

Democritus University of Thrace

School of Health Sciences

Department of Medicine



CURRICULUM VITAE

Ioannis Karakasiliotis

Professor in Medical Biology – Molecular Virology

Director, Laboratory of Biology

ALEXANDROUPOLIS

2025

1. Personal Details

Full name:	Ioannis Karakasiliotis
Father's name:	Nikolaos
Mother's name:	Angeliki
Date of birth:	10 January 1981
Place of birth:	Athens, Greece
Citizenship:	Greek
Marital status:	Married, one child
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2. Professional Career

- 2009–2013: Postdoctoral Researcher, BSRC “Alexander Fleming” (EKETA – Alexandros Fleming)
- 2013–2016: Postdoctoral Researcher, Hellenic Pasteur Institute
- 2016–2017: Affiliated Researcher, Hellenic Pasteur Institute
- 2016–2018: Assistant Professor of Medical Biology (tenure-track), Department of Medicine, Democritus University of Thrace (DUTH)
- 2018–2021: Assistant Professor of Medical Biology – Molecular Virology, Department of Medicine, DUTH
- 2021–present: Associate Professor of Medical Biology – Molecular Virology, Department of Medicine, DUTH
- 2021–present: Director, Laboratory of Biology, Department of Medicine, DUTH
- 2025–present: Professor of Medical Biology – Molecular Virology, Department of Medicine, DUTH

3. Military Service

February 2008 – November 2008

4. Education – Training

I. Undergraduate Education

- 1999–2003: B.Sc., Department of Biology, Faculty of Science, National and Kapodistrian University of Athens (NKUA). Final grade: Very Good.
- 2002–2003: Undergraduate thesis on RNA recombination in polioviruses, Enterovirus Reference Center, Hellenic Pasteur Institute (Supervisor: Prof. Panagiotis Markoulatos; academic oversight by Prof. Theodoros Katsorchis, NKUA).
- Note: Entered NKUA Biology 5th nationwide (Panhellenic exams) in 1999.

II. Graduate Education (Ph.D.)

2004–2008: Ph.D. in Molecular Virology, Department of Virology, Imperial College London (Supervisor: Prof. Ian Goodfellow).

Thesis title: Analysis of RNA–protein interactions involved in calicivirus translation and replication.

III. Postdoctoral Research

- 2009–2013: Postdoctoral research in post-transcriptional control, BSRC “Alexander Fleming” (Dr. Dimitris Kontoyiannis). Topics included immune responses in rheumatoid arthritis and colorectal cancer (projects & Bodossaki Foundation fellowship).
- 2013–2016: Postdoctoral research in Molecular Virology, Hellenic Pasteur Institute (Prof. Pinelopi Mavromara). Focus on hepatitis C virus (HCV) pathogenesis (IKY–SIEMENS Excellence fellowship).

IV. Courses – Summer Schools

- 2001: Summer school “Days of Biology,” NCSR “Demokritos,” Athens.
- 2009: 2nd Summer School of Immunology, Hellenic Academy of Immunology, Fiskardo, Kefalonia.
- 2019: Global Health: Vector-borne diseases, Salzburg Institute Pasteur Seminar (3–9 September 2019, Salzburg, Austria).
- 2023: Business skills development program (Interreg V-A Greece–Bulgaria 2014–2020, SCD), DUTH Departments of Civil Engineering & Production and Management Engineering.

5. Awards & Scholarships

- 2004–2008: Studentship, Department of Virology, Imperial College London (Ph.D.).
- 2006: Funded participation, 8th International PhD Student Symposium EMBL (EMBL).
- 2007: “Papanikolaou” Award, Hellenic Medical Society (HMS) of the UK (annual award to a young Greek researcher).
- 2009–2012: Postdoctoral Fellowship in memory of Stamatis G. Mantzavinos, Bodossaki Foundation (single awardee in 2009 for domestic postdoc).
- 2013–2015: IKY–SIEMENS Excellence Postdoctoral Fellowship, State Scholarships Foundation (IKY), for HCV pathogenesis studies at Hellenic Pasteur Institute.

6. Participation in Funded Research Projects (Team Member)

- 2009–2010: MasterSwitch (GA 223404 HEALTH-F2-2008-223404). PI: Dr. D. Kontoyiannis. Role of HuR in rheumatoid arthritis (BSRC “Alexander Fleming”).
- 2012: INFLACARE – Inflammation & Cancer Research in Europe (GA 223151 HEALTH-2007). PI: Dr. D. Kontoyiannis. Role of HuR in colorectal cancer (BSRC “Alexander Fleming”).
- 2013: Infrafrontier GR: Greek Research Infrastructure for phenotyping & archiving mammalian genotypes. PI: Dr. D. Kontoyiannis (BSRC “Alexander Fleming”).
- 2013: ARISTEIA I: The role of oncogenic viruses in hepatocellular carcinoma... PI: Prof. P. Mavromara (Hellenic Pasteur Institute).

7. Projects Coordinated as Principal Investigator (Total managed budget: €1,140,148.80)

- 2016–2017: IKY–SIEMENS (faculty) – Modulation of cell-death signals in HCV pathogenesis. €50,000.
- 2016–2017: GILEAD Hellas “Asklipios” – A novel mechanism of HCV-mediated post-transcriptional regulation. Ranked 1st. €20,000.
- 2017: Bodossaki Foundation – infrastructure grant to develop BSL2+ unit. €16,000.
- 2018–2020: Fondation Santé – Global changes in post-transcriptional regulators during West Nile virus replication. €50,000.
- 2018–2021: EYDE–ETAK RESEARCH–CREATE–INNOVATE – NGS tech for mass genomic/transcriptomic control against hematophagous insects. €699,923.20 (of €980,403.80 total).
- 2021–2022: Hellenic Ministry of Rural Development & Food – Analysis of the apicultural flora of Thrace. €23,744.
- 2024–2026: HFRI (ELIDEK) 4th PhD scholarship – Awardee: Konstantinos Konstantinidis. €28,800.

8. Service-Provision Programs Coordinated (as PI) (Total managed revenue: €50,200)

- 2020–present: Laboratory of Biology – Molecular Pre-implantation Screening Service (Revenue: €6,920, KE-82524).
- 2020–present: DNA Quality Control & Next-Generation Sequencing Service (Revenue: €3,200, KE-82564).
- 2020: Printec Hellas – Virucidal/bactericidal testing of UV lamps on ATM surfaces. €6,500 (+24% VAT), KE-82644.
- 2020: Galenica S.A. – Evaluation of extracts/substances for antiviral activity against SARS-CoV-2. €6,000 (+24% VAT), KE-82643.
- 2020: Region of Central Greece – Training seminars on COVID-19 protocols for teachers. €15,000, KE-82675.
- 2020: Vocational Training Center of Xanthi – COVID-19 protocols for tourism enterprises. €12,000, KE-82552.

9. Teaching

I. Undergraduate (Department of Medicine, DUTH)

- 2016–present: Biology (1st semester; compulsory, 7 ECTS).
- 2016–2018: Microbiology II (4th semester; compulsory, 6 ECTS; co-teaching).
- 2019–present: Viruses and Antiviral Technology (8th semester; elective).

II. Postgraduate

- 2013–present: Molecular Diagnostics of Infectious Diseases, M.Sc. Translational Research in Biomedicine, DMB&G, DUTH (2–3 hrs/year).
- 2014–present: Mouse cancer models & Apoptosis, M.Sc. Biomedical Sciences in Disease Diagnosis & Therapy, Department of Medicine, DUTH (4 hrs/year).
- 2014–2020: Viral Hepatitides, M.Sc. Applications in Biology, School of Biology, Aristotle University of Thessaloniki (2 hrs/year).
- 2016–present: Introduction to infectious diseases. Perturbation of the immune system by viruses, M.Sc. Molecular Biomedicine, Department of Medicine, NKUA (2 hrs/year).
- 2017–present: Multiple thematic lectures and lab trainings, Interdepartmental M.Sc. Infectious Diseases – International Medicine, DUTH (24 hrs/year).
- 2019–present: Mitosis and Meiosis, M.Sc. Human Reproduction, Department of Medicine, DUTH (2 hrs/year).
- 2020–present: Molecular karyotyping of embryonic stem cells by NGS, Inter-Institutional M.Sc. Stem Cells & Regenerative Medicine, AUTH (2 hrs/year).
- 2020–present: Research on COVID-19: dilemmas, M.Sc. Bioethics, Department of Medicine, DUTH (1.5 hrs/year).
- 2021: SARS-CoV-2 and other coronaviruses..., M.Sc. Clinical Pharmacology–Therapeutics, Department of Medicine, DUTH (2 hrs/year).

III. Supervision of Undergraduate Theses (main supervisor)

2017–2023: 16 theses supervised across MB&G, DUTH; topics include WNV NS5/NS1, RNA-binding proteins in HCV, mosquito barcoding in Evros, immune pathway modulation, NS3 protease biosensor, bacteriophage characterization, etc.

IV. Supervision of Master's Theses (main supervisor)

2017–2024: 12 theses across DUTH M.Sc. programs; topics include vector/arbovirus surveillance, HBV genotyping, innate immunity diversity, WNV genome enrichment, pediatric rotavirus vaccination, in vitro oocyte maturation, SARS-CoV-2 ORF7a cloning, microbiome/virome in endometriosis/infertility.

V. Ph.D. Supervision (principal supervisor)

- Maria Babali (2023): Changes in regulation of cellular mRNAs and metabolism by West Nile virus.
- Marios Dimitriou (ongoing): Mutant West Nile virus subgenome as a vaccine candidate.
- Konstantinos Konstantinidis (ongoing): Tool development for viral metagenomic analysis.
- Anastasios Vasileiadis (ongoing): Isolation and study of bacteriophages in inflammatory diseases.

VI. Ph.D. Advisory Committees (member)

Maria Daskou (U. Thessaly, ongoing): Inactivation efficacy for enteroviruses Sabin 1/Echo 12. Genome impacts.

Elena Avdoula (DUTH, ongoing): Respiratory microbiome and virome in IPF vs hypersensitivity pneumonitis.

VII. Ph.D. Examination Committees (member)

Participation in 8 Ph.D. examination boards (2018–2023) at DUTH and University of Patras on topics including HCV Core/Core+1 proteins, Wnt/ β -catenin signaling in HCC, in vitro oocyte maturation, RF radiation exposure modeling, etc.

VIII. Postdoctoral Supervision

Nikolaos Dovrolis, DUTH: Bioinformatics contributions to microbiome analyses in viral infections.

10. Invited Talks & Seminars

2007–2013: Seminars on RNA–protein interactions in calicivirus replication/translation (University of Crete; Hellenic Pasteur Institute); functional RNA in calicivirus life cycle (DUTH).

2019: New molecular/bioinformatics platform for mass screening of disease vectors (Regional Research Day, Eastern Macedonia & Thrace).

2020: University COVID-19 health-protocols seminar; training for teachers & tourism enterprises; COVID-19 and Sports; COVID-19 history/pandemic; Science against COVID (Thermo Scientific webinar).

11. Publications (peer-reviewed)

1. Karakasiliotis, I., Markoulatos, P., Katsorchis, T. Site analysis of recombinant and mutant poliovirus isolates of Sabin origin from patients and from vaccines. *Molecular and Cellular Probes* 2004; 18 (2), pp. 103-109
2. Triantos, D., Horefti, E., Paximadi, E., Kyriakopoulou, Z., Karakassiliotis, G., Papanastaslou, K., Lelekis, M., Panos G., Donta-Bakoyianni C., Rapidis A., Markoulatos P. Presence of human herpes virus-8 in saliva and non-lesional oral mucosa in HIV-infected and oncologic immunocompromised patients. *Molecular Oral Microbiology* 2004; 19(3), pp. 201-204
3. Karakasiliotis, I., Paximadi, E., Markoulatos, P. Evolution of a rare vaccine-derived multirecombinant poliovirus. *Journal of General Virology* 2005; 86(11), pp. 3137-3142
4. Paximadi, E., Karakasiliotis, I., Mamuris, Z., Stathopoulos, C., Krikelis, V., Markoulatos, P. Genomic analysis of recombinant Sabin clinical isolates. *Virus Genes* 2006; 32(2), pp. 203-210
5. Dedepsidis, E., Karakasiliotis, I., Paximadi, E., Kyriakopoulou, Z., Komiotis, D., Markoulatos, P. Detection of unusual mutation within the VP1 region of different re-isolates of poliovirus Sabin vaccine. *Virus Genes* 2006; 33(2), pp. 183-191 (IF: 1,542, Αναφορές 12)
6. Karakasiliotis, I., Chaudhry, Y., Roberts, L.O., Goodfellow, I.G. Feline calicivirus replication: Requirement for polypyrimidine tract-binding protein is temperature-dependent. *Journal of General Virology* 2006; 87(11), pp. 3339-3347
7. Monie, T.P., Perrin, A.J., Birtley, J.R., Sweeney, T.R., Karakasiliotis, I., Chaudhry, Y., Roberts, L.O., Matthews S., Goodfellow I.G., Curry, S. Structural insights into the transcriptional and translational roles of Ebp1. *EMBO Journal* 2007; 26(17), pp. 3936-3944
8. Paximadi, E., Karakasiliotis, I., Bolanaki, E., Krikelis, A., Markoulatos, P. Vaccine derived bi- and multi-recombinant Sabin strains. *Virus Genes* 2007 35 (3), pp. 541-548
9. Paximadi, E., Karakasiliotis, I., Papaventsis, D., Papageorgiou, G., Markoulatos, P. Recombinant Sabin environmental isolates in Greece and Cyprus. *Journal of Applied Microbiology* 2008; 104(4), pp. 1153-1162
10. Simmonds, P., Karakasiliotis, I., Bailey, D., Chaudhry, Y., Evans, D.J., Goodfellow, I.G. Bioinformatic and functional analysis of RNA secondary structure elements among different genera of human and animal caliciviruses. *Nucleic Acids Research* 2008; 36(8), pp. 2530-2546
11. Bailey, D.*, Karakasiliotis, I.*, Vashist, S., Chung, L.M.W., Reese, J., McFadden, N., Benson, A., Yarovsky F., Simmonds P., Goodfellow, I. Functional analysis of RNA structures present at the 3' extremity of the murine norovirus genome: The variable polypyrimidine tract plays a role in viral virulence *Journal of Virology* 2010; 84(6), pp. 2859-2870 (*equal contribution)
12. Karakasiliotis, I., Vashist, S., Bailey, D., Abente, E.J., Green, K.Y., Roberts, L.O., Sosnovtsev, S.V., Goodfellow, I.G. Polypyrimidine tract binding protein functions as a negative regulator of feline calicivirus translation *PLoS ONE* 2010; 5 (3), art. no. e9562
13. Karakasiliotis I, Kontoyiannis DL. ASCertaining cytoskeletal rearrangements in antigen presentation and migration. *Nature Immunology* 2011; 12 (10) pp 923-525
14. Kafasla P, Karakasiliotis I, Kontoyiannis DL. Decoding the functions of post-transcriptional regulators in the determination of inflammatory states: focus on macrophage activation. *Wiley Interdisciplinary Reviews-Systems Biology and Medicine* 2012; 4 (5) pp 509-523

15. Yiakouvaki A, Dimitriou M, Karakasiliotis I, Eftychi C, Theocharis S, Kontoyiannis DL. Myeloid cell expression of the RNA-binding protein HuR protects mice from pathologic inflammation and colorectal carcinogenesis. *Journal of Clinical Investigation* 2012; 122 (1) pp 48-61
16. Yunus MA, Lin X, Bailey D, Karakasiliotis I, Chaudhry Y, Vashist S, Zhang G, Thorne L, Kao CC, Goodfellow I. The murine norovirus core subgenomic RNA promoter consists of a stable stem-loop that can direct accurate initiation of RNA synthesis. *Journal of Virology* 2015; 89(2):1218-29
17. Kotta-Loizou I*, Karakasiliotis I*, Vassilaki N, Sakellariou P, Bartenschlager R, Mavromara P. Expression of the novel hepatitis C virus core+1/ARF protein in the context of JFH1-based replicons. *Journal of Virology* 2015; 89(9):5164-70 (*equal contribution)
18. Karakasiliotis I+, Mavromara P Hepatocellular carcinoma: from hepatocyte to liver cancer stem cell. *Frontiers in Physiology* 2015; 6:154 (+Corresponding author)
19. Skliris A, Papadaki O, Kafasla P, Karakasiliotis I, Hazapis O, Reczko M, Grammenoudi S, Bauer J, Kontoyiannis DL. Neuroprotection requires the functions of the RNA-binding protein HuR. *Cell Death Differ.* 2015; 22(5):703-18
20. Sali DA, Karakasiliotis I, Evangelidou M, Avrameas S and Lymberi P. Immunological evidence and regulatory potential for cell-penetrating antibodies in intravenous immunoglobulin *Clinical & Translational Immunology* 2015; 2 4(10):e42
21. Grammatikos G, Dietz J, Ferreiros N, Koch A, Dultz G, Bon D, Karakasiliotis I, Lutz T, Knecht G, Gute P, Herrmann E, Zeuzem S, Mavromara P, Sarrazin C, Pfeilschifter J. Persistence of HCV in Acutely-Infected Patients Depletes C24-Ceramide and Upregulates Sphingosine and Sphinganine Serum Levels. *International Journal of Molecular Sciences* 2016; 13;17(6). pii: E922.
22. Kassela K, Karakasiliotis I+, Charpantidis S, Koskinas J, Mylopoulou T, Mimidis K, Sarrazin C, Grammatikos G, Mavromara P. High prevalence of antibodies to core+1/ARF protein in HCV-infected patients with advanced cirrhosis. *Journal of General Virology* 2017 Jul;98(7):1713-1719. (+Corresponding author)
23. Moustafa S, Karakasiliotis I+, Mavromara P. Hepatitis C Virus core+1/ARF Protein Modulates the Cyclin D1/pRb Pathway and Promotes Carcinogenesis. *Journal of Virology* 2018;92(9). pii: e02036-17 (+Corresponding author)
24. Mylopoulou T, Papadopoulos V, Kassela K, Karakasiliotis I, Souvalidou F, Mimidis P, Veletza S, Mavromara P, Mimidis K. Relationship between antibodies to hepatitis C virus core+1 protein and treatment outcome. *Annals of Gastroenterology.* 2018; 31(5):593-597
25. Christodoulou-Vafeiadou E, Ioakeimidis F, Andreadou M, Giagkas G, Stamatakis G, Reczko M, Samiotaki M, Papanastasiou AD, Karakasiliotis I, Kontoyiannis DL. Divergent Innate and Epithelial Functions of the RNA-Binding Protein HuR in Intestinal Inflammation. *Frontiers in Immunology.* 2018; 9:2732
26. Kassela K, Karakasiliotis I+, Kokkiou E, Souvalidou F, Mimidis P, Veletza S, Panopoulou M, Koskinas J, Mimidis K, Mavromara P. Intergenotypic 2k/1b hepatitis C virus recombinants in the East Macedonia and Thrace region of Greece. *Annals of Gastroenterology.* 2019; 32(1):88-92. (+Corresponding author)
27. Spanakis N, Kassela K, Dovrolis N, Bampali M, Gatzidou E, Kafasi A, Froukala E, Stavropoulou A, Lilakos K, Veletza S, Tsiodras S, Tsakris A, Karakasiliotis I+. A main event and multiple introductions of SARS-Cov2 initiated the COVID-19 epidemic in Greece. *Journal of Medical Virology* 2021 Jan 6. Online ahead of print. (+Corresponding author)

28. Chaintoutis SC, Siarkou VI, Mathios E, Mylonakis ME, Kazakos GM, Skeva PN, Maria Bampali M, Dimitriou M, Dovrolis N, Polizopoulou ZS, Karakasiliotis I, Dovas CI. Limited cross-species transmission and absence of mutations associated with SARS-CoV-2 adaptation in cats: A case study of infection in a small household setting. *Transboundary and Emerging Diseases*. 2022 May;69(3):1606-1616. doi: 10.1111/tbed.14132 Epub 2021 May 16.
29. Ntoliou P, Tzilas V, Bouros E, Avdoula E, Karakasiliotis I, Bouros D, Steiropoulos P. The Role of Microbiome and Virome in Idiopathic Pulmonary Fibrosis. *Biomedicines*. 2021 Apr 20;9(4):442. doi: 10.3390/biomedicines9040442. PMID: 33924195; PMCID: PMC8074588.
30. Panagiotopoulos A, Tseliou M, Karakasiliotis I, Kotzampasi DM, Daskalakis V, Keselidis N, Notas G, Lionis C, Kampa M, Pirintsos S, Sourvinos G, Castanas E. p-cymene impairs SARS-CoV-2 and Influenza A (H1N1) viral replication: In silico predicted interaction with SARS-CoV-2 nucleocapsid protein and H1N1 nucleoprotein. *Pharmacol Res Perspect*. 2021 Aug;9(4):e00798. doi: 10.1002/prp2.798. PMID: 34128351; PMCID: PMC8204097.
31. 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. Alteration of L-Dopa decarboxylase expression in SARS-CoV-2 infection and its association with the interferon-inducible ACE2 isoform. *PLoS One*. 2021 Jun 29;16(6):e0253458. doi: 10.1371/journal.pone.0253458. PMID: 34185793; PMCID: PMC8241096.
32. Dovrolis N, Kassela K, Konstantinidis K, Kouvela A, Veletza S, Karakasiliotis I. ZWA: Viral genome assembly and characterization hindrances from virus-host chimeric reads; a refining approach. *PLoS Comput Biol*. 2021 Aug 9;17(8):e1009304. doi: 10.1371/journal.pcbi.1009304. PMID: 34370725; PMCID: PMC8376068.
33. Lamprou I, Tsolou A, Kakouratos C, Mitrakas AG, Xanthopoulou ET, Kassela K, Karakasiliotis I, Zois CE, Giatromanolaki A, Koukourakis MI. Suppressed PLIN3 frequently occurs in prostate cancer, promoting docetaxel resistance via intensified autophagy, an event reversed by chloroquine. *Med Oncol*. 2021 Aug 19;38(10):116. doi: 10.1007/s12032-021-01566-y. PMID: 34410522; PMCID: PMC8374126.
34. Panagiotopoulos AA, Karakasiliotis I, Kotzampasi DM, Dimitriou M, Sourvinos G, Kampa M, Pirintsos S, Castanas E, Daskalakis V. Natural Polyphenols Inhibit the Dimerization of the SARS-CoV-2 Main Protease: The Case of Fortunellin and Its Structural Analogs. *Molecules*. 2021 Oct 7;26(19):6068. doi: 10.3390/molecules26196068. PMID: 34641612; PMCID: PMC8512273.
35. Karakasiliotis I, Lagopati N, Evangelou K, Gorgoulis VG. Cellular senescence as a source of SARS-CoV-2 quasispecies. *FEBS J*. 2023 Mar;290(5):1384-1392. doi: 10.1111/febs.16230. Epub 2021 Nov 8. PMID: 34653312.
36. Sialakouma A, Karakasiliotis I, Ntala V, Nikolettos N, Asimakopoulos B. Embryonic Cell-free DNA in Spent Culture Medium: A Non-invasive Tool for Aneuploidy Screening of the Corresponding Embryos. *In Vivo*. 2021 Nov- Dec;35(6):3449-3457. doi: 10.21873/invivo.12645. PMID: 34697181; PMCID: PMC8627731.
37. Evangelou K, Veroutis D, Paschalaki K, Foukas PG, Lagopati N, Dimitriou M, Papaspyropoulos A, Konda B, Hazapis O, Polyzou A, Havaki S, Kotsinas A, Kittas C, Tzioufas AG, de Leval L, Vassilakos D, Tsiodras S, Stripp BR, Papantonis A, Blandino G, Karakasiliotis I, Barnes PJ, Gorgoulis VG. Pulmonary infection by SARS-CoV-2 induces senescence accompanied by an inflammatory phenotype in severe COVID-19: possible implications for viral mutagenesis. *Eur Respir J*. 2022 Aug 18;60(2):2102951. doi: 10.1183/13993003.02951-2021. PMID: 35086840; PMCID: PMC8796696.

38. Konstantinidis K, Bampali M, de Courcy Williams M, Dovrolis N, Gatzidou E, Papazilakis P, Nearchou A, Veletza S, Karakasiliotis I. Dissecting the Species- Specific Virome in *Culicoides* of Thrace. *Front Microbiol.* 2022 Mar 7;13:802577. doi: 10.3389/fmicb.2022.802577. PMID: 35330767; PMCID: PMC8940260.
39. Ridgway H, Moore GJ, Mavromoustakos T, Tsiodras S, Ligielli I, Kelaidonis K, Chasapis CT, Gadanec LK, Zulli A, Apostolopoulos V, Petty R, Karakasiliotis I, Gorgoulis VG, Matsoukas JM. Discovery of a new generation of angiotensin receptor blocking drugs: Receptor mechanisms and in silico binding to enzymes relevant to SARS-CoV-2. *Comput Struct Biotechnol J.* 2022;20:2091-2111. doi: 10.1016/j.csbj.2022.04.010. Epub 2022 Apr 9. PMID: 35432786; PMCID: PMC8994259.
40. Konstantinidis K, Dovrolis N, Kouvela A, Kassela K, Rosa Freitas MG, Nearchou A, de Courcy Williams M, Veletza S, Karakasiliotis I. Defining virus- carrier networks that shape the composition of the mosquito core virome of a local ecosystem. *Virus Evol.* 2022 Apr 16;8(1):veac036. doi: 10.1093/ve/veac036. PMID: 35505691; PMCID: PMC9055857.
41. Pirintsos S, Panagiotopoulos A, Bariotakis M, Daskalakis V, Lionis C, Sourvinos G, Karakasiliotis I, Kampa M, Castanas E. From Traditional Ethnopharmacology to Modern Natural Drug Discovery: A Methodology Discussion and Specific Examples. *Molecules.* 2022 Jun 24;27(13):4060. doi: 10.3390/molecules27134060. PMID: 35807306; PMCID: PMC9268545.
42. Vrazas V, Moustafa S, Makridakis M, Karakasiliotis I, Vlahou A, Mavromara P, Katsani KR. A Proteomic Approach to Study the Biological Role of Hepatitis C Virus Protein Core+1/ARFP. *Viruses.* 2022 Jul 31;14(8):1694. doi: 10.3390/v14081694. PMID: 36016316; PMCID: PMC9518822.
43. Bampali M, Konstantinidis K, Kellis EE, Pouni T, Mitroulis I, Kottaridi C, Mathioudakis AG, Beloukas A, Karakasiliotis I. West Nile Disease Symptoms and Comorbidities: A Systematic Review and Analysis of Cases. *Trop Med Infect Dis.* 2022 Sep 8;7(9):236. doi: 10.3390/tropicalmed7090236. PMID: 36136647; PMCID: PMC9506265.
44. Moustafa S, Kassela K, Bampali M, Dovrolis N, Kakkanas A, Beloukas A, Mavromara P, Karakasiliotis I. Hepatitis C Core Protein Induces a Genotype- Specific Susceptibility of Hepatocytes to TNF- Induced Death In Vitro and In Vivo. *Viruses.* 2022 Nov 14;14(11):2521. doi: 10.3390/v14112521. PMID: 36423130; PMCID: PMC9692671.
45. Mpekoulis G, Kalliampakou KI, Milona RS, Lagou D, Ioannidis A, Jahaj E, Chasapis CT, Kefallinos D, Karakasiliotis I, Kotanidou A, Chatzipanagiotou S, Vassilacopoulou D, Vassiliou AG, Angelakis E, Vassilaki N. Significance of Catecholamine Biosynthetic/Metabolic Pathway in SARS-CoV-2 Infection and COVID-19 Severity. *Cells.* 2022 Dec 20;12(1):12. doi: 10.3390/cells12010012. PMID: 36611805; PMCID: PMC9818320.
46. Dovrolis N, Filidou E, Tarapatzi G, Kokkotis G, Spathakis M, Kandilogiannakis L, Drygiannakis I, Valatas V, Arvanitidis K, Karakasiliotis I, Vradelis S, Manolopoulos VG, Paspaliaris V, Bamias G, Kolios G. Co-expression of fibrotic genes in inflammatory bowel disease; A localized event? *Front Immunol.* 2022 Dec 23;13:1058237. doi: 10.3389/fimmu.2022.1058237. PMID: 36632136; PMCID: PMC9826764.
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12. Patents

COMPOUNDS WITH ACTIVITY AGAINST SARS-CoV-2. Publication No.: WO/2024/218171 (24 Oct 2024). International Application No.: PCT/EP2024/060458. Applicants: National Hellenic Research Foundation; CERTH; DUTH; NKUA; and co-inventors including Ioannis Karakasiliotis.

13. Conference & Workshop Contributions (selected)

- Keynote: Transgenic animals in the study of hepatitis C, 11th Hellenic Virology Congress, Thessaloniki (2017).
- Workshop WK20: Real-time PCR in practice, 1st National Medical Students Congress “Leukippos,” Alexandroupoli (2018).
- Round table “Vaccines”: West Nile Virus vaccine, Clinical Virology Days, Athens (2019).
- Multiple national conference abstracts (2017–2023) on HCV Core+1/ARFP, WNV RNA enrichment, virus–vector networks, bioinformatics pipelines (ZWA/ZWA2).

14. Editorial Work

Reviewer for: *Advances in Virology*; *Cancer Management and Research*; *Clinical and Experimental Gastroenterology*; *Journal of General Virology*; *Journal of Medical Virology*; *OncoTargets and Therapy*; *The Pediatric Infectious Disease Journal*; *Virus Research*; *World Journal of Gastroenterology*; *World Journal of Hepatology*; *Clinical Immunology*; *Diseases*; *Viruses*; *Life*.

Guest Editor for special issues: Viruses (State-of-the-Art Virus Research in Greece, 2022); Biomolecules (Molecular Mechanisms of Viral Infections, 2024); Frontiers in Systems Biology (Systematic in silico Metagenomic Studies of Microbiota, 2024).

Book chapter editorial work (Greek editions): Chapter 7 in The Cell: A Molecular Approach (Cooper & Hausman, 7th ed., Academic Editions I. Basdra, 2017); Chapter 9 in Bioinformatics and Functional Genomics (Pevsner, 3rd Greek ed., Academic Editions I. Basdra, 2019).

15. Organizational / Administrative Work

In 2014, together with three early-career virologists, I initiated the restructuring and reactivation of the Hellenic Society of Virology after ~3 years of dormancy. By inviting 40 researchers and professors in Virology to the first General Assembly, we relaunched the Society on a new footing. At that Assembly, I was elected to the Board of Directors and served as General Secretary. In this role I participated in the Organizing and Scientific Committees of three Hellenic Virology Congresses (10th, 11th, 12th) and a range of themed workshops. In 2018 I served on the Local Organizing Committee of the 21st Annual Meeting of the European Society for Clinical Virology in Athens.

I. Department & University Service

2016–present: Member, Transfer Admissions (Placement) Examination Committee, Department of Medicine, DUTH.

2018: Selected Member, Education Office, Department of Medicine, Democritus University of Thrace (DUTH).

2020: Appointed to the Internal Evaluation Group (OMEA), the Curriculum Revision Committee, and the Department's Outreach Committee (Department of Medicine, DUTH).

19 Feb 2020: Organization of the event "ION WORLD, Clinical Solutions 2020," University General Hospital of Alexandroupoli (PGNA) – DUTH.

30 Jun 2021: Organization of the workshop "COVID-19 Collaboration Protocols," DUTH.

2022–present: Evaluator of proposals for the DUTH Center for Lifelong Learning (KEDIVIM).

2022 & 2024: External reviewer for the Special Account for Research Funds (ELKE), University of Crete.

2023–present: Member, DUTH Committee on Technology Transfer, Innovation & Entrepreneurship.

2024: External reviewer for the "K. Karatheodori 2024" program for the ELKE, University of Patras.

II. Professional Societies & Conferences

2014–present: Member of the Board of Directors, Hellenic Society of Virology (General Secretary 2014–2017).

27–28 Feb 2015: Organizer and member of the Scientific Committee, 10th Hellenic Virology Congress, Athens.

18–20 May 2017: Organizer and member of the Scientific Committee, 11th Hellenic Virology Congress, Thessaloniki.

2019: Member of the Organizing/Scientific Committees, 12th Hellenic Conference of Virology.

2018: Member of the Local Organizing Committee, 21st Annual Meeting, European Society for Clinical Virology, Athens.

2021: Member of the Evaluation Committee (Field EP3 – Life Sciences) of the Hellenic Foundation for Research & Innovation (HFRI/ELIDEK).

16. Infrastructure / Unit Development

2017 — BSL-2+ Biosafety Unit for the culture of highly infectious viruses (HCV), with a negative-pressure chamber. Funded by the Bodossaki Foundation.

2018 — Next-Generation Sequencing (NGS) Unit including the Thermo Ion Torrent S5 Sequencer and robotic library-prep systems. This was the first NGS unit in the Department of Medicine at Democritus University of Thrace. Funded by EYDE-ETAK, “Research – Create – Innovate.”

2020 — Upgrade of the BSL-2+ Unit to a BSL-3 Biosafety Unit for the culture of very highly infectious viruses (SARS-CoV-2), with a negative-pressure chamber. Funded by Fondation Santé, EYDE-ETAK “Research – Create – Innovate,” and internal revenues of the Laboratory of Biology.