2025

Kostas Mathiopoulos

Curriculum Vitae

Kostas D. Mathiopoulos
Department of Biochemistry and Biotechnology, University of Thessaly
29/5/2025

Kostas D. Mathiopoulos

Work address: Department of Biochemistry & Biotechnology, University of Thessaly
Biopolis, Larissa, 41500, Greece
Tel/Fax: (30-2410) 565284, E-mail: kmathiop@bio.uth.gr

Education

1989-1990 Master in Public Health, Harvard School of Public Health, Boston, USA
1983-1989 PhD, Molecular Biology, Tufts University, Boston, USA
1978-1983 BSc, Chemistry, National University of Athens, Athens, Greece

Professional Experience

2017-present Director, MSc Program "Advanced Experimental and Computational Biosciences", Department of Biochemistry and Biotechnology, University of Thessaly, Larissa, Greece

2016-2020 Department Head, Department of Biochemistry & Biotechnology, University of Thessaly, Larissa, Greece

2013-present Professor of Molecular Biology, Department of Biochemistry & Biotechnology, University of Thessaly, Larissa, Greece

2009-2013 Associate Professor of Molecular Biology, Department of Biochemistry & Biotechnology, University of Thessaly, Larissa, Greece

2006-2009 National Expert of the Greek Representation of the 7th European Framework Programme in the "Food, Agriculture and Fisheries and Biotechnology" sector

2002-2009 Assistant Professor of Molecular Biology, Department of Biochemistry & Biotechnology, University of Thessaly, Larissa, Greece

Grants

2023-2025 Mealworm Innovations: Yellow mealworms as a source of innovative solutions and products for the development of the bioeconomy in Greece. Project ID 15424. Program: Hellenic Foundation for Research and Innovation (HFRI), funded by the General Secretariat for Research and Innovation (GSRI), Role: Project coordinator. Budget: 167,900€.

2022–2026 REACT: Rapid elimination of invasive agricultural insect pest outbreaks by tackling them with Sterile Insect Techniques programs. HORIZON-CL6-2021-FARM2FORK-01-04, Project ID 101059523. Budget: 412,500€.

2019-2024 Coordinated Research Project on "Generic approach for the development of genetic sexing strains for SIT applications" financed by the International Atomic Energy Agency (IAEA). Principal Investigator of research sub-project "Exploring structure and function of the Tephritid Y chromosome". Budget: 30,000€.

2018-2020 BioRoboost: Fostering Synthetic Biology standardisation through international collaboration. H2020-NMBP-TR-IND-2018-2020 / BIOTEC-01-2018 (CSA), Project ID 210491758. Coordinator of the Greek contribution. Budget: 65,000€.

2018-2020 Emblematic Action «The Olive Road», Greek National research network on the olive tree. General Secretariat for Research & Technology (GSRT). PI of UThessaly sub-project 2. Budget: 50,000€.

2016-2019 National Infrastructures Program on Synthetic Biology: "OMIC-Engine". Principal Investigator, Budget: 4,000,000€.

2013-2015 IKYDA 2013, Programme for the promotion of the exchange and scientific cooperation between Greece and Germany. Principal Investigator. Travel budget only: 10,000€.

2012-2015 Research Program "Excellence" (Aristeia) of the Greek Ministry of Education entitled: "Novel approaches to olive fly control: focus on olfactory and reproductive systems". Principal Investigator. Budget: 350,000€.

2012-2014 Interdisciplinary and Interuniversity Research Support Program of the Greek Ministry of Education "Thales" entitled: "Symbiotic bacteria and 'omics' technologies towards the development of novel and environment-friendly control methods on insect pests: the case of the Mediterranean fruit fly". Participation as Principal Investigator of Collaborating Team. Budget: 74,750 €.

2010-2013 Human Research Potential Support Programme "Herakleitos II" of the Greek Ministry of Education entitled: «Transcriptomics and Proteomics analysis of the most important olive pest, the insect *Bactrocera oleae*, with emphasis in sex-separation systems and insecticide resistance». Participation as Principal Investigator. Budget: 45,000€

2010-2012 Specialty Crops Block Grant Program from California Department of Food and Agriculture entitled: "Spinosad Resistance in California Olive Fruit Fly (*Bactrocera oleae*) Populations". Participation as Principal Investigator of Collaborating Team. Budget: 52,500 $.

2006-2008 Bilateral Greece-Cyprus R&T Collaborative Programmes of the Greek General Secretariat of Research and Technology of the Ministry of Development on "Assessment of resistance of natural olive fly populations to the naturalyte insecticide spinosad as well as investigation of the underlying molecular mechanism of such resistance". Participation as Principal Investigator. Budget: 23,480€.

2005-2007 Research Potential Support Programme of the Greek General Secretariat of Research and Technology of the Ministry of Development on "Assessment of insecticide resistance in four insects of great economic importance (olive fly, green peach aphid, medfly and apple maggot fly), investigation of underlying resistance mechanisms and study of their bio-ecology. Participation as Principal Investigator of Collaborating Team. Budget: 180,000€.

Teaching

2020 – today "Special Topics in Molecular Biology" 6th semester, DBB, U Thessaly

2016 – today "Evolution of Ideas in the Biological Sciences", 8th semester, DBB, U Thessaly

2017 – today "Techniques in Molecular Biology and Genomics", 1st semester of Master Diploma Program in "Advanced Experimental and Computational Biosciences", DBB, U Thessaly

2008 – today "Methods and Techniques", 1st Semester of Master Diploma Program in "Molecular Biology Applications – Molecular Genetics, Molecular Markers", DBB, U Thessaly

2007 – today "Genetically Modified Organisms", 2nd Semester of Master Diploma Program in "Biotechnology – Nutrition and Environment", DBB, U Thessaly

2007 – today "Forensics" and «ancient DNA», 1st Semester of Master Diploma Program in «Molecular Biology Applications – Molecular Genetics, Molecular Markers», Department of Biochemistry and Biotechnology, U of Thessaly

2002-today "Molecular Biology I", 4th Semester, DBB, U Thessaly

2008 – 2018 "Genetics", a two-semester course including Genetics, Physiology and Evolution at the senior students of the Natural Sciences Programme of the Open University of Greece

2003 – 2017 "Molecular Ecology", 8th Semester, DBB, U Thessaly

2002 – 2018 "Molecular Biology II", 5th Semester, DBB, U Thessaly

Fellowships

1983-1989 National Science Foundation Fellowships Program, USA

1989-1990	Harvard School of Public Health Fellowship, USA
1990-1993	Fogarty International Fellowship (NIH, USA
1993-1995	Human Capital and Mobility Programme (European Union).

Publications

I. Monographies.

PhD Thesis: Identification of *Bacillus subtilis* genes expressed early during sporulation. Tufts University, Sackler School of Graduate Biomedical Sciences, May 1989.

II. Book Chapters

1. Mathiopoulos K, Bouaré M, McConkey G and McCutchan T (1993) PCR detection of *Plasmodium* species in blood and mosquitoes, pp.462-467. *In*: DH Persing, TF Smith, FC Tunover, and TS White (eds), Diagnostic Molecular Microbiology: Principles and Applications. American Society for Microbiology, Washington DC. [- , 6]
2. Mathiopoulos KD (1997) Constructing and screening cosmid libraries. *In* The Molecular Biology of Insect Disease Vectors: A Methods Manual. pp. 207-217. Eds JM Crampton, CB Beard and C Louis. Chapman & Hall, London, UK.
3. Mathiopoulos KD (1997) Constructing and screening cDNA libraries. *In* The Molecular Biology of Insect Disease Vectors: A Methods Manual. pp. 218-229. Eds JM Crampton, CB Beard and C Louis. Chapman & Hall, London, UK.
4. Mathiopoulos KD (2000) Malaria. *In* Encyclopedia of Microbiology, Volume 3, 2nd Edition, pp. 131-150. Academic Press.

III. Peer reviewed articles

1. **Mathiopoulos C** and Sonenshein AL* (1989) Identification of *Bacillus subtilis* genes expressed early during sporulation. Mol Microbiol 3: 1071-1081. doi: 10.1111/j.1365-2958.1989.tb00257.x
2. **Mathiopoulos C**, Mueller JP, Slack FJ, Murphy CG, Patankar S, Bukusoglu G and Sonenshein AL* (1991) A *B. subtilis* dipeptide transport system expressed early during sporulation. Mol Microbiol 5: 1903-1913. https://doi.org/10.1111/j.1365-2958.1991.tb00814.x
3. Slack FJ, Mueller JP, Strauch MA, **Mathiopoulos C** and Sonenshein AL* (1991) Transcriptional regulation of a *B. subtilis* dipeptide transport operon. Mol Microbiol 5: 1915-1925. https://doi.org/10.1111/j.1365-2958.1991.tb00815.x
4. Mueller JP, **Mathiopoulos C**, Slack FJ and Sonenshein AL* (1991) Identification of *B. subtilis* adaptive response genes by subtractive differential hybridization. Res Microbiol 142: 805-813. https://doi.org/10.1016/0923-2508(91)90059-j
5. **Mathiopoulos KD***, and Lanzaro GC (1995) Distribution of genetic diversity in relation to chromosomal inversions in the malaria mosquito *Anopheles gambiae*. J. Mol. Evol. 40: 578-584. https://doi.org/10.1007/bf00160504
6. **Mathiopoulos KD**, Powell JR and McCutchan TF* (1995) An anchored restriction mapping approach applied to genetic analysis of the malaria vector complex *Anopheles gambiae*. Mol. Biol. Evol. 12: 103-112. https://doi.org/10.1093/oxfordjournals.molbev.a040179
7. della Torre A, Favia G, Mariotti G, Coluzzi M and **Mathiopoulos KD*** (1996) Physical map of the malaria vector *Anopheles gambiae*. Genetics 143: 1307-1311. doi: 10.1093/genetics/143.3.1307
8. García BA, Caccone G, **Mathiopoulos KD** and Powell JR* (1996) Inversion monophyly in African Anopheline malaria vectors. Genetics 143: 1313-1320. doi: 10.1093/genetics/143.3.1313
9. Favia G*, Mariotti G, **Mathiopoulos KD** and A della Torre (1996) Rapid non-radioactive differential display using Tth polymerase. Trends Genet. 12: 396-397. doi: 10.1016/s0168-9525(96)90098-0

10. Zakharkin SO, Gordadze AV, Korochkina SE, **Mathiopoulos KD**, della Torre A, Benes H* (1997) Molecular cloning and expression of a hexamerin cDNA from the malaria mosquito, *Anopheles gambiae*. Eur J Biochem 246: 719-726. https://doi.org/10.1111/j.1432-1033.1997.t01-1-00719.x
11. **Mathiopoulos KD***, della Torre A, Predazzi V, Petrarca V and Coluzzi M (1998) Cloning of inversion breakpoints in the malaria mosquito *Anopheles arabiensis* unveils a transposable element at the breakpoint junction. P Natl Acad Sci USA 95: 12444-9. doi: 10.1073/pnas.95.21.12444
12. Caccone A, García BA, **Mathiopoulos KD**, Min GS, Moriyama EN, Powell JR* (1999) Characterization of the soluble guanylyl cyclase beta-subunit gene in the mosquito *Anopheles gambiae*. *Insect Mol Biol* 8: 23-30. https://doi.org/10.1046/j.1365-2583.1999.810023.x
13. **Mathiopoulos KD***, della Torre A, Santolamazza F, Predazzi V, Petrarca V and Coluzzi M (1999) Are chromosomal inversions induced by transposable elements? A paradigm from the malaria mosquito *Anopheles gambiae*. Parassitologia 41: 119-123. https://pubmed.ncbi.nlm.nih.gov/10697843/
14. Ahmed A, Martín D, Manetti A, Han S-J, Lee W-J, **Mathiopoulos KD**, Müller H-M, Kafatos FC, Raikhel A and Brey PT* (1999) Genomic structure and ecdyson regulation of the prophenoloxidase 1 gene in the malaria vector *Anopheles gambiae*. P Natl Acad Sci USA 96: 14795-14800. https://doi.org/10.1073/pnas.96.26.14795
15. D'Amelio S, **Mathiopoulos KD**, Santos CP, Pugachev ON, Webb SC, Picanço M and Paggi L* (2000) Genetic markers in ribosomal DNA for the identification of members of the genus *Anisakis* (Nematoda: Ascaridoidea) defined by polymerase-chain-reaction-based restriction fragment length polymorphism. Int J Parasitol 30 (2): 223-226. doi: 10.1016/s0020-7519(99)00178-2
16. Snabel V, D'Amelio S, **Mathiopoulos KD**, Turcekova L, Dubinsky P* (2000). Molecular evidence for the presence of a G7 genotype of *Echinococcus granulosus* in Slovakia. J Helminthol 74: 177-181. https://pubmed.ncbi.nlm.nih.gov/10881291/
17. D'Amelio S, **Mathiopoulos KD**, Brandonisio O, Lucarelli G, Doronzo F, Paggi L* (1999). Diagnosis of a case of gastric anisakidosis by PCR-based restriction fragment length polymorphism analysis. Parassitologia 41: 591-593. https://pubmed.ncbi.nlm.nih.gov/10870568/
18. Stratikopoulos EE, Augustinos AA, Gariou-Papalexiou A, Zacharopoulou A and **Mathiopoulos KD*** (2002). Identification and partial characterization of a new *Ceratitis capitata* specific 44-bp centromeric repeat. Chromosome Res 9: 287-295. https://doi.org/10.1023/a:1016567624117
19. Augustinos AA, Stratikopoulos EE, Zacharopoulou A and **Mathiopoulos KD*** (2002). Polymorphic microsatellite markers in the olive fly, *Bactrocera oleae*. Mol Ecol Notes 2: 278-280. https://doi.org/10.1046/j.1471-8286.2002.00222.x
20. Augustinos AA, Mamuris Z, Stratikopoulos EE, D'Amelio S, Zacharopoulou A and **Mathiopoulos KD*** (2005). Microsatellite analysis of olive fly populationsin the Mediterranean indicates a westward expansion of the species. Genetica 125: 231-241. doi: 10.1007/s10709-005-8692-y
21. Skouras JP, Margaritopoulos JT, Seraphides NA, Ioannides IM, Kakani EG, **Mathiopoulos KD** and Tsitsipis JA* (2007). Organophosphate resistance in olive fly, *Bactrocera oleae*, populations in Greece and Cyprus. Pest Manag Sci 63: 42-48. doi: 10.1002/ps.1306
22. Stratikopoulos EE, Augustinos AA, Petalas YG, Vrahatis MN, Mintzas A, **Mathiopoulos KD** and Zacharopoulou A* (2008). An integrated genetic and cytogenetic map for the Mediterranean fruit fly, *Ceratitis capitata*, based on microsatellite and morphological markers. Genetica 133: 147-157. doi: 10.1007/s10709-007-9195-9
23. Kakani EG, Ioannides IM, Margaritopoulos JT, Seraphides NA, Skouras PJ, Tsitsipis JA, **Mathiopoulos KD*** (2008). A small deletion in the olive fly acetylcholinesterase gene associated with high levels of organophosphate resistance. Insect Biochem Mol Biol 38: 781-787. doi: 10.1016/j.ibmb.2008.05.004
24. Kakani EG and **Mathiopoulos KD*** (2008). Organophosphate resistance-related mutations in the acetylcholinesterase gene of Tephritidae. J Appl Entomol 132: 762-771. doi: 10.1111/j.1439-0418.2008.01373.x
25. Augustinos AA, Stratikopoulos EE, Drosopoulou E, Kakani EG, Mavragani-Tsipidou P, Zacharopoulou A, **Mathiopoulos KD*** (2008). Isolation and characterization of microsatellite markers from the olive fly,

Bactrocera oleae, and their cross-species amplification in the Tephritidae family. BMC Genomics 9(1): 618. https://doi.org/10.1186/1471-2164-9-618

26. Zygouridis NE, Augustinos AA, Zalom FG and **Mathiopoulos KD** (2009). Analysis of Olive Fly Invasion in California Based on Microsatellite Markers. Heredity 102: 402-412. doi: 10.1038/hdy.2008.125
27. Liakopoulos A, Neocleous C, Klapsa D, Kanellopoulou M, Spiliopoulou I, **Mathiopoulos KD**, Papafrangas E and Petinaki E* (2009). A T2504A mutation in the 23S rRNA gene responsible for high-level resistance to linezolid of *Staphylococcus epidermidis.* J Antimicrob Chemother 64(1): 206-207. https://doi.org/10.1093/jac/dkp167
28. Stratikopoulos EE, Augustinos AA, Pavlopoulos I, Economou K, Mintzas A, **Mathiopoulos KD** and Zacharopoulou A* (2009). Isolation and characterization of microsatellite markers from the Mediterranean fruit fly, *Ceratitis capitata*: cross-species amplification in other Tephritidae species reveals a varying degree of transferability. Mol Genet Genomics 282(3): 283-306. doi: 10.1007/s00438-009-0465-3
29. Papagiannoulis A, Mathiopoulos KD, Mossialos D* (2010). Molecular detection of the entomopathogenic bacterium *Pseudomonas entomophila* using PCR. Lett Appl Microbiol 50(3): 241-245. https://doi.org/10.1111/j.1472-765X.2009.02785.x
30. Kakani EG, Zygouridis NE, Tsoumani K, Seraphides N, Zalom FG and **Mathiopoulos KD*** (2010). Spinosad resistance development in wild olive fruit fly *Bactrocera oleae* (Diptera: Tephritidae) populations in California. Pest Manag Sci 66(4):447-453. https://doi.org/10.1002/ps.1921
31. Tsoumani KT, Augustinos AA, Kakani EG, Drosopoulou E, Mavragani-Tsipidou P and **Mathiopoulos KD*** (2011). Isolation, annotation and applications of expressed sequence tags from the olive fly, *Bactrocera oleae*. Mol Genet Genomics 285: 33-45. doi: 10.1007/s00438-010-0583-y
32. Kakani EG, Bon S, Massoulié J and **Mathiopoulos KD*** (2011) Altered GPI modification of insect AChE improves tolerance to organophosphate insecticides. Insect Biochem Mol Biol 41: 150-158. https://doi.org/10.1016/j.ibmb.2010.11.005
33. Vontas J, Hernández-Crespo P, Margaritopoulos JT, Ortego F, Feng H-T, **Mathiopoulos KD**, Hsu J-H (2011) Insecticide resistance in Tephritid flies. Pestic Biochem Physiol 100: 199-205. doi: 10.1016/j.pestbp.2011.04.004
34. Tsoumani KT and Mathiopoulos KD (2011) Genome size estimation with quantitative real-time PCR in two Tephritidae species: *Ceratitis capitata* and *Bactrocera oleae*. J Appl Entomol136: 626-631. https://doi.org/10.1111/j.1439-0418.2011.01684.x
35. Kakani EG, Trakala M, Drosopoulou E, Mavragani-Tsipidou P and **Mathiopoulos KD*** (2012) Genomic structure, organization and localization of the acetylcholinesterase locus of the olive fruit fly, *Bactrocera oleae*. Bull Entomol Res 12: 1-12. doi: 10.1017/S0007485312000478
36. Zygouridis NE, Argov Y, Nemny-Lavy EE, Augustinos AA, Nestel D and Mathiopoulos KD (2013) Genetic changes during laboratory domestication of an olive fly SIT strain. J Appl Entomol 138: 423-432. doi: 10.1111/jen.12042
37. Kakani EG, Sagri E, Omirou M, Ioannides IM and Mathiopoulos KD (2013) Detection and geographical distribution of the organophosphate resistance-associated Δ3Q ace mutation in the olive fly, *Bactrocera oleae* (Rossi). Pest Manag Sci. 2013 Apr 23. doi: 10.1002/ps.3564.
38. Tsoumani KT, Drosopoulou E, Mavragani-Tsipidou P and Mathiopoulos KD (2013). Molecular characterization and chromosomal distribution of a species-specific centromeric satellite repeat from the olive fruit fly, *Bactrocera oleae* (Rossi). PLoS One. 2013 Nov 14;8(11):e79393. doi: 10.1371/journal.pone.0079393
39. Sagri E, Reczko M, Gregoriou M-E, Tsoumani KT, Zygouridis NE, Zalom FG, Ragoussis J and Mathiopoulos KD (2014). Olive fly transcriptomics analysis implicates energy metabolism genes in spinosad resistance. BMC Genomics 2014, 15:714. doi: 10.1186/1471-2164-15-714.
40. Sagri E, Reczko M, Tsoumani KT, Gregoriou M-E, Harokopos V, Mavridou A-M, Tastsoglou S, Athanasiadis K, Ragoussis J and Mathiopoulos KD (2014). The molecular biology of the olive fly comes of age. BMC Genet. 2014;15 Suppl 2:S8. doi: 10.1186/1471-2156-15-S2-S8.

41. Tsoumani KT, Drosopoulou E, Bourtzis K, Gariou-Papalexiou A, Mavragani-Tsipidou P, Zacharopoulou A and Mathiopoulos KD (2015). *Achilles*, a new transcriptionally active retrotransposon in the olive fruit fly, with Y chromosome preferential distribution. PLoS One 10(9):e0137050. doi: 10.1371/journal.pone.0137050.
42. Sarrou S, Liakopoulos A, Tsoumani K, Sagri E, Mathiopoulos KD, Tzouvelekis LS, Miriagou V, Petinaki E (2015). Characterization of a novel lsa(E)- and lnu(B)-carrying structure located in the chromosome of a *Staphylococcus aureus*sequence type 398 strain. Antimicrob Agents Chemother 60(2):1164-6. https://doi.org/10.1128/AAC.01178-15 .
43. Papanicolaou A, Schetelig MF, Arensburger P, Atkinson PW, … Mathiopoulos KD, … Handler AM (2016). The whole genome sequence of the Mediterranean fruit fly, *Ceratitis capitata* (Wiedemann), reveals insights into the biology and adaptive evolution of a highly invasive pest species. Genome Biol. 2016; 17: 192. https://doi.org/10.1186/s13059-016-1049-2.
44. Sagri E, Koskinioti P, Gregoriou M-E, Tsoumani KT, Bassiakos YC and Mathiopoulos KD (2017). Housekeeping in Tephritid insects: the best choice for expression analyses in the medfly and the olive fly. Scientific Reports 7:45634. https://doi.org/10.1038/srep45634.
45. Zacharopoulou A, Augustinos AA, Drosopoulou E, Tsoumani KT, Gariou-Papalexiou A, Franz G, Mathiopoulos KD, Bourtzis K & Mavragani-Tsipidou P (2017). A review of more than 30 years of cytogenetic studies of Tephritidae in support of sterile insect technique and global trade. *Entomol Exp Appl* 1–22. doi: 10.1111/eea.12616.
46. Meccariello A, Salvemini M, Primo P, … Mathiopoulos KD, …, Papathanos PA, Robinson MD and Saccone G (2019). *Maleness-on-the-Y* (*MoY*) orchestrates male sex determination in major agricultural fruit fly pests. Science 365 (6460), pp. 1457-1460; doi: 10.1126/science.aax1318.
47. Tsoumani KT, Meccariello A, Mathiopoulos KD, Papathanos PA (2020). Developing CRISPR-based sex-ratio distorters for the genetic control of fruit fly pests: A how-to manual. Arch Insect Biochem Physiol 103, e21652; doi: 10.1002/arch.21652.
48. Bayega A, Djambazian H, Tsoumani KT, … Mathiopoulos KD, Ragoussis J (2020). *De novo* assembly of the olive fruit fly (*Bactrocera oleae*) genome with linked-reads and long-read technologies minimizes gaps and provides exceptional Y chromosome assembly. BMC Genomics 21(1), 259; DOI: 10.1186/s12864-020-6672-3.
49. Meccariello A, Tsoumani KT, Gravina A, … Mathiopoulos KD, Saccone G (2020). Targeted somatic mutagenesis through CRISPR/Cas9 ribonucleoprotein complexes in the olive fruit fly, *Bactrocera oleae*. Arch Insect Biochem Physiol 104(2), e21667; https://doi.org/10.1002/arch.21667.
50. Gregoriou M-E, Mathiopoulos KD (2020). Knocking down sex peptide receptor by dsRNA feeding results in reduced oviposition rate in olive fruit flies. Arch Insect Biochem Physiol 104(2), e21665; https://doi.org/10.1002/arch.21665.
51. Koskinioti P, Ras E, Augustinos AA, Beukeboom LW, Mathiopoulos KD, Caceres C, Bourtzis K (2020). Manipulation of insect gut microbiota towards the improvement of *Bactrocera oleae* artificial rearing. Entomol Exp Appl 168(6-7), pp. 523-540; https://doi.org/10.1111/eea.12934.
52. Koskinioti P, Ras E, Augustinos AA, Beukeboom LW, Mathiopoulos KD, Caceres C, Bourtzis K (2020). The impact of fruit fly gut bacteria on the rearing of the parasitic wasp *Diachasmimorpha longicaudata*. Entomol Exp Appl 168(6-7), pp. 541-559; https://doi.org/10.1111/eea.12936.
53. Tsoumani KT, Belavilas-Trovas A, Gregoriou M-E, Mathiopoulos KD (2020). Anosmic flies: what Orco silencing does to olive fruit flies. BMC Genetics 21,140; DOI: 10.1186/s12863-020-00937-0.
54. Gregoriou M-E, Reczko M, Kakani EG, Tsoumani KT, Mathiopoulos KD (2021). Decoding the reproductive system of the olive fruit fly, *Bactrocera oleae*. Genes 2021, 12, 355. DOI: 10.3390/genes12030355.
55. Bayega A, Oikonomopoulos S, Gregoriou M-E, Tsoumani KT, Giakountis A, Wang YC, Mathiopoulos KD, Ragoussis J (2021). Nanopore long-read RNA-seq and absolute quantification delineate transcription dynamics in early embryo development of an insect pest. Sci Rep 11, 7878 (2021). DOI: 10.1038/s41598-021-86753-7.

56. Belavilas-Trovas A, Gregoriou M-E, Tastsoglou S, Soukia O, Giakountis A, Mathiopoulos KD (2022). A long non-coding RNA modulates tiger mosquito reproductive ability and points to species-specific insecticide applications. Frontiers Bioeng Biotechnol 2022 Aug 24;10:885767. doi: 10.3389/fbioe.2022.885767.
57. Giakountis A, Stylianidou Z, Zaka A, Pappa S, Papa A, Hadjichristodoulou C, Mathiopoulos KD. Development of Toehold Switches as a Novel Ribodiagnostic Method for West Nile Virus. *Genes*. 2023; 14(1):237. https://doi.org/10.3390/genes14010237.
58. Belavilas-Trovas A, Tastsoglou S, Dong S, Kefi M, Tavadia M, Mathiopoulos KD, Dimopoulos G. Long non-coding RNAs regulate *Aedes aegypti* vector competence for Zika virus and reproduction. PLoS Pathog. 2023 Jun 15;19(6):e1011440. DOI:10.1371/journal.ppat.1011440.
59. Rallis D, Tsoumani KT, Krsticevic F, Papathanos PA, Gouvi G, Meccariello A, Mathiopoulos KD, Papanicolaou A. Revisiting Y-chromosome detection methods: R-CQ and KAMY efficiently identify Y chromosome sequences in Tephritidae insect pests. bioRxiv; doi.org/10.1101/2023.10.27.564325
60. Nazarov A, Partosh T, Krsticevic F, Rallis D, Arien Y, Ostrovsky G, Kramer RM, Halon E, Handler A, Baxter S, Gazit Y, Mathiopoulos KD, Pines G, Papathanos PA. CRISPR/Cas9-mediated mutagenesis of the *white-eye* gene in the tephritid pest *Bactrocera zonata*. bioRxiv; doi.org/10.1101/2025.04.22.650062

Professional links

PubMed
https://pubmed.ncbi.nlm.nih.gov/?term=mathiopoulos+k&sort=date
https://pubmed.ncbi.nlm.nih.gov/?term=mathiopoulos+c&sort=date

Google Scholar
https://scholar.google.com/citations?hl=el&user=TpItDRYAAAAJ&view_op=list_works&sortby=pubdate

Orcid
https://orcid.org/0000-0002-2875-5697

Congresses

Presentations in more than 85 International and National Congresses. Details available upon request.

Foreign languages

Greek: mother tongue
English: fluent
Italian: fluent
Spanish: very good
French: good