Curriculum Vitae of **Dr Eirini Karamichali**

Position Title: Postdoctoral researcher at the Molecular Virology Laboratory, HPI, Athens. ResearcherID: AAQ-5175-2020/ ORCID ID: 0000-0002-9288-7854

Education:

Institution and Location	Degree	Comple-tion Date	Field of Study
University of Camerino, Italy	**B.S**	1998-2004	**Biology** (5 year degree)
University of Patras, Department of Pharmacy /Molecular Virology Lab, Hellenic Pasteur Institute	**M.Sc**	2006-2009	**Molecular Biology/Virology**
University of Patras, Department of Pharmacy /Molecular Virology Lab, Hellenic Pasteur Institute	**Ph.D "Regulation of the internal ribosome entry site (IRES) of Hepatitis C Virus"**	2009-2014	**Molecular Biology/Virology**

A. Personal Statement

I am a Biologist by training, specialising in molecular biology. I was born in Samos –Samou, Greece and obtained my first degree in Biology (100/110) at University of Camerino, Italy in 2004. Then i returned back in Greece and continued with my M.Sc in University of Patras, Department of Pharmacy/Molecular Virology HPI in Molecular Biology. Then I proceeded with my Ph.D at the University of Patras, Department of Pharmacy /Molecular Virology HPI in Molecular Biology where i studied the role of HCV NS5A and PKR in the regulation of HCV IRES-dependent translation. From 2014 until now i am a postdoctoral researcher at the Molecular Virology laboratory, Hellenic Pasteur Institute. I have extended experience in molecular and cell biology and significant research work in molecular virology of RNA viruses and more specifically in HCV. My research work is focused on the study of cellular and metabolic pathways involved in HCV infection. Currently my research is dedicated to the role of exosomes in HCV viral life cycle and their contribution to persistent infection. My major scientific goal is to investigate the exploitation of cellular mechanisms by the virus in order to escape the adaptive immune response.

B. Publications (in chronological order).

Peer reviewed publications

1. Kakkanas A, **Karamichali E**, Koufogeorgou E. I, Georgopoulou U, Foka P. *Targeting the YXXΦ motifs of the SARS coronaviruses 1 and 2 ORF3a peptides by in silico analysis to predict novel virus -host interactions*. Biomolecules (Submitted 27/04/22). Under review.
2. Mourtzi N, Siahanidou T, Tsifintaris M, **Karamichali E**, Tasiopoulou A, Sertedaki A, Pesmatzoglou M, Kapetanaki A, Liosis G, Baltatzis G, Vlachakis D, Chrousos GP, Giannakakis A. *lncRNA NORAD is consistently detected in breastmilk exosomes and its expression is downregulated in mothers of preterm infants*. Int J Mol Med. 2021 Dec; 48(6):216. doi: 10.3892/ijmm.2021.5049. (IF2021 4.101).
3. Foka P, Dimitriadis A, **Karamichali E**, Kochlios E, Eliadis P, Valiakou V, Koskinas J, Mamalaki A, Georgopoulou U. *HCV-Induced Immunometabolic Crosstalk in a Triple-Cell Co-Culture Model Capable of Simulating Systemic Iron Homeostasis*. Cells. 2021 Aug 30; 10(9):2251. doi: 10.3390/cells1009. (IF2020 6.600).
4. Valiakou V, Eliadis P, **Karamichali E**, Tsitsilonis O, Koskinas J, Georgopoulou U, Foka P. Differential *Expression of the Host Lipid Regulators ANGPTL-3 and ANGPTL-4 in HCV Infection and Treatment*. J Mol Sci. 2021 Jul 26; 22(15):7961. doi: 10.3390/ijms2215749.(IF2020 5.923).
5. Dimitriadis A, Foka P, Kyratzopoulou E, **Karamichali E**, Petroulia S, Tsitoura P, Kakkanas A, Eliadis P Georgopoulou U, Mamalaki A. T*he Hepatitis C virus NS5A and core proteins exert antagonistic effects on HAMP gene expression: the hidden interplay with the MTF-1/MRE pathway*. FEBS Open Bio. 2020 Nov 28; 11(1):237-50. https:doi: 10.1002/2211-5463.13048. (IF2020 2.231)
6. **E.Karamichali**, H. Chihab, A. Kakkanas, A. Marchio, T. Karamitros, V. Pogka, A. Varaklioti, A. Kalliaropoulos, B. Martinez-Gonzales, P. Foka, I. Koskinas, A. Mentis, S. Benjelloun, P. Pineau, U. Georgopoulou. *HCV defective genomes promote persistent infection by modulating the viral life cycle.* Front. Microbiol. 03 December 2018. https://doi.org/10.3389/fmicb.2018.02942. (IF2017:4,019)
7. Karamitros T, Hurst T, Marchi E, Karamichali E, Georgopoulou U, Mentis A, Riepsaame J, Lin A, Paraskevis D, Hatzakis A, McLauchlan J, Katzourakis A, Magiorkinis G. *Human Endogenous Retrovirus-K HML-2 integration within RASGRF2 is associated with intravenous drug abuse and modulates transcription in a cell-line model*. Proc Natl Acad Sci U S A. 2018 Oct 9; 115 (41):10434-10439. (IF2017:9,504)
8. **E. Karamichali**, E. Serti, A. Gianneli, A. Papaefthymiou, A. Kakkanas, P. Foka, A. Seremetakis, K. Katsarou, I. P. Trougakos and U. Georgopoulou. *The unexpected function of a highly conserved YXXΦ motif in HCV core protein*. Infect Genet Evol. 2017 Oct; 54:251-262. (IF2017:2.545)

9. P. Foka, A. Dimitriadis, **E. Karamichali**, E. Kyratzopoulou, D. Giannimaras, J. Koskinas, A. Varaklioti, A. Mamalaki, U. Georgopoulou. *Alterations in the iron homeostasis network: A driving force for macrophage-mediated Hepatitis C virus persistency.* Virulence 2016 Apr; 7(6):679-90 (IF2016:4.665)
10. **E. Karamichali**, P. Foka, E. Tsitoura, K. Kalliampakou, D. Kazazi, P. Karayiannis, U. Georgopoulou and P. Mavromara. *HCV NS5A co-operates with PKR in modulating HCV IRES-dependent translation*. Infect Genet Evol. 2014 Aug; 26:113-22. (IF2014:3.015)
11. Georgopoulou U, Dimitriadis A, Foka P, **Karamichali E**, Mamalaki A.Hepcidin and the iron enigma in HCV infection.Virulence. 2014 Mar 13; 5 (4). (IF2014:4.216)
12. P. Foka**, E. Karamichali**, G. Dalagiorgou, E. Serti, P. Doumba, G. Pissas, A. Kakkanas1, D. Kazazi, E. Kochlios, M. Gaitanou, J. Koskinas, U. Georgopoulou and P. Mavromara. *Hepatitis C virus (HCV) modulates the lipid metabolism regulatory factor Angiopoietin-like 3 (ANGPTL-3) gene expression through repression of Hepatic Nuclear Factor-1α (HNF-1α) activity*. J Hepatol. 2014 Jan; 60(1):30-8. (IF2014:11,336)

Publications/posters in Conferences' Proceeding with Reviewers

1. 2017. AG Vakrakou, **E Karamichal**i, O Georgopoulou, MN Manoussakis. *Detection of an intriguing virus-like sequence in the salivary gland epithelial cells of sjÖgren's syndrome patients*. Annals of the Rheumatic Diseases.76 (Suppl. 2) 1089-1089. (IF2017 11.496)
2. 2015. Foka, P., Dimitriadis, A., **Karamichali, E**., Kyratzopoulou, E., Giannimaras, D., Koskinas, J., Mamalaki, A. and Georgopoulou, U. *Regulation of Hepcidin (HAMP) as driving force for macrophage-mediated Hepatitis C (HCV) persistency*. J. Hepatol. 62(Suppl. 2), S579-S579. (IF2014:11,336)
3. 2012. Foka, P., **Karamichali, E**., Doumba, P.P., Dalagiorgou, G., Serti, E., Kochlios, E., Koskinas, J., Georgopoulou, U. and Mavromara, P. *Hepatic nuclear factor-1 alpha (HNF-1 alpha) loss of DNA binding activity is essential for HCV core-mediated modulation of lipid metabolism regulatory factor angiopoietin-like 3 (ANGPTL3) expression*. J. Hepatol. 56(Suppl. 2), S325-S325. (IF2012:9,858)
4. 2008**. Karamichali, E**., Georgopoulou, U., Kalliampakou, K., Karayiannis, P., Kalai, M., and Mavromara, P. The HCV, GBV-B and GBV-C effect of the nonstructural 5A protein on IRES-dependent translation initiation FEBS Journal Vol: 275 Supplement: 1 Pages: 406-406 Published: JUN 2008. (IF2008: 3.139)

C. Positions and Honours

2014 - Currently	**Current position:** Postdoc at the Molecular Virology Lab of the Hellenic Pasteur Institute, Athens-Greece.
2013 - 2014	**Previous position:** Research Assistant at the Molecular Virology Lab of the Hellenic Pasteur Institute Athens-Greece.

Project Title	**Funding source**	**Period**	**Role of the PI**
Infectious and neurodegenerative diseases in the 21st century: study of basic mechanisms for the development of the translational research and cutting edge technologies aiming to effective diagnosis prevention and therapy.	GSRT	2013-2014	Research Assistant
The many faces of Hepatitis C virus: impact of defective genomes on pathogenesis on liver disease by assessment of exosomes secretion	PasteurInternational Network	2014-16	Postdoc
Investigate the role of defective genomes in HCV infection	Gilead Hellas	2016	Postdoc
Grant from the State Scholarship Foundation (IKY) in the context of the program 'Support for Postdoctoral Researchers'. 2016-2017	IKY	2016-2017	Principle Investigator (PI)
Investigate the role of exosomes as transporters of HCV viral genome, defective HCV genomes and miRNAs in liver cancer	Gilead Hellas	2017	Principle Researcher
HCV-mediated regulation of host lipid metabolism as a putative predisposing factor for Hepatocellular carcinoma development	Gilead Hellas	2017	Postdoc
Infectious, autoimmune and neurodegenerative diseases: study of the pathogenic mechanisms and development of diagnostic, prognostic and therapeutic approaches	GSRT	2017-19 KRIPIS II	Postdoc
The role of exosomes as transporter of HCV genomes and miRNAs in the progression of hepatocellular cancer.	Empirikion Foundation	2018	Postdoc
Exosomes and regulation of the immune response in chronic HCV infection.	Gilead Hellas	2019	PI

Cellular mediators of adaptive immunological response during HCV infection	ESPA	2020	PI
The role of intercellular communication in the reduced immunosurveillance of HCV Chronic infection after treatment with DAAs	Gilead Hellas	2021	PI

D. Contributions to Science

1. Travel grant to participate to the Institut Pasteur Global Health: Viruses, Liver and Cancers Seminar from July 18 to 24, 2021 at Schloss Arenberg in Salzburg.
2. The poster presentation "The pivotal role of exosomal cargo in the immune respose of chronic HCV patients after treatment with DAAs" was selected as an oral presentation of the "Poster Tour" in the 27th International Symposium on Hepatitis C Virus and Related Viruses (HCV 2021), a virtual conference (July 6 – 9, 2021).
3. The poster presentation "HCV defective genomes promote persistent infection by modulating the viral life cycle" by E. Karamichali was selected as "Flash" oral presentation among the Nominated Posters in HCV 2018: 25th International Symposium on Hepatitis C Virus and Related Viruses (Dublin October 2018)
4. Candidate for the best young scientist award for the presentation titled: Investigation of the role of exosomes as transporters of HCV genomes and miRNAs in Hepatocellular Carcinoma Progression, 16th Hellenic Liver Congress, 4-6th May, 2018, Athens, Greece.
5. Grant from the State Scholarship Foundation in the context of the program 'Support for Postdoctoral Researchers'. 2016-2017
6. Grant to attend the 3rd Institute Pasteur International Network Scientific Symposium, 'From basic science to biomarkers & tools', Paris, November 29th –December 2nd, 2016.
7. 1st Award for oral presentation at the 14o National Conference of Hepatology. May 2015, Island of Kos.
8. Travel grant to attend the 5th European Congress of Virology, 1-14 September 2013, Lyon, France.

E. Additional Information

Memberships & Organization of Scientific Meetings

1. Member of the organizing committee of the 7th Young Scientist Forum (YSF) of the Hellenic Society of Biochemistry and Molecular Biology (HSBMB), 28 November 2019, Athens.
2. Member of the organizing committee of the StaPa International Retreat, 12-15 June 2019, Rome.
3. Member of the organizing committee of the Joint Retreat StaPa- YouPI, 21-23 June 2018, Athens.
4. Member of the organizing committee of the 3rd One-Day Conference of HPI PhD and Post-doctoral Scientists. 28th September 2017, Athens, Greece.
5. Founding member of the Young Researchers of the Hellenic Pasteur Institute (YouPI) group.

Training activities

2019 -2020 Training of D. Loukaki and K. Andreasaki (BSc in Biology) in Molecular Virology Lab/ HPI.
2018 Training of G. Athanasiou (BSc in Biology) in Molecular Virology Lab/ HPI.
2016-2017 Training of G. Papadopoulou (MSc in Biology) and V. Valiakou (PhD in Biology) in Molecular Virology Lab/ HPI.
2014-2015 Training of V. Petroulaki (MSc in Biology), A. Seremetakis (BSc in Biology) in Molecular Virology Lab/ HPI.
2013 Training of D.Marinou (BSc in Biology) in Molecular Virology Lab/ HPI.

Summary of work Web of Science
Peer-reviewed article: 11
Published proceedings:4
International Conferences:17 oral (2)
National conferences:27 oral (3)
Invited talks: 1
Research grants:10 PI (4)
Students Training: MSc (1) BSc (6)
Total impact Factor:93.984
Average impact factor:6.26
Citations: 86 (without self- citations) 75 until 23/05/22
h-index:6