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Nationality: Hellenic

Date of birth: 27/09/1979



## **CURRICULUM VITAE**

### **Education**

2003-2007: Imperial College London, PhD in Immunology

2000-2003: Imperial College London, BSc Biology with Microbiology (First Class Honours Degree)

1998-2000: IEK S.V.I.E Athens, Post-secondary diploma, Microbiology and Biochemical Laboratory Assistant

### **Research experience**

2009-today: Senior Post-doctoral Research Fellow, Cell and Gene Therapy Laboratory, Biomedical Research Foundation of the Academy of Athens (BRFAA), Athens

2007-2008: Junior Post-doctoral Research Fellow, Immunobiology Unit, ICH, London

2003-2006: PhD candidate, Department of Immunology, Imperial College London, London

### **Teaching experience**

Oct 2025: Guest lecturer in MSc course “Cell and Gene Therapies: from bench to bedside and Good Manufacturing Practices”, School of Medicine, University of Patras and Biomedical Sciences, University of West Attica, Greece

2013-today: Lecturer in Immunology and Microbiology courses, BSc Biomedical Sciences, Athens Metropolitan College (AMC), Athens

2010-2011: Guest lecturer in Regenerative Medicine course, School of Medicine, National and Kapodistrian University (NTUA), Athens

2009-2012: Research Associate, School of Medicine, National and Kapodistrian University (NTUA), Athens

2004-2006: Cell biology tutor, Department of Biology, Imperial College London, London

## Staff development activities

### December 2020

#### Courses attended:

1. Online Activities, 2. Dissertation Supervision, 3. Marking/Feedback/Moderation, 4. Formative Assessment, 5. Conducting online tests, 6. Designing Assessment Briefs

### January 2021

#### Courses attended:

1. Designing an effective research project, 2. Introduction to Quantitative Methodology, 3. Statistics refresher using SPSS

## Awards

2024 Academic Staff Recognition and Excellence, AMC

## Participation in research grants

1. **GENETHERTHAL 11E-RARE-09-155**, total budget 252.000,00 €
2. **GENETHERTHAL PLUS T3EPA-00089**, total budget 897.750,00 €
3. **CERVICANPRENED HFRI-FM17-3624**, total budget 179.199,00.

## Selected publications

1. Vassilopoulou, A-G, Kalafati E, **Drakopoulou E** and Anagnou NP. m<sup>6</sup>a mRNA methylation in hematopoiesis: the importance of writing, erasing and reading. *Cells* 2025;14;1388
2. Kalafati E, **Drakopoulou E**, Anagnou NP and Pappa KI. Developing oncolytic viruses for the treatment of cervical cancer. *Cells* 2023;12(14);1838.
3. **Drakopoulou E** et al. Gene Therapy for Malignant and Benign Gynaecological Disorders: A Systematic Review of an Emerging Success Story Cancers. 2022 June 30;14(13): 3238.
4. **Drakopoulou E** et al. The optimized  $\gamma$ -globin lentiviral vector GGHI-mB-3D leads to potentially therapeutic HbF levels *in vitro* in CD34+ cells from sickle cell disease patients *Viruses*. 2022;14(12): 2716.
5. **Drakopoulou E** et al. A novel BaEVRless-pseudotyped  $\gamma$ -globin lentiviral vector drives high and stable HbF expression and improves thalassemic erythropoiesis *in vitro*. *Hum Gene Ther*. 2019;30 (5):601-617.
6. **Drakopoulou E** et al. Towards more successful clinical trials for  $\beta$ -thalassemia. *Curr Mol Med*. 2013;13(8):1314-30
7. Papanikolaou E, Kontostathi G, **Drakopoulou E**, et al. Characterization and comparative performance of lentiviral vector preparations concentrated by either one-step ultrafiltration or ultracentrifugation. *Virus Res*. 2013;175(1):1- 11.

8. **Drakopoulou E et al.** The ongoing challenge of hematopoietic stem cell-based gene therapy for  $\beta$ -thalassemia. *Stem Cells Int.* 2011;2011:987980. doi: 10.4061/2011/987980.
9. **Drakopoulou E et al.** Non-redundant role for the transcription factor Gli1 at multiple stages of thymocyte development. *Cell Cycle.* 2010 Oct 15;9(20):4144-52.
10. Outram SV, Hager-Theodorides AL, Shah DK, Rowbotham NL, **Drakopoulou E**, Ross S, Lanske B, Dessens JT and Crompton T. Indian hedgehog (Ihh) both promotes and restricts thymocyte differentiation *Blood* 2009;113(10): 2217- 28.
11. Rowbotham NJ, Furmanski AL, Hager-Theodorides AL, Ross SE, **Drakopoulou E**, Koufaris C, Outram SV and Crompton T. Repression of Hedgehog signal transduction in T-lineage cells increases TCR- induced activation and proliferation *Cell Cycle* 2008; 7(7): 904-8.
12. Rowbotham NJ, Hager-Thodorides AL, Cebecauer M, Shah DK, **Drakopoulou E**, Dyson J, Outram SV and Crompton T. Activation of the Hedgehog signaling pathway in T-lineage cells inhibits TCR repertoire selection in the thymus and peripheral T-cell activation *Blood* 2007;109 (9) 3757-66.

### Selected conferences

1. **2025 7<sup>th</sup> Meeting of the Hellenic Society of Gene Therapy and Regenerative Medicine, Thessaloniki, Greece** (Invited speaker) Gene therapy for the treatment of hemoglobinopathies and cervical cancer
2. **2023 6<sup>th</sup> Meeting of the Hellenic Society of Gene Therapy and Regenerative Medicine, Thessaloniki, Greece** (Oral presentation) *Genetic manipulations of LIMA1/ EPLIN expression delineate its roles as a molecular therapeutic target for cervical carcinoma*
3. **2023 49<sup>th</sup> Annual Medical Congresses, Athens, Greece** (Oral presentations)
  - I. *Genetic manipulations of LIMA1/ EPLIN expression delineate its roles as a molecular therapeutic target for cervical carcinoma (Best oral presentation award)*
  - II. *Differential expression pattern of m<sup>6</sup>A RNA methylation between normal and cervical cancer cell lines*
  - III. *The improved  $\gamma$ -globin lentiviral vector GGHI-mB-3D leads to nearly therapeutic levels of fetal hemoglobin (HbF) in vitro in hematopoietic CD34<sup>+</sup> stem cells of sickle-cell disease patients*
4. **2022 72<sup>nd</sup> EEMB congress, Patras** (Oral presentation) *The novel lentiviral vector IFN $\beta$ /HF displays therapeutic efficacy as a gene therapy-based approach for multiple myeloma*
5. **2021 34<sup>th</sup> International Papilloma Virus Conference (IPVC), Toronto, Canada** (Oral and poster presentations)
  - I. *Aberrant expression of enzymes modulating m<sup>6</sup>A RNA methylation patterns between cervical cancer cell lines and normal cervical keratinocyte HCK1T cells (oral)*
  - II. *Differential expression of LIMA1 in normal and cervical cancer cells lines (oral)*
  - III. *Down regulation of LIMA1 expression confers cancer features in normal cervical epithelial cells, leading to increased migration and invasion (poster)*
6. **2021 22<sup>nd</sup> European Congress of Gynaecological Oncology, Prague, Czech Republic** (Poster) *Down-regulation of LIMA1 expression induces cancer characteristics in normal cervical keratinocyte HCK1T cell line, leading to increased migration and invasion*
7. **2019 27<sup>th</sup> Annual Congress European Society of Cell and Gene Therapy (ESGCT), Barcelona, Spain** (Poster) *The novel oncolytic lentiviral vector expressing IFN beta and pseudotyped with the measles virus HF glycoproteins displays therapeutic efficacy as a gene therapy approach for multiple myeloma*
8. **2018 23<sup>rd</sup> Annual Congress European Hematology Association (EHA), Stockholm, Sweden** (Oral Presentation) *A novel BAEVRLESS- pseudotyped globin lentiviral vector drives high and stable metal haemoglobin expression improving thalassemic erythropoiesis in vitro*

9. **2018 3<sup>rd</sup> Meeting of the Hellenic Society of Gene Therapy and Regenerative Medicine, Thessaloniki, Greece** (1st prize for the best paper) (Oral Presentation) *The novel BaEVRless-pseudotyped globin lentiviral vector drives high and stable metal haemoglobin expression improving thalassemic erythropoiesis*
10. **2017 2<sup>nd</sup> Meeting of the Hellenic Society of Gene Therapy and Regenerative Medicine, Athens, Greece** (1st prize for the best paper) (Oral Presentation) *Genome editing of fetal haemoglobin repressors as a novel therapeutic approach for  $\beta$ -thalassemia*
11. **2016 1<sup>st</sup> Meeting of the Hellenic Society of Gene Therapy and Regenerative Medicine, Thessaloniki, Greece** (1st prize for the best paper) (Oral Presentation) *The LCR-free lentiviral vector combining two HPFH activating elements corrects murine thalassemic phenotype in vivo.*
12. **2016 21<sup>st</sup> Annual Congress European Hematology Association (EHA), Copenhagen, Denmark** (Poster) *The LCR-free lentiviral vector combining two HPFH activating elements corrects murine thalassemic phenotype in vivo.*
13. **2015 41<sup>st</sup> Annual Medical Congresses, Athens, Greece** (2nd Basic Research Award) (Oral Presentation) *Improved gene therapy lentiviral vectors with novel regulatory elements and alternative envelope glycoproteins successfully correct hemoglobinopathies' clinical phenotype in vitro.*
14. **2014 25<sup>th</sup> Hellenic Society of Hematology (HSH) Conference, Thessaloniki, Greece** (Oral Presentation) *Novel  $\gamma$ -globin lentiviral vector for hemoglobinopathies' gene therapy achieves significant HbF increase in hematopoietic stem cells from patients with Sickle Cell Anemia*
15. **2013 39<sup>th</sup> Annual Medical Congresses, Athens, Greece** (Stem Cell Award for best Hematology paper) (Oral Presentation) *Novel therapeutic lentiviral vectors with alternative envelope glycoproteins achieve high transduction efficiency and transgene expression in human CD34+ cells*
16. **2012 23<sup>rd</sup> Hellenic Society of Hematology (HSH) Conference, Thessaloniki, Greece** (Oral Presentation) *Novel lentiviral vectors with alternative envelope glycoproteins expressing early cytokines, achieve high transduction efficiency and transgene expression in human hematopoietic stem cells*
17. **2012 38<sup>th</sup> Annual Medical Congresses, Athens, Greece** (Stem Cell Award and 2nd Basic Research Award) (Oral Presentation) *HbF production in cells from hemoglobinopathies' patients following transduction with either  $\gamma$ -globin lentiviral vectors or lentiviral vectors carrying shRNA for targeted silencing of EKLF transcription factor*
18. **2011 62<sup>nd</sup> Conference of Hellenic Society of Biochemistry and Molecular Biology (HSBMB), Athens, Greece** (Poster): *Transient expression of  $\gamma$ -globin in a  $\beta$ -thalassemia mouse model after lentiviral transduction*
19. **2010 5<sup>th</sup> International Conference on Gene Regulation in Lymphocyte Development, Crete, Greece**
20. **2006 EMBO Workshop, Hedgehog-Gli1 Signalling in Stem Cell Development and Cancer, Rome, Italy**
21. **2004 Keystone Symposia, T cell Development, Banff, Canada**