

Name: Niki Vassilaki

Position title: Principal Researcher (B grade, equivalent to Associate Professor) in Molecular Virology

Address: Hellenic Pasteur Institute, Molecular Virology, Vas. Sofias Ave., 11521 Athens

Phone: +302106478875, **Email:** nikiv@pasteur.gr

Dr **Niki Vassilaki**, is a **researcher B** and team leader of Molecular Virology at the Microbiology Department of Hellenic Pasteur Institute (HPI). She received a **B.Sc. in Biology (1999**, degree: Very good 8,4) and a **Ph.D. in Molecular Virology (2006**, degree: Excellent 10) from the Department of Biology of the National & Kapodistrian University of Athens. Her PhD thesis research was focused on the discovery of a novel protein of Hepatitis C virus, the core+1/ARFP (expression mechanisms, cellular and immunological properties), published in International Journals (*Varaklioti, Vassilaki et al J Biol Chem 2002, Vassilaki and Mavromara J Biol Chem 2003, Vassilaki et al. Febs J 2007, Virus Res 2008, J Gen Virol 2008, Boumlic, Vassilaki et al Virus Res 2011, Dalagiorgou, Vassilaki et al J Gen Virol 2011*) and resulted in a patent (*Patent No. US 7838002 B2*). In **2006-2008**, having been awarded a **German Academic Exchange Grant**, N. Vassilaki performed research as an **invited Post-doctoral fellow at the Department of Molecular Virology of the University of Heidelberg (Germany)**, headed by Prof. Ralf Bartenschlager, on the role of the hepatitis C virus core+1 open reading frame and core cis-acting RNA structural elements in viral RNA translation and replication, using the newly developed infectious HCV cell culture system and humanized mice in BSL2-BSL3 facilities (*Vassilaki et al. J Virol. 2008*). Since **2007**, she works as an **independent investigator** at HPI in the field of *Flaviviridae* viruses (Hepatitis C, Dengue, Yellow Fever, Zika), focusing on mechanisms of viral genome translation and replication (*Kotta-Loizou et al J Gen Virol. 2013, Kotta-Loizou et al. J Virol. 2015, Vassilaki et al. Int J Mol Sci 2020*), the role of metabolic biomarkers in viral pathogenesis (*Vassilaki et al. J Virol. 2013, Frakolaki et al. Cells 2018, Vassiliou et al. Biochimie 2019, Frakolaki et al. Cells 2019, Mpekoulis et al. Viruses 2021*) as well as on the discovery and characterization of novel anti-virals (*Zoidis et al. MedChemComm 2016, Lougiakis et al. Chem Biol Drug Des 2017, Ramsis et al. Arch Pharm Weinheim 2018, Giannakopoulou et al. MedChemComm 2019, Leila et al. ACS Omega 2019, Abdel Karim et al. Bioorg Chem. 2020, Mousa et al. Pharmaceuticals 2021*). Having established highly efficient cell-based infectious and subgenomic systems of *Flaviviridae* viruses adapted at conditions simulating tissue normoxic and metabolic microenvironment, she has coordinated an **international network of studies** (grant International Pasteur Network ACIP 2015-2017) on the interaction between host cell metabolism and viral infection under tissue normoxia

and on the discovery of broadly effective small molecule inhibitors (partners: Pasteur Greece, Paris and Korea, Heidelberg University /Germany, CIBERehd/Barcelona/Spain, Athens University/Faculty of Pharmacy/Greece, Thessaloniki University/Faculty of Biology/Greece). Since 2015, Dr's Vassilaki team has included in its research portfolio the Hepadnavirus HBV (*Gerasi et al. Bioorg Chem. 2020*) and since 2020 the Coronavirus SARS-CoV-2 (*Mpekoulis et al. PLoS One. 2021, Vassilaki et al. Microorganisms. 2021*).

She is responsible for the qPCR Array platform of HPI, has been trained on microarray technology in EMBO Practical Course (June 2005) and performed **Post-doctoral research work** in microarray platforms of **EMBL GeneCore Facility** (Heidelberg/Germany, **2007**). She has been educated on light microscopy and image analysis (**Pasteur Paris 2004, 2005**), on high content cell-based assays for chemical compound screening, on HBV cell culture system (May **2016, Pasteur Korea**) and on HDV and HEV cell culture models (**2020, Ghent University**).

She **teaches** Molecular Virology and evaluates seminars in 2 MSc programs of the Faculty of Biology at the University of Athens/Greece (Clinical Biochemistry/Molecular Diagnostics and Microbial Biotechnology), was an invited lecturer in the University of Thessaly (Department of Biochemistry and Biotechnology (Jan. 2020), in 2001-2005 she was teacher assistant in laboratory exercises of Biochemistry at the University of Athens, and at HPI she has taught in the international workshop Modern methods of Light Microscopy and applications in biomedical research and diagnosis. She has supervised 4 PhD theses and 15 Undergraduate diploma and MSc theses, and she has trained 3 Post-doc fellows, other 5 PhD students, 4 B.Sc. scientists and 4 undergraduate students. She has participated in a 3-member and in three 7-member PhD Thesis advisory committees. She also teaches high school students with lectures and practical exercises in Molecular Biology and Virology (Program Science and Society).

She is a **reviewer** in the international journals 'Journal of General Virology', 'Journal of Medical Virology', 'Virus Research', 'Viruses', 'Human Microbiome Journal', 'New Microbes and New Infections', 'Hepatology', 'Biochimie', 'Genes', 'International Journal of Molecular Sciences', 'Neuropharmacology', 'International Journal of Environmental Research and Public Health' and 'IUBMB Life'. She is **member** of the following **scientific societies**: 'Hellenic Society for Biological Sciences', 'Hellenic Society of Biochemistry and Molecular Biology', 'Scientific Committee of the Hellenic Society of Virology', 'Hellenic Association for the Study of Liver'.

She has **coordinated** the **grant programs**: International Pasteur Network grant for SARS-CoV-2 2020-2022, 3-year Doctoral scholarship of Excellence 2020-2023 (Hellenic Pasteur Institute - Nostos Foundation), Asklepios Gilead Sciences Hellas grants 2019-2020 and 2017-2018, Empeirikeion Foundation Research Grant 2017-2018, IKY (State Scholarships Foundation)

Doctoral grant 2018-2019 and Post-Doctoral grant 2019-2021, Erasmus+ Traineeship 2018, International Pasteur Network ACIP 2015-2017, National LATSIS Public Foundation 2013-2014 and DAAD German Academic Exchange Post-doctoral Research 2006-2007, she has participated as a **principal investigator** in ESFRI- European Strategy Forum for Research Infrastructures EATRIS-GR 2019-2022, Asklepios Gilead grant 2016-2017, Development grants for research institutions - KRIPIS I 2013-2015 and KRIPIS II 2017-2019 (Greek General Secretariat for Research and Technology, GSRT), National grant BIONIAN, Greek Life Sciences Cluster 2013-2015 (Greek GSRT), and as a **partner** in EU Recovery fund-Ministry of Development and Investments grant for the Creation of a Pathogens Research Centre, Single RTDI State Aid Action RESEARCH - CREATE - INNOVATE NanoVacLeish 2018-2021 (EPAnEK, GSRT), ARISTEIA 2013-2015 (Greek GSRT), THALES 2013-2015 (Greek GSRT), Asklepios Gilead Sciences Hellas 2018-2019, European COMPUVAC 2006-2008, International Pasteur Network PTR 2003-2006.

Publications/ Patents/ Conferences

- **46 publications** in International Journals/book (42 research papers, 4 reviews), **hetero-citations 470 (ISI), 810 (Google Scholar), h-index: 16**
- **1 granted patent, 1 provisional patent application**
- **92 presentations** in conferences (**68 International** and **32 National, 22 Oral** presentations).

Publications <https://www.ncbi.nlm.nih.gov/pubmed/?term=vassilaki+n>

Full length articles

1. *Association of Hepatitis C Virus Replication with the Catecholamine Biosynthetic Pathway.* Mpekoulis G, Tsopela V, Panos G, Siozos V, Kalliampakou K. I., Frakolaki E, Sideris C, D, Vassiliou A.G, Sideris D.C., Vassilacopoulou Dido and **Vassilaki N ***. **Viruses** **2021**, 13(11), 2139; <https://doi.org/10.3390/v13112139>
*** Corresponding author**
2. *Alteration of L-Dopa decarboxylase expression in SARS-CoV-2 infection and its association with the interferon-inducible ACE2 isoform.* Mpekoulis G, Frakolaki E, Taka S, Ioannidis A, Vassiliou AG, Kalliampakou KI, Patas K, Karakasiliotis I, Aidinis V, Chatzipanagiotou S, Angelakis E, Vassilacopoulou D, **Vassilaki N.*** **PLoS One.** **2021**, 29;16(6):e0253458. doi: 10.1371/journal.pone.0253458.
*** Corresponding author**
3. *Impact of Age and Sex on Antibody Response Following the Second Dose of COVID-19 BNT162b2 mRNA Vaccine in Greek Healthcare Workers.* **Vassilaki N**, Gargalionis AN,

Bletsa A, Papamichalopoulos N, Kontou E, Gkika M, Patas K, Theodoridis D, Manolis I, Ioannidis A, Milona RS, Tsirogianni A, Angelakis E, Chatzipanagiotou S. **Microorganisms**. **2021**, 9(8):1725. doi: 10.3390/microorganisms9081725.

4. *Increased Autotaxin Levels in Severe COVID-19, Correlating with IL-6 Levels, Endothelial Dysfunction Biomarkers, and Impaired Functions of Dendritic Cells*. Nikitopoulou I, Fanidis D, Ntatsoulis K, Moulos P, Mpekoulis G, Evangelidou M, Vassiliou AG, Dimakopoulou V, Jahaj E, Tshipilis S, Orfanos SE, Dimopoulou I, Angelakis E, Akinosoglou K, **Vassilaki N**, Tzouvelekis A, Kotanidou A, Aidinis V. **Int J Mol Sci**. **2021**, 22(18):10006. doi: 10.3390/ijms221810006.
5. *Design and Synthesis of Novel Symmetric Fluorene-2,7-diamine Derivatives As Potent Hepatitis C Virus Inhibitors*. Mousa M. H. A., Ahmed N. S., Schwedtmann K., Frakolaki E., **Vassilaki N.**, Zoidis G., Weigand J. J., Abadi A. **Pharmaceuticals**, **2021**, 14(4), 292; <https://doi.org/10.3390/ph14040292>
6. *A Novel Cis-Acting RNA Structural Element Embedded in the Core Coding Region of the Hepatitis C Virus Genome Directs Internal Translation Initiation of the Overlapping Core+1 ORF*. **Vassilaki N.***, Frakolaki E., Kalliampakou K.I., Sakellariou P., Kotta-Loizou I., Bartenschlager R. and Mavromara P.* **Int J Mol Sci**. **2020**, 21(18), 6974. doi: 10.3390/ijms21186974.

*** Corresponding authors**

7. *Human L-Dopa decarboxylase interaction with Annexin V and expression during apoptosis*. Chalatsa I., Arvanitis N., Arvanitis D., Tsakou A. C., Kalantzis E. D., Vassiliou A. G., Sideris D.C., Frakolaki E., **Vassilaki N.** and Vassilacopoulou D. **Biochimie**, **2020**, 177, 78-86. doi: 10.1016/j.biochi.2020.08.010.
8. *Symmetric benzidine derivatives as anti-HCV agents: insight into the nature, stereochemistry of the capping amino acid and the size of the terminal capping carbamates*. Abdel Karim S. E., Youssef Y. H., Abdel-Halim M., Frakolaki E., **Vassilaki N.**, Zoidis G., Ahmed N.S and Abadi A.H. **Bioorg Chem**. **2020**, 102, 104089. doi: 10.1016/j.bioorg.2020.104089.
9. *Design, synthesis and anti-HBV activity evaluation of new substituted imidazo[4,5-b]pyridines*. Gerasi M.1, Frakolaki E.1, Papadakis G., Chalari A. Lougiakis N., Marakos, Pouli N.* and **Vassilaki N.*** **Bioorg Chem**. **2020**, 103580. doi: 10.1016/j.bioorg.2020.103580. <https://doi.org/10.1016/j.bioorg.2020.103580> [Epub ahead of print].

*** Corresponding authors**

10. *Emerging role of L-Dopa decarboxylase in Flaviviridae virus infections.* Frakolaki E., Kalliampakou K. I., Kaimou P., Moraiti M., Kolaitis N., Boleti H., Koskinas J., Vassilacopoulou D. and **Vassilaki N.*** *Cells* **2019**, 8(8), pii: E837. doi: 10.3390/cells8080837. <https://doi.org/10.3390/cells8080837>

*** Corresponding author**

11. *Symmetric Anti-HCV Agents: Synthesis, Antiviral Properties, and Conformational Aspects of Core Scaffolds.* Leila A., Mousa M., Frakolaki E., **Vassilaki N.**, Bartenschlager R., Zoidis G., Abdel-Halim M. and Abadi A.H. *ACS Omega* **2019**, 4(7):11440-11454. doi: 10.1021/acsomega.9b01242. <https://doi.org/10.1021/acsomega.9b01242>

12. *Scaffold Hybridization Strategy towards potent hydroxamate-based inhibitors of Flaviviridae viruses and Trypanosoma species.* Giannakopoulou E., Pardali V., Frakolaki E., Siozos V., Myrianthopoulos V., Mikros E., Taylor M. C., Kelly J. M.*, **Vassilaki N.*** and Zoidis G.* *MedChemComm* **2019**, 10(6):991-1006. doi: 10.1039/C9MD00200F. <https://doi.org/10.1039/C9MD00200F>

*** Principal investigators**

13. *L-Dopa decarboxylase interaction with the major signaling regulator PI3K in tissues and cells of neural and peripheral origin.* Vassiliou A.G., Siaterli M.Z., Frakolaki E., Gkogkosi P., Paspaltsis I., Sklaviadis T., Vassilacopoulou D.* and **Vassilaki N.*** *Biochimie.* **2019**, 160:76-87. doi: 10.1016/j.biochi.2019.02.009. <https://doi.org/10.1016/j.biochi.2019.02.009>

*** Corresponding authors**

14. *The Role of Tissue Oxygen Tension in Dengue Virus Replication.* Frakolaki E., Kaimou P., Moraiti M., Kalliampakou K. I., Karampetsou K., Dotsika E. Liakos P., Vassilacopoulou D., Mavromara P., Bartenschlager R. and **Vassilaki N.*** *Cells.* **2018**, 7(12), pii: E241. Special Issue Gene Regulation by HIFs during Hypoxia. doi: 10.3390/cells7120241. <https://doi.org/10.3390/cells7120241>

*** Corresponding author**

15. *Comparison of DCs activation by virus-based vaccine delivery vectors emphasises the transcriptional downregulation of the oxidative phosphorylation pathway.* Tsitoura E., Kazazi D., Oz-Arslan D., Sever E. A., Khalili S., **Vassilaki N.**, Aslanoglou E., Dérian N, Six A., Sezerman O. U., Klatzmann D. and Mavromara P. *Hum Gene Ther.* **2019**, 30(4):429-445. doi: 10.1089/hum.2018.161. <https://doi.org/10.1089/hum.2018.161>

16. *Expanding the chemical space of anti-HCV NS5A inhibitors by stereochemical exchange and peptidomimetic approaches.* Ramsis T.M., Abdel Karim S.E., **Vassilaki N.**, Frakolaki E., Kamal A.A.M., Zoidis G., Ahmed N.S. and Abadi A.H. *Arch Pharm (Weinheim).* **2018**,

351(7):e1800017. doi: 10.1002/ardp.201800017. <https://doi.org/10.1002/ardp.201800017>

17. *Novel nucleoside analogues targeting HCV replication through an NS5A-dependent inhibition mechanism.* Lougiakis N., Frakolaki E., Karmou P., Pouli N.*, Marakos P., Madan V., Bartenschlager R., **Vassilaki N.*** **Chem Biol Drug Des.** **2017**, 90(3), 352-367. doi: 10.1111/cbdd.12966. <https://doi.org/10.1111/cbdd.12966>

* **Corresponding authors**

18. *Virus-host interactions under hypoxia.* Special issue: Effects of hypoxia on infection and host immune control. **Vassilaki N.*** and Frakolaki E. **Microbes Infect.** **2017**, 19, 193-203. doi: 10.1016/j.micinf.2016.10.004. <https://doi.org/10.1016/j.micinf.2016.10.004> *Review.*

* **Corresponding author**

19. *# Novel indole-flutimide heterocycles with activity against influenza PA endonuclease and hepatitis C virus.* Zoidis G., Giannakopoulou E., Stevaert A., Frakolaki E., Myriantopoulos V., Fytas G., Mavromara P., Mikros E., Bartenschlager R., **Vassilaki N.*** and Naesens L.* **Med. Chem. Comm.** **2016**, 7, 447-456. doi: 10.1039/C5MD00439J. <https://doi.org/10.1039/C5MD00439J>

* **Principal investigators**

Featured as: New Talent Europe (top research from emerging investigators from Europe), 2016 MedChemComm Hot Article (particularly interesting or significant research), Front cover in MedChemComm

20. *Hepatitis C virus suppresses Hepatocyte Nuclear Factor 4 alpha, a key regulator of hepatocellular carcinoma.* Vallianou I., Dafou D., **Vassilaki N.**, Mavromara P. and Hadzopoulou-Cladaras M. **Int J Biochem Cell Biol.** **2016**, 78, 315-26. doi: 10.1016/j.biocel.2016.07.027. <https://doi.org/10.1016/j.biocel.2016.07.027>

21. *Expression of the novel HCV core+1/ARF protein in the context of JFH1-based replicons.* Kotta-Loizou I., Karakasiliotis I., **Vassilaki N.**, Sakellariou P., Bartenschlager R. and Mavromara P. **J Virol.** **2015**, 89:5164-70. doi: 10.1128/JVI.02351-14. <https://doi.org/10.1128/JVI.02351-14>

22. *Viral Hepatitis.* Robotis J.F.* and **Vassilaki N.*** In **Reference Module in Biomedical Sciences**, **2014**, edited by M. Caplan, Elsevier. doi: 10.1016/B978-0-12-801238-3.05401-5. <https://doi.org/10.1016/B978-0-12-801238-3.05401-5> *Review*

* **Corresponding authors**

23. *Low oxygen tension enhances hepatitis C virus replication.* **Vassilaki N.***, Kalliampakou K.I., Kotta-Loizou I., Befani C., Liakos P., Simos G., Mentis A.F., Kalliaropoulos A., Doumba P.P., Smirlis D., Foka P., Bauhofer O., Poenisch M., Windisch M.P., Lee M.E.,

Koskinas J., Bartenschlager R. and Mavromara P.* **J Virol.** **2013**, 87, 2935-48. doi: 10.1128/JVI.02534-12. <https://doi.org/10.1128/JVI.02534-12>

* **Corresponding authors**

- 24.** *Hepatitis C virus core+1/ARF protein decreases hepcidin transcription through an API binding site.* Kotta-Loizou I., **Vassilaki N.***, Pissas G., Kakkanas A., Bakiri L., Bartenschlager R. and Mavromara P.* **J Gen Virol.** **2013**, 94, 1528-34. doi: 10.1099/vir.0.050328-0. <https://doi.org/10.1099/vir.0.050328-0>

* **Corresponding authors**

- 25.** *High Levels of HCV core+1 Antibodies in HCV Patients with Hepatocellular Carcinoma.* 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. **J Gen Virol.** **2011**, 92: 1343-51. doi: 10.1099/vir.0.023010-0. <https://doi.org/10.1099/vir.0.023010-0>

- 26.** *Synonymous mutations in the core gene are linked to unusual serological profile in hepatitis C virus infection.* Budkowska A., Kakkanas A., Nerrienet E., Kalinina O., Maillard P., Horm S.V., Dalagiorgou G., **Vassilaki N.**, Georgopoulou U., Martinot M., Sall A.A., and Mavromara P. **PLoS One.** **2011**, 6:e15871. doi: 10.1371/journal.pone.0015871. <https://doi.org/10.1371/journal.pone.0015871>

- 27.** *Internal translation initiation stimulates expression of the ARF/core+1 open reading frame of HCV genotype 1b.* Boumlic A., **Vassilaki N.**, Dalagiorgou G., Kochlios E., Kakkanas A., Georgopoulou U., Markoulatos P., Orfanoudakis G., Mavromara P. **Virus Res** **2011**, 155, 213-20. doi: 10.1016/j.virusres.2010.10.007. <https://doi.org/10.1016/j.virusres.2010.10.007>

- 28.** *Prevalence of intrinsic disorder in the hepatitis C virus ARFP/Core+1/S protein.* Boumlic A., Nominé Y., Charbonnier S., Dalagiorgou G., **Vassilaki N.**, Kieffer B., Travé G., Mavromara P., Orfanoudakis G. **FEBS J** **2010**, 277, 774-89. doi: 10.1111/j.1742-4658.2009.07527.x. <https://doi.org/10.1111/j.1742-4658.2009.07527.x>

- 29.** *The HCV ARFP/F/core+1 protein: production and functional analysis of an unconventional viral product.* **Vassilaki N.*** and Mavromara P.* **IUBMB Life** **2009**, 61, 739-52. doi: 10.1002/iub.201 <https://doi.org/10.1002/iub.201> Review.

* **Corresponding authors**

- 30.** *Role of hepatitis C virus core+1 open reading frame and core cis-acting RNA elements in viral RNA translation and replication.* **Vassilaki N.**, Friebe P., Meuleman P., Kallis S., Kaul A., Paranhos-Baccalà G., Leroux-Roels G., Mavromara P. and Bartenschlager R. **J Virol** **2008**, 82, 11503-15. doi: 10.1128/JVI.01640-08. 10.1128/JVI.01640-08

31. *Expression studies of the HCV-1a core+1 open reading frame in mammalian cells.* **Vassilaki N.**, Boleti H. and Mavromara P. **Virus Res** **2008**, 133, 123-135. doi: 10.1016/j.virusres.2007.10.019. <https://doi.org/10.1016/j.virusres.2007.10.019>
32. *Differences in the expression of the hepatitis C virus core+1 open reading frame between a nuclear and a cytoplasmic expression system.* **Vassilaki N.**, Kalliampakou K.I. and Mavromara P. **J Gen Virol** **2008**, 89, 222-231. doi: 10.1099/vir.0.83260-0. <https://doi.org/10.1099/vir.0.83260-0>
33. *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.* **Vassilaki N.**, Boleti H., Mavromara P. **FEBS J.** **2007**, 274, 4057-4074. doi: 10.1111/j.1742-4658.2007.05929.x. <https://doi.org/10.1111/j.1742-4658.2007.05929.x>
34. *HCV-associated hepatocellular carcinoma.* **Vassilaki N.**, Khalili S. and Mavromara P. In **Viral Oncogenesis 2006** (Tognon M, eds), pp 145-181. Research Signpost Press, Kerala, India. *Review*
35. *Two alternative mechanisms are responsible for the synthesis of HCV ARFP/F/core+1.* **Vassilaki N.** and Mavromara P. **J Biol Chem** **2003**, 278, 40503–40513. doi: 10.1074/jbc.M305504200. <https://doi.org/10.1074/jbc.M305504200>
36. *Alternate translation occurs within the core-coding region of the hepatitis C viral genome.* Varaklioti A., **Vassilaki N.**, Georgopoulou U., and Mavromara P. **J Biol Chem** **2002**, 277, 17713-17721. doi: 10.1074/jbc.M201722200. <https://doi.org/10.1074/jbc.M201722200>

Published conference proceedings

37. *Design and synthesis of novel symmetric diamino fluorene prolinamide analogues as potent hepatitis C virus inhibitors.* Ahmed N. S., Mousa M. H. A., Schwedtmann K., Frakolaki E., **Vassilaki N.**, Zoidis G., Weigand J., Abadi A. **MDPI**, **2020**, doi: 10.3390/ECMC2020-07367. Conference: 6th International Electronic Conference on Medicinal Chemistry, Nov 6, 2020
38. *Evaluation of antioxidant activity, total phenolic content and hepatotoxicity of herbal infusions.* Sotiropoulou N. S., Frakolaki E., **Vassilaki N.** Tarantilis P. A. **2019** Conference: Natural Products in Drug Discovery and Human Health, PSE Meeting 2019, Location: Lisbon, Portugal, Date: Jul 28-31, doi: 10.13140/RG.2.2.36615.96163. <https://doi.org/10.13140/RG.2.2.36615.96163>

39. *Hepatitis C virus suppresses HNF4 alpha expression and modulates HNF4 alpha-miR feedback circuit.* Vallianou I., **Vassilaki, N.**, Dafou, D., Mavromara P and Hadzopoulou-Cladaras M. **FEBS J.** **2014**, 281:471. Conference: FEBS EMBO 2014, Location: Paris, France, Date: Aug 30-SEP 04, 2014
40. *The synthesis of novel HCV core+1/ARF protein as a model system for studying unconventional translation mechanisms.* Kotta-Loizou I, **Vassilaki N.**, Mavromara P. **FEBS J.** **2012**, 279: 507-508.
Conference: 22nd IUBMB Congress/37th FEBS Congress Location: Seville, Spain Date: Sep 04-09, 2012
41. *Characterization of the translational mechanism that controls the synthesis of HCV core+1/ARF protein.* Kotta-Loizou I, **Vassilaki N.**, Mavromara P. **FEBS J.** **2011**, 278: 87.
Conference: 36th FEBS Congress of the Biochemistry for Tomorrows Medicine Location: Torino, Italy Date: Jun 25-30, 2011
42. *Prevalence of intrinsic disorder in the Hepatitis C Virus ARFP/Core+1/S.* Boumlic A., Nomine Y., Charbonnier S., Dalagiorgou G., **Vassilaki N.**, Kieffer B., Trave G., Mavromara P., Orfanoudakis G. **FEBS J.** **2009**, 276: 398. Conference: 34th Congress of the Federation-of-European-Biochemical-Societies Location: Prague, Czech Republic Date: Jul 04-09, 2009
43. *Detection of humoral responses to the hepatitis C virus core+1 protein in patients with HCV-associated hepatocellular carcinoma.* Dalagiorgou G., **Vasilaki N.**, Kakkanas A., Aslanoglou E., Vassilopoulos D., Hadziyiannis S., Mavromara P. **FEBS J.** **2008**, 275: 268.
Conference: Joint Conference of the 33rd FEBS Congress/11th IUBMB Location: Athens, Greece Date: Jun 28-Jul 03, 2008
44. *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).* Kalliampakou K., **Vassilaki N.**, Mavromara P. **FEBS J.** **2008**, 275: 270. Conference: Joint Conference of the 33rd FEBS Congress/11th IUBMB Location: Athens, Greece Date: Jun 28-Jul 03, 2008
45. *Modulation of liver specific gene promoters by the HCV core and core+1/s proteins.* Pissas G., Foka PN., **Vassilaki N.**, Kakkanas A., Mavromara P. **FEBS J.** **2008**, 275: 274.
Conference: Joint Conference of the 33rd FEBS Congress/11th IUBMB Location: Athens, Greece Date: Jun 28-Jul 03, 2008
46. *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.* **Vassilaki N.**, Friebe P.,

Paranhos-Baccala G., Mavromara P., Bartenschlager R. **FEBS J.** **2008**, 275: 277.
Conference: Joint Conference of the 33rd FEBS Congress/11th IUBMB Location: Athens,
Greece Date: Jun 28-Jul 03, 2008

- 47.** *Expression of the ARFP/F/core+1 protein from HCV-1b clinical isolates.* Boumlic A.,
Vassilaki N., Georgopoulou U., Orfanoudakis G., Mavromara P. **Journal of Clinical
Virology** **2006**, 36: S111. doi:10.1016/S1386-6532(06)80344-6.
[https://doi.org/10.1016/S1386-6532\(06\)80344-6](https://doi.org/10.1016/S1386-6532(06)80344-6) Conference: 12th International Symposium
on Viral Hepatitis and Liver Disease Location: Paris, France Date: Jul 01-05, 2006

Patents

Granted Patent: Mavromara P. and **Vassilaki N.** "Novel HCV core+1 protein, methods for
diagnosis of HCV infections, prophylaxis and for screening of anti-HCV agents" No. US
7838002 B2

Provisional Patent Application: Mavromara P. and **Vassilaki N.** "*In vitro* expression of the HCV
ARFP/F/CORE+1 coding open reading frame" No. US 20060166320 A1

Awards/Prizes/Distinctions

- 2021** Poster Presentation award, 18th Hellenic Symposium on Medicinal Chemistry. Online
symposium 2021: "*Combining metal chelating agents to acquire dual inhibitors of
Flaviviridae viruses and trypanosoma species*", Giannakopoulou E. et al.
- 2019** Best Poster Presentation award, selected for Oral Presentation, 11th Joint Meeting on
Medicinal Chemistry (JMMC) 2019, Prague, Czech Republic: "*Metal-chelating agents
with improved inhibitory activity against Hepatitis C Virus*", Giannakopoulou E. et al.
- 2019** The proposal "*Hepatotropic Viruses under Liver Normoxia: Identifying Metabolic
Determinants of Disease and Characterizing Novel Antivirals*", acronym HEPVIROXIA
(P.I. Niki Vassilaki) passed successfully the 1st phase (score 84.2/100) and was evaluated
at the 2nd phase with score 82/100 in the First Call for Hellenic Foundation for Research
and Innovation Research Projects To support Faculty members and Researchers.
- 2018** Invited co-chair at the 25th International Symposium on Hepatitis C Virus and Related
Viruses (HCV2018, Dublin, Ireland). Session: Emerging and Related Viruses
- 2018** Best Oral Presentation award, 4th Meeting of Postgraduate and Postdoctoral Researchers
of HPI: "*Interaction between tissue normoxia and Dengue Virus replication*", Moraiti M.
et al.
- 2017** Best poster award, 17th Hellenic Symposium on Medicinal Chemistry: "*Broadly effective*

- metal chelators, as influenza PA endonuclease and HCV inhibitors*", Giannakopoulou E. et al.
- 2016** Feature article "*Novel indole-flutimide heterocycles with activity against influenza PA endonuclease and hepatitis C virus*", in *Med. Chem. Comm.* 2016, Vol.7, No3, p.447-456, Zoidis G. et al. Principal Investigators: Vassilaki N. and Naesens L.
a) New Talent Europe, b) 2016 MedChemComm Hot Article and c) Front cover
- 2016** Institut Pasteur International Network Symposium 2016 Travel Award (Paris, France)
- 2016** 2 awards for best trainees' performance in the course *High Content Assay for Drug Screening and Target discovery Using RNAi Technology*, Institut Pasteur Korea (Korea), 9-13 May
- 2012** Poster award, 63rd Conference of the Hellenic Society for Biochemistry and Molecular Biology: "*Low Oxygen Tension Enhances Hepatitis C Virus Replication*", Vassilaki N. et al.
- 2010** FEMS Young Scientist Meeting Award for oral presentation at 4th European Congress of Virology (Cernobbio, Italy): "*Oxygen tension modulates HCV proliferation*", Vassilaki N. et al.
- 2008** FEMS Young Scientist Meeting Award for poster at 14th International Congress of Virology-IUMS (Istanbul, Turkey): "*Exploring the importance of the HCV core RNA secondary structure and core+1 ORF expression for viral RNA translation and replication*", Vassilaki N. et al.
- 2003-2008**: 10th, 11th and 15th International Symposium on HCV and Related Viruses Travel Awards
- 2004-2006**: PhD fellowship from HPI: "*Expression mechanisms of HCV core+1 protein*"
- 1998, 1997, 1996**: Awards and Scholarships from the State Scholarships Foundation (IKY)