microscopy: Application in Manufacturing and Research of Corneal Stem Cells. (*equal contribution). In “Confocal Laser Microscopy - Principles and Applications in Medicine, Biology, and the Food Sciences”. Edited by Neil Lagali. InTech publisher 2013, Chapter 5: 81-98 (ISBN 978-953-51-1056-9). <http://www.intechopen.com/articles/show/title/laser-scanning-confocal-microscopy-application-in-manufacturing-and-research-of-corneal-stem-cells>

2013: Di Iorio E, Barbaro V, Del Vecchio C, Parekh M, Alvisi G, Poletti G, Palù G, Parolin C. Gene Therapy approaches for corneal diseases. In New Insights on Biobanks (Caenazzo, L., Ed) p. 87-112. 2013, ISBN: 9788867871216