

CURRICULUM VITAE: Thomais Papamarcaki, Professor of Biological Chemistry

Personal Details

Positions: *Professor*, Laboratory of Biological Chemistry, School of Medicine, Faculty of Health Sciences, University of Ioannina, Greece, *Associate Member/Group Leader*, Biomedical Research Division, Foundation of Research & Technology, Ioannina, Greece

Work address: Laboratory of Biological Chemistry, University of Ioannina Medical School, 45110 Ioannina, Greece; **Tel:** 0030-26510-07563; **E-mail:** thpapama@uoi.gr

Papamarcaki Research Group: The research of our laboratory is focused on the functional roles and mechanisms of action of histone chaperones, using *in vitro* cell cultures and the zebrafish model organism, and by employing biochemical & molecular cell biology techniques, bio-imaging & high-throughput molecular analysis.

Education

- 1970- 1976 High School, Chania, Crete
- 1976-1980 Degree in Chemistry, Chemistry Department, University of Thessaloniki
- 1983-1988 Ph.D in Biochemistry, Medical School, University of Ioannina, Greece

Professional Experience

- 2016-Today Professor, Laboratory of Biological Chemistry, School of Medicine, University of Ioannina
- 2006-2016 Associate Professor, Laboratory of Biological Chemistry, Medical School, University of Ioannina
- 1995-2006 Assistant Professor, Laboratory of Biological Chemistry, Medical School, University of Ioannina
- 1991-1995 Lecturer, Laboratory of Biological Chemistry, Medical School, University of Ioannina
- 1990-1991 Post-doctoral fellow, Cell Biology Program, European Molecular Biology Laboratory (EMBL) Heidelberg, Germany
- 1981-1990 Research Assistant, Medical School, University of Ioannina

Experience

- 1991-today Teaching of Biochemistry, Medical School, University of Ioannina
- 2002- today Postgraduate Program Biotechnology, University of Ioannina

Journal Reviewer: Biochem J; FEBS J; PLoS ONE, J Biol Chem; EMBO Rep, J. Cell Science, Exp. Cell Res.

Recent Research Grants

- **BIOMED 20 Program** «Ανταγωνιστικότητα, Επιχειρηματικότητα και Καινοτομία (ΕΠΑνEK)», «ΕΣΠΑ 2014–2020» Project Title: The role of chromatin remodelers in the Hedgehog pathway. Funding: 80.000 euros.
- **Synergasia Program** (2013-2015) Project Title: Novel functional foods containing bioactive essential oils from Greek endemic species with health promoting properties. Total Funding: 989.350 euros. **Investigator of Ioannina team: T. Papamarcaki.** Funding: 100.000 euros.
- **Thalis Program** IDIPRO (2012-2015) Project Title: The new Biology of Intrinsically Disordered Proteins: A targeted, multidisciplinary analysis of IDP structure, function and properties in real time and true cellular conditions. Project Coordinator: Spyros D. Georgatos. **Investigator of Ioannina team: T. Papamarcaki.** Funding: 40.000 Euros.
- **European Regional Development Fund (ERDF)** (2012-2015) Project Title: Development of a test system to study neurotoxicity of microcystins using the model-organism zebrafish. **Principal Investigator: T Papamarcaki:** Funding: 140.000 euros.
- **KRIPIS II Program** (2014-20120) Advanced Research Activities in Biomedical and Agro alimentary Technologies” (MIS 5002469). Funding: 32.000 euros

Selected Publications

1. Serifi I, Besta S, Karetou Z, Giardoglou P, Beis D, Niewiadomski P and **Papamarcaki T** (2021) Targeting of SET/I2PP2A oncprotein inhibits Gli1 transcription revealing a new modulator of Hedgehog signaling. *Sci. Rep.* 2021 Jul 6;11(1):13940.
2. Tzima E, Serifi I, Tsikari I, Alzualde A, Leonidas I and **Papamarcaki T** (2017) “Transcriptional and behavioral responses of zebrafish larvae to Microcystin-LR exposure. *Int. J. Mol. Sci.* 18, 365.
3. Serifi I, Tzima E, Soupsana K, Karetou Z, Beis D and **Papamarcaki T** (2016) “The zebrafish homologs of SET/I2PP2A oncprotein: expression patterns and insights into its physiological roles” *Biochem. J.* 473, 4609-4627.
4. Papadaki A, Politou AS, Smirlis D, Kotini MP, Kourou K, **Papamarcaki T** and Boleti H (2015) “The Leishmania donovani histidine acid ecto-phosphatase LdMAcP: insight into its structure and function” *Biochem. J.* 467(3):473-486.

5. Emmanouilidou A, Karetou Z, Tzima E, Kobayashi T and **Papamarcaki T** (2013) "Knockdown of Prothymosin α leads to apoptosis and developmental defects in zebrafish embryos" *Biochem. Cell Biol.* 91(5):325-332.
6. Matragkou Ch, Papachristou H, Karetou Z, Papadopoulos G, **Papamarcaki T et al** (2009) "On the intra-cellular trafficking of mouse S5 ribosomal protein from cytoplasm to nucleoli" *J. Mol. Biol.* 392, 1192-1204.
7. Karetou Z, Emmanouilidou A, Sanidas I, Liokatis S, Nikolakaki E, Politou AS and **Papamarcaki T** (2009) "Identification of distinct SET/TAF-I β domains required for core histone binding and quantitative characterisation of the interaction" *BMC Biochem.*, 10 (1):10.
8. Nikolakaki E, Drosou V, Sanidas I, Peidis P, **Papamarcaki T** and Giannakouros T (2008) "RNA association or phosphorylation of the RS domain prevents aggregation of RS domain-containing proteins" *Biochim. Biophys. Acta* 1780: 214-225.
9. Karetou Z, Martic G, Sfliomos G and **Papamarcaki T** (2005) 'The histone chaperone SET/TAF-I β interacts functionally with the CREB-binding protein" *Biochem. Biophys. Res. Commun.* 335: 322–327.
10. Papanikolaou A, Papafotika A, Murphy C, **Papamarcaki T**, et al (2005) "Cholesterol-dependent lipid assemblies regulate the activity of the ecto-nucleotidase CD39" *J. Biol. Chem.* 280: 26406-26414.
11. Martic G, Karetou Z, Kefala K, Clapier C, Straub T and **Papamarcaki T** (2005). "Parathymosin affects the binding of linker histone H1 to nucleosomes and remodels chromatin structure" *J. Biol. Chem.* 280:16143-16150.
12. Karetou Z, Martic G, Tavoulari S, Christoforidis S, Wilm M, Gruss C and **Papamarcaki T** (2004) "Prothymosin α associates with the oncoprotein SET and is involved in chromatin decondensation" *FEBS Let.* 577, 496-500.
13. Karetou Z, Kretsovali A, Murphy C, Tsolas O, and **Papamarcaki T** (2002) "Prothymosin α interacts with the CREB-binding protein and potentiates transcription" *EMBO Rep.* 3, 361-366.
14. Karetou Z, Sandaltzopoulos R, Frangou-Lazaridis M, Lai C-Y, Tsolas O, Becker PB and **Papamarcaki T** (1998) " Prothymosin α modulates the interaction of histone H1 with chromatin" *Nucleic Acids Res.* 13, 3111-3113.