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C.V. of
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Personal details

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Faculty/Research Positions

- October 2023 – present: Professor of Bioinformatics with emphasis in Microbiology, Department of Biochemistry and Biotechnology, University of Thessaly, Greece.
- August 2019 – October 2023: Associate Professor of Bioinformatics with emphasis in Microbiology, Department of Biochemistry and Biotechnology, University of Thessaly, Greece.
- January 2014 – August 2019: Assistant Professor of Bioinformatics in Genomics, Department of Biochemistry and Biotechnology, University of Thessaly, Greece.

- July 2010 – December 2013: Lecturer of Bioinformatics in Genomics, Department of Biochemistry and Biotechnology, University of Thessaly, Greece.
- February 2010 – June 2010: Postdoctoral researcher at the Systems Biology group of Prof. Stephen G. Oliver, Department of Biochemistry, University of Cambridge, UK.
- February 2008 – January 2010: EMBO long term fellow at Prof. Yves Van de Peer's group, at the Bioinformatics and Evolutionary Genomics Group, Department of Plant Systems Biology, UGent & VIB, Gent, Belgium.
- July 2007 – January 2008: Postdoctoral researcher at the Bioinformatics and Evolutionary Genomics Group of Prof. Yves Van de Peer, Department of Plant Systems Biology, UGent & VIB, Gent, Belgium.
- October 2005 - March 2007: First assistant at the Bioinformatics group of Prof. Marc Robinson-Rechavi, Department of Ecology and Evolution, Faculty of Medicine and Biology, University of Lausanne, Switzerland.
- March 2004 – September 2004. CASE (AstraZeneca) funded PhD placement in text mining, at the Pathways group of Dr David De Graaf, in the pharmaceutical company AstraZeneca PLC, Macclessfield, UK and Waltham, MA, USA.

Education

- 2001-2005: PhD in Bioinformatics, Manchester University, UK. Supervisor: Prof Stephen G. Oliver, Prof Erich Bornberg-Bauer, Dr David Robertson (co-supervisor).
- 2000-2001: MRes in Bioinformatics (with Distinction), Leeds University, UK
- 1998-1999: Exchange student with Erasmus/Socrates programme, Queen's University of Belfast, UK.
- 1994-1999: BSc in Biology, Aristotle University of Thessaloniki, Greece.

Awards-scholarships-distinctions

- 2008 – 2010: EMBO long-term postdoctoral fellowship (ALTF-930-2007).
http://www.embo.org/fellowships/autumn_07.html
- 2005: Best published PhD research of the year 2004 in the Faculty of Life Sciences, University of Manchester, UK. £1200 prize (see page 6 of document in url bellow, section: Faculty Research Symposium).

<http://documents.manchester.ac.uk/display.aspx?DocID=7475>

- 2001-2004: EPSRC studentship for PhD studies.
- 2001-2004: CASE (AstraZeneca) studentship for PhD studies.
- 2004: Travel funding to attend the Gordon Conference on Molecular Evolution. Ventura, CA, USA. Poster presentation of the article published in EMBO reports (Amoutzias et al., 2004).
- Article in EMBO reports (Amoutzias et al., 2004) commented in:
<http://www.nature.com/embor/journal/v5/n4/full/7400129.html>

Reviewing experience

- One hundred and fifty five (155) **verified** (in Publons.com, now Web of Science) reviews for 56 peer-reviewed international journals, including prestigious bioinformatics journals like *Nucleic Acids Research*, *eLife*, *Virus Research*, *Bioinformatics*, *Genome Biology and Evolution*, *PLOS Computational Biology*, *BMC Biology*. Reviews for journals that belong in the field of Microbiology include *Virus Evolution*, *Infection*, *Genetics and Evolution*, *Fungal Biology*, *Intervirology*, *Journal of General Virology*, *Journal of Medical Virology*, *Pathogens*, *Microorganisms*, *Vaccines*, *Viruses*, *Virology*.
- Grant application reviewer (panel reviewer) for Qatar National Research Fund.
- Grant application reviewer for the Research Foundation - Flanders (Fonds Wetenschappelijk Onderzoek -Vlaanderen, FWO).
- Grant application reviewer for National Science Center of Poland.
- Grant application reviewer for the General Secretariat of Research and Technology (ΓΓΕΤ) and for ΕΛΙΔΕΚ.
- Reviewer for the Kalippos framework of open access online scientific books for the Greek Academia.

Research interests

Bioinformatics, Computational Biology, Evolution, Comparative Genomics, Pathogen Genomics, Proteomics, Metabolomics, Machine learning, Neural Networks, Random Forests, Data Integration, Text Mining, Gene Regulation, Transcription Factors, Phosphorylation, Molecular Networks, Secondary Metabolism, Prokaryotes, *Pseudomonas*, *Bacillus*, Viruses, Coronaviruses, SARS-CoV-2, Enteroviruses, Human Papillomaviruses.

Accepted Research Proposals.

- 2014 - 2015: Aristeia II national research framework for the **F**iltering, **A**nnotation and **B**ioinformatics analyses of high-throughput **P**hosphoproteomic data (FAB-Phos). Budget: €200,000. Principal Investigator: Dr. Amoutzias.
- 2011 – 2012: Processing and analysis of human genomic and phosphoproteomic data. Funded by the Research Committee of the University of Thessaly. Budget: €3,330. Principal Investigator: Dr. Amoutzias.
- 2008 – 2010: EMBO long-term postdoctoral fellowship (ALTF-930-2007).

Publications

I have co-authored 80 peer-reviewed papers (15 as first author, 16 as corresponding author), 3 book chapters in the field of Bioinformatics and also translated (in Greek) four book chapters of University student text-books, on Bioinformatics, Genomics, Proteomics and Systems Biology. All my work is purely computational. According to Google Scholar (search on 24-10-2023), my work has been cited 3603 times and has an H-index of 29 and i10 index of 55. According to Scopus (search on 24-10-2023), my work has been cited 2463 times (2361 times, excluding self-citations of selected author) and has an H-index of 24. The cumulative five-year impact factor (based on Web of Science, for the year 2021) is 519.

Book Chapters

6) **Αμούτζιας Γρ.**, Ηλιόπουλος Ι. Μοριακή Γενετική του Ανθρώπου.

5) **Αμούτζιας Γρ.**, Ηλιόπουλος Ι., Φαδούλογλου Β. Κεφάλαιο 12. Πρωτεϊνική Ανάλυση και Πρωτεωμική. Βιοπληροφορική και Λειτουργική Γονιδιωματική, 3^η έκδοση, Pevsner J. Επιστημονική επιμέλεια της μετάφρασης του κεφαλαίου.

4) **Αμούτζιας Γρ.**, Ηλιόπουλος Ι. Κεφάλαιο 5 Προηγμένα προγράμματα αναζήτησης σε βάσεις δεδομένων. Βιοπληροφορική και Λειτουργική Γονιδιωματική, 3^η έκδοση, Pevsner J. Επιστημονική επιμέλεια της μετάφρασης του κεφαλαίου.

3) Παπασιδέρη Ι, **Αμούτζιας Γρ.** Γονιδιωματική, Πρωτεομική, Βιολογία Συστημάτων. Κεφάλαιο 5 Φοιτητικού συγγράμματος «Το Κύτταρο-Μια Μοριακή προσέγγιση». Επιστημονική επιμέλεια της μετάφρασης του κεφαλαίου.

2) **Amoutzias G.D.** and Van de Peer Y. Single-Gene and Whole-Genome duplications and the evolution of protein-protein interaction networks. In: Evolutionary Genomics and Systems Biology. 2010. pp. 413-429

1) **Αμούτζιας Γρ.**, Van de Peer Y. Η εξέλιξη των πρωτεϊνικών αλληλεπιδράσεων μέσα από το πρίσμα της Βιοπληροφορικής και της Βιολογίας Συστημάτων. In: Βιοπληροφορική. 2008. Επιμέλεια: Κοσσίδα Σ. Σελ. 187-204.

Published Peer-reviewed Papers

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Published Peer-reviewed Papers

* denotes corresponding author

2023

80) Tsavea E., Tzika P., Katsivelou E., Adamopoulou A., Nikolaidis M., **Amoutzias GD.**, Mossialos D. Impact of Mt. Olympus Honeys on Virulence Factors Implicated in Pathogenesis Exerted by *Pseudomonas aeruginosa*. Antibiotics 12 (6), 998. DOI: 10.3390/antibiotics12060998.

79) Nikolaidis M, Hesketh A, Frangou N, Mossialos D, Van de Peer Y, Oliver SG, **Amoutzias GD***. A panoramic view of the genomic landscape of the genus *Streptomyces*. *Microbial Genomics* Jun;9(6). doi: 10.1099/mgen.0.001028.

78) Goutzourelas N, Kevrekidis DP, Barda S, Malea P, Trachana V, Savvidi S, Kevrekidou A, Assimopoulou AN, Goutas A, Liu M, Lin X, Kollatos N, **Amoutzias GD**, Stagos D. Antioxidant Activity and Inhibition of Liver Cancer Cells' Growth of Extracts from 14 Marine Macroalgae Species of the Mediterranean Sea. *Foods*. 2023 Mar 19;12(6):1310. doi: 10.3390/foods12061310. PMID: 36981236; PMCID:PMC10048654.

77) Yfantis A, Mylonis I, Chachami G, Nikolaidis M, **Amoutzias GD**, Paraskeva E, Simos G. Transcriptional Response to Hypoxia: The Role of HIF-1-Associated Co-Regulators. *Cells*. 2023 Mar 3;12(5):798. doi: 10.3390/cells12050798. PMID:36899934; PMCID: PMC10001186.

76) Papanikolaou NA, Nikolaidis M, **Amoutzias GD**, Fouza A, Papaioannou M, Pandey A, Papavassiliou AG. The Dynamic and Crucial Role of the Arginine Methylproteome in Myoblast Cell Differentiation. *Int. J. Mol. Sci.* 2023, 24(3), 2124; <https://doi.org/10.3390/ijms24032124>.

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75) Tsakogiannis D, Nikolaidis M, Zagouri F, Zografos E, Kottaridi C, Kyriakopoulou Z, Tzioga L, Markoulatos P, **Amoutzias GD**, Bletsas G. Mutation Profile of HPV16 L1 and L2 Genes in Different Geographic Areas. *Viruses* 2022 Dec 31;15(1):141. doi: 10.3390/v15010141.

74) Georgi I, Asoutis Didaras N, Nikolaidis M, Dimitriou TG, Charistos L, Hatjina F, **Amoutzias GD**, Mossialos D. The Impact of *Vairimorpha (Nosema) ceranae* Natural Infection on Honey Bee (*Apis mellifera*) and Bee Bread Microbiota. *Applied Sciences (Switzerland)*, 2022, 12(22), 11476.

73) Baltavia I, Theodosiou T, Papanikolaou N, Pavlopoulos GA, **Amoutzias GD**, Panagopoulou M, Chatzaki E, Andreacos E, Iliopoulos I. Prediction and Ranking of Biomarkers Using *multiple* UniReD. *Int J Mol Sci*. 2022 Sep 21;23(19):11112. doi: 10.3390/ijms231911112

72) Nikolaidis M, Hesketh A., Mossialos D. Iliopoulos I. Oliver S.G., **Amoutzias G.D***. A Comparative Analysis of the Core Proteomes within and among the *Bacillus subtilis* and *Bacillus cereus* Evolutionary Groups Reveals the Patterns of Lineage- and Species-Specific Adaptations. *Microorganisms* 2022, 10(9), 1720; doi: 10.3390/microorganisms10091720.

71) **Amoutzias GD***, Nikolaidis M, Hesketh A. The Notable Achievements and the Prospects of Bacterial Pathogen Genomics. *Microorganisms*. 2022 May 17;10(5):1040. doi: 10.3390/microorganisms10051040.

70) Nikolaidis M, Papakyriakou A, Chlichlia K, Markoulatos P, Oliver SG, **Amoutzias GD***. Comparative Analysis of SARS-CoV-2 Variants of Concern, Including Omicron, Highlights Their Common and Distinctive Amino Acid Substitution Patterns, Especially at the Spike ORF. *Viruses*. 2022 Mar 29;14(4):707. doi: 10.3390/v14040707.

69) Nikolaidis M, Markoulatos P, Van de Peer Y, Oliver SG, **Amoutzias GD***. The Neighborhood of the Spike Gene Is a Hotspot for Modular Intertypic Homologous and Nonhomologous Recombination in Coronavirus Genomes. *Mol Biol Evol*. 2022 Jan 7;39(1):msab292. doi: 10.1093/molbev/msab292.

Mention in Forbes Magazine:

<https://www.forbes.com/sites/williamhaseltine/2022/04/01/coronaviruses-can-recombine-with-cellular-and-heterologous-viruses-to-create-unexpected-variants/>

68) **Amoutzias GD***, Nikolaidis M, Tryfonopoulou E, Chlichlia K, Markoulatos P, Oliver SG. The Remarkable Evolutionary Plasticity of Coronaviruses by Mutation and Recombination: Insights for the COVID-19 Pandemic and the Future Evolutionary Paths of SARS-CoV-2. *Viruses*. 2022 Jan 2;14(1):78. doi: 10.3390/v14010078.

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- 67) Bletsa G, Zagouri F, **Amoutzias GD**, Nikolaidis M, Zografos E, Markoulatos P, Tsakogiannis D. Genetic variability of the HPV16 early genes and LCR. Present and future perspectives. *Expert Rev Mol Med*. 2021 Dec 1;23:e19. doi: 10.1017/erm.2021.18.
- 66) Nikolaidis M, Tsakogiannis D, Bletsa G, Mossialos D, Kottaridi C, Iliopoulos I, Markoulatos P, **Amoutzias GD***. HPV16-genotyper: A computational tool for risk-assessment, lineage genotyping and recombination detection in hpv16 sequences, based on a large-scale evolutionary analysis. *Diversity* Volume 13, Issue 10 October 2021 Article number 497
- 65) Koureas M, **Amoutzias GD**, Vontas A, Kyritsi M, Pinaka O, Papakonstantinou A, Dadouli K, Hatzinikou M, Koutsolioutsou A, Mouchtouri VA, Speletas M, Tsiodras S, Hadjichristodoulou C. Wastewater monitoring as a supplementary surveillance tool for capturing SARS-COV-2 community spread. A case study in two Greek municipalities. *Environ Res*. 2021 Sep;200:111749. doi: 10.1016/j.envres.2021.111749.
- 64) Theodorakis E, Antonakis AN, Baltavia I, Pavlopoulos GA, Samiotaki M, **Amoutzias GD**, Theodosiou T, Acuto O, Efstathiou G, Iliopoulos I. ProteoSign v2: a faster and evolved user-friendly online tool for statistical analyses of differential proteomics. *Nucleic Acids Res*. 2021 Jul 2;49(W1):W573-W577. doi: 10.1093/nar/gkab329.
- 63) Tsadila C, Nikolaidis M, Dimitriou TG, Kafantaris I, **Amoutzias GD**, Pournaras S, Mossialos D. Antibacterial Activity and Characterization of Bacteria Isolated from Diverse Types of Greek Honey against Nosocomial and Foodborne Pathogens. *Applied Sciences (Switzerland)*, Volume 11, Issue 131 July 2021 Article number 5801.
- 62) Didaras NA, Kafantaris I, Dimitriou TG, Mitsagga C, Karatasou K, Giavasis I, Stagos D, **Amoutzias GD**, Hatjina F, Mossialos D. Biological Properties of Bee Bread Collected from Apiaries Located across Greece. *Antibiotics (Basel)*. 2021 May 10;10(5):555. doi: 10.3390/antibiotics10050555.

- 61) Kafantaris I, Tsadila C, Nikolaidis M, Tsavea E, Dimitriou TG, Iliopoulos I, **Amoutzias GD**, Mossialos D. Transcriptomic Analysis of *Pseudomonas aeruginosa* Response to Pine Honey via RNA Sequencing Indicates Multiple Mechanisms of Antibacterial Activity. *Foods*. 2021 Apr 24;10(5):936. doi: 10.3390/foods10050936.
- 60) Koutsianos D, Athanasiou LV, Dimitriou T, Nikolaidis M, Tsadila C, **Amoutzias G**, Mossialos D, Koutoulis KC. Antibiotic Resistance Patterns and *mcr-1* Detection in Avian Pathogenic *Escherichia coli* Isolates from Commercial Layer and Layer Breeder Flocks Demonstrating Colibacillosis in Greece. *Microb Drug Resist*. 2020 Sep 21. doi: 10.1089/mdr.2020.0057.
- 59) Daskou M, Tsakogiannis D, Alexopoulou DS, Dimitriou TG, Mossialos D, **Amoutzias GD**, Kottaridi C, Markoulatos P. A colorimetric IsoPCR for the rapid and sensitive visual detection of high-risk HPV16 in clinical samples with hydroxynaphthol blue. *J Virol Methods*. 2021 Apr;290:114072. doi: 10.1016/j.jviromet.2021.114072
- 58) Kafantaris, I., **Amoutzias, G.D.** & Mossialos, D. Foodomics in bee product research: a systematic literature review. *Eur Food Res Technol* (2020). <https://doi.org/10.1007/s00217-020-03634-5>
- 57) Samaras A, Nikolaidis M, Antequera-Gómez ML, Cámara-Almirón J, Romero D, Moschakis T, **Amoutzias GD**, Karaoglanidis GS. Whole Genome Sequencing and Root Colonization Studies Reveal Novel Insights in the Biocontrol Potential and Growth Promotion by *Bacillus subtilis* MBI 600 on Cucumber. *Front Microbiol*. 2021 Jan 12;11:600393. doi: 10.3389/fmicb.2020.600393.
- 56) Koureas M, Kalompatsios D, **Amoutzias GD**, Hadjichristodoulou C, Gourgoulisanis K, Tsakalof A. Comparison of Targeted and Untargeted Approaches in Breath Analysis for the Discrimination of Lung Cancer from Benign Pulmonary Diseases and Healthy Persons. *Molecules*. 2021 Apr 29;26(9):2609. doi: 10.3390/molecules26092609.

55) Daskou M, Dimitriou TG, Alexopoulou DS, Tsakogiannis D, **Amoutzias GD**, Mossialos D, Kyriakopoulou Z, Markoulatos P. WarmStart colorimetric RT-LAMP for the rapid, sensitive and specific detection of Enteroviruses A-D targeting the 5'UTR region. *J Appl Microbiol*. 2021 Jan;130(1):292-301. doi: 10.1111/jam.14770.

2020

54) Didaras NA, Karatasou K, Dimitriou TG, **Amoutzias GD**, Mossialos D. Antimicrobial Activity of Bee-Collected Pollen and Beebread: State of the Art and Future Perspectives. *Antibiotics (Basel)*. 2020 Nov 14;9(11):811. doi: 10.3390/antibiotics9110811.

53) Koureas M, Kirgou P, **Amoutzias G**, Hadjichristodoulou C, Gourgoulisanis K, Tsakalof A. Target Analysis of Volatile Organic Compounds in Exhaled Breath for Lung Cancer Discrimination from Other Pulmonary Diseases and Healthy Persons. *Metabolites*. 2020 Aug 3;10(8):317. doi: 10.3390/metabo10080317.

52) Nikolaidis M, Mossialos D, Oliver SG, **Amoutzias GD***. Comparative Analysis of the Core Proteomes among the Pseudomonas Major Evolutionary Groups Reveals Species-Specific Adaptations for Pseudomonas aeruginosa and Pseudomonas chlororaphis. *Diversity* 2020, 12(8), 289; <https://doi.org/10.3390/d12080289>

51) Komaitis F, Kalliampakou K, Botou M, Nikolaidis M, Kalloniati C, Skliros D, Du B, Rennenberg H, **Amoutzias GD**, Frillingos S, Flietakis E. Molecular and physiological characterization of the monosaccharide transporters gene family in *Medicago truncatula*. *J Exp Bot*. 2020 May 30;71(10):3110-3125. doi: 10.1093/jxb/eraa055.

50) Daskou M, Dimitriou TG, Kouklamani-Giannouli G, Nikolaidis M, Mossialos D, **Amoutzias GD**, Markoulatos P. Development of a reverse transcription loop-mediated isothermal amplification assay (RT-LAMP) that detects enteroviruses by targeting the highly conserved 5'-UTR region. *Virus Genes*. 2020 Apr;56(2):194-201. doi: 10.1007/s11262-020-01732-w. Epub 2020 Jan 18. PMID: 31955385

49) Theodosiou T, Papanikolaou N, Savvaki M, Bonetto G, Maxouri S, Fakourelis E, Eliopoulos AG, Tavernarakis N, **Amoutzias GD**, Pavlopoulos GA, Aivaliotis M, Nikolettou V, Tzamarias D, Karagogeos D, Iliopoulos I. UniProt-Related Documents (UniReD): assisting wet lab biologists in their quest on finding novel counterparts in a protein network. *NAR Genomics and Bioinformatics*, 2020 1–13. doi: 10.1093/nargab/lqaa005.

2019

48) Ntountoumi C, Vlastaridis P, Mossialos D, Stathopoulos C, Iliopoulos I, Promponas V, Oliver SG, **Amoutzias GD***. Low complexity regions in the proteins of prokaryotes perform important functional roles and are highly conserved. *Nucleic Acids Res.* 2019 Sep 4. pii: gkz730. doi: 10.1093/nar/gkz730.

47) Daskou M, Tsakogiannis D, Dimitriou TG, **Amoutzias GD**, Mossialos D, Kottaridi C, Gartzonika C, Markoulatos P. WarmStart colorimetric LAMP for the specific and rapid detection of HPV16 and HPV18 DNA. *J Virol Methods.* 2019 Apr 28;270:87-94.

46) Daskou M, Tsakogiannis D, Dimitriou TG, Manali M, Aпти C, **Amoutzias GD**, Mossialos D, Kottaridi C, Markoulatos P. A 2-stage, nested-like nucleic acid amplification method (IsoPCR) for the highly sensitive detection of HPV16 and HPV18 DNA. *Mol Cell Probes.* 2019 Mar 19. pii: S0890-8508(18)30307-4.

45) Nikolaidis M, Mimouli K, Kyriakopoulou Z, Tsimpidis M, Tsakogiannis D, Markoulatos P, **Amoutzias GD***. Large-scale genomic analysis reveals recurrent patterns of intertypic recombination in human enteroviruses. *Virology.* 2019 Jan 2;526:72-80.

2018

44) Chaliotis A, Vlastaridis P, Ntountoumi C, Botou M, Yalelis V, Lazou P, Tatsaki E, Mossialos D, Frilingos S* and **Amoutzias GD***. NAT/NCS2-hound: A webserver for the detection and evolutionary classification of prokaryotic and eukaryotic nucleobase-cation

symporters of the NAT/NCS2 family. *Gigascience*. 2018 Dec 1;7(12). doi: 10.1093/gigascience/giy133.

43) Karakasidou K, Nikolouli K, **Amoutzias GD**, Pournou A, Manassis C, Tsiamis G, Mossialos D. Microbial diversity in biodeteriorated Greek historical documents dating back to the 19th and 20th century: A case study. *Microbiologyopen*. 2018 Oct;7(5):e00596. doi: 10.1002/mbo3.596.

42) Priftis A, Goutzourelas N, Chalabalaki M, Ntasi G, Stagos D, **Amoutzias GD**, Skaltsounis LA, Kouretas D. Effect of polyphenols from coffee and grape on gene expression in myoblasts. *Mech Ageing Dev*. 2017 Nov 23. pii: S0047-6374(17)30155-0. doi: 10.1016/j.mad.2017.11.015.

41) Tsakogiannis D, Moschonas GD, Bella E, Kyriakopoulou Z, **Amoutzias GD**, Dimitriou TG, Kottaridi C, Markoulatos P. Association of p16 (CDKN2A) polymorphisms with the development of HPV16-related precancerous lesions and cervical cancer in the Greek population. *J Med Virol*. 2017 Nov 23. doi: 10.1002/jmv.24996.

40) Kyriakopoulou Z, **Amoutzias GD**, Dimitriou TG, Tsakogiannis D, Mossialos D, Markoulatos P. Intra- and inter-serotypic recombinations in the 5' UTR-VP4 region of Echovirus 30 strains. *Arch Virol*. 2017 Oct 30. doi: 10.1007/s00705-017-3600-1.

2017

39) Fikatas A, Dimitriou TG, Kyriakopoulou Z, Moschonas GD, **Amoutzias GD**, Mossialos D, Gartzonika C, Levidiotou-Stefanou S, Markoulatos P. Detection of negative and positive RNA strand of poliovirus Sabin 1 and echovirus E19 by a stem-loop reverse transcription PCR. *Lett Appl Microbiol*. 2017 Jun 20. doi: 10.1111/lam.12766. PMID: 28631392.

38) Vlastaridis P., Papakyriakou A., Chaliotis A., Stratikos E., Oliver SG. and **Amoutzias GD***. The pivotal role of protein phosphorylation in the control of yeast central metabolism. *G3: Genes, Genomes, Genetics* 2017 Mar 1. pii: g3.116.037218.

37) Chaliotis A, Vlastaridis P, Mossialos D, Ibba M, Becker HD, Stathopoulos C and **Amoutzias GD***. The complex evolutionary history of aminoacyl-tRNA synthetases. *Nucleic Acids Res.* 2017 Feb 17;45(3):1059-1068.

36) Vlastaridis P, Kyriakidou P, Chaliotis A, Van de Peer Y, Oliver SG, **Amoutzias GD***. Estimating the total number of phosphoproteins and phosphorylation sites in eukaryotic proteomes. *Gigascience.* 2017 Feb 1;6(2):1-11. doi: 10.1093/gigascience/giw015. PMID:28327990

35) Tsimpidis M, Bachoumis G, Mimouli K, Kuriakopoulou Z, Robertson DL, Markoulatos P, **Amoutzias GD***. T-RECs: Rapid and large-scale detection of recombination events among different evolutionary lineages of viral genomes. *BMC Bioinformatics.* 2017 Jan 5;18(1):13.

2016

34) Fikatas A, Dimitriou TG, Kyriakopoulou Z, Tsachouridou O, Gartzonika C, Levidiotou-Stefanou S, **Amoutzias GD**, Markoulatos P. Serum neutralization assay for the determination of antibody levels against non-polio enterovirus strains in Central and Western Greece. *Viral Immunol.* 2016 Sep;29(7):444-50.

33) **Amoutzias GD**, Giannoulis T, Moutou KA, Psarra AG, Stamatis C, Tsiourlianos A, Mamuris Z. SNP identification through transcriptome analysis of the European brown hare (*Lepus europaeus*): cellular energetics and mother's curse. *PLoS One.* 2016 Jul 26;11(7).

32) **Amoutzias GD**, Chaliotis A, Mossialos D. Discovery Strategies of Bioactive Compounds Synthesized by Nonribosomal Peptide Synthetases and Type-I Polyketide Synthases Derived from Marine Microbiomes. *Mar Drugs.* 2016 Apr 16;14(4). pii: E80.

31) Pappi PG, Maliogka VI, **Amoutzias GD**, Katis NI. Genetic variation of eggplant mottled dwarf virus from annual and perennial plant hosts. *Arch Virol.* 2016 Mar;161(3):631-9.

30) Vlastaridis P, Oliver SG, Van de Peer Y, **Amoutzias GD***. The Challenges of Interpreting Phosphoproteomics Data: A Critical View Through the Bioinformatics Lens. *Lecture Notes in Bioinformatics*. 2016. 9874, pp. 196-204.

2015

29) Katsiani, A.T., Maliogka, V.I., **Amoutzias, G.D.**, Efthimiou, K.E., Katis, N.I. Insights into the genetic diversity and evolution of Little cherry virus 1.

Plant Pathology 2015, 64 (4), pp. 817-824

28) Kyriakopoulou Z, Bletsa M, Tsakogiannis D, Dimitriou TG, **Amoutzias GD**, Gartzonika C, Levidiotou-Stefanou S, Markoulatos P. Molecular epidemiology and evolutionary dynamics of Echovirus 3 serotype. *Infect Genet Evol.* 2015 Jun;32:305-12.

27) Kyriakopoulou Z, Pliaka V, **Amoutzias GD**, Markoulatos P. Recombination among human non-polio enteroviruses: implications for epidemiology and evolution. *Virus Genes.* 2015 Apr;50(2):177-88

2014

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