



Surname:	Flemetakis
Name:	Emmanouil
Place of Birth:	Chania, Crete
Date of Birth:	30-07-1971
Education:	<p>1996: MSc in Agricultural Biotechnology Department of Agricultural Biotechnology, Agricultural University of Athens.</p> <p>2002: PhD in Plant Molecular Biology Department of Agricultural Biotechnology, Agricultural University of Athens.</p>
Appointments:	<p>2002-2004: PostDoc Researcher in the laboratory of Molecular Biology, Agricultural Biotechnology, Agricultural University of Athens</p> <p>2004-Jan 2010: Lecturer in the Department of Agricultural Biotechnology, Agricultural University of Athens.</p> <p>Jan 2010-April 2017: Assistant Professor in the Department of Agricultural Biotechnology, Agricultural University of Athens.</p> <p>April 2017-August 2022: Associate Professor in the Department of Agricultural Biotechnology, Agricultural University of Athens.</p> <p>August 2022-present: Professor in the Department of Agricultural Biotechnology, Agricultural University of Athens.</p> <p>Iera Odos 75, 118 55 Botanikos Athens, Greece Tel: +30-210-5294343 Fax: +30-210-5294314 E-mail: mflem@hua.gr</p>

Short Description

Prof. Emmanouil Flemetakis is the Vice-Rector of the Agricultural University of Athens (AUA), and a member of the Laboratory of Molecular Biology in the Department of Biotechnology. His research expertise includes state of the art molecular biology, biochemical and biotechnology methods and applications, including genomic, metagenomic, transcriptomic and metabolomic platforms, protein-protein interaction methods, and plant and microbe genetic transformation technologies. During the past years, the group of Dr. E. Flemetakis has been working on the study of the genetic, molecular and biochemical mechanisms governing algae productivity and quality, with the goal of developing custom high-value application-based algae biomass. To this purpose, his group is actively working on gaining a deeper understanding into the adaptation, regulation, and metabolic manipulation of algae metabolism for the enhanced production of high-value target metabolites. During and after his PhD thesis, he has worked as a visiting researcher and Professor in several research institutes including the Max Plank Institute for Molecular Plant Physiology (Golm, Germany), the John Innes Research Centre, Department of Metabolic Biology (Norwich, UK), the Samuel Noble Foundation, Plant Biology Division (Ardmore, Oklahoma, USA), etc. He has also coordinated or actively participated in more than 25 national and international research projects. Dr. E. Flemetakis has published more than 120 research papers in refereed journals and 150 abstracts in national and international conferences. He is a member of the editorial board of the Plant Biology and Marine Biotechnology journals, and active reviewer in many high impact scientific journals (Plant Physiology, New Phytology etc)

Teaching Experience

Under-graduate Level courses:

- Biochemistry,
- Recombinant DNA
- Technology, Metabolic Engineering
- Environmental Biotechnology, Molecular Plant-Microbe Interactions

Post-graduate Level courses:

- Genomics
- Plant-microbe Interactions
- Biochemistry of Natural Products

Member of:

- Founding member and vice-president of the Hellenic Society of Agricultural Biotechnology (2006-present).
- Member of the Hellenic Biochemical and Molecular Biology Society (2002-present).
- Member of the American Society of Plant Biologists (2008-present)
- Member of the American Society for Microbiology (2008-present)

Editorial appointments, and reviewer in scientific journal

- Member of the Editorial Board of the Plant Biology journal
- Plant Physiology, Planta, New Phytologist, Molecular Plant-Microbe Interactions, BBA, FEBS Letters, etc

II. SELECTED RESEARCH PROJECTS

1. Member of the research team in the Marie Curie RTN project “INTENSIFYING TRAINING IN EUROPE ON GENOMIC RESEARCH ACTIVITY IN LEGUMES – INTEGRAL” 2002-2006.
2. Principal investigator in the national research project “Studies on the molecular and biochemical mechanisms involved in nodule organogenesis and function”- Pythagoras II 2005 – 2007.
3. Member of the national research team «Stomatal organogenesis and development of the photosynthetic apparatus. Climatic change effects. Molecular, ecophysiological and anatomical studies”- Pythagoras II 2005 – 2007.
4. Principal investigator in Greek-France bilateral project “Molecular and biochemical characterization of monosaccharide transporters expressed in nitrogen fixing nodules” 2005-2008.
5. Principal investigator in Greek-Germany exchange research project IKY-DAAD “Studies on the carbon cycle during the symbiotic interaction of the model legume *Lotus japonicus* and the rhizobium *Mesorhizobium loti*” 2009-2011.
6. Member of the research team of the national project “Biotechnology for the exploitation of microalgae – BioExplore”- Cooperation. 2007-2013.
7. Principal investigator in FP7-PEOPLE-2010-IRSES project AQUAPHAGE—Network for the development of phage therapy in aquaculture PIAPP-GA-2010-269175. 2010-2013
8. Member of the research team national project “Research for the improvement of the efficiency of breeding programs for the production of sunflower seeds” - Cooperation. 2007-2013.

9. Principal investigator in Greek national project Excellence II – « Studying the Hypoxia-Related Regulation and the Biochemical Role of Genes Involved in Symbiotic Nitrogen Fixation in Legume Root Nodules. – NodHypSNF», 2014-2015.
10. Coordinator of the FP7-PEOPLE-2011-IAPP project “Exploitation of microalgae diversity for the development of novel high added-value cosmeceuticals-AlgaeCom” PIAPP-GA-2011-286354. 2011-2014.
11. Principal investigator in H2020-PEOPLE-2015-RISE project “Development of Microalgae-based novel high added-value products for the Cosmetic and Aquaculture industry – Algae4A-B”. 2016-2019.
12. Member of the research team in H2020-PEOPLE-2019-RISE project “Optimization of novel value chains for fish and seafood by developing an integrated sustainable approach for improved quality, safety and waste reduction – ICHTHYS”. 2020-2023.
13. Coordinator of the «Sustainable technologies and methodologies to improve quality and extend product shelf life in the Mediterranean agro-food supply chain-FRUALGAE» PRIMA 2019. 2020-2023.
14. Member of the research team of «A significant step forward for the European University for Smart Urban Coastal Sustainability», ERASMUS-EDU-2022-EUR-UNIV-1.
15. Member of the research team «European Strategic alliance for research, development and innovation on medical countermeasures against CBRN threats», EDF-2022-FPA-MCBRN-MCM.
16. Principal investigator of the project “Time-Resolved Phageomics: Exploring the potential of phage therapy in allergy and asthma” under “Basic Research Financing (Horizontal Support of all Sciences)”, which is included in “Promote Research and Innovation” of the National Recovery and Resilience Plan (“Greece 2.0”).
17. Coordinator of the project «Synergetic beneficial microbial consortia for improving plant productivity and adaptation in challenging environments» Research and Innovation” of the National Recovery and Resilience Plan (“Greece 2.0”).
18. Principal investigator of the project «Integrated emerging approaches for joint protection and restoration of Natural Lakes in the spirit of European life heritage support (ProCleanLakes)», HORIZON-MISS-2023-OCEAN-01-04. 2024-2027.
19. Member of the research team of the project HORIZON-PEOPLE-MCSA-2023-SE project “Sustainable packaging solutions for food and cosmetics based on aquatic biomass and side-streams – AQUAPACK”. 2025-2028.

II. LIST OF SELECTED PUBLICATIONS

1. Kavroulakis, N., Flemetakis, E., Aivalakis, G. and Katinakis P. (2000). Carbon metabolism in developing soybean nodules: the role of carbonic anhydrase. *Molecular Plant Microbe Interactions* 13:14-22.
2. Flemetakis, E., Kavroulakis, N., Quaedvlieg, N., Spaink, H., Dimou, M., Roussis, A. and Katinakis P. (2000). *Lotus japonicus* contains two distinct ENOD40 genes which are expressed in symbiotic and non-symbiotic tissues including embryos. *Molecular Plant-Microbe Interactions* 13: 987-994.
3. Flemetakis, E., Agalou, A., Kavroulakis, N., Dimou, M., Martsikovskaya, A., Slater, A., Spaink, H., Roussis, A. and Katinakis P. (2002). *Lotus japonicus* gene *Ljsbp* is highly conserved among plants and animals and encodes a homologue to the mammalian selenium-binding proteins. *Molecular Plant-Microbe Interactions* 15:313-22.
4. Kavroulakis, N., Flemetakis, E., Aivalakis, G., Dahiya, P., Brewin, N. J., Fasseas, K., Hatzopoulos, P. And Katinakis, P. (2003). Tissue distribution and subcellular localization of carbonic anhydrase in mature soybean root nodules indicates a role in CO₂ diffusion. *Plant Physiology and Biochemistry* 41:479-484.

5. Flemetakis, E., Dimou, M., Cotzur, D., Efrose, R. C., Aivalakis, G., Colebatch, G., Udvardi, M. and Katinakis P. (2003). A sucrose transporter, *LjSUT4*, is up-regulated during *Lotus japonicus* nodule development. *Journal of Experimental Botany* 54:1789-1791.
6. Roussis, A., Flemetakis, E., Dimou, M., Kavroulakis, N., Venieraki, A., Aivalakis, G. and Katinakis, P. (2003). Nodulin PvNOD33, a putative phosphatase whose expression is induced during *Phaseolus vulgaris* nodule development. *Plant Physiology and Biochemistry* 41:719-725.
7. Flemetakis, E., Dimou, M., Cotzur, D., Aivalakis, G., Efrose, R. C., Kenoutis, C., Udvardi, M. and Katinakis, P. (2003). A *Lotus japonicus* β -type carbonic anhydrase gene expression pattern suggests distinct physiological roles during nodule development. *Biochimica et Biophysica Acta - Gene Structure and Expression* 1628:186-194.
8. Aivalakis, G., Dimou, M., Flemetakis, E., Plati, F., Katinakis, P. and Drossopoulos, J. B. (2004). Immunolocalization of carbonic anhydrase and phosphoenolpyruvate carboxylase in developing seeds of *Medicago sativa*. *Plant Physiology and Biochemistry* 42:181-186.
9. Gaude, N., Tippmann, H., Flemetakis, E., Katinakis, P., Udvardi, M. and Dormann, P. (2004). The galactolipid digalactocyclodiacetylglycerol accumulates in the peribacteroid membrane of nitrogen-fixing nodules of soybean and *Lotus*. *Journal of Biological Chemistry* 279:34624-34630.
10. Flemetakis, E., Efrose, R. C., Desbrosses, G., Dimou, M., Delis, C., Aivalakis, G., Udvardi, M. and Katinakis, P. (2004). Induction and spatial organization of polyamine biosynthesis during nodule development in *Lotus japonicus*. *Molecular Plant-Microbe Interactions* 17:1283-1293.
11. Delis, C., Dimou, M., Efrose, R.C., Flemetakis, E., Aivalakis, G. and Katinakis P. (2005). Ornithine decarboxylase and arginine decarboxylase gene transcripts are co-localized in developing tissues of *Glycine max* etiolated seedlings. *Plant Physiology and Biochemistry* 43:19-25.
12. Grønlund, M., Roussis, A., Flemetakis, E., Quaedvlieg, N. E. M., Schlaman, H. R. M., Umehara, Y., Katinakis, P., Stougaard, J. and Spaink, H. P. (2005). Analysis of Promoter Activity of the Early Nodulin *Enod40* in *Lotus japonicus*. *Molecular Plant-Microbe Interactions* 18: 414-427.
13. Tjamos, S. E., Flemetakis, E., Paplomatas, E. J. and Katinakis P. (2005). Induction of Resistance to *Verticillium dahliae* in *Arabidopsis thaliana* by the Biocontrol Agent K-165 and Pathogenesis-Related Proteins Gene Expression. *Molecular Plant-Microbe Interactions* 18: 555-561.
14. Dimou, M., Flemetakis, E., Delis, C., Aivalakis, G., Spyropoulos, K.G. and Katinakis, P. (2005). Co-expression of two sugar transporters in primary and lateral roots of etiolated *Glycine max* seedlings. *Plant Growth Regulation* 45: 259-266.
15. Dimou, M., Flemetakis, E., Delis, C., Aivalakis, G., Spyropoulos, K.G. and Katinakis, P. (2005). Genes coding for a putative cell-wall invertase and two putative monosaccharide/H⁺ transporters are expressed in roots of etiolated *Glycine max* seedlings. *Plant Science* 169: 798-804.
16. Delis, C., Dimou, M., Flemetakis, E., Aivalakis, G. and Katinakis, P. (2006). A root- and hypocotyl-specific gene coding for copper-containing amine oxidase is related to cell expansion in soybean seedlings. *Journal of Experimental Botany* 57:101-111.
17. Flemetakis, E., Efrose, R.C., Ott, T., Stedel, S., Aivalakis, G., Udvardi, M.K. and Katinakis, P. (2006). Spatial and Temporal Organization of Sucrose Metabolism in *Lotus japonicus* Nitrogen-Fixing Nodules Suggests a Role for the Elusive Alkaline/Neutral Invertase. *Plant Molecular Biology* 62:53-69.
18. Efrose, R.C., Flemetakis, E., Sfichi, L., Stedel, C., Kouri, E.D., Udvardi, M.K., Kotzabasis, K. and Katinakis P. (2008). Characterization of spermidine and spermine synthases in *Lotus japonicus*: induction and spatial organization of polyamine biosynthesis in nitrogen fixing nodules. *Planta* 228:37-49.

19. Rogato, A., D'Apuzzo, E., Barbulova, A., Omrane, S., Stedel, C., Simon-Rosin, U., Katinakis, P., Flemetakis, M., Udvardi, M. and Chiurazzi, M. (2008). Tissue-specific down-regulation of *LjAMT1;1* compromises nodule function and enhances nodulation in *Lotus japonicus*. *Plant Molecular Biology* 68:585-595.
20. Ott, T., Sullivan J., James, E. K., Flemetakis, E., Günther, C., Gibon, Y., Ronson, R. and Udvardi, M. (2009). Absence of symbiotic leghemoglobins alters bacteroid and plant cell differentiation during development of *Lotus japonicus* root nodules. *Molecular Plant-Microbe Interactions* 22:800-808.
21. Kalloniati, C., Tsikou, D., Lampiri, V., Fotelli, M. N., Rennenberg, H., Chatzipavlidis, I., Fasseas, C., Katinakis, P. and Flemetakis, E. (2009). Characterization of a *Mesorhizobium loti* α -type carbonic anhydrase and its role in symbiotic nitrogen fixation. *Journal of Bacteriology* 191:2593-2600.
22. Andreadeli, A., Flemetakis, E., Axarli, I., Dimou M., Udvardi, M.K., Katinakis, P. and Labrou, N.E. (2009). Cloning and Characterization of *Lotus japonicus* Formate Dehydrogenase: a Possible Correlation with Hypoxia. *Biochimica et Biophysica Acta – Proteins and Proteomics*. 1794:976-984.
23. Tani, E., Polidoros, A.N., Flemetakis, E., Stedel, C., Kalloniati, C., Demetriou, K., Katinakis, P. and Tsafaris, A.S. (2009). Characterization and expression analysis of AGAMOUS-like, SEEDSTICK-like, and SEPALLATA-like MADS-box genes in peach (*Prunus persica*) fruit. *Plant Physiology and Biochemistry* 47:690-700.
24. Tsiplakou, E., Flemetakis, E., Kalloniati, C., Papadomichelakis, G., Katinakis, P. and Zervas, G. Sheep and goats differences on CLA and fatty acids milk fat content in relation with mRNA stearoyl-CoA desaturase and lipogenic genes expression in their mammary gland. *Journal of Dairy Research* 76:392-401.
25. Kouri, E.D., Labrou, N.E., Garbis, S.D., Kalliampakou, K.I., Stedel, C., Dimou, M., Udvardi, M.K., Katinakis, P. and Flemetakis E. (2009). Molecular and Biochemical characterization of the Parvulin-type PPIases in *Lotus japonicus*. *Plant Physiology* 150:1160-1173.
26. Welham, T., Pike, P., Horst I., Flemetakis, E., Katinakis, P., Kaneko, T., Sato, S., Tabata, T., Perry, J., Parniske, M. and Wang, T.L. (2009). A cytosolic invertase is required for normal growth and cell development in the model legume, *Lotus japonicus*. *Journal of Experimental Botany* 60:3353-3365.
27. Dimou, M., Paunescu, A., Aivalakis, G., Flemetakis, E. and Katinakis, P. (2009). Co-localization of carbonic anhydrase and phosphoenol-pyruvate carboxylase and localization of pyruvate kinase in roots and hypocotyls of etiolated *Glycine max* seedlings. *International Journal of Molecular Sciences* 10:2896-2910.
28. Sfetsas, C.C., Milios, L., Skopelitou, K., Venieraki, A., Todou, R., Flemetakis, E., Katinakis, P. and Labrou, N.E. (2009). Characterization of 1,2-dibromoethane-degrading haloalkane dehalogenase from *Bradyrhizobium japonicum* USDA110. *Enzyme and Microbial Technology* 45:397-404.
29. Fasseas, M.K., Tsikou, D., Flemetakis, E. and Katinakis, P. (2010). Molecular and biochemical analysis of the β class carbonic anhydrases in *Caenorhabditis elegans*. *Molecular Biology Reports* 37:2941-2950.
30. Fasseas, M.K., Tsikou, D., Flemetakis, E. and Katinakis, P. (2011). Molecular and biochemical analysis of the α class carbonic anhydrases in *Caenorhabditis elegans*. *Molecular Biology Reports* 38:1777-1785.
31. Kalliampakou, K.I., Kouri, E.D., Boleti, H., Pavli, O., Maurousset, L., Udvardi, M.K., Katinakis, P., Lemoine, R. and Flemetakis, E. (2011). Cloning and functional characterization of *LjPLT4*, a plasma membrane xylitol H $^{+}$ -symporter from *Lotus japonicus*. *Molecular Membrane Biology* 28:1-13.
32. Tsikou, D., Stedel, C., Kouri, E.D., Udvardi, M.K., Wang, T.L., Katinakis, P., Labrou, N.E., and Flemetakis, E. (2011). Characterization of two novel nodule-enhanced α -type carbonic anhydrases from *Lotus japonicus*. *Biochimica et Biophysica Acta – Proteins and Proteomics* 1814:496-504.
33. Tani, E., Tsaballa, A., Stedel, C., Kalloniati, C., Papaefthimiou, D., Polidoros, A., Darzentas, N., Ganopoulos, I., Flemetakis, E., Katinakis, P. and Tsafaris, A. (2011). The study of a SPATULA-like bHLH transcription

- factor expressed during peach (*Prunus persica*) fruit development. *Plant Physiology and Biochemistry* 49:654-663.
34. Tsiplakou, E., Flemetakis, E., Kalloniati, C., Zervas, G. (2011). Differences in mRNA lipogenic gene expression in the subcutaneous adipose tissue of sheep and goats under the same dietary treatments. *Small Ruminant Research* 99:110-115.
 35. Fotelli, M.N., Tsikou, D., Kolliopoulou, A., Aivalakis, G., Katinakis, P., Udvardi, M.K., Rennenberg, H. and Flemetakis, E. (2011). Nodulation enhances dark CO₂ fixation and recycling in the model legume *Lotus japonicus*. *Journal of Experimental Botany* 62: 2959–297.
 36. Skopelitou, K., Muleta, A.W., Pavli, O., Skaracis, G.N., Flemetakis, E., Papageorgiou, A.C. and Labrou, N.E. (2012). Overlapping protective roles for glutathione transferase gene family members in chemical and oxidative stress response in *Agrobacterium tumefaciens*. *Functional & Integrative Genomics* 12:157-172.
 37. Kapazoglou, A., Engineer, C., Drosou, V., Kalloniati, C., Tani, E., Tsaballa, A., Kouri, E.D., Ganopoulos, I., Flemetakis, E. and Tsaftaris A.S. (2012). The study of two barley type I-like MADS-box genes as potential targets for epigenetic regulation during seed development. *BMC Plant Biology* 12:166-188.
 38. Tsikou, D., Kalloniati, C., Fotelli, M.N., Nikolopoulos, D., Katinakis, P., Udvardi, M.K., Rennenberg, H. and Flemetakis, E. (2013). Cessation of photosynthesis in *Lotus japonicus* leaves leads to reprogramming of nodule metabolism. *Journal of Experimental Botany* 64:1317-1332.
 39. Diamantopoulos, P.D., Aivalakis, G., Flemetakis, E. and Katinakis, P. (2013). Expression of three β-type carbonic anhydrases in tomato fruits. *Molecular Biology Reports* 40:4189-4196.
 40. Skopelitou, K., Georgakis, N., Efrose, R., Flemetakis, E. and Labrou, N.E. (2013). Sol-gel immobilization of haloalkane dehalogenase from *Bradyrhizobium japonicum* for the remediation 1,2-dibromoethane. *Journal of Molecular Catalysis B: Enzymatic*. 97: 5-11.
 41. Tsiplakou, E., Flemetakis, E., Kouri, E.D., Kalloniati, C., Sotirakoglou, K. and Zervas, G. (2013). Differences in urokinase plasminogen activator (u-PA) and its receptor (u-PAR) genes expression in subcutaneous adipose tissue between sheep and goats. *Livestock Science* 157: 345-350.
 42. Pavli, O.I., Vlachos, C.E., Kalloniati, C., Flemetakis, E. and Skaracis, G.N. (2013). Metabolite profiling reveals the effect of drought on sorghum (*Sorghum bicolor* L. Moench) metabolism. *Plant OMICS* 6:371-376.
 43. Vullo, D., Flemetakis, E., Scozzafava, A., Capasso, C. and Supuran, C.T. (2014). Anion inhibition studies of two α-carbonic anhydrases from *Lotus japonicus*, LjCAA1 and LjCAA2. *Journal of Inorganic Biochemistry* 136:67-72.
 44. Tsiplakou, E., Flemetakis, E., Kouri, E.-D., Sotirakoglou, K. and Zervas, G. (2015) The effect of long term under- and over-feeding on the expression of genes related to glucose metabolism in mammary tissue of sheep. *Journal of Dairy Research* 82:228-235.
 45. Tsiplakou, E., Flemetakis, E., Kouri, E.-D., Karalias, G., Sotirakoglou, K. and Zervas, G. (2015). The effect of long term under-and over-feeding on the expression of six major milk protein genes in the mammary tissue of sheep *Journal of Dairy Research* 82:257-264.
 46. Tsiplakou, E., Flemetakis, E., Kouri, E.-D., Sotirakoglou, K., Zervas, G. (2015). The effect of long term under- and over-feeding on the expression of genes related to lipid metabolism in mammary tissue of sheep. *Journal of Dairy Research* 82:107-112.
 47. Tsiplakou, E., Flemetakis, E., Kouri, E.D. and Zervas, G. (2015). The effect of long term under- and over-feeding on the expression of genes related to lipid metabolism in the mammary tissue of goats. *Livestock Science* 173:32-37.

48. Kissoudis C., Kalloniati C., Pavli O., Flemetakis E., Madesis P., Labrou N.E., Skaracis G., Tsafaris A., Nianioti-Obeidat I. (2015). Stress-inducible GmGSTU4 shapes transgenic tobacco plants metabolome towards increased salinity tolerance. *Acta Physiologiae Plantarum* 37:102.
49. Kissoudis, C., Kalloniati, C., Flemetakis, E., Madesis, P., Labrou, N.E., Tsafaris, A. and Nianioti-Obeidat, I. (2015). Maintenance of metabolic homeostasis and induction of cytoprotectants and secondary metabolites in alachlor-treated GmGSTU4-overexpressing tobacco plants, as resolved by metabolomics. *Plant Biotechnology Reports* 9:287-296.
50. Kalloniati, C., Krompas, P., Karalias, G., Udvardi, M.K., Rennenberg, H., Herschbach, C. and Flemetakis, E. (2015). Nitrogen-fixing nodules are an important source of reduced sulfur, which triggers global changes in sulfur metabolism in *Lotus japonicus*. *Plant Cell* 27:2384-2400.
51. Labrou, N.E., Papageorgiou, A.C., Pavli, O., Flemetakis, E. (2015). Plant GSTome: Structure and functional role in xenome network and plant stress response. *Current Opinion in Biotechnology* 32:186-194.
52. Skliros, D., Kalatzis, P.G., Katharios, P. and Flemetakis, E. (2016) Comparative functional genomic analysis of two *Vibrio* phages reveals complex metabolic interactions with the Host Cell. *Frontiers in Microbiology* 14(7):1807.
53. Tsiplakou, E., Flemetakis, E., Kouri, E.-D., Karalias, G., Sotirakoglou, K. and Zervas, G. (2016). The effect of long term under-and over-feeding on the expression of six major milk protein genes in the mammary tissue of goats. *Journal of Animal Physiology and Animal Nutrition* 100(3):422-430.
54. Skopelitou, K., Muleta, A.W., Papageorgiou, A.C., Chronopoulou, E.G., Pavli, O., Flemetakis, E., Skaracis, G.N. and Labrou NE. (2017). Characterization and functional analysis of a recombinant tau class glutathione transferase GmGSTU2-2 from *Glycine max*. *International Journal of Biological Macromolecules* 94:802-812
55. Chatzikonstantinou M., Kalliampakou, A.K., Gatzogia, M., Flemetakis, E., Katharios, P. and Labrou, N.E. (2017). Comparative analyses and evaluation of the cosmeceutical potential of selected Chlorella strains. *Journal of Applied Phycology* 29:179–188
56. Georgakis, N., Chronopoulou, E., Gad, M.A., Skliros, D., Efrose, R.C., Flemetakis, E., and Labrou, N.E. (2017). Functional and catalytic characterization of the detoxifying enzyme haloalkane dehalogenase from *Rhizobium leguminosarum*. *Protein and Peptide Letters* 24(7), 599-608.
57. Tsiplakou, E., Abdullah, M.A.M., Skliros, D., Chatzikonstantinou, M., Flemetakis, E. and Labrou, N.E. and Zervas, G. (2017). The effect of dietary *Chlorella vulgaris* supplementation on micro-organism community, enzyme activities and fatty acid profile in the rumen liquid of goats. *Journal of Animal Physiology and Animal Nutrition* 101(2):275-283.
58. Tsiplakou, E., Abdullah, M.A.M., Mavrommatis, A., Chatzikonstantinou, M., Skliros, D., Sotirakoglou, K., Flemetakis, E., Labrou, N.E. and Zervas, G. (2017). The effect of dietary *Chlorella pyrenoidosa* inclusion on goats milk chemical composition, fatty acids profile and enzymes activities related to oxidation. *Livestock Science* 197(1): 106-111.
59. Tsiplakou, E., Flemetakis, E., Kouri, E.-D., Sotirakoglou, K. and Zervas, G. (2017) The effect of long term under- and over-feeding on the expression of genes related to glucose metabolism in mammary tissue of goats. *Animal Production Science* 57(4):622-626
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61. Efrose, R.C., Rosu, C.M., Stedel, C., Stefan, A., Sirbu, C., Gorgan, L.D., Labrou, N.E. and Flemetakis, E. (2018). Molecular diversity and phylogeny of indigenous *Rhizobium leguminosarum* strains associated with *Trifolium repens* plants in Romania. *Antonie van Leeuwenhoek* 111 (1), 135-153.

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63. Stefan, A., Van Cauwenberghe, J., Rosu, C.M., Stedel, C., Labrou, N.E., Flemetakis, E. and Efrose, R.C. (2018). Genetic diversity and structure of *Rhizobium leguminosarum* populations associated with clover plants are influenced by local environmental variables. *Systematic and Applied Microbiology* 41 (3), 251-259.
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