

## Personal Details

Olga Papadodima, Ph.D., Functional Research Scientist

Date and place of Birth: 19/4/1974, Athens

### Address

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## Degrees

- **2006:** Ph. D. on Biology, School of Sciences, National and Kapodistrian University of Athens entitled: 'Study of the human gene BM88, coding for a new neurospecific molecule which is involved in the differentiation of neural cells'. Supervisors: Dr. R. Matsas, Head of Laboratory of cellular and molecular Neurobiology, Department of Biochemistry, Hellenic Pasteur Institute and Dr. A. Mamalaki, Head of Molecular Biology and Immunobiotechnology Laboratory, Department of Biochemistry, Hellenic Pasteur Institute

- **1999:** Diploma in Biology (direction Molecular Biology), School of Sciences, Department of Biology, University of Crete

## Research Experience and Academic appointments

**2007-:** Functional Research Scientist, Institute of Biological Research and Biotechnology, National Hellenic Research Foundation, Metabolic Engineering and Bioinformatics Programme

**2006-07:** Post Doctoral Researcher, Institute of Biological Research and Biotechnology, National Hellenic Research Foundation, Metabolic Engineering and Bioinformatics Programme

**1999-2005:** PhD student, Hellenic Pasteur Institute, Department of Biochemistry, Laboratory of cellular and molecular Neurobiology.

**1998-1999:** Under-Graduate student, University of Crete, Faculty of Medicine, Laboratory of Parasitology.

## Participation in Research Programmes and Funding Sources

1. Greece-China Joint R&D Projects entitled "Personalization of melanoma therapeutic management through the fusion of systems biology and intelligent data mining methodologies- PROMISE", (110,000 €, Group budget, 2012-2015).

2. Operational Program "Education and Lifelong Training" Action "Thalis", "MODELLING THE DYNAMIC PROGRESSION OF CELLULAR AGING THROUGH THE DEVELOPMENT OF SYSTEMS BIOLOGY AND BIOINFORMATICS TOOLS - MAESTRO" (250,200.00 €, Group budget, 2012-2015).

3. Cooperation Research Program entitled "Development of novel Angiogenesis-Modulating Pharmaceuticals by screening of natural compounds and synthetic analogues-DAMP" (duration 2010-2014), sponsored by the Program "Competitiveness and Entrepreneurship" Act 1 of the Peripheral Entrepreneurial Program of Attiki, with co-funding by the European Fund of Regional Development and National Funds. (297,000.00 €, Group budget, 2010-2014).

4. FP7- ICT-2007.4.4 Intelligent Content and Semantics, entitled «e-Laboratory for Interdisciplinary Collaborative Research in Data Mining and Data-Intensive Sciences (e-LICO)» (contract no:231519) (369,308.00 €, Group budget, 2009-2012).

5. Cooperation Research Program entitled "PIK3CA Oncogenic Mutations in Breast and Colon Cancers: Develop-ment of Targeted Anticancer Drugs and Diagnostics -POM" (duration 2010-2014), sponsored by the Program "Competitiveness and Entrepreneurship" Act 1 of the Peripheral Entrepreneurial Program of Attiki, with co-funding by the European

Fund of Regional Development and National Funds (**332,100.00** €, Group budget, **2010-2014**)

6. Operational Program “Competitiveness” Action “Excellence in the Research Centers of the GSRT 2nd round”, Application/ Development of Bioinformatic Tools for Systems Biology Research” (**885,106.00** €, Budget **2006-2009**)

### **Publications in Journals and Peer-Reviewed Conference Proceedings**

1. **International Journal of Molecular Sciences, Volume 14, Issue 10, 11 October 2013:**  
HuR-regulated mRNAs associated with nuclear hnRNP A1-RNP complexes  
**Papadodima O.**, Chatziioannou A., Patrinoú-Georgoúla M, Kolisís FN., Pletsá V., Guialis A.
2. **Oncotarget, 4(9), 2013**  
The KLK5 protease suppresses breast cancer by repressing the mevalonate pathway.  
Pampalakis, G., Obasuyi, O., **Papadodima, O.**, Chatziioannou, A., Zoumpourlis, V., & Sotiropoulou, G.
3. **The Scientific World Journal 2013, volume 2013, doi:10.1155/2013/685917**  
A comparative genomic study in schizophrenic and in bipolar disorder patients, based on microarray expression profiling meta-analysis  
Logotheti M., **Papadodima O.**, Venizelos N., Chatziioannou A., Kolisís F.N.
4. **Bioinformatics and Bioengineering (BIBE), 2013 IEEE 13th International Conference**  
Identifying Gender Independent Biomarkers Responsible for Human Muscle Aging Using Microarray Data  
Emmanouíl G. Sifakis, , Ioannis Valavanis, **Olga Papadodima**, and Aristotelis A. Chatziioannou
5. **Bioinformatics and Bioengineering (BIBE), 2013 IEEE 13th International Conference**  
Integrative Transcriptomic Analysis of Two Cell Lines elucidates the Architecture of Endoplasmic Reticulum Stress Signaling in Glioblastoma  
Aristotelis A. Chatziioannou, **Olga Papadodima**, Nicolas Dejeans, and Eric Chevet
6. **Advances in Bioinformatics 2012, volume 2012, doi:10.1155/2012/453513**  
Application of an Integrative Computational Framework in Transcriptomic Data of Atherosclerotic Mice Suggests Numerous Molecular Players  
**Papadodima O.**, Sirsjö A., Kolisís F.N., and Chatziioannou A.
7. **Lecture Notes in Computer Science, 2012, 7297 LNCS, pp. 254-261**  
**Papadodima, O.**, Sirsjö, A., Chatziioanou, A.  
Bioinformatic analysis of expression data of ApoE deficient mice
8. **Proceedings of the IEEE/EMBS International Conference on Information Technology Applications in Biomedicine, ITAB, 2010, art. no. 5687785**  
**Papadodima, O.**, Chatziioanou, A., Sirsjö, A., Kolisís, F.N.  
Bioinformatic transcriptomic analysis of apoE deficient mice suggests alterations in atherosclerosis related molecular mechanisms

**9. BMC Medical Genomics 2009, 2:68**

A transcriptomic computational analysis of mastic oil-treated Lewis lung carcinomas reveals molecular mechanisms targeting tumor cell growth and survival

Panagiotis Moulos\*, **Olga Papadodima\***, Aristotelis Chatziioannou, Heleni Loutrari, Charis Roussos and Fragiskos N Kolisis

\*Equal Contribution

**10. FEBS Letters 2008 Mar 5; 582(5):741-8**

BM88/Cend1 is involved in histone deacetylase inhibition-mediated growth arrest and differentiation of neuroblastoma cells

Politis PK, Akrivou S, Hurel C, **Papadodima O**, Matsas R

**11. Journal of Neurochemistry 2005; 95 (1): 146-59**

Characterization of the BM88 promoter and identification of an 88 bp fragment sufficient to drive neuron-specific expression

**Papadodima O.**, Sergaki M., Hurel C., Mamalaki A. and Matsas R.

**Selected Conference Announcements**

**1. 64<sup>th</sup> Congress of the Hellenic Society of Biochemistry and Molecular Biology, 2013, Athens, Greece**

Modulation of pathways underlying distinct cell death mechanisms in two human lung cancer cell lines in response to N-methyl-N-nitrosourea treatment.

**Papadodima Olga**, Moulos Panagiotis, Kolisis Fragiskos, Chatziioannou Aristotelis, Pletsavassiliki (Oral presentation)

**2. 64<sup>th</sup> Congress of the Hellenic Society of Biochemistry and Molecular Biology, 2013, Athens, Greece**

Dynamic miRNA profiling of BMP4 induced osteogenesis in bone marrow mesenchymal stem cells

**Logotheti Marianthi**, **Papadodima Olga**, Deschaseaux Frederic, Vekris Antonios, Pontikoglou Charalampos, Chatziioannou Aristotelis

**3. The European Cancer Congress 2013, Amsterdam**

Development of a prognostically relevant "angiogenic signature" in ascites from patients with advanced ovarian cancer

Sofia-Paraskevi Trachana, Nikolaos Gavalas, Eleftherios Pilalis, Athanasios Papatheodorou 1, Aristotelis Chatziioannou, **Olga Papadodima**, Evangelos Terpos, Meletios-Athanasios Dimopoulos, Aristotelis Bamias

**4. 2<sup>nd</sup> International Conference on Genomics in Europe (ICG), 2013, Ghent, Belgium**

Global gene expression and computational analysis indicates modulation of major common pathways in mastic oil-treated human K562 lymphoblastomas, A549 lung and HCT116 colon carcinomas (poster)

**Papadodima O.**, Loutrari H., Kolisis FN and Chatziioannou A.

**5. Congress event consisting of the World Psychiatric Association Thematic Conference on Intersectional Collaboration: "The Multidisciplinary Facets of Psychiatry," the "4th European Congress of the International Neuropsychiatric Association: Overlap**

**and Integration in Neuropsychiatry" and the "First Interdisciplinary Congress on Psychiatry and Related Sciences", 2012, Athens, Greece**

A comparative genomic study in schizophrenic and in bipolar disorder patients based on microarray expression profiling meta-analysis.

Logotheti M., **Papadodima O.**, Chatziioannou A., Kolisis F., Venizelos N.,

**6. Gene Regulation: from DNA Sequence to Nuclear Structure, 2012, Athens, Greece**

Integration of gene expression alterations in schizophrenic and bipolar disorder patients in relation to the cell transport biochemical mechanisms.

Logotheti M., **Papadodima O.**, Chatziioannou A., Venizelos N., Kolisis F.

**7. Annual Meeting of the American Association for Cancer Research, 2012, McCormick Place, Chicago, Illinois, USA**

Suppression of the mevalonate pathway and oncogenic signaling may underlie the tumor-suppressing effects of KLK5 in breast cancer

Pampalakis G., Obasuyi O., **Papadodima O.**, Chatziioannou A., Zoumpourlis V., Sotiropoulou G.

**8. 4th SWEDISH-HELLENIC LIFE SCIENCES RESEARCH CONFERENCE, 2011, Athens, Greece**

A transcriptomic computational analysis of mastic oil-treated Lewis Lung Carcinomas reveals molecular mechanisms targeting tumour growth and survival (oral presentation)

**Papadodima O.**

**9. 10<sup>th</sup> International Conference on Information Technology and Applications in Biomedicine (ITAB), 2010, Corfu, Greece**

Bioinformatic Transcriptomic Analysis of ApoE Deficient Mice suggests Alterations in Atherosclerosis related Molecular Mechanisms (oral presentation)

**Papadodima O.**, Chatziioannou A., Sirsjo A., Kolisis FN

**10. 3rd SWEDISH-HELLENIC LIFE SCIENCES RESEARCH CONFERENCE, 2010, Athens, Greece**

Bioinformatic analysis of mastic oil treatment in different tumor cell lines reveals molecular mechanisms targeting cell growth and survival (poster)

P. Moulos, **O. Papadodima**, A. Chatziioannou, H. Loutrari and F.N. Kolisis

**11. 3rd SWEDISH-HELLENIC LIFE SCIENCES RESEARCH CONFERENCE, 2010, Athens, Greece**

Transcriptomic computational analysis of the cell death induced by n methyl-nitrosourea, a model sn1 methylating agent, in human lung cancer cells

P. Moulos, A. Koryllou, **O. Papadodima**, A. Chatziioannou, M. Patrino-Georgoula, V. Pletsa and F.N. Kolisis

**12. 60<sup>th</sup> Meeting of Hellenic Society of Biochemistry and Molecular Biology, 2009, Athens**

**A transcriptomic** computational analysis of different mastic oil treated tumor cell lines reveals mechanisms targeting cell growth and survival (oral presentation)

Moulos P., **Papadodima O.**, Chatziioannou A., Loutrari H., Kolisis F.N

**13. 60<sup>th</sup> Meeting of Hellenic Society of Biochemistry and Molecular Biology, 2009, Athens**

Microarray analysis of the cell death induced by N-methyl-N-nitrosourea, a model  $S_N1$  methylating agent, in two lung cancer cell lines of human origin (poster)

Moulos P., Koryllou A., **Papadodima O.**, Chatziioannou A., Patrino-Georgoula A., Pletsa V., Kolisis FN

**14. 10th International Conference on Environmental Mutagens, 2009, Firenze, Italy**

Bioinformatic analysis of the cell death induced by N-methyl-N-nitrosourea, a model  $S_N1$  methylating agent, in two lung cancer cell lines of human origin

Moulos P., Koryllou A., **Papadodima O.**, Chatziioannou A., Patrino-Georgoula M., Pletsa V., Kolisis FN

**15. 59<sup>th</sup> Meeting of Hellenic Society of Biochemistry and Molecular Biology, 2009, Athens**

Time-course microarray analysis of tumor gene expression associated with chemoprevention by mastic oil: prediction of putative target pathways (poster)

**Papadodima O.**, Moulos P., Chatziioannou A., Loutrari H, Roussos C., Kolisis FN.

**16. Quantitative Molecular Biosciences Workshop, 2008, Spetses, Greece**

Microarray analysis of lung adenocarcinoma gene expression in response to mastic oil: prediction of putative target pathways (poster)

Moulos P., Chatziioannou, A., **Papadodima, O.**, Magkouta, S., Roussos, C., Loutrari, H., Kolisis, F.N.:

**17. 12th Meeting of the European Neuroendocrine Association, 2006, Athens**

Transcriptional regulation of BM88 gene in neurons and Schwann cells (oral presentation)

**O. Papadodima**, F. Papastefanaki, C. Hurel, D. Thomaidou, A. Mamalaki, R. Matsas

**18. 57<sup>th</sup> Meeting of Hellenic Society of Biochemistry and Molecular Biology, 2005, Athens**

Characterization of BM88 promoter and transcriptional regulation in neurons and Schwann cells (oral presentation)

**Papadodima O.**, Papastefanaki F., Hurel C., Thomaidou D., Mamalaki A., Matsas R.

**19. 6th EMBL Mouse Genetics Meeting, 2005, Heidelberg, Germany**

Mouse bm88 gene characterization and study of its role in the developing mouse brain (poster)

Sergaki M., **Papadodima O.**, Hurel C., Nguyenn L., Guillemot F., Thomaidou M., Matsas R.

**20. 30<sup>th</sup> FEBS Congress & 9<sup>th</sup> IUBMB Conference, 2005, Budapest**

Structural characterization and functional promoter analysis of the human BM88 gene (poster)

**Papadodima O.**, Hurel C., Mamalaki A., Matsas R.

**21. European Winter Conference on Brain Research, 2004, Les Arcs, France**

Genomic structure of human and mouse BM88 genes and functional characterization of their promoters (poster)

Papadodima O., Sergaki M., Hurel C., Mamalaki A., Matsas R.

**22. FEBS Advanced Course: "From differentiation to death of stem cells", 2001, Spetses, Greece.**

Human BM88 gene maps to chromosome 11p15.5, a region implicated in Beckwith Wiedemann Syndrome and tumorigenesis (poster)

Gaitanou M., **Papadodima O.**, Pappa C., Mamalaki A., Tirone F., Matsas R.