

Aikaterini Berdiaki

Curriculum Vitae

Personal details

Home Address: 17 Zorzi Street, Heraklion, Crete, 714 09, Greece; Date of birth: 24/05/1977;

Nationality: Greek; Gender: female; Telephone: 00306944863542; e-mail: berdiaki@uoc.gr

Education

1996-1999: **BSc in Molecular and Cellular Biology, University of Kent at Canterbury: Graduated with Upper Second Class 2(i) Honours.**

1999-2000: **MSc Course in Clinical Biochemistry with Molecular Biology, University of Surrey**

2001- 2006: **PhD Institute of reproductive and developmental biology, Imperial College.** PhD studentship funded by Wellbeing. Title: 'Peroxisome Proliferator-activated receptor γ action in the human ovary'.

April 2002: **National ovarian workshop** UK seminars for researchers in the field of reproductive biology Fitzwilliam College, Cambridge, UK

April 2004: **National ovarian workshop** UK seminars for researchers in the field of reproductive biology University of Edinbrugh, Scotland, UK

Current Position

2006- present: **Postdoc University of Crete, School of Medicine, Laboratory of Anatomy-Histology-Embryology.**

Research: Investigation of the role of hyaluronan and hyaluronan receptor RHAMM in fibrosarcoma cell functions. In addition, the role of proteoglycans, other glycosaminoglycans and growth factors are studied in several cancer cell lines: fibrosarcoma, osteosarcoma, melanoma, breast and colon; importance in tumor progression.

Previous Positions

2005-2007: **Postdoc University of Crete, School of Medicine, Laboratory of Anatomy-Histology-Embryology** funded by the European Union and the Greek government (ΠΥΘΑΓΟΡΑΣ II) 'Investigation of molecules important in HDL/LDL homeostasis and in the differentiation of macrophages to foam cells, as prognostic markers in atherosclerosis'

2013- 2014: **Postdoc University of Crete, School of Medicine, Laboratory of Anatomy-Histology-Embryology in collaboration with the University of Patras, Department of Biochemistry.**

Research: funded by the European Union and the Greek government (ΘΑΛΗΣ) titled 'The role of intracellular interaction of ER α/β with EGF-R and IGF-R in the growth and progression of breast cancer '.

2014-2015: **Postdoc University of Crete, School of Medicine, Laboratory of Pharmacology**

Research: funded by the European Union and the Greek government (ΑΡΙΣΤΕΙΑ) titled 'Targeting RGS9-2 in the brain in order to fight for addiction and chronic pain'.

Teaching experience

- Supervision of graduate students

2005-2006: Institute of reproductive and developmental biology, Imperial College.

Supervision of two MSc students in the subject of Developmental Biology.

2006- present: University of Crete, School of Medicine, Laboratory of Anatomy-Histology-Embryology. Assisted in the supervision of 13 PhD students in the field of extracellular matrix and cancer.

2007-2013: (ΠΔ407/1980) part time teaching position at the University of Crete, School of Medicine, Laboratory of Anatomy-Histology-Embryology. Teaching to 2nd year medical students the subjects of development of the human embryo (from gonads to birth), development of several different tissues/organs and also the histology of the female reproductive system.

- 2007-2013: Teaching seminars for graduate students, funded by the European Union and the Greek government at the University of Crete, School of Medicine. The program was titled 'Diagnostics and therapeutics aspects of the 21st century'.

- 2017 February-2017 September: teaching position at the University of Crete, School of Medicine, Department of Morphology. Teaching to 3rd year medical students the subject of Cytology. Funded by the Greek government.

Presentations in International Conferences

I have presented my scientific work in 41 International Conferences and 16 National Conferences.

Selected poster presentations:

- **Berdiaki A.**, Zafiroopoulos A., Fthenou E., Chalkiadakis G., Tzanakakis G.N. FGF regulates HA biosynthesis in fibrosarcoma cells through modulation of HAS isoform balance in favour of HAS1. FEBS Advanced Lecture Course, Matrix Pathobiology, Signaling and Molecular Targets, Patras, Greece, May 21-26 2007. (P72)
- **Berdiaki A.**, Nikitovic D., Kouvidi A., Syrogianni H., Tzanakakis GN. bFGF induces changes in hyaluronan synthase and hyaluronidase isoform expression and modulates the migration capacity of fibrosarcoma cells. 34th FEBS Congress, Prague, Czech, 4-9 July 2009. (Ph-95)
- Kouvidi K., **Berdiaki A.**, Mytilineou M., Nikitovic D., Tzanakakis GN. Role of RHAMM in low molecular weight hyaluronan (LMWHA) mediated fibrosarcoma cell adhesion. P11.722011: 36th FEBS Congress, Torino, Italy, June 25-30
- Kouvidi K., **Berdiaki A.**, Nikitovic D., Tzanakakis GN. Hyaluronan/RHAMM receptor signaling in fibrosarcoma cell proliferation 4th FEBS Advanced Lecture Course, FEBS – MPST 2013, Matrix Pathobiology, Signaling and Molecular Targets, Kos, Greece, September 26 – October 1, 2013
- Kouvidi K., **Berdiaki A.**, Tzardi M., Karousou E., Passi A., Nikitovic D., Tzanakakis GN. Receptor for hyaluronic acid-mediated motility (RHAMM) regulates HT1080 fibrosarcoma cell proliferation via a b-catenin/c-myc signalling axis. 2nd MBE (Matrix Biology Europe) Conference, Athens, Greece, June 11-14, 2016 ST44/P113

Publications

I have 31 scientific publications in international peer reviewed journals.

Selected publications:

- **Berdiaki A.**, Zafiroopoulos A, Fthenou E, Katonis P, Tsatsakis A, Karamanos NK, et al. Regulation of hyaluronan and versican deposition by growth factors in fibrosarcoma cell lines. *Biochimica et biophysica acta*. 2008;1780(2):194-202.
- **Berdiaki A.**, Nikitovic D, Tsatsakis A, Katonis P, Karamanos NK, Tzanakakis GN. bFGF induces changes in hyaluronan synthase and hyaluronidase isoform expression and modulates the migration capacity of fibrosarcoma cells. *Biochimica et biophysica acta*. 2009;1790(10):1258-65.
- Kouvidi K *, **Berdiaki A.** *, Nikitovic D, Katonis P, Afratis N, Hascall VC, et al. Role of receptor for hyaluronic acid-mediated motility (RHAMM) in low molecular weight hyaluronan (LMWHA)-mediated fibrosarcoma cell adhesion. *The Journal of biological chemistry*. 2011;286(44):38509-20. (*1st authors)
- Kouvidi K, Nikitovic D, **Berdiaki A.**, Tzanakakis GN. Hyaluronan/RHAMM interactions in mesenchymal tumor pathogenesis: role of growth factors. *Advances in cancer research*. 2014;123:319-49.
- Nikitovic D, **Berdiaki A.**, Galbiati V, Kavasi RM, Papale A, Tsatsakis A, et al. Hyaluronan regulates chemical allergen-induced IL-18 production in human keratinocytes. *Toxicology letters*. 2015;232(1):89-97.
- Kouvidi K, **Berdiaki A.**, Tzardi M, Karousou E, Passi A, Nikitovic D, et al. Receptor for hyaluronic acid- mediated motility (RHAMM) regulates HT1080 fibrosarcoma cell proliferation via a beta-catenin/c-myc signaling axis. *Biochimica et biophysica acta*. 2016;1860(4):814-24.
- Nikitovic D, Kouvidi K, Kavasi RM, **Berdiaki A.**, Tzanakakis GN. Hyaluronan/Hyaladherins - a Promising Axis for Targeted Drug Delivery in Cancer. *Current drug delivery*. 2016;13(4):500-11.

Books

Nikitovic D., Pratsinis H, Berdiaki A., Gialeli C., Kletsas D., and Tzanakakis G.N.; *Extracellular Matrix: Pathobiology & signaling* (DeGruyter, Berlin, 2012) Chapter 8.3: Growth factor signaling and extracellular matrix

Links: <https://scholar.google.com/citations?user=DPmeoh0AAAAJ&hl=en>