

# Petros Marangos CV

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<https://www.bri.forth.gr/en/research-en/item/5537-petros-marangos>

## CURRENT POSITIONS

**2022- University of Ioannina, Department of Biological Applications & Technology (BAT), Ioannina, Greece, Associate Head of Department, BAT**

**2022- Biomedical Research Institute, Foundation for Research and Technology (BRI/FORTH), Ioannina, Greece**

Member of the Research Committee

**2016- University of Ioannina, BAT, Ioannina, Greece**

Associate Professor of Developmental Biology

**2016- BRI/FORTH, Ioannina, Greece**

Affiliated Researcher

**2012 University College London (UCL), London, UK**

Department of Cell and Developmental Biology, Division of Biosciences

Honorary Senior Lecturer

## PREVIOUS POSITIONS

**2017-2022 University of Ioannina, Department of Biological Applications & Technology (BAT), Ioannina, Greece, Head of Department, BAT**

**2011-2016 University of Ioannina, Department of Biological Applications & Technology (BAT), Ioannina, Greece**

Assistant Professor of Developmental Biology

**2009-2010 Fleming Biomedical Sciences Research Center, Institute of Molecular Oncology, Athens, Greece**

Investigator (EMBO Long-Term Fellowship)

Research on the DNA damage response of mammalian oocytes

**2004-2009 University College London (UCL), London, UK**

Department of Cell and Developmental Biology, Division of Biosciences

Post-Doc involving research in the regulation of the mammalian meiotic cell cycle and in the possible deleterious effects following alterations of the normal cell cycle.

**2004 Stanford University, San Francisco, CA, USA**

Department of Pathology

The work involved the role of Emi1 in the mitotic and meiotic cell cycles. Changes of the protein's concentration in the cells have been shown to cause irregular cell cycles. The work was supported by a Bogue Fellowship awarded from UCL.

## EDUCATION

### **2000-2004 University College London (UCL), London, UK**

Department of Physiology

PhD in Mammalian Embryology and Cell Biology

Project: "Regulation of the cell cycle during mammalian oocyte maturation, fertilization and embryo development". The project involved the regulation of Ca<sup>++</sup> during oocyte development and the involvement of cell cycle regulators in the control of meiosis.

### **1998-1999 Hammersmith Hospital, Imperial College School of Medicine, London, UK**

MSc in Human Reproductive Biology

Project: "Tissue Factor Expression during the Differentiation of Endometrial Stromal Cells"

### **1991-1996 University of Athens, Athens, Greece**

Department of Biology. BSc (Hons) Biology, 2:1

Project: "Cloning and Characterization of Clones of Yeast Artificial Chromosomes (YACs) containing the Genetic Locus of the Tumour Necrosis Factor (TNF)". In association with Dr G. Kollias, Laboratory of Molecular Genetics, Pasteur Institute, Athens, Greece

## PUBLICATIONS

Pailas, A., Niaka, K., Zorzompokou, C., **Marangos, P. (correspondence)**. The DNA Damage Response in Fully Grown Mammalian Oocytes. *Cells*, 2022, 11(5), 798

Rémillard-Labrosse, G., Dean, N. L., Allais, A., Mihajlović, A. I., Jin, S. G., Son, W. Y., Chung, J. T., Pansera, M., Henderson, S., Mahfoudh, A., Steiner, N., Agapitou, K., **Marangos, P.**, Buckett, W., Ligeti-Ruiter, J., & FitzHarris, G. Human oocytes harboring damaged DNA can complete meiosis I. *Fertility and Sterility*, 2020, 113(5), 1080–1089.e2.

Gonzalez Malagon, S. G., Dobson, L., Muñoz, A. M., Dawson, M., Barrell, W., **Marangos, P.**, Krause, M., Liu, K. J. Dissection, Culture and Analysis of Primary Cranial Neural Crest Cells from Mouse for the Study of Neural Crest Cell Delamination and Migration. *JoVE (J. Vis. Exp.)* 2019, (152), e60051, doi:10.3791/60051.

Zhang QH, Yuen WS, Adhikari D, Flegg JA, FitzHarris G, Conti M, Sicinski P, Nabti I, **Marangos P**, Carroll J. Cyclin A2 modulates kinetochore-microtubule attachment in meiosis II. *J Cell Biol.* 2017 Aug 17. 216:3133-3143.

Nabti I, Grimes R, Sarna H, **Marangos P**, Carroll J. Maternal age-dependent APC/C-mediated decrease in securin causes premature sister chromatid separation in meiosis II. *Nat Commun.* 2017 May 18;8:15346.

**Marangos P (correspondence)**. Preparation of cell lysate from mouse oocytes for Western blotting analysis. *Methods in Molecular Biology.* 2016;1457:209-15

**Marangos P (correspondence)**, Stevense M, Niaka K, Lagoudaki M, Nabti I, Jessberger R and Carroll J. DNA damage-induced metaphase I arrest is mediated by the Spindle Assembly Checkpoint and maternal age. *Nature Communications.* 2015 November 2;6:8706.

Ibtissem Nabti, **Marangos P (correspondence)**, Kudo N and Carroll J. Dual-mode regulation by CDK1 and MAPK controls APC activity during meiosis I in mouse oocytes. *Journal of Cell Biology*. 2014 March; 204(6):891-900.

Carroll J and **Marangos P (correspondence)**. The DNA damage response in mammalian oocytes. *Frontiers in Genetics (Cancer Genetics)*. 2013 June 24;4:117.

**Marangos P (correspondence)**. Micro-injection of Morpholino oligonucleotides for depleting Securin in mouse oocytes. *Methods in Molecular Biology*. 2013; 957: 153-62

**Marangos P (correspondence)** and Carroll J. Oocytes progress beyond prophase in the presence of DNA damage. *Current Biology*, 2012 June; 22(11): 989-994.

**Marangos P (correspondence)** and Carroll J. Securin regulates entry into M-phase by modulating the stability of cyclin B. *Nature Cell Biology*, 2008 April; 10(4): 445-451.

**Supported by a News and Views article.**

**Marangos P (correspondence)**, Verschuren EW, Chen R, Jackson PK and Carroll J. Prophase I arrest and progression to metaphase I in mouse oocytes are controlled by Emi1-dependent regulation of APC/Cdh1. *Journal of Cell Biology*. 2007 Jan 1;176(1):65-75.

FitzHarris G, **Marangos P** and Carroll J. Changes in endoplasmic reticulum structure during mouse oocyte maturation are controlled by the cytoskeleton and cytoplasmic dynein. *Developmental Biology*. 2007 May 1;305(1):133-44.

**Marangos P**, Carroll J. Fertilization and InsP3-induced Ca<sup>2+</sup> release stimulate a persistent increase in the rate of degradation of cyclin B1 specifically in mature mouse oocytes. *Developmental Biology*. 2004 Aug 1;272(1):26-38.

**Marangos P**, Carroll J. The dynamics of cyclin B1 distribution during meiosis I in mouse oocytes. *Reproduction*. 2004 Aug;128(2):153-62.

Dumollard R, **Marangos P**, Swann K, Duchon M and Carroll J. Sperm-triggered Ca<sup>2+</sup> oscillations and Ca<sup>2+</sup> homeostasis in the mouse egg have an absolute requirement for mitochondrial ATP production. *Development*. 2004 Jul;131(13):3057-67.

Carroll J, FitzHarris G, **Marangos P**, Hallet G. Ca<sup>2+</sup> signalling and cortical re-organisation during the transition from meiosis to mitosis in mammalian oocytes. *Eur J Obstet Gynecol Reprod Biol*. 2004 Jul 1;115 Suppl 1:S61-7.

**Marangos P**, FitzHarris G. and Carroll J Ca<sup>2+</sup> oscillations at fertilization in mammals are regulated by the formation of pronuclei. *Development*. 2003 Apr 1; 130(7):1461-1472

Halet G, **Marangos P**, FitzHarris G, Carroll J. Ca<sup>2+</sup> oscillations at fertilization in mammals. *Biochem Soc Trans*. 2003 Oct; 31(Pt 5):907-11

FitzHarris G, **Marangos P** and Carroll J. Cell cycle-dependent regulation of structure of endoplasmic reticulum and inositol 1,4,5-trisphosphate-induced Ca<sup>2+</sup> release in mouse oocytes and embryos. *Molecular Biology of the Cell*. 2003 Jan;14(1):288-301

Christian M, **Marangos P**, Mak I, White J and Brosens J. Interferon- $\gamma$  modulates prolactin and tissue factor expression in differentiating human endometrial stromal cells. *Endocrinology*. 2001 Jul;142(7):3142-51

## FELLOWSHIPS / AWARDS / MEDIA COVERAGE

**2020-**: Participation in various radio/TV/social media programmes regarding the Covid-19 pandemic.

**2014:** The laboratory is acknowledged by the Scientific Excellence Initiative.

[https://www.youtube.com/watch?v=SgZhMUASXeA&ab\\_channel=aristeiaacademl](https://www.youtube.com/watch?v=SgZhMUASXeA&ab_channel=aristeiaacademl)

- 2013:** Media coverage: TV news reports (ET3, ITV Ioannina, Epirus TV).
- 2012:** Honorary Senior Lecturer, Department of Cell and Developmental Biology, Division of Biosciences, University College London (UCL), London, UK.
- 2012:** New Investigator Award 2012, Society for Reproduction & Fertility, UK.
- 2008:** EMBO Long-Term Fellowship (EMBL, Heidelberg, Germany).
- 2008:** Presentation of research in a *News and Views* article in the Nature Cell Biology journal.
- 2004:** Bogue Fellowship from UCL for placement at Stanford University, San Francisco, USA

## CONFERENCES/MEETINGS (Invited Speaker)

- Nov. 2022:** "Teaching in the time of new educational challenges", Ioannina, Greece
- Sept. 2018:** Conference "Novel Developments on Infertility and Assisted Reproduction", Ioannina, Greece
- Oct. 2017:** Fondation Santé Fellows Symposium
- May 2016:** Institute of Molecular Biology and Biotechnology Retreat, Iraklio, Crete
- Mar. 2016:** ESHRE Campus symposium "Oocyte maturation - from basics to clinics", Brussels, Belgium
- Dec. 2015:** Meeting in Medical Chemistry, University of Ioannina, Ioannina
- Nov. 2014:** Congress of the Hellenic Society of Biochemistry and Molecular Biology, Thessaloniki, Greece
- Apr. 2013:** Technische Universität Dresden, Germany
- Aug. 2012:** Society for the Study of Reproduction Meeting, Pennsylvania, USA
- Jul. 2012:** Society for Reproduction & Fertility Meeting, Edinburgh, UK
- Jun. 2011:** EMBO Fellows Meeting, EMBL, Heidelberg, Germany
- Oct. 2009:** Meeting in Cell Biology, Villefranche sur mer, France
- Oct. 2008:** Obstetrics and Gynaecology Unit, University College Hospital, London, UK
- Nov. 2004:** European Institute of Oncology, Milan, Italy

## MEMBERSHIPS & REVIEWING ACTIVITIES

**Reviewer:** Nature Communications  
 Developmental Biology  
 Human Reproduction  
 Reproduction

**Member:** Hellenic Society of Biochemistry and Molecular Biology  
 Hellenic Society of Biological Sciences  
 Society for Reproduction and Fertility, UK  
 Society for the Study of Reproduction, USA

## TEACHING / SUPERVISION ACTIVITIES

University of Ioannina, Department of Biological Applications & Technology,  
 Ioannina, Greece

**Undergraduate Teaching:** In charge and exclusive organiser and lecturer of the following courses: Cell Biology, Developmental Biology, Reproductive Biology

## ADMINISTRATIVE ACTIVITIES

2022- Associate Head of Department, BAT, University of Ioannina.

2017- 2022      Head of Department, BAT, University of Ioannina.  
2016-2017      Member of the Undergraduate Studies Program Committee.  
2016-2017      3<sup>rd</sup> Year Undergraduate Student Tutor.

## RESEARCH GRANTS

State Excellence (Hellenic Ministry of Development and Investments, ESPA)  
2021-2024  
3,000,000 Euros  
Collaborator – Member of the Organizing and Proposal Preparation Committee

IKY Foundation Post-Doctoral Fellowship  
February 2020 – February 2022  
Supervisor

ELIDEK PhD Fellowship  
September 2019-June 2022  
Supervisor

Niarchos Foundation PhD Fellowship  
January 2019 – September 2019  
Supervisor

KRIPIS II / GSRT  
January 2018 – December 2020  
Co-participant

Fondation Santé  
January 2016 –December 2017  
Coordinator

IKY Foundation Post-Doctoral Fellowship  
April 2015 – March 2017  
Supervisor

COST Action CA15132  
The comet assay as a human biomonitoring tool (hCOMET)  
National (Greek) representative

John Latsis Foundation  
January 2014 – December 2015  
Coordinator

Medical Research Council (MRC), UK Research Grant  
April 2011 – April 2016  
Collaborator

Bilateral Collaboration Greece-France 2009, ΣΑΕ «2009ΣΕ0138008» (ESPA, 2007-2013)  
January 2010 – December 2011

Coordinator