CURRICULUM VITÆ (2021)

Christo KOLE, M.D., Ph.D.

Resident Doctor in Cardiology

Date of Birth: 27th May 1986
Nationality/ Citizenship: Greek
Languages: English, French, Greek, Albanian
Web of Science ResearcherID: ABE-5654-2020
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Current Academic Rank

2018 - : **Maître de Conférence** en Neurosciences/ Biologie moléculaire, France, qualification N° 18269287891

Equivalent to Senior Lecturer / Adjunct Professor, tenure-track in Neuroscience/ Molecular Biology

Professional/Research Experience

*During the past years I gained experience in laboratory management and direction. Due to my expertise in **recombinant Adeno-Associated Virus (AAV) vectors** and **Lentivirus Production** for Gene therapy, I was charged to set up and organize the AAV branch of the Laboratory of Retinal Cell and Molecular Biology. My areas of expertise include also **Reprogramming** technology to generate **Induced Pluripotent Stem Cells**. Animal experimentation include Behavioural analysis, Microsurgery, Electrophysiology, water maze etc..; Biochemistry- Molecular biology & cell biology techniques.*

Aout 2021 – Current: **Internal medicine resident,**
Prefecture, General Hospital of Kalamata, Greece

- this resident-oriented facility allows intensive patient care, problem solving and clinical experience in inpatient and outpatient settings
- autonomy in the care of patients in the Covid-19 clinic and outpatient department where I was the primary caregiver for a multitude of patients

2018 – Current: **Scientific/ researcher associate,**
First Department of Surgery, University of Athens, Laikon General Hospital, Athens, Greece

- The main objective of our work was to evaluate the efficacy of clinical trials using different strategies of immunotherapy as standard initial or second-line treatment in patients with gastro-intestinal tumors.
- We further focused in the better understanding of the tumor microenvironment as an effort to improve clinical outcome and the development of a more personalized targeted therapy.

2015 – 2018 **Post-Doctor researcher,** Laboratory of Retinal Cell and Molecular Biology National Eye Institute/ National Institutes of Health, Washington D.C., USA

- Our objective was to identify and characterize the mechanisms of action of genes that play a role in neuronal protection and survival or regeneration. Our studies aimed to apply this knowledge in the

development of gene therapy for patients with glaucoma.

- Experience in laboratory management and supervising students. Due to my expertise in recombinant adeno-associated virus (AAV) vectors and lentivirus production for gene therapy, I was responsible for setting up and organizing the AAV branch of the Cellular and Molecular Biology Laboratory. of the retina. My areas of expertise also include reprogramming technology to generate induced pluripotent stem cells.

2011 – 2014: **PhD Theses,** Department of genetics, Institut de la Vision,
Université Pierre et Marie Curie, Paris, France
Under the direction of Thierry Léveillard
Thesis title: *The role of OTX2 splice variants in the homeostasis of retinal epithelial cells: a therapeutic prospective for retinitis pigmentosa.*

- Our objective was to identify and characterize the mechanisms of action of genes that play a role in neuroprotection. We focused in the development of a gene therapeutic approach for *retinitis pigmentosa* and age related macular degeneration.

2010 – 2011: **Biomedical engineer,** Department of genetics, Institut de la Vision, Paris, France

2010 – 2011: **Master Internship,** Department of genetics, Institut de la Vision, Paris, France
Research project title: *The role of OTX2 splice variants in the homeostasis of retinal epithelial cells*

2009 – 2010: **Molecular Biology Internship,** Laboratory of General Biology, Medical School, University of Patras, Greece

2008 – 2009: **Molecular Biology Internship,** Laboratory of Gene Expression, Diagnostics and Modern Therapeutic Techniques, Democritus University, Alexandrupolis, Greece

Education

2016 -2021: **Medical Degree,** *Graduated with honors*
School of Medicine, University of Athens, Greece

2011 - 2014: **PhD in Neuroscience,** *Graduated with first class honors*
Université Pierre et Marie Curie**:** Paris, France

2010 - 2011: **Master in Science: Tissue, Cell and Gene Biotherapies,** *Graduated with honors*
Faculté de Médecine, Université Paris-Est Créteil Val de Marne**:** Créteil, France

2005 - 2009: **Bachelor of Science in Molecular Biology and Genetics,** *Graduated with honors*
School of Molecular Biology and Genetics, Democritus University**,**
Alexandroupoli, Greece

Training/ Workshops

2021: **Advanced Trauma Life Support**, American college of Surgeons, Attikon University Hospital

2020:	**Acute and Intensive Cardiac Care Heart Failure**, Attikon University Hospital, University of Athens, Greece
2020:	**Electrocardiography**, Ippokrateio General Hospital, University of Athens, Greece
2020:	**BLS/AED**, European Resuscitation Council, Athens, Greece
2019:	**Invasive Cardiology**, Ippokrateio General Hospital, University of Athens, Greece
2017:	**RNA-seq**, Biotec56, FAES@NIH, USA
2016:	**Mechanisms in Neuronal remodeling**, EMBO, Seeon, Germany
2014:	**Histone variants**, EMBO, Strasbourg, France
2013:	**Advances in stem cells biology**, Pasteur Institute, Paris, France
2012:	**Methods in Protein-Protein Interactions**, CEA Saclay, Paris, France

Fellowships and Awards

2015-2018:	Visiting fellow grant / National Eye Institute, NIH, USA
2015:	Emerging Trends and Hot Topics Award/ ARVO2015, USA
2011-2014:	PhD Research grant / Institute de la Vision, Université Pierre et Marie CURIE, France
2010-2011:	Research grant, Master II scholarship / Fondation Voir et Entendre; INSERM, France

Publications In International Peer-Reviewed Journals

Granted patent(s)

- Patent (WO2016097183A1), Leveillard T, **Kole C**, Sahel J.A, *Transgenic RPE cells overexpressing OTX2 for the treatment of retinal degeneration*

Publications

- **Kole, C.** et al., "Immunotherapy for gastroenteropancreatic neuroendocrine neoplasms (GEP-NENs): a 2021 update." *Cancer Immunol Immunother* (2021). https://doi.org/10.1007/s00262-021-03046-8
- **Kole, C.** et al., "Immunotherapy for gastric cancer: a 2021 update." *Immunotherapy (Under revision)*
- Charalampakis, Nikolaos et al. "Immunotherapy for cholangiocarcinoma: a 2021 update." *Immunotherapy*, 10.2217/imt-2021-0126. 30 Jun. 2021, doi:10.2217/imt-2021-0126
- **Kole, C.** et al., "Immunotherapy for Hepatocellular carcinoma: A 2021 update." *Cancers* 2020, 12, 2859; doi:10.3390/cancers12102859
- Schizas, D., Charalampakis, N., **Kole, C.** et al., "Immunotherapy for pancreatic cancer: A 2020 update." *Cancer treatment reviews*, vol. 86 102016. 25 Mar. 2020, doi:10.1016/j.ctrv.2020.102016
- Schizas, D, et al., "Immunotherapy for esophageal cancer: a 2019 update." *Immunotherapy* vol. 12,3 (2020): 203-218. doi:10.2217/imt-2019-0153
- **Kole, C.** et al., "Activating Transcription Factor 3 (ATF3) Protects Retinal Ganglion Cells and Promotes Functional Preservation After Optic Nerve Crush." *Investigative ophthalmology & visual science* vol. 61,2 (2020): 31. doi:10.1167/iovs.61.2.31

- **Kole, C.** et al., "Otx2-Genetically Modified Retinal Pigment Epithelial Cells Rescue Photoreceptors after Transplantation." *Molecular therapy: the journal of the American Society of Gene Therapy* vol. 26,1 (2018): 219-237. doi:10.1016/j.ymthe.2017.09.007
- Mei, X. et al., "The Thioredoxin Encoded by the Rod-Derived Cone Viability Factor Gene Protects Cone Photoreceptors Against Oxidative Stress." *Antioxidants & redox signaling* vol. 24,16 (2016): 909-23. doi:10.1089/ars.2015.6509
- **Kole, C.** et al., "Identification of an Alternative Splicing Product of the Otx2 Gene Expressed in the Neural Retina and Retinal Pigmented Epithelial Cells." *PloS one* vol. 11,3 e0150758. 17 Mar. 2016, doi:10.1371/journal.pone.0150758
- Mastoraki A. et al., "Assessment of Synergistic Contribution of Histone Deacetylases in Prognosis and Therapeutic Management of Sarcoma." *Molecular diagnosis & therapy, 10.1007/s40291-020-00487-2. 21 Jul. 2020, doi:10.1007/s40291-020-00487-2*
- Mead B. et al., "Viral delivery of multiple miRNA promotes retinal ganglion cell survival and functional preservation after optic nerve crush injury." *Experimental eye research, 108071. 20 Jun. 2020, doi:10.1016/j.exer.2020.108071*
- Sengupta M. et al., **"**Olfactomedin1 provides retinal ganglion cell neuroprotection and stimulates axon regeneration after optic nerve crush in rodents." *Invest Ophthalmol Vis Sci* (2018), Vol.59, 5516
- Sengupta M. et al., *"*Brorin, a Chordin-related protein, facilitates neuroprotection of injured retinal ganglion cells." *Invest Ophthalmol Vis Sci* 2019, 60(9):4843.
- Klipfel L. et al., "Benefits of transplanting human iPSC-derived RPE cells overexpressing the OTX2 transcription factor in age-related macular degeneration." **(Manuscript under preparation for publication)**
- **Kole C**. Kyriatzis G. "[Telomerase regulation and cancer]", *BIO* (2008*),* 29: 50-54 [Article in Greek]

Medical/ scientific books

- **Kole C.,** et al., (2021) **Thoracic Trauma.** In: Pikoulis E., Doucet J. (eds) Emergency Medicine, Trauma and Disaster Management. Hot Topics in Acute Care Surgery and Trauma. Springer, Cham. https://doi.org/10.1007/978-3-030-34116-9_17

Abstract/Presentations in National and International conferences

ARVO 2019 Annual Meeting, (Vancouver, 28 Apr- 2 May 2019)
ARVO 2018 Annual Meeting, (Hawaii, 29 Apr- 3 May 2018)
Society for Neuroscience Annual Meeting, (Washington, DC, 11-15 November 2017)
Société de Génétique Ophtalmologique Francophone (SGOF), (Strasbourg, 2-3 Dec 2016) Benefits of transplanting human iPSC-derived RPE cells overexpressing the OTX2 transcription factor in age-related macular degeneration
ARVO 2015 Annual Meeting, (Denver, Colorado 03-07 May 2015)
Colloque de Roscoff, Ecole Doctorale - Cerveau, Cognition, Compartment-UPMC (Roscoff, 07-09 April 2014)
Journées de Rentrée de l'Ecole Doctorale Interdisciplinaire pour le vivant-UPMC (Paris, 13-14 Nov 2012)

14th Scientific Congress, Hellenic Medical Students & 2nd International Forum of the Hellenic Medical Students & Junior Doctors (Athens, 09-11 May 2008): Regulation of telomerase and the role in tumor growth: molecular approach

Peer-Review

MDPI Cancers, Impact Factor 6.126
MDPI Pharmaceuticals, Impact Factor 4.286
MDPI Pharmaceutics, Impact Factor 4.421
MDPI Genes, Impact Factor 3.759
Journal of International Medical Research 1.671
MDPI Clinics and Practice
MDPI Biomolecules 4.879
Experimental Eye Research Journal Impact Factor 2.910
Scientific Advisory Board, Editorial Board, Journal of Palliative Care in Greece

References (upon request)