

Curriculum Vitae: Penelope Mavromara. MS, PhD.Prof.
Dept of Molecular Biology and Genetics /Democritus University of Thrace
& Hellenic Pasteur Institute

1.PERSONAL INFORMATION

Place of Birth: Island of Tinos, Greece
Marital status: Married to Spyros Kalos with one child, Zoe Kalos

2. EDUCATION

1974-1978 **B.S. in Chemistry,**
Chemistry Department
Aristotelion University of Thessaloniki, Greece

1979-1981 **M.S. in Biochemistry**
Department of Biological Chemistry-Medical School
The University of Michigan, Ann. Arbor, MI, USA

1981-1984 **Ph.D. in Biochemistry**
Department of Biological Chemistry-Medical School
The University of Michigan, Ann. Arbor, MI, USA
Title: Cloning and characterization of the genes
coding for the membrane component of the
leucine transport system in E. coli

1982 **Advanced Bacterial Genetics Course**
Cold Spring Harbor Laboratories

3. ACADEMIC APPOINTMENTS

1984 -1988 **Post Doctoral Fellow**
The University of Chicago, Chicago, USA
Dr. Bernard Roizman's Laboratory
Area of Research: Molecular Virology: HSV-1 gene expression

1989 -1990 **Assistant Professor**
Department of Microbiology, Biochemistry and Molecular Biology
Thomas Jefferson University, Philadelphia, USA

1991 – 1999 Head of the Molecular Virology Laboratory

Hellenic Pasteur Institute

1999 – 2012

Research Director

Head of the Molecular Virology Laboratory
Hellenic Pasteur Institute

2012-

Professor of Biochemistry

Dept. of Molecular Biology and Genetics
Democritus University of Thrace

4. FELLOWSHIPS-DISTINCTIONS

- Horace Rackham Predoctoral Fellowship from the University of Michigan (1982)
- American Association of University Women (AAUW) International Fellowship (1983)
- Horace Rackham Dissertation Grant from the University of Michigan (1983)
- Leukemia Society Fund/postdoctoral fellowship (1984-1987)
- Damon Runyon-Walter Winchell Cancer/postdoc fellowship (1984-1987)
- Knight of the French National Order of “Palme Academiques” (2007)

- Member of the American Society of Microbiology
- Member of the American Association of the Advancement of Science
- Member of the European Society of Virology
- Member of the European Association of the Study of Liver Diseases
- Member of the Hellenic Society of Biochemistry and Molecular Biology
- Member of the Scientific Council of the Hellenic Pasteur Institute (2010)
- Associate Editor in Intervirology (2010-2012)

5. RESEARCH GRANTS

- ❖ **NIH R29:** Regulation of 3' coterminal HSV-1 gene expression (1990-1994)
total direct cost \$353,059
- ❖ **UNIDO:** HPV and cervical cancer in Greece: Epidemiological studies, HPV typing, development of immunoreagents (1993-1995)
- ❖ **FP4. Life Sciences BIOMED (1996-1998):** Molecular approaches to analyze Hepatitis C virus replication for the development of effective therapy and vaccines
total direct cost 45,000.00€
- ❖ **FP4: (1996-2000) FMRX-CT-960053:** European Union network for investigation of dendritic immunotherapy for induction of anti-viral and anti-tumor immunity and transplantation tolerance. Total Direct Cost: 200,000.00€
- ❖ **FP4: (1996-2000) BIOTECH PL960422:** European Union Network for Evaluation of Nucleic Acid-Based Vaccines for Induction of Antiviral Immunity Total Direct Cost: 300,000.00€

- ❖ **INCO-COPERNICUS (1998-2000) IC15-CT98-0304:** Improvement of surveillance and prevention of HCV infection: Total Direct Cost: 40,000.00€
- ❖ **IP Paris: Institute Pasteur International Network. ACIP I:** Etude Comparative d'epidemiologie moleculaire des infections par l'hepatitis C en Europe et l'Iran (1997 – 1999) (Coordinator)
- ❖ **IP Paris: Institute Pasteur International Network. ACIP II:** Recherche des recombinants chez des virus ARN de polarite positive (enterovirus et virus de l'hepatite C) (1998 – 2000),total direct cost : 32,112.00€ (Coordinator)
- ❖ **Greek General Secretariat of Science and Technology, PENED I:** Production of recombinant antigens –for diagnostic purposes- of the Human Pappiloma Virus in eukaryotic cells with the use of viral vector systems of expression. Development of immunodiagnostic systems. (1996 – 1998) Total Direct Costs: 8.000.000Drs
- ❖ **Greek General Secretariat of Science and Technology, PENED 99 II:** Gene cloning of regulatory proteins and biotechnological development-application of systems for the production of heterologous peptides. (11/2000 – 9/2001) Total Direct Costs: 14.800.000Drs
- ❖ **Greek General Secretariat of Science and Technology,** Program for a carrier opportunity in Greece for Greek-speaking researchers abroad. Research on the molecular pathogenesis and treatment of viral infections and carcinogenesis in humans. (1999 – 2001) Total Direct Costs: 33.000.000Drs
- ❖ **Greek General Secretariat of Science and Technology, Bilateral S&T Collaboration Program Greece – Italy:** Recombinant HSV expression viral vectors for the study of selected viral proteins: Vaccine development against the HCV virus. C (1999-2001) Total Direct Costs: 4.200.000Drs
- ❖ **FP5 (2004-2006). EUROAMP QLK2-CT-00055** European (EURO) Network for Development of Novel Safe Vaccines Based on New Generation Amplicons (AMP) and Other Defective HSV – 1 Derived Vectors as Foreign Antigen Delivery Systems, Total direct cost : 300,000.00€
- ❖ **Greek General Secretariat of Science and Technology, Bilateral S&T Collaboration Program Greece – France PLATO 1:** Development and use of amplicons (viral expression systems) for the expression of the structural proteins of the HCV virus. (1999-2001) Total Direct Costs: 3.150.000Drs
- ❖ **Greek General Secretariat of Science and Technology, Bilateral S&T Collaboration Program Greece – France PLATO 2:** Construction of HSV-based viral vectors (amplicon) for the development of vaccines against HCV: Development of strategy and improvement of antigen presentation to the immune system. (2002-2004) Total Direct Costs: 12,325.75€
- ❖ **IP Paris: Institute Pasteur International Network ACIP III:** Etude des genotypes du virus de l'hepatite C en Asie du Sud Est (Cambodge et Vietnam) et developpement de methodes diagnostiques specifiques (2003-2005) Total direct cost: 10,000.00€ (Coordinator)

- ❖ **ΚΕΕΛΠΝΟ-HCDCP:** Research on the biological functions of the core+1/F protein of the HCV virus: new prospects on the treatment of HCV infection. (2003-2004), Total Direct Costs: 30,000.00€,
- ❖ **IP Paris: Institute Pasteur International Network. PTR:** Implications of HCV diversity in the diagnosis and pathogenesis of virus infection in Eastern Europe, SE Asia and Central Africa (2003 – 2005) Total direct cost: 40,000.00€ (Coordinator)
- ❖ **Greek General Secretariat of Science and Technology, Bilateral S&T Collaboration Program Greece – France PLATO 3:** HCV – dependent hepatocellular cancer. Development of a suppression system with RNA mediation (RNAi) that suppresses the reproduction of the HCV virus with the use of HSV-based viral vectors (amplicon) (2004 – 2006), Total Direct Costs: 11,800.00€
- ❖ **IP Paris: Institute Pasteur International Network. INSERM: ATC-Hépatite C :** Vers la résolution de controverses concernant les mécanismes de la traduction chez le virus de l'hépatite C: conséquences en pathologie humaine (2004-2005) Total direct cost: 12,000.00€
- ❖ **Hellenic Pasteur Institute, Internal Funding:** Investigation of the role of HCV in hepatocellular cancer with the use of transgenic mice (2004-2006) in collaboration with Dr. L. Probert/Lab of Molecular Genetics in HPI. Total direct cost 25,000€
- ❖ **FP6 (2005-2009)-LSHB-CT-2004-005246 COMPUVAC:** Rational design and standardized evaluation of novel genetic vaccines (2005-2008) Total direct cost: 724,000.00€
- ❖ **FP6 (2005-2009) LSHB-CT-018649 THOVLEN:** Targeted herpes-virus derived oncolytic vectors for liver cancer European Network (2005-2009), Total direct cost 289,260€
- ❖ **Greek General Secretariat of Science and Technology, PENED:** Study of the immunoregulatory function of the core protein and the –until recently unknown- core+1 protein of the HCV virus: Use of novel technology – prospects for novel therapeutic approaches. (2006-2008) Total direct cost 124,000€
- ❖ **Bodosakis Foundation:** Donation for laboratory equipment (2009) Total Direct Costs: 80,000€
- ❖ **Institut Pasteur International Network (RIIP):** Organization and support of HCV Network. (2011-2012) Total direct cost 20,000.00€
- ❖ **Greek General Secretariat of Science and Technology, APIΣTEIA:** The role of oncogenic viruses in the pathogenesis of hepatocellular carcinoma: From the HCV core/core+1 protein/ host interactions to HCV-associated liver cancer. (2011-2013) : Total direct cost 407,350€

6. PUBLICATIONS

1. Landick R., Anderson J.J., Mayo M.M., Gunsalus R.P., Mavromara P., Daniels C.J. and Oxender D.L. (1980). Regulation of the High-Affinity Leucine Transport in *E. coli* ***J Supramol Struct.* 14 (4): 527-537**

2. Copeland B.R., Landick R., Mavromara P* and Oxender D.L. (1984). Role of the Membrane Potential in Protein Folding and Domain Formation During Secretion in E. coli **J Cell Biochem.** 24 (4):345-356
3. Landick R., Duncan J., Copeland B., Mavromara P* and Oxender, D.L. (1984). Secretion and Degradation of Mutant Leucine-Specifying Binding Protein Molecules Containing C-terminal Deletions. **J Cell Biochem.** 24 (4):331-344
4. Mavromara P*, Su T.Z., Landick R. and Oxender, D.L. (1984). Branched-Chain Amino Acid Transport in E. coli **Microbiology** 24-28
5. Oxender D.L., Landick R., Mavromara P* and Copeland B.R. (1984). Role of Membrane Potential in Protein Folding and Secretion in E. coli **Microbiology** 4-7
6. Mavromara P*, Mayo M.M., Su TZ, Anderson, J.J. and Oxender, D.(1985). Identification of livG, a Membrane-Associated Component of the Branched-Chain Amino Acid Transport in E. coli **J Bacteriol.** 163 (3): 1196-1202
7. Mavromara P*, Antonucci T.K., Landick R. and Oxender, D.L. (1986) Cloning and Characterization of livH the Structural Gene Encoding a Component of the Leucine Transport System in E. coli **J Bacteriol.** 166 (2): 565-575
8. Mavromara P*, Silver S., Voss H.J., McKnight J.L.C. and Roizman B. (1986). Regulation of Herpes Simplex Virus 1 Genes: α Gene Sequence Requirements for Transient induction of indicator genes regulated by b or g late promoters. **Virology** 149 (2): 152-164
9. McKnight J.L.C., Kristie T.M., Silver S., Pellet P.E., Mavromara P*, Fiume C.G. Arsenakis M. and Roizman B. (1986). Regulation of herpes simplex virus 1 gene expression: the effect of genomic environment and its implications for model systems. In control of Gene Expression and Replication. Cancer Cell Vol. 4 Botchan, T., Grodzicker, P. Sharp eds, Cold Spring Harbor Laboratories (Cold Spring Harbor, NY), p163-173.
10. Mavromara P**, Ackerman M. and Roizman B. (1986). Construction and properties of a viable herpes simplex virus I recombinant lacking the coding sequences of the $\alpha 47$ gene. **J Virol** 60 (2): 807-812
11. Mavromara P** and Roizman B. (1987). Activation of herpes simplex virus I gamma2 by viral DNA replication. **Virology** 161 (2): 593-598
12. Meignier B., Longnecker R., Mavromara P**, Sears A.E. and Roizman B. (1988). Virulence of and establishment of latency by genetically engineered deletion mutants of herpes simplex virus I **Virology.** 162 (1): 251-254
13. Roizman B., Kristie T., Michael N., McKnight J.L.C., Mavromara P** and Spector D. (1988). The trans-activation of viral gene expression in herpes simplex virus infected cells **Biochimie** 70 (8):1031-1043
14. Michael N., Spector D., Mavromara P**, Kristie T. and Roizman B. (1988). The DNA binding properties of the major regulatory protein $\alpha 4$ of herpes simplex viruses. **Science** 239 (4847): 1531-1534
15. Michael, N., Mavromara, P**, Kristie, T., Spector, D. and Roizman, B. The characteristics of the DNA binding sites of $\alpha 4$, the major regulatory protein of herpes simplex virus 1. Proc. Centenary Symposium of the Institut Pasteur, Oct. 19, 1987.

16. Mavromara P**, and B. Roizman (1989). Delineation of regulatory domains of early and late genes by construction of chimeric genes expressed in herpes simplex virus 1 genomes. **Proc Natl Acad Sci. USA** 86 (11): 4071-4075
17. Romanelli M-G., Mavromara P**, Spector D. and Roizman B. (1992). Mutational analysis of the ICP4 binding sites in the 5' transcribed noncoding domains of the herpes simplex virus 1 UL49.5 gene. **J Virol.** 66 (8): 4855-4863
18. Ong C. K., Chan S. Y., Campo M. S., Fujinaga K., Mavromara P**, Labropoulou V., Pfister H., Tay S. K., ter Meulen J., Villa L. L. et al. (1993). Evolution of human papillomavirus type 18: an ancient phylogenetic root in Africa and intratype diversity reflect coevolution with human ethnic groups. **J Virol.** 67 (11): 6424-6431
19. Ho L., Chan S. Y., Burk R. D., Das B. C., Fujinaga K., Icenogle J. P., Kahn T., Kiviat N., Lancaster W., Mavromara P**. et al. (1993). The genetic drift of human papillomavirus type 16 is a means of reconstructing prehistoric viral spread and the movement of ancient human populations. **J Virol.** 67 (11): 6413-6423
20. Georgopoulou U., Michaelidou A., Roizman B., and Mavromara P**. (1993). Identification of a new transcriptional unit that yields a gene product within the unique sequences of the short component of the herpes simplex virus 1 genome. **J Virol.** 67 (7): 3961-3968
21. Labropoulou V., Balamotis A., Tosca A., Rotola A., and Mavromara P**. (1994). Typing of human papillomaviruses in condylomata acuminata from Greece. **J Med Virol.** 42 (3): 259-263
22. Georgopoulou, U., Kakkanas, A., Miriagou, V., Michaelidou, A., and Mavromara, P. (1995). Characterization of the US8.5 protein of herpes simplex virus. **Arch Virol.** 140 (12): 2227-2241
23. Miriagou, V., Argnani, R., Kakkanas, A., Georgopoulou, U., Manservigi, R., and Mavromara, P. (1995). Expression of the herpes simplex virus type 1 glycoprotein E in human cells and in Escherichia coli : protection studies against lethal viral infection in mice. **J Gen Virol.** 76 (Pt12): 3137-3143
24. Kakkanas, A., Papadogeorgaki, H., Manservigi, R., Miriagou, V., Georgopoulou, U., and Mavromara, P. (1995). Escherichia coli expressed herpes simplex virus gG1 and gG2 proteins in ELISA and immunoblotting assays. **Intervirol.** 38 (6): 346-351
25. Labropoulou, V., Diakomanolis, E., Dailinas, S., Kalpaktoglou, K., Rodolakis, A., Beaudenon, S., Kakkanas, A., and Mavromara, P. (1996). Genital papillomavirus in Greek women with high-grade cervical intraepithelial neoplasia and cervical carcinoma. **J Med Virol.** 48 (1): 80-87
26. Labropoulou, V., Diakomanolis, E., Dailianas, S., Kalpaktoglou, K., Balamotis, A., and Mavromara, P. (1997). Type-specific prevalence of genital human papillomaviruses in benign, premalignant and malignant biopsies in patients from Greece. **Sex Transm Dis.** 24 (8): 469-474
27. Papadopoulou K., Labropoulou V., Davaris P., Mavromara P., Tsimara-Papastamatiou H. (1998) Detection of human papillomaviruses in squamous cell carcinomas of the lung in Greece. **Virchows Arch.** 433 (1): 49-54
28. Inchauspe G., Mavromara P., Austyn J., Spengler U., Maertens. (1998) Hepatitis C virus infection: Immune correlates of protection and application to the development of a DNA-based vaccine. Proceedings of an International Symposium

29. A.Varaklioti., U.Georgopoulou., A.Kakkanas, L. Psaridi, W. Caselmann, P.Mavromara (1998) Mutational analysis of two unstructured domains of the 5'UTR of HCV RNA **Biochem Biophys Res Commun.** 253 (3): 678-685
30. Psaridi, L., Georgopoulou, U., Varaklioti, A., Mavromara, P (1999). Mutational analysis of a conserved tetraloop in the 5' untranslated region of hepatitis C virus identifies a novel RNA element essential for the internal ribosome entry site function. **FEBS Lett.** 453 (1-2): 49-53
31. Miriagou, V., Stevanato, L., Manservigi, P., Mavromara, P (2000). The C-terminal cytoplasmic tail of herpes simplex virus type 1 gE protein is phosphorylated *in vivo* and *in vitro* by cellular enzymes in the absence of other viral proteins **J Gen Virol.** 81 (Pt 4): 1027-1031
32. Kalliampakou K., Psaridi-Linardaki L., Mavromara P (2002). Mutational analysis of the apical region of domain II of the HCV IRES **FEBS Lett.** 511(1-3): 79-84
33. Tsitoura E., Lucas M., R E. Tsitoura, M. Lucas, V. Revol-Guyot, Al. Epstein, R. Manservigi and P. Mavromara (2002). Expression of hepatitis C virus envelope glycoproteins by herpes simplex virus type 1-based amplicon vectors. **J Gen Virol.** 83 (Pt 3): 561-566
34. Varaklioti A., Vassilaki N., Georgopoulou U. and Mavromara P. (2002). Alternate translation occurs within the core coding region of the hepatitis C viral genome **J Biol Chem.** 277 (20):17713-17721
35. Kalamvoki M., Miriagou V., Hadziyannis A., Georgopoulou U., Varaklioti R., Hadziyannis S., and Mavromara P (2002). Expression of immunoreactive forms of the hepatitis C NS5A protein in *E.coli* and their use for diagnostic assays **Arch Virol.** 147 (9):1733-1745
36. U. Georgopoulou, K. Caravokiri and P. Mavromara (2003). Suppression of the ERK1/2 signaling pathway from HCV NS5A protein expressed by herpes simplex recombinant viruses. **Arch Virol.** 148 (2):237-251
37. M Lucas, E Tsitoura, M Montoya, B. Laliotou, E. Aslanoglou, V. Kouvatsis, C Entwisle, J Miller, P Klenerman, A Hadziyannis, S Hadziyannis, P Borrow and P Mavromara (2003). Characterisation of secreted and intracellular forms of a truncated hepatitis C virus E2 protein expressed by a recombinant herpes simplex virus **J Gen Virol.** 84 (Pt3): 545-554
38. N. Vassilaki and P. Mavromara (2003). Two alternative mechanisms are responsible for the expression of the HCV ARFP/F/core+1 coding open reading frame **J Biol Chem** 278 (42): 40503-40513
39. Lauterbach H, Berto E, Kerksiek K, Busch D, Berto E, Bozac A, Mavromara P, Manservigi R, Epstein AL, Marconi P and Brocker T (2004). Protection from Bacterial infection by a single vaccination with replication-deficient mutant herpes simplex virus-1 **J Virol** 78: 4020-4028
40. M Kalamvoki and P. Mavromara (2004). Calcium - dependent calpain proteases are implicated in processing of the hepatitis C NS5A protein **J Virol** 78 (2): 11865-11878
41. R. Manservigi, A. Boero, R. Argnani, S. Zucchini, V. Miriagou, P. Mavromara, M. Cilli, E. Caselli, M. Grossi, P. Balboni, E. Cassai (2005). Immunotherapeutic activity of a recombinant combined gB-gD-gE vaccine against recurrent HSV-2 infections in a guinea pig model **Vaccine** 23 (7): 865-872
42. K. Kalliampakou, M. Kalamvoki and P. Mavromara (2005). Hepatitis C virus (HCV) NS5A protein downregulates HCV IRES-dependent translation **J Gen Virol** 86(Pt 4): 1015-25
43. P. Mavromara, A. Sall, O. Kalinina, V. Horm, A. Budkowska; HCV Collaborative Team of the

International Pasteur Network (2005). The impact of HCV diversity on diagnosis tools for HCV infection **Med Mal Infect** 35 Suppl 2: S103-4

44. M. Kalamvoki, U. Georgopoulou and P. Mavromara (2006). The NS5A protein of the hepatitis C virus genotype 1a is cleaved by caspases to produce C-terminal-truncated forms of the protein that reside mainly in the cytosol **J Biol Chem** 281(19): 13449-62

45. E. Tsitoura, U. Georgopoulou and P. Mavromara (2006). HSV-1 based amplicon vectors as an alternative system for the expression of functional HCV proteins **Curr Gene Ther** 6(3): 393-8

46. U. Georgopoulou, P. Tsitoura, M. Kalamvoki and P. Mavromara (2006). The protein phosphatase 2A represents a novel cellular target for hepatitis C virus NS5A protein **Biochimie** 88(6): 651-62

47. V. Kouvatzis, R. Argnani, E. Tsitoura, M. Arsenakis, U. Georgopoulou, P. Mavromara and R. Manservigi (2007). Characterization of herpes simplex virus type 1 recombinants that express and incorporate high levels of HCV E2-gC chimeric proteins **Virus Res** 123(1):40-9

48. N. Vassilaki, H. Boleti and P. Mavromara (2007). Expression studies of the core+1 protein of the hepatitis C virus 1a in mammalian cells. The influence of the core protein and proteasomes on the intracellular levels of core+1 **FEBS J** 274(16): 4057-74

49. P. Tsitoura, U. Georgopoulou, S. Petres, A. Varaklioti, A. Karafoulidou, D. Vagena, C. Politis and P. Mavromara (2007). Evidence for cellular uptake of recombinant hepatitis C virus non-enveloped capsid-like particles **FEBS Lett** 581(21): 4049-57

50. N. Vassilaki, K. Kalliampakou and P. Mavromara (2008). Differences in the expression of the hepatitis C virus core+1 open reading frame between a nuclear and a cytoplasmic expression system **J Gen Virol** 89 (Pt 1): 222-31

51. N. Vassilaki, H. Boleti and P. Mavromara (2008). Expression studies of the HCV-1a core+1 open reading frame in mammalian cells **Virus Res** 133(2):123-35

52. N.Vassilaki, P.Friebe, P.Meuleman, S.Kallis, A.Kaul, G.Paranhos-Baccala, G.Leroux-Roels, P.Mavromara and R.Bartenschlager (2008). Role of the Hepatitis C Virus core+1 open reading frame and core cis-acting RNA elements in viral RNA translation and replication **J Virol** 82(23): 11503-15

53. I. Nianiou, K. Kalantidis, P. Madesis U Georgopoulou P.Mavromara and A. Tsiftaris (2008). Expression of an HCV core antigen coding gene in tobacco (N. tabacum L.) **Prep Biochem Biotechnol** 38(4): 411-21

54.K. Katsarou, E. Serti, P. Tsitoura ,A. Lavdas ,A. Varaklioti ,A. Pickl-Herk ,D. Blaas ,D. Oz-Arslan, R. Zhu, P.Hinterdoefer, P. Mavromara, U. Georgopoulou (2009). Green-Fluorescent protein-tagged HCV non-enveloped capsid like particles: Development of a new tool for tracking HCV core uptake. **Biochimie** 91(7):903-15

55. E. Tsitoura, J. Thomas, D. Cuchet, K. Thoinet, P. Mavromara and A. Epstein (2009). Infection with herpes simplex type 1-based amplicon vectors results in an IRF3/7-dependent,TLR-independent activation of the innate antiviral response in primary human fibroblasts **J Gen Virol** 90: 2209-20

56. P. Madesis, M. Osathanunkul, U. Georgopoulou, MF Gisby, EA Mudd, I. Nianiou, P. Tsitoura, P. Mavromara, A. Tsiftaris and A. Day (2009). A hepatitis C virus core polypeptide expressed in chloroplasts detects anti-core antibodies in infected human sera. **J Biotechnol** 145(4): 377-386

57. H.Boleti, D. Smirlis, G. Dalagiorgou, E. Meurs, S. Christoforidis and [P. Mavromara](#) (2010). ER targeting and retention of the HCV NS4B protein relies on the concerted action of multiple structural features including its transmembrane domains *Mol Membr Biol* **27(1): 50-74**
58. A. Boumlic, Y. Nomine, S. Charbonnier, G. Dalagiorgou, N. Vassilaki, B. Kieffer, G. Trave, [P. Mavromara](#) and G. Orfanoudakis (2010). Prevalence of intrinsic disorder in the hepatitis C virus ARFP/Core+1/S protein *FEBS J* **277(3): 774-89**
59. 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**
60. Opreșan G, Szmál C, Dinu S, Opreșoreanu AM, Thiers V, Panait M, Oțelea D, [Mavromara P](#); HCV Collaborative Team of the CEEX 158 Project, Ruță S, Sultana C, Alexiu I, Manolescu L, Anton G, Grancea C, Neagu A, Sencovici C, Calistru PJ, Târdei G, Moțoc A, Lazăr S, Ionescu C, Ceaușu E, Cristea C, Voiculescu G, Brehar-Cioflec D, Popovici D, Chicin G, Claiți C (2010). Comparative methods for genotyping hepatitis C virus isolates from Romania *Roum Arch Microbiol Immunol.* **2009 Jul-Sep;68(3):151-7**
61. Kochlios E., Foka P., Doumba PP., Koskinas J., [Mavromara P.](#) (2010) Effect of Hepatitis C virus core and core+1 proteins on pro- and anti-inflammatory cytokine and chemokine gene expression *CYTOKINE* **52 (1-2): 82**
62. Arnaud N, Dabo S, Maillard P, Budkowska A, Kalliampakou KI, [Mavromara P](#), Garcin D, Hugon J, Gatignol A, Akazawa D, Wakita T, Meurs EF (2010) Hepatitis C virus controls interferon production through PKR activation *PLoS One.* **5(5):e10575**
63. R. Njouom, E. Nerrienet, A. Budkowska, P. Maillard, D. Rousset, O. Kalinina, [P. Mavromara](#); HCV Collaborative Team of the International Pasteur Network (2010) Evaluation of core and NS4B synthetic peptide-based immunoassays for the detection of hepatitis C virus antibodies in clinical samples from Cameroon, Central Africa *J Clin Virol Sep;* **49(1):61-4**
64. Foka P, Pouchet A, Hernandez-Alcoceba R, Doumba PP, Pissas G, Kouvatzis V, Dalagiorgou G, Kazazi D, Marconi P, Foschini M, Manservigi R, Konstadoulakis MM, Koskinas J, Epstein AL, [Mavromara P](#) (2010) Novel tumour-specific promoters for transcriptional targeting of hepatocellular carcinoma by herpes simplex virus vectors *J Gene Med.* **12(12):956-67**
65. A. Boumlic, N. Vassilaki, G. Dalagiorgou, E. Kochlios, A. Kakkanas, U. Georgopoulou, P. Markoulatos, G. Orfanoudakis and [P. Mavromara](#) (2011) Internal translation initiation stimulates expression of the ARFP/core+1 open reading frame of HCV genotype 1b *Virus Res.* **1;155(1):213-20**
66. E. Serti, PP Doumba, G. Thyphronitis, P. Tsitoura, K. Katsarou, P. Foka, MM Konstadoulakis, J. Koskinas, [P. Mavromara](#), U. Georgopoulou U (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):505-22**
67. A. Budkowska, A. Kakkanas, E. Nerrienet, O. Kalinina, P. Maillard, S. Viseth Horm, G. Dalagiorgou, N. Vassilaki, U. Georgopoulou, M. Martinot, A. Sall and [P. Mavromara](#). Synonymous

mutations in the core gene are linked to unusual serological profile in Hepatitis C virus infection
PLoS One. 2011 Jan 6;6(1):e15871

68. Dalagiorgou G, Vassilaki N, Foka P, Boumlic A, Kakkanas A, Kochlios E, Khalili S, Aslanoglou E, Veletza S, Orfanoudakis G, Vassilopoulos D, Hadziyannis S, Koskinas J, [Mavromara P.](#) (2011) High Levels of HCV core+1 Antibodies in HCV Patients with Hepatocellular Carcinoma. *J Gen Virol.* 92(Pt 6):1343-51

69. T.Karamitros, A.Kakkanas, A.Katsoulidou, V.Sypasa, G.Dalagiorgou, [P.Mavromara](#) and A.Hatzakis. (2012) Detection of specific antibodies to HCV-ARF/CORE+1 protein in patients treated with pegylated interferon plus ribavirin.
J. Viral Hepatitis, 2012,19,182-188

70. Em.Kochlios, P.Foka and [P. Mavromara.](#) (2012) Modulation of monocyte/macrophage-derived cytokine and chemokine expression profile by persistent Hepatitis C virus (HCV) infection leads to chronic inflammation.
J.Mol.Biochem. 2012,1,40-53

71. Kotta-Loizou I, Vassilaki N, Pissas G, Kakkanas A, Bakiri L, Bartenschlager R, [Mavromara P](#) (2013) Hepatitis C virus core+1/ARF protein decreases hepcidin transcription through an AP1 binding site. *J Gen Virol.* 94:1528-34

72. Vassilaki N, Kalliampakou KI, Kotta-Loizou I, Befani C, Liakos P, Simos G, Mentis AF, Kalliaropoulos A, Doumba PP, Smirlis D, Foka P, Bauhofer O, Poenisch M, Windisch MP, Lee ME, Koskinas J, Bartenschlager R, [Mavromara P.](#) (2013) Low Oxygen Tension Enhances Hepatitis C Virus Replication *J Virol.*87(5):2935-48.

73. Foka P, Karamichali E, Dalagiorgou G, Serti E, Doumba PP, Pissas G, Kakkanas A, Kazazi D, Kochlios E, Gaitanou M, Koskinas J, Georgopoulou U, [Mavromara P.](#) (2014) Hepatitis C virus modulates lipid regulatory factor Angiopoietin-like 3 gene expression by repressing HNF-1 α activity. *J Hepatol.* 60(1):30-8.

74. Karamichali E, Foka P, Tsitoura E, Kalliampakou K, Kazazi D, Karayiannis P, Georgopoulou U, [Mavromara P.](#) (2014) HCV NS5A co-operates with PKR in modulating HCV IRES-dependent translation. *Infect Genet Evol.*26:113-22.

75. Kotta-Loizou I, Karakasiliotis I, Vassilaki N, Sakellariou P, Bartenschlager R, [Mavromara P.](#) (2015) Expression of the novel HCV core+1/ARF protein in the context of JFH1-based replicons. *J. Virol.* 2015 Feb 18. pii: JVI.02351-14.

REVIEWS

E. Tsitoura, U. Georgopoulou and [P. Mavromara](#) (2006). HSV-1 based amplicon vectors as an alternative system for the expression of functional HCV proteins ***Curr Gene Ther* 2006, 6, 393-398**

N. Vassilaki, S. Khalili and [P. Mavromara](#) (2006). HCV – associated hepatocellular carcinoma ***Viral Oncogenesis* 2006: 145-181**

P. Foka, A. Epstein, and P. Mavromara (2008). Cancer Virotherapy: Using recombinant oncolytic herpes simplex virus Type -1 (HSV-1)-derived vectors as potential anticancer agents **BIO – MED Reviews (in press)**

N.Vassilaki and [P.Mavromara](#) (2009) The HCV ARFP/F/core+1: Expression and functional analysis of a non-traditional viral product.(2009) *IUBMB Life* 61(7): 739-52

CONFERENCE PROCEEDINGS

1. Landick R., Daniels C., [Mavromara P.](#), Oxender D. (1981). Organization and expression of the Liv-1 transport regulon of Escherichia-coli. *FEDERATION PROCEEDINGS* 40(6):1894
2. Landick R., [Mavromara P.](#), Oxender D. (1982). Transcriptional regulation of leucine transport *FEDERATION PROCEEDINGS* 41(3):752
3. Boumlic A, Vassilaki N, Georgopoulou U., Orfanoudakis G, [Mavromara P.](#) (2006). Expression of the ARFP/F/core+1 protein from HCV-1b clinical isolates *JOURNAL OF CLINICAL VIROLOGY* 36: S111
4. Kazazi D, Khalili S, Oz-Arslan D., Ivacevic T., Tsitoura E., Kreppel F., Kochanek S., Jennings G., Bellier B., Brocker T., Benes V., Klatzmann D., [Mavromara P.](#) (2008). Transcriptional profiling dendritic cells upon in vivo exposure to adeno-based vaccine vectors *FEBS JOURNAL* 275: 407
5. Karamichali E., Georgopoulou U., Kalliampakou K., Karayiannis P., Kalai M [Mavromara P.](#) (2008) The HCV, GBV-B and GBV-C effect of the non structural 5A protein on IRES-dependent translation initiation *FEBS JOURNAL* 275: 406
6. Vassilaki N., Friebe P., Paranhos-Baccala G., [Mavromara P.](#), Bartenschlager R. (2008). Cis-acting RNA elements within the hepatitis C virus core/core+1 coding region but not core+1 proteins modulate the efficiency of virus proliferation *FEBS JOURNAL* 275: 277
7. Pissas G., Foka PN., Vassilaki N., Kakkanas A., [Mavromara P](#) (2008). Modulation of liver specific gene promoters by the HCV core and core+1/s proteins *FEBS JOURNAL* 275: 274
8. Katsarou K., Serti E., Tsitoura P., [Mavromara P.](#), Georgopoulou U., (2008). Signaling events upon cellular uptake of recombinant HCV non-enveloped capsid-like particles *FEBS JOURNAL* 275: 271
9. Kalliampakou K., Vassilaki N., [Mavromara P](#) (2008). Translation mediated by the internal ribosome entry site (IRES), of the hepatitis C virus (HCV) genomic RNA, is regulated positively by the phosphorylation of the eukaryotic translation initiation factor 2 alpha (eIF2 alpha) *FEBS JOURNAL* 275: 270
10. Dalagiorgou G., Vasilaki N., Kakkanas A., Aslanoglou E., Vassilopoulos D., Hadziyiannis S., [Mavromara P](#) (2008) Detection of humoral responses to the hepatitis C virus core+1 protein in patients with HCV-associated hepatocellular carcinoma *FEBS JOURNAL* 275: 268
11. Foka P., Doumba PP., Kouvatsis V., Dalagiorgou G., Pissas G., Kazazi D., Pourchet A., Epstein AL., Nikolopoulou M., Konstadoulakis M., Koskinas I., [Mavromara P.](#) (2008) Evaluation and use of novel liver specific gene promoters for precise targeting of HSV-1 oncolytic viruses against hepatocellular carcinoma *HEPATOLOGY* 48 (4): 495
12. 57. Pourchet A., Foka P., Doumba P., Biollay C., Melendez M., Koskinas I., [Mavromara P.](#), Epstein AL (2009). Identification of Liver Specific Gene Promoters for Transcriptional

Targeting of HSV-1 Oncolytic Viruses Against Hepatocellular Carcinoma **HUMAN GENE THERAPY 20 (6): 673-674**

13. Boumlic A., Nomine Y., Charbonnier S., Dalagiorgou G., Vassilaki N., Kieffer B., Trave G., [Mavromara P.](#), Orfanoudakis G. (2009) Prevalence of intrinsic disorder in the Hepatitis C Virus ARFP/Core+1/S *FEBS JOURNAL* 276: 398
14. Serti E., Katsarou K., Foka P., Thyphronitis G., Tsitoura P., [Mavromara P.](#), Georgopoulou U. (2009) Modulation of p38 signaling pathway by HCV non-enveloped capsid like particles *FEBS JOURNAL* 276: 251
15. Pourchet A., Foka P., Doumba P., Hernandez-Alcoceba R., Biollay C., Melendez M., Koskinas I., Greco A., [Mavromara P.](#), Epstein A. (2009) Assessment of liver specific promoters for targeting expression of oncolytic HSV-1 against hepatocellular carcinoma *HUMAN GENE THERAPY* 20 (11): 1543
16. Kochlios, Foka P, Doumba PP, et al.
Effect of Hepatitis C virus core and core+1 proteins on pro- and anti-inflammatory cytokine and chemokine gene expression Emmanouil
CYTOKINE 52 (1-2): 82-82 Sp. Iss. SI OCT-NOV 2010
17. Kotta-Loizou I, Vassilaki N, Mavromara P
Characterization of the translational mechanism that controls the synthesis of HCV core+1/ARF protein. *FEBS JOURNAL* 278: 87-87 Sp. Iss. SI Suppl. 1 JUN 2011
18. Foka, P., Karamichali, E., Doumba, P.P., Dalagiorgou, G., Serti, E., Kochlios, E., Koskinas, J., Georgopoulou, U. and Mavromara, P. (2012). 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.
19. Kotta-Loizou I, Vassilaki N, Mavromara P
The synthesis of novel HCV core+1/ARF protein as a model system for studying unconventional translation mechanisms
FEBS JOURNAL 279: 507-508 Sp. Iss. SI Suppl. 1 SEP 2012

PUBLICATIONS IN GREEK JOURNALS

1. V.Labropoulou, K.Papadopoulou, [P.Mavromara](#) (1997). The role of mutant HPV16 and HPV18 in the pathogenesis of Cervical Cancer. *Gynecology and 'Obstetrics* 38-41
2. V.Labropoulou, E.Diakomoanolis, S.Dalianas, L.Kalpatsoglou, A.Balamotis, [P.Mavromara](#) (1997). Type-Specific Prevalance of Genital Human Papillomavirus in Benign, Premalignant and Malignant biopsies in Patients from Greece. *Gynecology and 'Obstetrics*
3. [P.Mavromara](#) (1997) HPV From the Molecular Biology to the clinical picture (book) University Studio Press p57-66
4. [P.Mavromara](#), V.Labropoulou, K.Papadopoulou, E. Prousalis (1995). Methods of detection of the HPV. *Records in the Hellenic Society of Microbiology*
5. V.Labropoulou, E.Diakomoanolis, S.Dalianas, L.Kalpatsoglou, A.Balamotis, [P.Mavromara](#) (1996). Molecular Epidemiology of HPV Genital Infection. *Greek Virology* 1(1)

6. V.Labropoulou. , A.Balamotis, H.Balamotis,A.Tosca, P.Mavromara (1992).Detection and Typing of HPV Condylomata Acuminata in the Greek Polpulation. Records, 2nd Conference of the Hellenic Society of Virology. Pg.240-245

7. PATENTS

Mavromara P., Varaklioti A., Georgopoulou O. «Nucleic acids and new polypeptides associated with and/or overlapping with HCV core gene products» U.S. Patent No. 6,803,214

Mavromara P. Vassilaki N “Novel HCV core+1 protein, methods for diagnosis of HCV infections, prophylaxis and for screening of anti-HCV agents” Provisional Patent Application WO2005/005468 (PCT/EP2004/007996)

Mavromara P., Vassilaki N “In vitro expression of the HCV ARFP/F/core+1 coding open reading frame” U.S. Provisional Patent Application No 60/614,610

Mavromara and Roizman «Compositions and Methods for the identification of viral inhibitors of host cell protein synthesis shut-off».
USA provisional patent application (withdrawn)

8. TRAINING / EDUCATIONAL CONTRIBUTIONS

PhD theses	20 of which 2 in progress
BS/MS short term training (3-12 months)	17
International Students training	10
Postdoctoral training	9