

## BIOGRAPHICAL SKETCH Urania Georgopoulou

<b>NAME</b> Urania Georgopoulou	<b>POSITION TITLE</b> Research Director Head of Molecular Virology Laboratory
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EDUCATION/TRAINING	DEGREE	YEARS	FIELD OF STUDY
University Paris XI (Orsay), France	Ph.D.	1983-1986	Sciences de la vie (Physiology and Cellular Biology)
University "Pierre et Marie Curie", Paris VI, France	D.E.A.	1982-1983	Developmental Biology
University of Patras, Greece	BSc.	1978-1982	Biology

### A. Positions and Honors.

#### Positions and Employment

- 2018-today: Research Director, Laboratory of Molecular Virology, HPI
- 2007 – 2017: Principal Investigator, Laboratory of Molecular Virology, HPI
- 1994 – 2007: Researcher C - Laboratory of Molecular Virology, HPI
- 1990 – 1993: Post-doctoral fellow in the laboratory of Molecular Virology, HPI
- 1988 – 1990: Post-doctoral scientist in the Laboratory of Hygiene and Epidemiology, University Medical School, Athens.
- 1990: Visiting scientist, Human Retrovirus Section - National Cancer Institute (Frederick, USA)
- 1987 - 1988: Post-doctoral scientist in the Laboratory of Hepatology in Hippokraton General Hospital of Athens, Greece
- 1986 - 1987: Post-doctoral scientist in the laboratory of Microbiological Immunology, Institut Pasteur – Paris, France

#### Honors, Awards

- 2015: Award of the Hellenic Association for the Study of the Liver (*Foka P., et al.*, 14<sup>o</sup> Panhellenic Meeting 7-10/5/ 2015, Kos -Greece (Oral Presentation 1<sup>st</sup> prize).
- 2009: Award of Hellenic Society of Biochemistry and Molecular Biology (*Katsarou K et al.*, EEBMB Athens, Greece (Oral Presentation 1<sup>st</sup> prize).
- 1987: Grant from the Hellenic Society of Gastroenterogy (*Georgopoulou U., et al.*, oral presentation 1<sup>st</sup> prize)
- 1986 - 1987: Scholarship from the French Government
- 1983 - 1986: Institute of National Scholarship Award (IKY)
- 1978 - 1979: Institute of National Scholarship Award (IKY)

#### Professional Activities

#### Functions (memberships, etc)

- Contributed in expert committees for the: Italian Ministry of Health, Health and Medical Research Fund from The Government of the Hong Kong

- Expert evaluator of GSRT for grant proposals
- Greek Representative for infectious diseases in the MIRA project, Malta 2009

#### **Editorial activities**

- Peer-reviewer of scientific papers for international journals (PLOS One, Infection Genetics and Evolution, Intervirology, WJG, WJH, Clinical Experimental Medicine, International Journal of Biochemistry and Cell Biology, Biochimie, J. Mol. Biochem. Etc
- Member of the Editorial Board of World Journal of Gastroenterology

#### **Patent Applications:**

USA Patent Application Title: Nucleic Acids and new polypeptides associated with and/or overlapping with HCV core products. Mavromara P., Varaklioti A., **Georgopoulou U.** Patent Application No: 09/644,987

#### **Organization of Scientific Meetings/Advanced Courses-Educational**

- Invited speaker in Instituto Bolognetti-Pasteur Rome, January, 2016
- Speaker in the RIIP meeting - Europe May, 27-28 2015
- Speaker in the Round table for Viral Hepatitis and cancer in the RIIP meeting for MATI region, Institut Pasteur Morocco 2014
- Teaching in Post-graduate Programs of Studies (Master's Degree) in conjunction with the Department of Biology and the Dentistry School of the University of Athens.
- Guidance of post-graduate research students towards obtaining a doctorate degree
- Post graduate course in virology – University of Cyprus (2005) - invited
- Organizing the Annual Seminars in Hellenic Pasteur Institute (2002-2010)
- 2007: Organizing comitee of 59<sup>th</sup> meeting of Hellenic Society for Biochemistry and Molecular Biology (Athens)
- 2004: Two days meeting for RIPIA partners, project PTR: “ Implications of HCV diversity in the diagnosis and pathogenesis of virus infection in Eastern Europe, SE Asia and Central Africa” (Athens 2004).

#### **B. Selected Publications**

1. Chihab H, Jadid FZ, Foka P, Zaidane I, El Fihry R, Georgopoulou U, Marchio A, Elhabazi A, Chair M, Pineau P, Ezzikouri S, Benjelloun S. , 2018. Programmed cell death-1 3'-untranslated region polymorphism is associated with spontaneous clearance of hepatitis B virus infection. J Med Virol. 2018 Jul 17. doi: 10.1002/jmv.25265. [Epub ahead of print]
2. Molyvdas A, Georgopoulou U, Lazaridis N, Hytiroglou P, Dimitriadis A, Foka P, Vassiliadis T, Loli G, Phillipidis A, Zebekakis P, Germanis AE, Speletas M, Germanidis G., 2018, The role of the NLRP3 inflammasome and the activation of IL-1 $\beta$  in the pathogenesis of chronic viral hepatic inflammation., Cytokine. May 23. pii: S1043-4666(18)30185-6.
3. Karamitros T, Papatheodoridis G, Paraskevis D, Hatzakis A, Mbisa JL, Georgopoulou U, Klenerman P, Magiorkinis G., 2018, Impact of Interferon- $\alpha$  Receptor-1 Promoter Polymorphisms on the Transcriptome of the Hepatitis B Virus-Associated Hepatocellular Carcinoma. Front Immunol. Apr 16;9:777.
4. Karamichali, E. Serti, A. Gianneli, A. Papaefthymiou, A. Kakkanas, P. Foka, A. Seremetakis, K. Katsarou, I. P. Trougagos and U. Georgopoulou, 2017, The unexpected function of a highly conserved YXX $\Phi$  motif in HCV core protein, Infection, Genetics and Evolution 54:251-262.
5. E. Kaffe, A. Katsifa, N. Xylourgidis, I. Ninou, M. Zannikou, V. Harokopos, P. Foka, A. Dimitriadis, K. Evangelou, A. Moulas, U. Georgopoulou, V. Gorgoulis, G. Dalekos, V. Aidinis. 2016. Hepatocyte Autotaxin expression promotes liver fibrosis and cancer, Hepatology, Dec 16. doi: 10.1002/hep.28973. [Epub ahead of print].

6. Dalagiorgou G, Piperi C, Adamopoulos C, Georgopoulou U, Gargalionis AN, Spyropoulou A, Zoi I, Nokhbehsaim M, Damanaki A, Deschner J, Basdra EK, Papavassiliou AG, Cell Mol Life Sci. 2017 Mar;74(5):921-936.
7. Foka, P., A. Dimitriadis, E. Karamichali, E. Kyrtzopoulou, D. Giannimaras, J. Koskinas, A. Varaklioti, A. Mamalaki, and U. Georgopoulou. 2016. Alterations in the iron homeostasis network: A driving force for macrophage-mediated hepatitis C virus persistency. Virulence. 7:679-90.
8. Karamouzis, M. V., G. Dalagiorgou, U. Georgopoulou, A. Nonni, M. Kontos, and A. G. Papavassiliou. 2016. HER-3 targeting alters the dimerization pattern of ErbB protein family members in breast carcinomas. Oncotarget 7:5576-5597.
9. Dalagiorgou G., Piperi C. Adamopoulos C, Georgopoulou U.,Gargalionis A.N., Spyropoulou A., Zoi I.,Nokhbehsaim M., Damanaki A.,Deschneer J., Basdra EK., Papavassiliou AG., Mechanosensor polycystin-1 potentiates differentiation of human osteoblastic cells by upregulating Runx2 expression via induction of JAK2/STAT3 signaling axis, 2016, Cellular Molecular Life Sciences, Published on line 3 October.
10. Doumba, P. P., E. Serti, M. Boutsikou, M. M. Konstandoulakis, U. Georgopoulou, and J. Koskinas. 2015. The role of caveolin-1 in the phenotype of human t lymphocytes after uptake of hcv non-enveloped particles. Journal of Hepatology 62:S579-S579.
11. Foka, P., A. Dimitriadis, E. Karamichali, E. Kyrtzopoulou, D. Giannimaras, J. Koskinas, A. Mamalaki, and U. Georgopoulou. 2015. Regulation of hepcidin (hamp) as driving force for macrophage-mediated hepatitis c (hcv) persistency. Journal of Hepatology 62:S579-S580.
12. Simos, T., U. Georgopoulou, G. Thyphronitis, J. Koskinas, and C. Papaloukas. 2015. Analysis of Protein Interaction Networks for the Detection of Candidate Hepatitis B and C Biomarkers. Ieee Journal of Biomedical and Health Informatics 19:181-189.
13. Karamouzis, M; Dalagiorgou, G; Georgopoulou, U; Kontos, M; Papavassiliou, AG, Proximity ligation assay (PLA) to identify HER2-negative breast carcinomas responding in HER-3 targeting agents, 2015. Journal of clinical oncology 33 (15) Suppl: S Meeting Abstract: e22184
14. Foka, P., A. Dimitriadis, E. Kyrtzopoulou, D. A. Giannimaras, S. Sarno, G. Simos, U. Georgopoulou, and A. Mamalaki. 2014. A complex signaling network involving protein kinase CK2 is required for hepatitis C virus core protein-mediated modulation of the iron-regulatory hepcidin gene expression. Cellular and Molecular Life Sciences 71:4243-4258.
15. Foka, P., E. Karamichali, G. Dalagiorgou, E. Serti, P. P. Doumba, G. Pissas, A. Kakkanas, D. Kazazi, E. Kochlios, M. Gaitanou, J. Koskinas, U. Georgopoulou, and P. Mavromara. 2014. Hepatitis C virus modulates lipid regulatory factor Angiopoietin-like 3 gene expression by repressing HNF-1 alpha activity. Journal of Hepatology 60:30-38.
16. Georgopoulou, U., A. Dimitriadis, P. Foka, E. Karamichali, and A. Mamalaki. 2014. Hepcidin and the iron enigma in HCV infection. Virulence 5:465-476.
17. Karamichali, E., P. Foka, E. Tsitoura, K. Kalliampakou, D. Kazazi, P. Karayiannis, U. Georgopoulou, and P. Mavromara. 2014. HCV NS5A co-operates with PKR in modulating HCV IRES-dependent translation. Infection Genetics and Evolution 26:113-122.
18. Karamouzis, M. V.; Dalagiorgou, G.; Georgopoulou, U.; et al., HER-3 targeting affects the dimerization pattern of egfr family members in breast carcinomas (BC) 2014. 39th ESMO Congress (ESMO) Annals of Oncology Volume: 25 Supplement: 4 Meeting Abstract: 176P
19. Dalagiorgou G, Piperi C, Georgopoulou U, Adamopoulos C, Basdra EK, Papavassiliou AG (2013). Mechanical stimulation of polycystin-1 induces human osteoblastic gene expression via potentiation of the calcineurin/NFAT signaling axis, Cell Mol Life Sci.;70(1):167-180
20. Doumba PP, Serti E, Boutsikou M, Konstadoulakis MM, Georgopoulou U, Koskinas J. (2013). Phenotypic and functional alterations of primary human PBMCs induced by HCV non-enveloped capsid-like particles uptake, Cell Mol Life Sci. Volume: 70, Issue: 18, Pages: 3463-3474.
21. Dalagiorgou, G; Piperi C.; Gargalionis, AN; Georgopoulou, U; Papavassiliou, AG; Basdra, EK (2012). Activation of the polycystin- calcineurin-NFAT axis in mechanically-stimulated osteoblastic cells, Wound Repair and Regeneration, Volume: 20, Issue: 5, Pages: A89-A89.

22. Foka P, E. Karamichali, P.P. Doumba, G Dalagiorgou, E. Serti, E. Kochlios, J. Koskinas, U. Georgopoulou, P. Mavromara (2012). Hepatic Nuclear Factor-1a (HNF-1a) loss of DNA binding activity is essential for HCV core –mediated modulation of lipid metabolism regulatory factor Angiopoietin –like 3 (ANGPTL3) expression *Journal of Hepatology*, Vol. 56Supplement 2, Page S325
23. E. Serti, PP Doumba, G. Thyphronitis, P. Tsitoura, K. Katsarou, P. Foka, MM Konstadoulakis, J. Koskinas, P. Mavromara, U. Georgopoulou (2011). Modulation of IL-2 expression after uptake of hepatitis C virus non-enveloped capsid-like particles: the role of p38 kinase. *Cell Mol Life Sci.* 68 (3): 505-522.
24. Budkowska A, Kakkanas A, Nerrienet E, O Kalinina, P. Maillard, S. Viseth, Horm G. Dalagiorgou, N. Vassilaki, U. Georgopoulou, M. Martinot, A. Sall, P. Mavromara (2011). Synonymous Mutations in the Core Gene Are Linked to Unusual Serological Profile in Hepatitis C Virus Infection. *PLOS ONE* 6 (1): Art. No. e15871.
25. Boumlic A, Vassilaki N, Dalagiorgou G, E. Kochlios, A. Kakkanas, U. Georgopoulou, P. Markoulatos, G. Orfanoudakis and P. Mavromara (2011). Internal translation initiation stimulates expression of the ARF/core+1 open reading frame of HCV genotype 1b. *Virus Res.* 155 (1): 213-220.
26. Katsarou K, Tsitoura P, Georgopoulou U (2011). MEK5/ERK5/mef2: A novel signaling pathway affected by hepatitis C virus non-enveloped capsid-like particles. *BBA-Molecular Cell Research* 1813 (10): 1854-1862.
27. Doumba PP, Serti E, Boutsikou M, M.M. Konstandoulakis, U. Georgopoulou, J. Koskinas (2011). Uptake Of HCV non-enveloped particles from human peripheral blood mononuclear cells (PBMCS) leads to modulation of the immune response. *Journal of Hepatology* 54: S314-S314 780 Suppl. 1.
28. Madesis P, Osathanunkul M, Georgopoulou U, et al (2010). A hepatitis C virus core polypeptide expressed in chloroplasts detects anti-core antibodies in infected human sera. *Journal of Biotechnology* 145 (4): 377-386.
29. Katsarou K, Lavdas AA, Tsitoura P, Serti E, Markoulatos P, Mavromara, Georgopoulou U (2010). Endocytosis of hepatitis C virus non-enveloped capsid-like particles induces MAPK-ERK1/2 signaling events. *Cell Mol Life Sci* 67 (14): 2491-2506.
30. Katsarou K, Serti E, Tsitoura P, Lavdas AA, Varaklioti A, Pickl-Herk AM, Blaas D, Oz-Arslan D, Zhu R, Hinterdorfer P, Mavromara P, Georgopoulou U. (2009). Green fluorescent protein - Tagged HCV non-enveloped capsid like particles: Development of a new tool for tracking HCV core uptake. *Biochimie* 91 (7): 903-915.
31. Serti E., Katsarou K., Thyphronitis G., Tsitoura P., Mavromara P, Georgopoulou U (2009). Modulation of p38 signalling pathway by HCV non-enveloped capsid like particles” 34th FEBS Congress (Prague, Czech Republic, 2009). *FEBS J.* 276: 251 Suppl 1.
32. Karamichali E, Georgopoulou U, Kalliampakou K, et al (2008). The HCV, GBV-B and GBV-C effect of the non structural 5A protein on IRES-dependent translation initiation. *FEBS J.* 275: 406-406 Suppl. 1.
33. Irimi Nianiou , Kriton Kalantidis , Panagiotis Madesis , Urania Georgopoulou ,Penelope Mavromara & Athanasios Tsiftaris (2008). Expression of an HCV core antigen coding gene in tobacco (*N. tabacum L.*). *PREPARATIVE BIOCHEMISTRY & BIOTECHNOLOGY* 38 (4): 411-421.
34. Tsitoura P, Georgopoulou U, Petres S, et al (2007). Evidence for cellular uptake of recombinant hepatitis C virus non-enveloped capsid-like particles. *FEBS LETTERS* 581 (21): 4049-4057
35. Tsitoura E, Georgopoulou U, Mavromara P. (2006) HSV-1 based amplicon vectors as an alternative system for the expression of functional HCV proteins. *Curr Gene Ther.* 2006 Jun;6(3):393-8.