

**Vlachonasios Konstantinos (Kostas)**

Professor of Plant Molecular Physiology  
School of Biology, Aristotle University of Thessaloniki, Greece

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**Experience Overview**

Dr. Vlachonasios has more than 20 years of experience working on plant biology. Research interests include issues related to plant molecular physiology, plant growth and production, climate change and food security. KV published numerous papers in peer-reviewed scientific journals and presentations at international scientific meetings and conferences. KV has significant experience conducting literature reviews and synthesizing complex information related to plant physiology and development and responses to environmental cues. Initiate, develop and deliver research on various topics and provide academic leadership for research and teaching. He has demonstrated leadership in managing and supervising research teams and identifying critical areas for research collaboration in plant biology and molecular genetics. Significant experience working in multidisciplinary teams with universities, EU agencies, industry, NGOs, international organizations and the Greek government. Exceptional scientific, analytic and written communication skills and is a trained and accomplished teacher of scientific principles to diverse audiences.

**Education** (*Fluent in English and Greek*)

- 1992 **B.Sc.** Plant Sciences, Agriculture, Aristotle University of Thessaloniki (AUTH), Thessaloniki, Greece.
- 1994 **DPGS.** Horticultural Crops and Technology, Mediterranean Agronomic Institute (MAICh), Chania, Greece
- 1999 **PhD.** Horticulture, Michigan State University (MSU), East Lansing, Michigan, USA. Dissertation: «Prestorage Heat Treatment to Inhibit Chilling Injury and Synchronize Ripening in Tomato (*Lycopersicon esculentum* Mill.) Fruit». Supervisor: Prof. DR Dilley.

**Position Held**

- 2024- to date **Professor**, School of Biology, Department of Botany, AUTH, Thessaloniki, Greece
- 2018-2024 **Associate Professor**, School of Biology, Department of Botany, AUTH, Thessaloniki, Greece
- 2012-2018 **Assistant Professor**, School of Biology, Department of Botany, AUTH, Thessaloniki, Greece
- 2016 **Tenure at Assistant Professor**, School of Biology, Department of Botany, AUTH, Thessaloniki, Greece
- 2013 **Sabbatical**, National Plant Phenomics Centre, Institute of Biological, Environmental and Rural Sciences, Aberystwyth University, Aberystwyth, Wales, UK
- 2012-2013 **Sabbatical**, Carolyn Lynch Laboratory, Department of Biology, University of Pennsylvania, Philadelphia, USA
- 2004-2012 **Lecturer**, School of Biology, Department of Botany, AUTH, Thessaloniki, Greece
- 2002-to date **Visiting Professor**, Department of Horticultural Genetics and Biotechnology, MAICh, Chania, Greece
- 2004 **Lecturer**, Department of Biochemistry and Biotechnology, University of Thessaly, Larissa, Greece
- 2003-2004 **Lecturer**, Department of Agricultural Development, Demokriteio University of Thrace, Orestiada, Greece
- 2003 **Greek Military Service**
- 1999-2002 **Postdoc**, Department of Biochemistry and Molecular Biology, MSU, USA. Project: The role of transcriptional adaptor proteins in the cold acclimation of *Arabidopsis thaliana*. Supervisor: Prof. SJ. Triezenberg.

**Publications in Peer-reviewed Journals (1: Graduate, 2: Undergraduate student) 28 in SCI out of total 36.**

Cited by 1450, h-index=18, i10-index=26, SUM IF<sub>year publication</sub>= 122.82, mean IF<sub>year publication</sub>= 3.96.

1. Balouri C<sup>2</sup>, Poulis S, Tsompani D<sup>2</sup>, Spyropoulou Z<sup>2</sup>, Ketikoglou MC<sup>2</sup>, Kaldis A, Doonan JH, **Vlachonasios KE\*** (2024). GIBBERELLIN SIGNALING THROUGH RGA SUPPRESSES GCN5 EFFECT ON STAMEN ELONGATION OF ARABIDOPSIS FLOWERS. [bioRxiv, 2024.04. 30.591935](https://doi.org/10.1101/2024.04.30.591935)
2. Seira E<sup>1</sup>, Poulaki S<sup>1</sup>, Hassiotis C, Poulis S, **Vlachonasios KE\*** (2023). Gene Expression of Monoterpene Synthases Is Affected Rhythmically during the Day in *Lavandula angustifolia* Flowers. *Physiologia* 3:433-441. <https://doi.org/10.3390/physiologia3030030>
3. Poulis S, Tsilimigka F<sup>1</sup>, Mallioura A<sup>2</sup>, Pappas D, Seira E<sup>1</sup>, Vlachonasios K\* (2022). Histone acetyltransferase GCN5 affects auxin transport during root growth by modulating histone acetylation and gene expression of PINs. *Plants* 11: 3572. <https://doi.org/10.3390/plants11243572> (IF<sub>2022</sub>=4.5)
4. Tsilimigka F<sup>1</sup>, Poulis S, Mallioura A<sup>2</sup>, **Vlachonasios K\*** (2022). ADA2b and GCN5 affect cytokinin signaling by modulating histone acetylation and gene expression during root growth of *Arabidopsis thaliana*. *Plants* 11: 1335; <https://doi.org/10.3390/plants11101335> (IF<sub>2022</sub>=4.5, cited 5)
5. Poulis S, Dadarou D<sup>2</sup>, Gavriilidis M<sup>1</sup>, Mougou N, Kargios N<sup>2</sup>, Maliori V<sup>2</sup>, Hark AT, Doonan JH, **Vlachonasios KE\*** (2021). The transcriptional adaptor protein ADA3a modulates flowering of *Arabidopsis thaliana*. *Cells* 10: 904, <https://doi.org/10.3390/cells10040904>. (IF<sub>2021</sub>: 7.67, cited 2).
6. **Vlachonasios KE** (2021). Histone acetylation: a requirement for petunia floral scent. *J. Exp. Bot.* 72: 3493-3495. (IF<sub>2021</sub>: 7.30, cited by 1).
7. Pyrka I<sup>1</sup>, Stefanaki A, **Vlachonasios K\*** (2021). DNA barcoding of St. John's wort (*Hypericum* spp.) growing wild in North-Eastern Greece. *Planta Med.* 87: 1-9, DOI: 10.1055/a-1379-3249. (IF<sub>2021</sub> 3.01, cited by 1)
8. **Vlachonasios KE\***, Poulis S, Mougou N (2021). The Histone Acetyltransferase GCN5 and the Associated Coactivators ADA2: From Evolution of the SAGA Complex to the Biological Roles in Plants. *Plants* 10: 308; <https://doi.org/10.3390/plants10020308>. (IF<sub>2021</sub>=4.66, cited by 14)
9. Mougou N, Baalbaki B, Doupis G, Kavroulakis N, Poulis S, **Vlachonasios K**, Koubouris G (2020). The effect of low temperature on physiological, biochemical and flowering functions of olive tree in relation to genotype. *Sustainability* 12: 10065; <https://doi.org/10.3390/su122310065>. (IF<sub>2020</sub>=3.25, cited by 5)
10. Poulis S<sup>1</sup>, **Vlachonasios KE\*** (2018). Synergistic action of *GCN5* and *CLAVATA1* in the regulation of gynoecium development in *Arabidopsis thaliana*. *New Phytol.* 220: 593-608 [doi: 10.1111/nph.15303](https://doi.org/10.1111/nph.15303). (IF<sub>2018</sub>=7.30, cited by 28)
11. Kotak J, Saisana M<sup>2</sup>, Gegas V, Pechlivani N<sup>2</sup>, Kaldis A, Papoutsoglou P<sup>2</sup>, Makris A<sup>2</sup>, Burns J, Kendig AL, Kuschner CE, Whitney G, Caiola H, Doonan JH, **Vlachonasios KE\***, McCain ER, Hark AT (2018). The Histone Acetyltransferase GCN5 and the Transcriptional Coactivator ADA2b Affect Leaf Development and Trichome Morphogenesis in *Arabidopsis*. *Planta* 248: 613-28 <https://doi.org/10.1007/s00425-018-2923-9>. (IF<sub>2018</sub>=3.06, cited by 21)
12. Mougou N<sup>1</sup>, Triikka F, Trantas E, Ververidis F, Makris A, Argiriou A, **Vlachonasios KE\*** (2018). Expression of hydroxytyrosol and oleuropein biosynthetic genes are correlated with metabolite accumulation during fruit development in olive, *Olea europaea*, cv. Koroneiki. *Plant Physiol. Biochem.* 128: 41-49. [pdf](https://doi.org/10.1016/j.pbi.2018.04.003) (IF<sub>2018</sub>=3.40, cited by 25)
13. Bush MS, Pierrat O, Nibau C, Mikitova V, Zheng T, Corke FMK, **Vlachonasios K**, Mayberry LK, Browning KS, Doonan JH (2016). The eIF4A RNA helicase associates with CDKA in proliferating plant cells and is modulated by phosphorylation. *Plant Physiol.* 172: 128-140 [http://dx.doi.org/10.1104/pp.16.00435](https://doi.org/10.1104/pp.16.00435). (IF<sub>2016</sub>=6.44, cited by 28)
14. Poulis S<sup>1</sup>, **Vlachonasios KE\*** (2016). Synergistic action of histone acetyltransferase GCN5 and receptor CLAVATA1 negatively affects ethylene responses in *Arabidopsis thaliana*. *J. Exp. Bot.* 67: 905-918 [doi: 10.1093/jxb/erv503](https://doi.org/10.1093/jxb/erv503) (IF<sub>2016</sub>=5.83, cited by 22)
15. Hassiotis CN, Ntana F<sup>2</sup>, Lazari DM, Poulis S<sup>1</sup>, **Vlachonasios KE\*** (2014). Environmental and developmental factors affect essential oil production and quality of *Lavandula angustifolia* during flowering period. *Ind. Crops Prod.* 62: 359-66 [pdf](https://doi.org/10.1016/j.indcrop.2014.07.011) (IF<sub>2014</sub>=2.84, cited by 127)
16. Camargo A, Doonan JH, Papadopoulou D<sup>2</sup>, Spyropoulou Z<sup>2</sup>, **Vlachonasios K**, Gay AP (2014). Objective definition of rosette shape variation using a combined computer vision and data mining approach. *PloS ONE* 9: e98889. [doi: 10.1371/journal.pone.0096889](https://doi.org/10.1371/journal.pone.0096889) (IF<sub>2014</sub>=3.23, cited by 38)
17. Demirbas S<sup>1</sup>, **Vlachonasios K**, Acar O, Kaldis A (2013). The effect of salt stress on *Arabidopsis thaliana* and *Phelipanche ramosa* interaction. *Weed Res.* 53: 452-60. [pdf](https://doi.org/10.1111/weed.12001) (IF<sub>2013</sub>=2.02, cited by 11)

18. Zacharaki V<sup>1</sup>, Benhamed M, Poullos S<sup>1</sup>, Latrasse D, Papoutsoglou P<sup>2</sup>, Delarue M, **Vlachonasios KE\*** (2012). The *Arabidopsis* ortholog of the YEATS domain containing protein YAF9a regulates flowering by controlling H4 acetylation levels at the *FLC* locus. *Plant Sci.* 196: 44-52. [pdf](#) (IF<sub>2012</sub>=2.92, cited by 34)
19. Theodoridis S<sup>1</sup>, Stefanaki A<sup>1</sup>, Tezcan M<sup>1</sup>, Aki C, Kokkini S, **Vlachonasios K\*** (2012). DNA barcoding in native plants of the Labiatae (Lamiaceae) family from Chios Island (Greece) and the adjacent Cesme-Karaburun Peninsula (Turkey). *Mol. Ecol. Resour.* 12: 620-633. [pdf](#) (IF<sub>2012</sub>=7.43, cited by 95)
20. Mougou N<sup>2</sup>, Poullos S<sup>1</sup>, Kaldis A, **Vlachonasios KE\*** (2012). *Arabidopsis thaliana* TBP-Associated Factor 5 is essential for plant growth and development. *Mol. Breeding* 30: 355-366. [pdf](#) (IF<sub>2012</sub>=3.25, cited by 24)
21. **Vlachonasios KE\***, Kaldis A, Nikoloudi A, Tsementzi D<sup>2</sup> (2011). The role of transcriptional coactivator ADA2b in *Arabidopsis* abiotic stress responses. *Plant Signal. Behav.* 6: 1475-1478. [pdf](#) (cited by 20)
22. Kaldis A, Tsementzi D<sup>2</sup>, Tanriverdi O<sup>1</sup>, **Vlachonasios KE\*** (2011). *Arabidopsis thaliana* transcriptional co-activators ADA2b and SGF29a are implicated in salt stress responses. *Planta* 233: 749-762. [pdf](#) (IF<sub>2011</sub>=3.00, cited by 87)
23. Hassiotis CN, Lazari D, **Vlachonasios K** (2010) The effects of habitat type and diurnal harvest on essential oil yield and composition of *Lavandula angustifolia* Mill. *Fres. Environ. Bull.* 19: 1491-1498. [pdf](#) (IF<sub>2010</sub>=0.72, cited by 67)
24. Tezcan M, **Vlachonasios K**, Aki C (2010). DNA barcoding study on *Sideritis trojana* Bornm. An endemic medicinal plant of Ida mountain Turkiye. *Fres. Environ. Bull.* 19: 1352-1355. (IF<sub>2010</sub>=0.72, cited by 12)
25. Stefanaki A, Aki C, **Vlachonasios K**, Kokkini S (2010). Phytogeographic versus political borders: European Union's Lifelong Learning Programme towards a common concept in the East Aegean (E. Greece, W. Turkey). *Fres. Environ. Bull.* 19: 696-703. (IF<sub>2010</sub>=0.72, cited by 8)
26. Cohen R, Schocken J, Kaldis A, **Vlachonasios KE**, Hark AT, McCain ER (2009). The histone acetyltransferase GCN5 affects the inflorescence meristem and stamen development in *Arabidopsis*. *Planta* 230: 1207-1221. [pdf](#) (IF<sub>2009</sub>=3.37, cited by 48)
27. Hark AT, **Vlachonasios KE**, Kanchan A, Pavangadkar KA, Rao S, Gordon H, Adamakis ID, Kaldis A, Thomashow MF, Triezenberg SJ (2009). Two *Arabidopsis* orthologs of the transcriptional coactivator ADA2 have distinct biological functions. *Biochim. Biophys. Acta - Gene Regulatory Mechanisms* 1789: 117-124. [html](#) (IF<sub>2009</sub>=3.48, cited by 68)
28. Ferenczi A, Song J, Tian M, **Vlachonasios K**, Dilley D, Beaudry R (2006). Aroma suppression and recovery following 1-MCP application to apple fruit. *J. Amer. Soc. Hort. Sci.* 131: 691-701. [html](#) (IF<sub>2006</sub>=1.04, cited by 55)
29. **Vlachonasios KE**, Thomashow MF, Triezenberg SJ (2003) Disruption mutations of *Arabidopsis* *ADA2b* and *GCN5* transcriptional adaptor genes dramatically affect plant growth, development and gene expression. *Plant Cell* 15: 626-638. [pdf](#) (IF<sub>2003</sub>=10.68, cited by 397)
30. Kadyrzhanova DK, **Vlachonasios KE**, Verwerdis P, Dilley DR (1998) Molecular cloning of a novel heat induced/chilling tolerance related cDNA in tomato fruit by use of mRNA differential display. *Plant Mol. Biol.* 36: 885-895. [pdf](#) (IF<sub>1998</sub>=2.97, cited by 113)

**Presentations in Scientific Conferences** (1: Graduate, 2: Undergraduate student), Last 8 years from total 126.

1. Poullos S, Balouri C, **Vlachonasios K** (2023) The role of auxin and cytokinin in the synergistic interaction of histone acetyltransferase GCN5 and receptor CLV1 in inflorescence and floral meristem. ACPD 2023, Prague, Czech Republic, June 25-29.
2. Seira E, Poullos S, **Vlachonasios K** (2022) Genetic interaction between histone acetylation writers and histone methylation readers in *Arabidopsis thaliana*. 72<sup>nd</sup> National Conference of the Hellenic Society for Biochemistry and Molecular Biology. Patra, December 2-4.
3. Balouri C, Poullos S, **Vlachonasios K** (2022) The effect of GCN5 in *Arabidopsis thaliana* flower responses to gibberellins. Characterization of the *rga-t2;gcn5-6* double mutant. 72<sup>nd</sup> National Conference of the Hellenic Society for Biochemistry and Molecular Biology. Patra, December 2-4.
4. Kaftantzi MA, Poullos S, **Vlachonasios K** (2022) The effect of triple mutants of transcriptional adaptors in the expression of genes related to the transport and biosynthesis of auxin in *Arabidopsis thaliana*. 72<sup>nd</sup> National Conference of the Hellenic Society for Biochemistry and Molecular Biology. Patra, December 2-4.
5. Poullos S, **Vlachonasios K** (2022) The role of SPT as a mediator of CLV1 and GCN5 interaction in gynoecium development in *Arabidopsis*. SEB 2022 Annual Meeting. Montpellier, France, July 5-8.

6. Poullos S, Mougiou N, **Vlachonasios K** (2021) SPATULA acts synergistically with CLAVATA signalling and GCN5 histone acetyltransferase in gynoecium development in *Arabidopsis thaliana*. SEB 2021 Annual Conference (online) 29 June - 8 July.
7. Tsilimigka F<sup>1</sup>, Poullos S, **Vlachonasios K** (2019) The effect of the histone acetyltransferase GCN5 on auxin signaling and transport at the root growth of *Arabidopsis thaliana*. SEB 2019 Annual Meeting. Seville, Spain. [Selected for oral presentation.](#)
8. Tsilimigka F<sup>1</sup>, Poullos S, Mallioura A<sup>2</sup>, **Vlachonasios KE** (2019) The effect of the histone acetyltransferase GCN5 on auxin signaling and transport at the root growth of *Arabidopsis thaliana*. 41<sup>st</sup> Scientific Conference of HSBS. Katerini. [Best poster presentation award.](#)
9. Psatha A<sup>2</sup>, Poullos S, **Vlachonasios K** (2019) The effect of transcriptional coactivator ADA2b on the expression of genes involved in gibberellin biosynthesis and signaling in the flower of *Arabidopsis thaliana*. 41<sup>st</sup> Scientific Conference of HSBS. Katerini.
10. **Vlachonasios K** (2018) Synergistic action of histone acetylation and CLAVATA signaling in the regulation of gynoecium development in *Arabidopsis thaliana*. UBFS-2018 III. Plant Physiology Symposium with International Participation. Abstract Book. COMU, Canakkale, Turkey. ([Invited Speaker](#))
11. Skoumida A<sup>2</sup>, Poullos S<sup>1</sup>, **Vlachonasios K** (2018) The effect of *Arabidopsis thaliana* GCN5 histone acetyltransferase on gibberellins: production of transgenic plants with reference genes. 40<sup>th</sup> Scientific Conference of Hellenic Association for Biological Sciences. Veroia.
12. Vareltzoglou MR<sup>2</sup>, Poullos S<sup>1</sup>, **Vlachonasios K** (2017) The effect of histone acetyltransferase GCN5 on auxin signaling and transport in the root growth of *Arabidopsis thaliana* in response to high salinity. 15<sup>o</sup> Panellenic Scientific Conference of Hellenic Botanical Society (EBE), Chania.
13. Poullos S<sup>1</sup>, **Vlachonasios KE** (2017) The synergistic action of CLAVATA1 and GCN5 genes in the response to auxin and cytokinin during gynoecium development in *Arabidopsis thaliana*. 39<sup>th</sup> Scientific Conference of Hellenic Association for Biological Sciences. Lamia.
14. Kontogiannis S<sup>2</sup>, **Vlachonasios KE** (2017) The effect of YAF9A/B transcriptional adaptors on *Arabidopsis thaliana* responses to salt stress. 39<sup>th</sup> Scientific Conference of Hellenic Association for Biological Sciences. Lamia.
15. Dadarou D<sup>2</sup>, Topouzis S<sup>1</sup>, Tsakona M<sup>2</sup>, Poullos S<sup>1</sup>, Corke F, Nibau C, Moron-Garcia OM, Gay A, Doonan J, **Vlachonasios KE** (2016) YAF9a is implicated in drought stress responses in *Arabidopsis thaliana*. GARNet 2016: Innovation in the Plant Sciences, Cardiff, UK.
16. Hark AT, Kotak J, Sheikh M, Kendig A, Kuschner C, Whitney G, Makris A<sup>2</sup>, **Vlachonasios K**, Doonan J, McCain E (2016) The histone acetyltransferase GCN5 affects trichome development in *Arabidopsis*. Plant Biology 2016, Austin, TX, USA.
17. Gavriilidis M<sup>1</sup>, Mougiou N<sup>1</sup>, Poullos S<sup>1</sup>, **Vlachonasios KE** (2016) The effect of transcriptional adaptor ADA3a/b on flower mechanism of *Arabidopsis thaliana*. 38<sup>th</sup> Scientific Conference of Hellenic Association for Biological Sciences.
18. Frantzezos G<sup>1</sup>, Vlachonasios KE (2016) The effect of histone acetylation on salt stress responses in *Arabidopsis thaliana*. 38<sup>th</sup> Scientific Conference of Hellenic Association for Biological Sciences. Kavala.
19. Gavriilidis M<sup>1</sup>, Mougiou N<sup>1</sup>, Poullos S<sup>1</sup>, Makris A, **Vlachonasios K** (2015) Examination of the interaction of transcriptional adaptor ADA3b with other putative components of SAGA complex in *Arabidopsis thaliana*. 66<sup>th</sup> National Conference of the Hellenic Society for Biochemistry and Molecular Biology. Athens.
20. **Vlachonasios KE**, Topouzis S<sup>1</sup>, Tsakona M<sup>2</sup>, Corke F, Camargo-Rodriguez A, Doonan J (2015). Phenomics analysis of *Arabidopsis thaliana* chromatin remodeling mutants during drought stress. EPPN, Plant Phenotyping Symposium “Next generation plant phenotyping for trait discovery, breeding and beyond: transnational access to European platforms”. Barcelona, Spain, [pp16](#).
21. Poullos S<sup>1</sup>, **Vlachonasios KE** (2015) CLAVATA signaling and GCN5 histone acetyltransferase affect gynoecium development and gene expression in *Arabidopsis thaliana*. SEB 2015 Annual Meeting, Prague, [pp196](#).

### GenBank Accessions

450 gene accessions in GenBank, including nucleotide sequences from diverse plant organisms

### Inventions

Invention Disclosure # 02-031. Triezenberg SJ, Thomashow MF, and **Vlachonasios KE** (2002). Title: Disruption of a specific gene in *Arabidopsis* confers constitutive freezing tolerance. MSU, East Lansing, MI, USA.

**Memberships and Reviewing activities**

**Member** of American Association for the Advancement of Science (AAAS), American Society of Plant Biologist (ASPB), European Plant Science Organization (EPSO), Contact Point of the Society for Experimental Biology (SEB), Hellenic Society for Biochemistry and Molecular Biology (HSBMB), Treasurer of Hellenic Society for Biological Sciences (HSBS), Hellenic Society of Botany (HSB).

**Associate Editor:** Bioscience Horizons

**Editorial Board:** J. Plant Studies.

**Editor in Special Issue:** Plants

**Reviewer** of 113 Manuscripts for 53 Peer-Reviewed Journals, including:

Genome Res., Trends Plant Sci., Proc. Natl. Acad. Sci. USA, Plant Cell, Mol. Ecol. Res., Plant J., Mol. Plant, Plant Biotech. J., J. Exp. Bot., Front. Cell Dev. Biol., BBA (Gene Regulatory Mechanisms), Sci. Rep., BMC Plant Biol., Front. Genet., Front. Plant Sci., PloS One, Plant Sci., Plant Physiol. Biochem., Funct. Plant Biol., Plants, Plant Diversity etc.

**Reviewer** of Grant Proposals including EVOL-INCO 2011-2014 (Republic of Serbia). FCT 2012 (Republic of Portugal). CONICYT-PCI 2014 (Republic of Chile). ARIMNet2 2014-2015. ERA-Net. H2020-SFS-03-2016, H2020-MSCA-IF-2016 – 2020, EDBM34-2017-2019, RESEARCH-CREATE-INNOVATE-2017, ELIDEK 2017-2019, EPPN2020, HORIZON-MSCA – PF 2021-2023, HORIZON-MSCA – DN 2021

**Teaching****A. Undergraduate Studies Program**

*AUTh, School of Biology*

B.3.13. “Plant Physiology”, 6 ECTS, 3<sup>rd</sup> semester, (2004-present).

GMB.6.9. “Animal and Plant Biotechnology”, 6 ECTS, 6<sup>th</sup> semester, (2004-present).

BPB.8.5. “Applied Botany”, 6 ECTS, 8<sup>th</sup> semester, (2014-present)

GE0101 “Dissertation”, 18 ECTS, 8<sup>th</sup> semester, (2005-present);

Supervisor of 62 students, more than 50% continued for MSc or PhD programs abroad (UK, USA, Netherlands, Sweden)

GE0201 “Internship”, 12 ECTS, 8<sup>th</sup> semester, (2006-present);

Supervisor of 39 students

GE0203 “Internship in Education”, 6 ECTS, 8<sup>th</sup> semester (2020-present);

Supervisor of 3 students.

LLP-Erasmus Placement “On-site training”, 18 ECTS, (2009-present);

Supervisor of 7 students from Turkey and Germany.

*AUTh, School of Pharmacy*

N43. “Biotechnology of medicinal plants”, 6 ECTS, 8<sup>th</sup> semester, (2017-2019).

**B. Postgraduate Studies Program**

*Conservation of Biodiversity and Sustainable Exploitation of Native Plants (BNP), School of Biology, AUTh, Greece*

BNP 2.8 Molecular Identification of Plants, 2 ECTS, (2008-2018)

BNP 1.4 Scientific Paper Retrieval, 2 ECTS, (2009-2018)

BNP 7.5 Proposals Writing, 2 ECTS, (2011-2012)

BNP 8.1 Advanced Laboratory Practical's, 12 ECTS, (2009-2018)

BNP 2.3 Cultivation and Conservation of Plant material, 2 ECTS (2017-2018)

*Applied Genetics and Biotechnology (AGB), School of Biology, AUTh, Greece*

G5. Genetic Engineering-Cloning in Plasmids (2007-2014)

*Applied Biology (AB): Biotechnology-Molecular and Microbial Analysis of Food and Products, School of Biology, AUTh, Greece*

AB.0.1.1. Laboratory Techniques and Biological Applications (2014-present)

AB.0.1.4. Current Topics in Biosciences (2014-2016, 2020-2022)

AB.0.1.5 Transferable skills (2019-present)

*Department of Horticultural Genetics and Biotechnology, MAICh, Greece*

HOB.534 Arabidopsis Genetics (2002-present), Offered in English.

**Supervisor of MSc Thesis**

1. *Theodoropoulos Konstantinos* (2009). The effect of transcriptional adaptor proteins ADA2a, ADA2b and GCN5 in plant light responses. AGB
2. *Zacharaki Vasiliki* (2009). The role of transcriptional adaptors *AtYAF9a/b* in flowering mechanisms of *Arabidopsis thaliana*. AGB
3. *Poulios Stylianos* (2011). The combinatory action of GCN5 acetyltransferase and the CLV1 receptor affects ethylene signaling in *Arabidopsis thaliana*. AGB
4. *Theodoridis Spyros* (2011). DNA barcoding in native plants of the Labiatae (Lamiaceae) family from Chios Island (Greece) and the adjacent Çeşme-Karaburun Peninsula (Turkey). BNP
5. *Kalfagianni Agni* (2012). DNA barcoding in native plants: Use of DNA barcodes ITS, *matK*, and *trnH-psbA* to identify native plants of genus *Mentha* from Chios and the adjacent Çeşme-Karaburun. BNP
6. *Topouzis Stergios* (2015). Phenomic analysis of *Arabidopsis* chromatin remodeling mutants in response to drought stress. AGB
7. *Pegiou Kalliopi* (2016). Analysis of the metabolic pathway of arginine in tomato varieties using genomic approaches. AB
8. *Gavriilidis Maxim* (2016). The effect of transcriptional adaptors ADA3a/b in flowering mechanisms of *Arabidopsis thaliana*. AB
9. *Baltsavia Ismini* (2018). Use of R programming language on processing of “DNA barcoding” molecular data from species of genus *Sideritis*. BNP
10. *Pyrka Ioanna* (2020). Identification of plant from genus *Hypericum* using DNA barcoding. BNP
11. *Tsilimiga Foteini* (2020). The effect of transcriptional adaptor proteins GCN5 and ADA2b on auxin and cytokinin signaling during root growth of *Arabidopsis thaliana*. AB
12. *Lykoudi Elisabet* (2022). Molecular identification of fresh oregano and thyme sold in Greek Food Market. AB
13. *Tziatzia Lydia* (2022). Development of a synthetic transcription system and exploitation of a plant portable activation motif in the *Saccharomyces cerevisiae*. AB
14. *Patanou Victoria* (2022) Development of genetic engineering tools for the development of *LIP2* overproduction strains of *Y. lipolytica* in glycerol based culture conditions.
15. *Seira Eleftheria* (2023). Genetic interaction between histone acetylation writers and histone methylation readers in *Arabidopsis thaliana*. AB
16. *Karroki Eleni* (start on 2021)
17. *Mpalouri Christina* (start on 2022)
18. *Mallioura Areti* (start on 2022)
19. *Tsiligkaki Christina* (start on 2022)
20. *Kaftatzi Maria Katerina* (start on 2023)

**Co-supervision of postgraduate students**

1. *Radu Talida* (2004). Functional Analysis of *Arabidopsis* Prolyl 4-hydroxylase 7 T-DNA Mutants. Supervisor: Kalaitzis P. MAICH
2. *Codreanu Corina-Mirela* (2006). The expression of *HSP90-1* gene under low concentration oxygen and the biological role of *P4H7* gene in *Arabidopsis thaliana*. Supervisor: Kalaitzis P. MAICH
3. *Younesi Erfan* (2008). In silico analysis of the prolyl 4-hydroxylase gene family and functional characterization of the *p4h4* T-DNA knockout mutants in *Arabidopsis thaliana*. Supervisor: Kalaitzis P. MAICH

**Supervisor of PhD. Dissertation**

1. *Poulios Stylianos* (2018). The interaction of GCN5 histone acetyltransferase and CLV1 receptor in *Arabidopsis thaliana* development.
2. *Mougiou Niki* (2019). Genes involved in the biosynthesis of hydroxytyrosol in olive fruit and heterologous expression in *Arabidopsis thaliana* and *Saccharomyces cerevisiae*.
3. *Poulaki Stefania* (start on June 2020)
4. *Papadimitriou Alexandros* (start on October 2020).
5. *Tersendis Christos* (start on October 2023)

External Examiner of 22 MSc Theses and 3 PhD Dissertations

**Supervision of Postdoctoral Fellowships**

1. Dr. Nikoloudi Adriana
2. Dr. Kaldis Athanasios
3. Dr. Poullos Stylianos

### **Fellowships and Awards**

- |           |  |
|-----------|--|
| 1994-1997 | State Scholarships Foundation, Republic of Greece  |
| 1997      | Travel Award, American Society for Horticultural Sciences  |
| 1998      | Travel Award, American Society of Plant Physiologists  |
| 1998      | Dissertation Completion Fellowship, College of Agriculture and Natural Resources, MSU, USA.      |
| 2019      | Award for Best Poster Presentation: Tsilimigka F, Poullos S, Mallioura A, Vlachonasios KE, HSBS. |

### **Research projects (Supervisor and Participation)**

1. Gynoecium Development in Plants: Molecular and hormonal aspects of histone acetylation and CLAVATA signaling interaction. ELIDEK. Principal Investigator (PI): **Vlachonasios KE.** (2022-2024)
2. The role of transcriptional adaptors GCN5 and ADA2b in *Arabidopsis thaliana* responses to brassinosteroids. ELIDEK for PhD studies of Papadimitriou Alexandros. (2022-2024).
3. Mechanisms of Floral Gynoecium Development. How does the transcription factor SPATULA affect the synergistic action of histone acetylation and CLAVATA signaling in gynoecium development of *Arabidopsis thaliana*? Ministry of Development and Affairs. Principal Investigator (PI): **Vlachonasios KE.** (2020-2021)
4. Aroma Distil. RESEARCH-CREATE-INNOVATE. Principal Investigator (PI): Asimopoulou A (2018-2020)
5. Plant Up. Upgrading the plant capital” (MIS 5002803) “Reinforcement of the Research and Innovation Infrastructure” (NSRF 2014-2020). Principal Investigator (PI): Asimopoulou A (2018-2020).
6. Aromatic Biodiversity of Natural Habitats. ARISTEIA II. Ministry of Education, Lifelong Learning and Religious Affairs, Greece. PI: Kokkini S. (2014-15)
7. Phenomics analysis of *Arabidopsis thaliana* MAGIC mapping population and chromatin remodeling mutants during drought stress. European Plant Phenotyping Network. PI: **Vlachonasios KE.** (2013)
8. Metabolic Engineering of model biofactories by recruiting the genetic resources of plants and microorganisms for the heterologous production of hydroxytyrosol with direct application in plant protection. Thales, Ministry of Education, Lifelong Learning and Religious Affairs, Greece. PI: Ververidis P. (2012-15)
9. Co-evolution, structure and function of ADA2 transcriptional adaptor proteins. Hungary – Greece, Joint research and technology programs, Ministry of Development, General Secretariat for Research and Technology (GSRT), Greece. PI: **Vlachonasios KE.** (2012-14)
10. Major Allergens in apple and olive fruits. SEE-ERA-NET Pilot Joint Call. PI: **Vlachonasios KE.** (2007-08)
11. Histone Acetylation in Regulation of Plant Development. France – Greece, Joint research and technology programs, Ministry of Development, GSRT, Greece. PI: **Vlachonasios KE.** (2006-08)
12. The role of transcriptional coactivator GCN5 in *Arabidopsis* growth and development. PYTHAGORAS, Ministry of Education, EPEAEK II, Greece. PI: **Vlachonasios KE.** (2004-06)
13. Molecular mechanisms of *Arabidopsis* plants to drought and salt tolerance: a study of the role of transcriptional adaptor protein ADA2. Spain – Greece, Joint research and technology programs, Ministry of Development, GSRT, Greece. PI: Moustakas M. (2004-06)
14. The role of transcriptional adaptor proteins in the cold acclimation of *Arabidopsis thaliana*. National Science Foundation (NSF), MCB 9728462, USA. PIs: Thomashow MF and Triezenberg SJ. (1999-2002)
15. Structure-function analysis of ACC oxidase by site-directed mutagenesis. NSF, USA. PI: Dilley DR. (1995-98)
16. The effect of pre-storage heat treatment on chilling injury and fruit ripening of tomato fruits (US-Israel Binational Agricultural Research and Development Fund No. IS-2179). PI: Dilley DR. (1994-98)