

ACADEMIC PROFESSIONAL EXPERIENCE

- 2023-present** **Head of Department, Science and Mathematics**
- 2021-present** **Assistant professor, Molecular Biology**
- 2020-2021** **Lecturer**
Deree, The American College of Greece
- 2017-2018** **Project manager**
Protatonce, NCSR Demokritos, Athens
- 2015-2017** **Senior research associate**
Institute Gustave Roussy (IGR), CNRS, Villejuif, Paris, France
Project: The role of the Fanconi Anemia pathway in the cellular response to DNA replication stress.
- 2010-2014** **Research associate**
Institute of Human Genetics (IGH) and Institute of Research in Cancerology Montpellier (IRCM), CNRS, Montpellier, France
Project: The role of non-coding RNAs in initiation of DNA replication.
- 2005-2009** **Postdoctoral researcher and Lecturer**
Institute for Experimental Cancer Research (ISREC)
Ecole Polytechnique Fédérale de Lausanne (EPFL), Switzerland
Project: The cellular DNA damage response induced by the virus AAV.

EDUCATION AND QUALIFICATIONS

- 2000-2004** **Ph.D in Molecular Biology and Biomedicine**
Institute of Molecular Biology and Biotechnology (IMBB), University of Crete, Greece / University of Washington, USA
Project: Construction of novel retroviral vectors to express human γ -globin in mammalian haematopoietic stem cells (supervised by Prof G. Stamatoyannopoulos, Prof N.P. Anagnou and Dr D.W. Emery)
- 1999-2000** **MSc in Human Molecular Genetics / Grade: Distinction**
University of London, Imperial College, UK
Project: Generation of an efficient minicircle vector-producing system based on mutant loxP sites (supervised by Prof C. Coutelle)
- 1996-1999** **BSc (Hons) degree in Genetics / Grade: 1st class**
University of Wales Swansea, UK

AWARDS AND FELLOWSHIPS

- 2013** **Award** for the best oral presentation at the 7th annual GDR replication meeting, St-André de Buèges, France
- 2010** **Post-doctoral fellowship** from the French Association for Cancer Research (ARC)
- 2003** **Award** for the best oral presentation at the 9th international conference on thalassemia and the hemoglobinopathies, Palermo, Italy
- 2003** Onassis foundation **PhD fellowship** (not accepted)
- 2002** **Award** for the best oral presentation at the 13th conference of the Hellenic Society of Haematology, Patra, Greece
- 2000** **Distinction** for the MSc degree
- 1999** Memorial **prize** for the BSc research project

PUBLICATIONS IN PEER-REVIEWED JOURNALS

1. Fragkos M*, Choleza M and Papadopoulou P. The Role of γ H2AX in Replication Stress-induced Carcinogenesis: Possible Links and Recent Developments. *Cancer Diagn Progn.* 2023; 3(6): 639–48. ***corresponding author.**
2. Fragkos M*, Barra V, Egger T, Bordignon B, Lemacon D, Naim V* and Coquelle A. Dicer prevents genome instability in response to replication stress. *Oncotarget.* 2019;10(43):4407-23. ***co-corresponding author.**
3. Aze A*,Fragkos M*,Bocquet S, Julien Cau and Mechali M. RNAs coordinate nuclear envelope assembly and DNA replication through ELYS recruitment to chromatin. *Nature Communications.* 2017;8(1):2130. doi: 10.1038/s41467-017-02180-1. ***equal contribution**
4. Fragkos M and Naim V. Rescue from replication stress during mitosis. *Cell Cycle.* 2017; 16(7):613-633.
5. Fragkos M, Ganier O, Coulombe P and Mechali M. DNA replication origin activation in space and time. *Nature Reviews Mol Cell Biol.* 2015;16(6):360-74.
6. Fragkos M and Beard P. Mitotic catastrophe can occur in the absence of apoptosis in p53-null cells with a defective G1 checkpoint. *PLOS One.* 2011;6(8):e22946.
7. Fragkos M, Jurvansuu J and Beard P. H2AX is required in cell cycle arrest via the p53/p21 pathway. *Mol Cell Biol.* 2009;29(10):2828-40.
8. Fragkos M, Breuleux M, Clement N and Beard P. Recombinant adeno-associated viral vectors are deficient in provoking a DNA damage response. *J Virol.* 2008;82(15):7379-87.
9. Jurvansuu J, Fragkos M, Ingemarsdotter C and Beard P. Chk1 instability is coupled to mitotic cell death of p53-deficient cells in response to virus-induced DNA damage signaling. *J Mol Biol.* 2007;372(2):397-406.
10. Fragkos M, Anagnou NP, Tubb J and Emery DW. Use of the hereditary persistence of fetal haemoglobin 2 enhancer to increase expression of oncoretrovirus vectors for human gamma-globin. *Gene Ther.* 2005;12(21):1591-600.
11. Emery DW, Nishino T, Murata K, Fragkos M, Stamatoyannopoulos G. Hematopoietic stem cell gene therapy. *Int J Hematol.* 2002;75(3):228-36.
12. Bigger BW, Tolmachov O, Collombet JM, Fragkos M, Palaszewski I, Coutelle C. An araC-controlled bacterial cre expression system to produce DNA minicircle vectors for nuclear and mitochondrial gene therapy. *J Biol Chem.* 2001;276(25):23018-27.

INVITED SEMINARS

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| 2015 | Dr Alex Pintzas , National Hellenic Research Foundation, Athens, Greece |
| 2014 | Dr Elena Katsantoni , Bioacademy, Athens, Greece |
| 2013 | Dr Robert Fuchs , CRCM, Marseille, France |
| 2013 | Dr Gaelle Legube , University of Toulouse, France |
| 2012 | Dr Evi Soutoglou , IGBMC, Strasbourg, France |
| 2009 | Prof Penny Jeggo , Genome damage/stability center, Sussex University, UK |
| 2009 | Dr Andreas Ladurner , EMBL Heidelberg, Germany |
| 2009 | Prof Steve Jackson , Gurdon Institute, University of Cambridge, UK |
| 2008 | Prof Thanos Halazonetis , University of Geneva, Switzerland |

ORAL PRESENTATIONS AT CONFERENCES

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| 2013 | 7 th annual GDR replication meeting, St-André de Buèges, France |
| 2008 | 12 th international <i>Parvovirus</i> Workshop, Cordoba, Spain |
| 2003 | 9 th international conference on thalassemia & hemoglobinopathies, Palermo, Italy |
| 2003 | 14 th conference of the Hellenic Society of Haematology, Alexandroupoli, Greece |
| 2002 | 13 th conference of the Hellenic Society of Haematology, Patra, Greece |

POSTER PRESENTATIONS AT CONFERENCES

- 2016** International DNA replication meeting, Trieste, Italy
2013 Eukaryotic DNA replication meeting, Cold Spring Harbor Laboratory, NY, USA
2011 4th EMBO Conference on Nuclear Structure and Dynamics, L'isle Sorgue, France
2007 2nd EMBO Conference on Nuclear Structure and Dynamics, Montpellier, France
2002 13th Conference on Hemoglobin Switching, Oxford, UK
2002 5th Annual meeting of the American Society of Gene Therapy, Boston, USA

TECHNICAL EXPERIENCE

- Molecular biology** Cloning, southern blotting, PCR, RNase protection assay, bacterial and mammalian cell culture, flow cytometry, viral infections, western blotting, immunofluorescence and microscopy, cell death assays, FISH and cytogenetics, RNAi and cell transfections
- Biochemistry** Recombinant protein production and analysis, chromatin purification, protein co-immunoprecipitation, RNA immunoprecipitation, ELISA

TEACHING AND SUPERVISION EXPERIENCE

- 2020-present** Courses taught: Introductory biology, Molecular immunology, Research methods, Molecular neurobiology, Cell and Molecular biology, Environmental health
- 2016** Supervision of Naouel Athemane, postgraduate student at IGR
- 2014** Supervision of Alexane Wijnand, student at IRCM, Montpellier
- 2007-2008** Organization and supervision of practical courses for PhD students at EPFL
- 2007-2008** Training responsible for the Zeiss Axioplan microscope at ISREC, EPFL
- 2008** Supervision of Andreas Elmer, postgraduate student at ISREC, EPFL
- 2007** Supervision of Joelle Ven, student at ISREC, EPFL
- 2007** Courses taught at EPFL: Molecular virology and Genome stability
- 2003** Demonstrator in second year biology practical classes, University of Crete
- 2003-2004** Supervision of Angelos Oikonomopoulos, student at the University of Crete

LANGUAGES

- English:** fluent, professional level
French: fluent
Greek: fluent, mother tongue

IT SKILLS

MS office, FlowJo, Image J, Adobe Photoshop

OTHER ACADEMIC ACTIVITIES

Guest editor and reviewer in Frontiers in Cell and Developmental Biology