### **PERSONAL DATA**

Name and Last name: Panagiota Koutsouli

Place & date of birth: Athens, 19/6/1963.

Citizenship: Greek

Professional state: Associate Professor (permanent position). Research area: Genetic improvement of Livestock, Laboratory of Animal Breeding and Husbandry, Department of Animal Science (DAS), Agricultural University of Athens (AUA), Iera odos 75, 11855, Athens.

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### **EDUCATION & QUALIFICATIONS**

- Bachelor Degree in Animal Production from Higher Agricultural School of Athens (13/01/1988),
   degree 7.3 "very good"
- Scholarship from the National Scholarship Foundation of Greece (IKY) after successful exams (November 1988) for a doctoral thesis in the Laboratory of Animal Breeding and Husbandry, Faculty of Animal Production of Agricultural University of Athens (AUA)
- PhD: "excellent", 1996. Title: "Study of the genetic structure of the main Greek breeds of sheep", AUA (Supervisor: Prof E. Rogdakis)
- Biochemical and molecular analysis (molecular techniques for DNA RNA extraction, PCR, RFLPs polymorphisms, DNA and proteins genotyping) / Statistical analysis of data (Statgraphics, SPSS), Software for population genetic analysis and phylogenetic studies (BIOSYS-II, GENETIX, FSTAT, POPGENE, PHYLIP, TREEVIEW, MICROSAT, GENECLASS, WHICHRUN) / Software programs (WORD, EXCEL, POWERPOINT, COREL DRAW, PHOTO-PAINT) / Foreign Languages (English (First Certificate University of Cambridge) & French (Superieur III Institut Francais d' Athenes).

# PROFESSIONAL EXPERIENCE – ACADEMIC EXPERIENCE

- 10/1992 to 4/1995: Researcher (under employment contract): participation in research projects of the Laboratory of Animal Breeding and Husbandry, AUA
- 1/1996 to 1/2005: Teaching and research member of the Laboratory of Animal Breeding and Husbandry of AUA (permanent position)
- 1/2005 to 8/2017: Lecturer (permanent position), subject area: "Genetic improvement of Livestock" at the Laboratory of Animal Breeding and Husbandry, Department of Animal Science (DAS), (ФЕК 314/31-12-2004).

- 8/2017 to 12/2023: Assistant Professor (permanent position), subject area: "Genetic improvement of Livestock" at the Laboratory of Animal Breeding and Husbandry, Department of Animal Science (DAS) (ΦΕΚ, 815, Γ'/22.08.2017).
- 12/2023 to date: Associate Professor (permanent position) subject area: "Genetic improvement of Livestock" at the Laboratory of Animal Breeding and Husbandry, Department of Animal Science (DAS) (ΦΕΚ 3195, Γ′/08.12.2023).

### **RESEARCH PUBLICATIONS**

- Papadaki K., Laliotis G.P., Koutsouli P., Bizelis I.(2024): Attention bias and novel object test in rams (Ovis aries) under intensive farming, Behavioural processes, volume 215, 104993 https://doi.org/10.1016/j.beproc.2024.104993
- Klawatsch J., Papachristou D., Koutsouli P., Upadhyay M., Seichter D., Russ I., Mioč
   B., Simčič
   M., Bizelis I., Medugorac I. (2023): Genetic basis of ear length in sheep breeds sampled across the region from the Middle East to the Alps. <u>Anim.Gen.</u>, 55, 123–133, https://doi.org/10.1111/age.13387
- 3. Pogorevc N., Dotsev A., Upadhyay M., Sandoval-Castellanos E., Hannemann E., Simčič M., Antoniou A., Papachristou D., Koutsouli P., Rahmatalla S., Brockmann G., Sölkner J., Burger P., Lymberakis P., Poulakakis N., Bizelis I., Zinovieva N., Horvat S., Medugorac I. (2023): Whole-genome SNP genotyping unveils ancestral and recent introgression in wild and domestic goats, Molecular Ecology, 00, 1-15, DOI: 10.1111/mec.17190
- Massouras T., Charmanta A.-A., Koutsouli P., Masoura M., Politis I., Hettinga K. (2023): The Effect of Milking Frequency, Breed, and Stage of Lactation on the Milk Fat Globule Size and Fatty Acid Composition in Sheep's Milk. <u>Foods</u> 2023, 12, 2446. https://doi.org/10.3390/ foods12132446
- Papadaki K., Laliotis G.P., Koutsouli P., Bizelis I. (2023): Association of personality traits with maintenance and social behaviour of rams (Ovis aries), <u>Small Rum. Res.</u>, Vol 220, March 2023, 106928, https://doi.org/10.1016/j.smallrumres.2023.106928
- 6. Emilio Katsoulakou M., Papachristou D., Kostaras N., Laliotis G.P., Bizelis I., Cothran E.G., Juras R., Koutsouli P. (2023): Genetic variability of small horse populations from Greek islands, <u>Black Sea J. of Agri.</u>, Volume 6 Issue 2: xxx-xxx / March 2023, doi: 10.47115/bsagriculture.1165045
- Klawatsch J., Papachristou D., Koutsouli P., Seichter D., Russ I., Simčič M., Bizelis I. and I. Medugorac I.
   (2022): 536. Genetic regulation of ear size in Slovenian and Greek sheep breeds, <u>Proceedings of 12th</u>
   <u>World Congress on Genetics Applied to Livestock Production</u> (WCGALP), R.F. Veerkamp and Y. de Haas
   (eds) DOI: 10.3920/978-90-8686-940-4\_536.

- 8. Nikolaou K., Koutsouli P., Laliotis G.P, Papachristou D., Bizelis I. (2022): Comparative Analysis of Buffalo, Local and Continental Cattle Carcasses with the European Union Classification System in Greece. Meat Sci., vol.195, https://doi.org/10.1016/j.meatsci.2022.109018
- Papadaki K., Laliotis G.P., Koutsouli P., Pafilis P. and I. Bizelis (2022): Do sheep (Ovis aries) perform third-party interventions? <u>Ethology</u>, 21 August 2022. http://doi.org/10.1111/eth.13326
- **10.** *Masouras P.K., Nikolaou K., Laliotis G.P., Koutsouli P., Bizelis I.* (**2022**): Relationship Between Meat Quality Characteristics, Intramuscular Fat and Marbling in Greek Cattle Carcasses. *Adv.in Anim. and Vet. Sci.*, 10(3): 506-513. DOI | http://dx.doi.org/10.17582/journal.aavs/2022/10.3.506.513
- 11.Nikolaou K., Koutsouli P., and I. Bizelis (2020): Evaluation of Greek Cattle Carcass Characteristics (Carcass Weight and Age of Slaughter) Based on SEUROP Classification System. <u>Foods</u> 2020, 9, 1764; doi:10.3390/foods9121764
- 12. Semitekolos D., Pardou K., Georgiou P., Koutsouli P., Bizelis I. and L. Zoumpoulakis (2020): Investigation of mechanical and thermal insulating properties of wool fibres in epoxy composites. <u>Polymers and Polymer Composites</u> 1–10. https://doi.org/10.1177/0967391120971387
- 13. Papachristou D., Koutsouli P., Laliotis G.P., Kunz E., Upadhyay M., Seichter D., Russ I., Gjoko B., Kostaras N., Bizelis I. and I. Medugorac (2020): Genomic diversity and population structure of the indigenous Greek and Cypriot cattle populations. <u>Gen. Sel. Evol.</u>, 52:43 https://doi.org/10.1186/s12711-020-00560-8
- 14. *Laliotis G.P., Koutsouli P., Sotirakoglou K., Savoini G and I. Politis,* (2020): Association of oxidative stress biomarkers and clinical mastitis incidence in dairy cows during the periparturient period. *J. of Vet. Res.* 64, 2020. DOI:10.2478/jvetres-2020-0053
- 15. Invernizzi G., Koutsouli P., Savoini G., Mariani E., Rebucci R., Baldi A. and I. Politis (2019): Oxidative indices as metabolic stress predictors in periparturient dairy cows, <u>Italian J. of Anim. Sci.</u>, 18:1, 1356-1360, DOI: 10.1080/1828051X.2019.1661803
- 16.Laliotis G.P., Koutsouli P., Bizelis I.A. (2018): Implementation of contemporary DNA based techniques on traceability process of small ruminant species and products. <u>J. of Adv. Vet. and Anim.Res.</u> 5(3):255-264. <a href="http://doi.org/10.5455/javar.2018.e274">http://doi.org/10.5455/javar.2018.e274</a>
- 17. Armaou E., Simitzis P., Koutsouli P., Zoidou E., Massouras Th., Goliomytis M., Bizelis and I. Politis (2018): The effect of extended milking intervals (24, 48 and 72 h) on milk yield, milk composition, mammary physiology and welfare traits in dairy ewes. <u>J.Dairy Res.</u>, Nov; 85(4): 416-422. doi:10.1017/S002202991800047X

- 18. Koutsouli P., Simitzis P., Theodorou G., Massouras Th., Bizelis I. and I. Politis (2016): The effect of milking frequency reduction from twice to once daily on mammary physiology and animal welfare of two dairy Greek sheep breeds. <u>Small Rum. Res.</u>, 147, 18-24. <a href="http://dx.doi.org/10.1016/j.smallrumres.2016.12.005">http://dx.doi.org/10.1016/j.smallrumres.2016.12.005</a>
- **19.** Triantafyllopoulos K., <u>Koutsouli</u> P., Kandris A., Papachristou D., Markopoulou K., Mataragka A., Massouras Th. and I. Bizelis (**2016**): Effect of β-lactoglobulin gene polymorphism, lactation stage and breed on milk traits in Chios and Karagouniko sheep breeds. <u>Annals of Anim. Sci.</u>, DOI: 10.1515/aoas-2016-0058.
- 20.Tsiplakou E., Mavrommatis A., Kalogeropoulos Th., Chatzikonstantinou M., Koutsouli P., Sotirakoglou K., Labrou N., and G. Zervas (2016): The effect of dietary supplementation with rumen protected methionine alone or in combination with rumen protected choline and betaine on sheep milk and antioxidant capacity. J.Ani.Phys. Ani.Nutr.
- 21. Pilotto A., Savoini G., Baldi A., Invernizzi G., De Vecchi C., Theodorou G., <u>Koutsouli P.</u> and I. Politis. (2016): Short communication: Associations between blood fatty acids, β-hydroxybutyrate and α-tocopherol in the periparturient period in dairy cows: an observational study. <u>J.Dai.Sci.</u> 99:1–6. http://dx.doi.org/10.3168/jds.2016-10938
- 22. Simitzis P., Galani K., Vasiliou P., <u>Koutsouli P.</u>, Bizelis I. (2016): Effect of breed and litter size on the display of maternal perinatal and offspring postnatal behavior in dairy sheep. <u>J. Vet.Beh.Clin.Appl.Res</u>, 13, 10-18.
- 23. Spetsarias S., <u>Koutsouli P.</u>, Theodorou G., Theodoropoulos G., Bizelis I. (2016): Allelic polymorphism of OvarDRB1 exon2 gene and parasite resistance in two dairy sheep breeds. <u>Int. J. of Health Ani. Sci and Food Safety</u>, vol 3, no1, 1-19.
- 24. Sinanoglou V. J, <u>Koutsouli P</u>., Fotakis Ch., Sotiropoulou G., Cavouras D. and I. Bizelis (**2015**): Assessment of lactation stage and breed effect on sheep milk fatty acid profile and lipid quality indices. <u>Dairy Sci.</u> & Tech. 95, 509-531
- 25. <u>Koutsouli P.</u>, Patounas G., Massouras Th., Bizelis I. and I. Politis (2015): Plasmin–plasminogen system and milk coagulation properties of two Greek dairy sheep breeds. <u>Small Rum. Res.</u>, 124, 89-94.
- 26. Simitzis P.E, Karastamatis S., <u>Koutsouli P</u>., Bizelis I. and I. Politis (**2015**): Effect of yoghurt serum powder supplementation on growth performance and anti-oxidant status in fattening lambs, <u>Int. J. of Health</u>

  Ani. Sci. and Food Safety, vol 2, no1, 1-8.
- 27. Koutsouli P., Bizelis J. and E. Rogdakis (2007): Genetic structure of semi-fat tailed sheep breeds II.

- Genetic relationships among breeds and use of microsatellite genotypes for breed assignment. <u>Ani.</u> Sci. Rev., 36, 71-82
- 28. Bizelis J., <u>Koutsouli P.</u> and E. Rogdakis (2007): Genetic structure of semi-fat tailed Greek sheep breeds:

  I. Gene frequencies, genetic variation and F-statistics. <u>Ani. Sci. Rev.</u>, 36, 55-69.
- 29. <u>Koutsouli P.</u> and E. Rogdakis (2002): Genetic structure of Greek sheep breeds: III. Genetic variation within and between breeds. <u>Ani. Sci. Rev.</u>, 30, 29-44.
- 30. <u>Koutsouli P.</u> and E. Rogdakis (2002): Genetic structure of Greek sheep breeds based on genetic systems: II. Hardy-Weinberg equilibrium and linkage disequilibrium in co-dominant loci. <u>Animal Science</u> Review, 30, 15-27.
- 31. Koutsouli P., Bizelis J., Panopoulou E. and E. Rogdakis (2002): Genetic structure of Greek sheep breeds:

  1. Gene frequencies, Ani. Sci. Rev., 30, 3-14.
- 32.E. Rogdakis, <u>P. Kutsuli</u>, I. Surdis und E. Panopulu (1995): "Untersuchungen zur genetischen Struktur der wichtigsten Schafrassen Grienchenlands", (Genetic structure of Greek sheep breeds). <u>Journal of Animal Breeding and Genetics</u>, 112, 255-266
- 33. <u>Panagiota Koutsouli</u> (1996): "Study of the genetic structure of the main Greek breeds of sheep", Thesis, Athens, 1996.

# PRESENTATIONS IN INTERNATIONAL CONFERENCES WITH PROCEEDINGS

- Emilio-Katsoulakou M., Kostaras N., Laliotis G., Bizelis I., Cothran E.G., Juras R., Koutsouli P. 2023.
   Investigation of DMRT3 allelic mutation & genetic structure of indigenous Greek Gaited horse populations, AGROSYM 2023" XIV International Agriculture Symposium, 6/10/2023 (oral presentation).
- 2. *Papadaki K., Laliotis G.P., Koutsouli P. and Bizelis I., 2021*. Vocal and behavioural differences of lambs between different sheep breeds. Book of Abstracts of the 66<sup>th</sup> Annual Meeting of the European Association for Animal Production. Davos, 2021, p. 161 (poster).
- Papadaki K., Laliotis G.P., Koutsouli P. and Bizelis I., 2021. Differences in sheep vocal characteristics at weaning (Poster). Recent advances in animal welfare science VIII Virtual UFAW Animal Welfare Conference, 29-30/6/2021.
- 4. Simitzis P., Galani K., Koutsouli P. and Bizelis I., 2014. Effect of breed and litter size on the display of maternal and offspring postnatal behavior in sheep EAAP 65th Annual Meeting, Copenhagen, Book of abstracts No. 20, (2014) Copenhagen, Denmark, 25 29/8/2014.

5. Bizelis I., Koutsouli P., Sinanoglou V., Symeon G. and Mantis F., 2010: Meat quality and lipid composition of four sheep breeds reared by the traditional Greek sheep farming Book of Abstracts of the 61st Annual Meeting of the European Association for Animal Production, 23-27/8/2010.

### PRESENTATIONS IN GREEK CONFERENCES WITH REVIEWERS

- 1) *Koutsouli P., Panopoulou E. & E. Rogdakis, 1990*: "Genetic variation at Orino Epirus and Karagouniko sheep breeds and their associations among various protein polymorphisms and milk yield in Orino Epirus sheep". 7<sup>th</sup> Annual Meeting of the Hellenic Society of Animal Sciences, Xanthi, 24-25 May 1990.
- 2) *Koutsouli P., Panopoulou E. & E. Rogdakis, 1991*: "Associations between protein polymorphisms and sheep milk yield". 8<sup>th</sup> Annual Meeting of the Hellenic Society of Animal Sciences, Volos, 21-22 November 1991.
- 3) *Koutsouli P., Panopoulou E., Rogdakis E. & I. Sourdis,* **1992**: "Genetic distances among Greek sheep breeds". 9<sup>th</sup> Annual Meeting of the Hellenic Society of Animal Sciences, Athens, 24-25 November 1992.
- 4) *Koutsouli P., Rogdakis E. & I. Sourdis, 1993*: "Linkage disequilibrium among protein polymorphisms in Greek sheep breeds". 10<sup>th</sup> Annual Meeting of the Hellenic Society of Animal Sciences, Florina, 3-5 November 1993.
- 5) *Koutsouli P., Panopoulou E., Sourdis I. & E. Rogdakis,* **1995**: "Analysis of protein polymorphisms in Greek sheep breeds". 17<sup>th</sup> Scientific Conference of Hellenic Association of Biological Sciences, Patra, 27-29 April 1995.
- 6) *Koutsouli P., Rogdakis E. & I. Sourdis, 1995*: "Genetic structure of Karagouniko sheep population". 11<sup>th</sup> Annual Meeting of the Hellenic Society of Animal Sciences, Larissa, 2-3 November 1995.
- 7) *Koutsouli P. & E. Rogdakis, 1996*: "Genetic structure of Kenyan goat populations". 12<sup>th</sup> Annual Meeting of the Hellenic Society of Animal Sciences, Lamia, 23-25 October 1996.
- 8) *Koutsouli P., E. Rogdakis & A. Mantzios,* **1996**: "Results from the crossbreeding between Karagouniko and Boutsiko II. Growth rate and carcass quality criteria of fattened lambs until the age of five months". 12<sup>th</sup> Annual Meeting of the Hellenic Society of Animal Sciences, Lamia, 23-25 October 1996.
- 9) *Koutsouli P., Bizelis I. & E. Rogdakis, 1997*: "DNA fingerprinting in sheep". 13<sup>th</sup> Annual Meeting of the Hellenic Society of Animal Sciences, Ancient Olympia, 1-3 October 1997.
- 10) Bizelis I., Koutsouli P., Rogdakis E. & E. Biniari, 1999: "DNA fingerprinting in Pilio sheep population". 15<sup>th</sup> Annual Meeting of the Hellenic Society of Animal Sciences, Chania, 3-5 November 1999.
- 11) *Koutsouli P., Bizelis I. & E. Ρογδάκης, 2000*: "Phylogenies among Greek sheep breeds". 16<sup>th</sup> Annual Meeting of the Hellenic Society of Animal Sciences, Kalamata, 17-19 October 2000.

- 12) *Koutsouli P., Bizelis I. & E. Rogdakis, 2001*: "Genetic differentiation among Greek sheep flocks". 17<sup>th</sup> Annual Meeting of the Hellenic Society of Animal Sciences, Drama, 17-18 May 2001.
- 13) Ayioutanti A., Koutsouli P., Bizelis I., & E. Rogdakis, 2002: "Association of NADH-Diaphorase concentrations and Diaphorase genotypes in sheep blood". 18<sup>th</sup> Annual Meeting of the Hellenic Society of Animal Sciences, Ioannina, 5-7 June 2002.
- 14) *Koutsouli P., Bizelis I. & E. Rogdakis, 2004*: "Study of genetic structure of semi-fat tailed sheep breeds of Chios, Mytilini and Argos with microsatellites". 20<sup>th</sup> Annual Meeting of the Hellenic Society of Animal Sciences, Tripoli, 6-8 October 2004.
- 15) *Koutsouli P. & I. Bizelis, 2010*: The Leather and its products. Abstracts, editor: S. V. Ramandanis, 2° Panhellenic Conference for meat and its products. 24, 25, 26 September 2010.
- 16) Kandris A., Kostakis K., Papachristou D., Koutsouli P., Triantafyllopoulos K., Massouras Th. & I. Bizelis, **2011**: "Study of polymorphism in β-lactogloboulin gene in sheep breeds". 26<sup>th</sup> Annual Meeting of the Hellenic Society of Animal Sciences, Chalkida, 12-14 October 2011. Animal Science Review. Special Edition No. 37, pp 93.
- 17) Spetsarias S., Theodorou G., Lampidonis A., Koutsouli P., Theodoropoulos G. & I. Bizelis, 2011: "Ovar-DRB1 polymorphisms in Arta sheep and associations with parasitological and productive traits". 26<sup>th</sup> Annual Meeting of the Hellenic Society of Animal Sciences, Chalkida, 12-14 October 2011. Animal Science Review. Special Edition No. 37, pp 92.
- 18) *Kyriazopoulou P., Triantafyllopoulos K., Kandris A., Koutsouli P., & I. Bizelis, 2012*: "Study of a novel single nucleotide polymorphism (SNP) of κ-casein in Greek sheep breeds". 27<sup>th</sup> Annual Meeting of the Hellenic Society of Animal Sciences, Trikala, 3-5 October 2012. Animal Science Review. Special Edition No. 38, p: 73.
- 19) *Koutsouli P., Sinanoglou V., G. Sotiropoulou, A. Klavdianos, K. Sotirakoglou & J. Bizelis, 2013*: "Fatty acids profile of milk from Greek sheep breeds" in Modern trends in the field of lipid, 5<sup>th</sup> Panhellenic Conference, Greek Lipid Forum, 29-30 March 2013, Charokopio University.
- 20) *Koutsouli P., Sinanoglou V., Sotiropoulou G., Klavdianos Papastathis A., Sotirakoglou K. & I. Bizelis,* **2013**: "The effect of breed on fatty acids profile of sheep milk". 28<sup>th</sup> Annual Meeting of the Hellenic Society of Animal Sciences, Florina, 2-4 October 2013. Animal Science Review. Special Edition No. 39, pp 117-118. 21) *Patounas G., Koutsouli P., Massouras Th., Bizelis I. & I. Politis,* **2013**: "Study of the plasmin-plasminogen system and reological properties of milk from two dairy sheep breeds". 28<sup>th</sup> Annual Meeting

- of the Hellenic Society of Animal Sciences, Florina, 2-4 October 2013. Animal Science Review. Special Edition No. 39, pp 111-112.
- 22) *Gialitaki E., Koutsouli P., Fasseas K., & I. Bizelis,* **2013**: "Study of wool traits in greek sheep breeds". 28<sup>th</sup> Annual Meeting of the Hellenic Society of Animal Sciences, Florina, 2-4 Οκτωβρίου 2013. Animal Science Review. Special Edition No. 39, pp 145-146.
- 23) Spetsarias S., Theodorou G., Koutsouli P., Lampidonis A., Theodoropoulos G. & I. Bizelis, 2013: "OVar-DRB1 polymorphism in Greek sheep breeds and associations with their parasitological and productive traits". 28<sup>th</sup> Annual Meeting of the Hellenic Society of Animal Sciences, Florina, 2-4 October 2013. Animal Science Review. Special Edition No. 39, pp 115-116.
- 24) Kyriazopoulou P., Koutsouli P., Ballingall K., Spetsarias S., Theodorou G., Theodoropoulos G. & I. Bizelis, **2014**. "Gene polymorphism of Major Histocompatibility Complex (MHC) in two rare sheep breeds". 29<sup>th</sup> Annual Meeting of the Hellenic Society of Animal Sciences, Kyparissia, 1-3 October 2014. Animal Science Review. Special Edition No. 39, pp 47-48.
- 25) Charismiadou M., Karla Γ., Theodorou G., Koutsouli P., & I. Politis, 2014: "The effect of health status of the udder in the activation of plasminogen in somatic cells of sheep milk". 29<sup>th</sup> Annual Meeting of the Hellenic Society of Animal Sciences, Kyparissia, 1-3 October 2014. Animal Science Review. Special Edition No. 39, pp 59.
- 26) Mavrommatis Al., Kalogeropoulos Th., Tsiplakou E., Koutsouli P., Bizelis I. & G. Zervas, 2014: "The effect of methionine and betaine inclusion in sheep diets on milk yield and its chemical composition". 29<sup>th</sup> Annual Meeting of the Hellenic Society of Animal Sciences, Kyparissia, 1-3 October 2014. Animal Science Review. Special Edition No. 39, pp 79.
- 27) *Koutsouli P., 2014*: "Genetic management of small populations". Scientific Conference of Hellenic Animal Society. Conservation and management of animal genetic resources, 1 June 2014, Conference auditorium AUA, Athens,
- 28) Dimitriadis Ch., Koutsouli P. П., Theodorou G., Massouras Th., Bizelis I., & I. Politis, 2015: "The effect of milking frequency on productivity and qualitative traits of milk in two dairy Greek sheep breeds". 30<sup>th</sup>Annual Meeting of the Hellenic Society of Animal Sciences, Giannitsa, 14-16 October 2015. Animal Science Review. Special Edition No. 42, pp 102-103
- 29) *Papadakis G., Koutsouli P., Massouras Th., Bizelis I., & I. Politis,* **2015**: "The effect of milking frequency on physicochemical and cheese making properties of milk in two dairy greek sheep breeds". 30<sup>th</sup> Annual

- Meeting of the Hellenic Society of Animal Sciences, Giannitsa, 14-16 October 2015. Animal Science Review. Special Edition No. 42, pp 104-105.
- 30) *Levendos P., Koutsouli P., Simitzis P. & I. Bizelis, 2015*: "Acoustic behavior analysis of the ram during mating". 30<sup>th</sup> Annual Meeting of the Hellenic Society of Animal Sciences, Giannitsa, 14-16 Οκτωβρίου 2015. Animal Science Review. Special Edition No. 42, pp 114.
- 31) *Vassiliou P., Simitzis P., Koutsouli P., & I. Bizelis, 2015*: "Study of the ewe's periparturient behavior". 30<sup>th</sup>Annual Meeting of the Hellenic Society of Animal Sciences, Giannitsa, 14-16 October 2015. Animal Science Review. Special Edition No. 42, pp 141-142.
- 32) *Koutsouli P., 2016*: "Good management practices in small populations", lecture in thematic day conference: "Conservation and Management of Animal Genetic Resourses: necessity and investment concurrently". 1-6-2016, loannina, Cultural Center of Ioannina, pp 13-16.
- 33) Bizelis I., Kostaras N., Ramljak J., Papaioannou K., **Koutsouli P.**, Trivizaki S., & I. Medugorak, **2016**: "Phylogenetic relationships among indigenous cattle populations". 31<sup>st</sup> Annual Meeting of the Hellenic Society of Animal Sciences, Serres, 5-7 October 2016. Animal Science Review. Special Edition No. 44, pp 55-56.
- 34) Simitzis P., Spanou P., Koutsouli P., Bizelis I. & I. Politis, 2016: "Effect of 24-hour cessation of milking on parameters of the behavior of ewes". 31<sup>st</sup> Annual Meeting of the Hellenic Society of Animal Sciences, Serres, 5-7 October 2016. Animal Science Review. Special Edition No. 44, pp 67.
- 35) Charmanda A., Koutsouli P., Bizelis I., Hettinga K., & Th. Massouras, 2016: "Factors affecting the morphometric traits of fat globules in sheep milk". 31<sup>st</sup> Annual Meeting of the Hellenic Society of Animal Sciences, Serres, 5-7 October 2016. Animal Science Review. Special Edition No. 44, pp105-106.
- 36) Oikonomou M., Koutsouli P., Papakitsos G., Mandala I., Masouras Th., 2017: Change in the characteristics of sheep colostrum during its transition to regular milk. 32<sup>nd</sup> Annual Meeting of the Hellenic Society of Animal Sciences, Larisa, 4-6 October 2017. Animal Science Review. Special Edition No. 45, pp: 45.
- 37) *Xarchakos D., Koutsouli P., Fasseas K., Pappas D., Bellos G., Nikolaou M., Mantzaris K., Bizelis I.,* **2017**: Investigation of wool quality in flocks from two breeds of sheep reared in Epirus. 32<sup>nd</sup> Annual Meeting of the Hellenic Society of Animal Sciences, Larisa, 4-6 October 2017. Animal Science Review. Special Edition No. 45, pp: 82.
- 38) Armaou E., Simitzis P., Koutsouli P., E. Zoidou, T. Masouras, I. Bizelis, I. Politis, 2017: Effect of milking interruption interval on mammary physiology and milk composition in sheep. 32<sup>nd</sup> Annual Meeting of the

- Hellenic Society of Animal Sciences, Larisa, 4-6 October 2017. Animal Science Review. Special Edition No. 45, pp: 86.
- 39) *Pardou A., Semitekolos D., Zoumboulakis L., Koutsouli P., Bizelis I., 2018*: The wool of Greek sheep as a basis for the manufacture of Composite Material. 33<sup>rd</sup> Annual Meeting of the Hellenic Society of Animal Sciences, Preveza, 3-5 October 2018. Animal Science Review. Special Edition No. 45, pp. 82.
- 40) *Papachristou D., Laliotis G., Koutsouli P., Kostaras N., Medugorac I., Bizelis I.,* **2018**: Phylogenetic relationships between European and indigenous cattle populations, 33<sup>rd</sup> Annual Meeting of the Hellenic Society of Animal Sciences, Preveza, 3-5 October 2018. Animal Science Review. Special Edition No. 45, pp: 48-49.
- 41) *Nikolaou K., Koutsouli P., Papadimitriou D., Bizelis I.,* **2019**: Quality characteristics of beef carcasses produced in Greece. 6° Panhellenic Congress MEAT AND PRODUCTS THEREOF, from stable to table. Proccedings, 1, 2, 3 February 2019, Conference Center "IOANNIS VELLIDIS", Zootecnhia, pp: 126-135.
- 42) *Nikolaou K., Koutsouli P., Bizelis I., 2019*: International standards for the classification of the quality characteristics of bovine carcasses, 34<sup>th</sup> Annual Meeting of the Hellenic Society of Animal Sciences, Volos, 2-4 October 2019, Animal Science Review. Special Edition No. 46, pp: 60-61.
- 43) *Papachristou D., Laliotis G., Koutsouli P., Kostaras N., Medugorac I., Bizelis I.,* **2019**: Investigation of the genetic relationships of the indigenous Keas cattle breed, 34<sup>th</sup> Annual Meeting of the Hellenic Society of Animal Sciences, Volos, 2-4 October 2019, Animal Science Review. Special Edition No. 46, pp: 96-97.
- 44) *Georgatou S., Bizelis I., Pappas D., Tsiapalis C., Bellos G., Laliotis G., Koutsouli P., 2021*: Productive traits of Arta sheep breed, 35<sup>th</sup> Annual Meeting of the Hellenic Society of Animal Production, November 2021, Special edition No. 50, pp: 17-18.
- 45) *Nikolaou K., Koutsouli P., Laliotis G., Bizelis I.,* **2021**: Quality of cattle carcasses produced in Greece, 35<sup>th</sup> Annual Meeting of the Hellenic Society of Animal Sciences, 6-7 November 2021, Special edition No. 50, pp: 49-50.
- 46) Georgatou S., Bellos G., Nikolaou M., Pappas D., Mantzaris K., Bizelis I., Koutsouli P., 2021: Investigation of the quality of wool in Arta sheep breed, 35<sup>th</sup> Annual Meeting of the Hellenic Society of Animal Sciences, 6-7 November 2021, Special edition No. 50, pp: 51-52.
- 47) Papachristou D., Koutsouli P., Laliotis G., Tsaprailis A., I. Medugorac, Bizelis I., 2021: Investigation of the genetic structure of Greek Brachyceros breed, 35<sup>th</sup> Annual Meeting of the Hellenic Society of Animal Sciences, 6-7 November, Special edition No. 50, pp: 71-72.

- 48) *Emilio-Katsoulakou M., Kostaras N., Laliotis G., Cothran E.G., Juras R., Bizelis I. Koutsouli P., 202*1: Study of the genetic structure of indigenous Greek horses using microsatellites, 35<sup>th</sup> Annual Meeting of the Hellenic Society of Animal Sciences, 6-7 November 2021, Special edition No. 50, pp: 73-74.
- 49) *Papadaki K, Samaras A., Laliotis G, Koutsouli P, Pavlidis M., Bizelis I.,* **2021**: Study of Greek breed rams' social behavior, 35<sup>th</sup> Annual Meeting of the Hellenic Society of Animal Sciences, 6-7 November 2021, Special edition No. 50, pp: 77-78.
- 50) *Papadaki K, Laliotis G, Koutsouli P, Bizelis I.,* **2021**: Investigation of breed effect on the acoustic parameters of dairy ewes and lambs, 35<sup>th</sup> Annual Meeting of the Hellenic Society of Animal Sciences, 6-7 November 2021, Special edition No. 50, pp: 79-80.
- 51) Papachristou D., Koutsouli P., Laliotis G, Tsaprailis A., Medugorac I., Bizelis I., 2022: Detection of crossbred individuals in populations of Greek Brachyceros cattle, 34<sup>th</sup> Panhellenic Statistics Conference, Statistics and Experimental Sciences, 19-22 May 2022, Agricultural University of Athens.
- 52) *Georgatou S., Papachristou D., Laliotis G., Bizelis I., Koutsouli P., 2022*: Phenotypic and genetic characterization of local cattle population of northern Crete, 36<sup>th</sup> Annual Meeting of the Hellenic Society of Animal Sciences, 5-7 October 2022, Special edition No. 51, pp: 45-46
- 53) Papachristou D., Koutsouli P., Laliotis G., Tsaprailis A., I. Medugorac I. Bizelis I., 2022: Genetic management of the Greek Bracycheros cattle breed, 36<sup>th</sup> Annual Meeting of the Hellenic Society of Animal Sciences, 5-7 October 2022, Special edition No. 51, pp: 51-52
- 54) *Kailis K., Bizelis I., Koutsouli P, Laliotis G., 2022*: In silico analysis of promoter region of genes involved in lipogenesis in sheep, 36<sup>th</sup> Annual Meeting of the Hellenic Society of Animal Sciences, 5-7 October 2022, Special edition No. 51, pp: 43-44.
- 55) *Papadaki K, Pafilis P., Bizelis I., Koutsouli P, Laliotis G., 2022*: Third party interventions as a mean of resolving aggressive interactions in sheep, 36<sup>th</sup> Annual Meeting of the Hellenic Society of Animal Sciences, 5-7 October 2022, Special edition No. 51, pp: 57-58
- 56) *Papachristou D., Koutsouli P., Laliotis G., Bizelis I.,* **2022**: Certification of milk products with genetic tools. DAIRY 2022, Saturday 12 November 2022, MDF EXPO 12-14/11/2022, Metropolitan EXPO.

### PARTICIPATION IN PROJECTS

- 10/1992 09/1993: "Protein polymorphism in Greek sheep breeds", financed by General Secretariat for Research & Technology.
- 2. **10/1993-4/1995**: "Population Analysis of Goat Breeds in Kenya", financed by European Committee with cooperation of University of Hohenheim of Germany and Egerton University of Kenya (10 / 1993).

- 04 / 1995). (EEC-STD 3 RESEARCH PROGRAMME "POPULATION ANALYSIS OF GOAT BREEDS IN KENYA". EEC-CONTRACT NO. TS3\*-CT92-0107)
- 3. 1999: Cooperation of Animal Breeding and Husbandry department with Institute of Zoology of London, The Zoological Society of London, in a program of sheep phylogeny with microsatellites). My participation was involved in the collection of animal samples, extraction of DNA and statistical analysis of the results from the microsatellite data.
- 4. **2000-2003**: "Applied programs for genetic improvement, protection and conservation of indigenous sheep and goat Greek populations". My participation was involved in the collection of animal samples from sheep flocks, biochemical analyses and statistical analysis of genetic data.
- 5. 2005-2008: Changes in the undergraduate program of FASA: scientific coordinator: St. Deligeorgis. My participation was in the preparation of the educational material of FASA for the website of AUA, Scientific coordinator: S. Deligeorgis.
- 6. **2008-2009**: RESEARCH PROGRAM: EUREKA SPELEET E!3757 "Quality skin traits from an indigenous sheep breed, an imported foreign sheep breed and an indigenous goat breed", Scientific coordinator:

  I. Bizelis
- 2010-2012: Scientific coordinator in the Research program: "Information and advices for the promotion and dissemination of Skopelos goat breed from the Animal Cooperative of Skopelos breeders in the activities of Action 3.4 (Conservation of genetic resources in livestock)" (10/2010-01/2012).
- 8. 20/4/2018-20/4/2020: <u>Different forces behind the development of genomic diversity in indigenous cattle strains and breeds in Greece and Germany</u>), in collaboration with Population Genomics Group, Department of Veterinary Sciences, LMU Munich, Germany (Specialization: Genetic Diversity of farm animals) (Scientific coordinator for the Greek group: I. Bizelis)
- 9. 2.2018-3.2020: Educational program of AUA, Initiation and support of the new generation for the development of the agri-food sector with the aim of improving the Greek economy. Delivering lectures/seminars at breeders and preparing training material distributed to trainees. Scientific coordinator: N. Dercas
- 10.1/9/2018 31/5/2019: Program of the Educational Policy Institute, IEP, TRAINING OF TEACHERS FOR THE USE AND APPLICATION OF DIGITAL TECHNOLOGIES IN TEACHING PRACTICE (SECOND LEVEL ICT (Information and Communication Technology) TRAINING). Preparation of Training Material for the utilization of ICT in the teaching of Earth Professions with an emphasis on learning, teaching and

- training activities for the subjects of Animal Production. Member of the team for the implementation of the program's actions (Scientific coordinator: A. Koutsouris)
- 11.15/10/2019 15/10/2021: International project: <u>CLICHA, Climate Change in Agriculture</u>, Project Nr. 586273-EPP-1-2017-1-EL-EPPKA2-CBHE-JP. Development of educational material in Animal Selection regarding the heat tolerance. Participation in business forum in Tunisia and Athens, evaluation of the teaching material (Scientific coordinator: I. Bizelis).
- 12.1/1/2021-27/5/2022: Improving the sustainability of livestock farms in the Region of Crete through the sustainable management of herds and the implementation of an integrated traceability system up to the final production and distribution of the product based on local breeds of goats and sheep. Action 1 of Measure 16 «Collaboration» in local level, funded from the Ministry of Rural Development and Foods (Program of Agricultural development 2014-2020. Participation in the scientific group of Action 2 of the program (Scientific coordinator: I. Bizelis)
- 13.1/11/2021-27/5/2022: <u>Application of an Integrated System of Traceability of Livestock Products,</u>
  Action 1 of Measure 16 «Collaboration» in local level, funded from the Ministry of Rural Development and Foods (Program of Agricultural development 2014-2020). Participation in the scientific group of Action 2 of the program (Scientific coordinator: I. Bizelis)
- 14.**1.11.2021-27.5.2022**: *Genetic identification of the Kea breed cattle and qualitative characterization of its products,* Action 1 of Measure 16 «Collaboration» in local level, funded from the Ministry of Rural

  Development and Foods (Program of Agricultural development 2014-2020. Participation in the scientific group of Action 2 of the program (Scientific coordinator: I. Bizelis)
- 15.**1/12/2021-25/12/2022**: **Scientific coordinator** of the program: <u>"Study of the population and identification of the indigenous cattle of Chania, \chi\_{\text{funded}} from Prefecture of Chania, Crete.</u>
- 16.1/12/2021-1/3/2023: «<u>Provision of services to study the population and identify the domestic sheep population of Kasos using modern genetic tools»</u>, funded from Municipality of Kasos island (Scientific coordinator: I. Bizelis)
- 17.1/12/2021-1/3/2023: "Study of the grazing capacity of the island of Kasos, management proposals, the available pasture and ways to improve/increase the pasture» funded from Municipality of Kasos island (Scientific coordinator: I. Bizelis)
- 18.**1/12/2021 30/11/24**: <u>"Sustainable adaptation of livestock to climate change LIFECLIC, project No 2021-1EE01-KA220-VET-000025360 co-funded from ERASMUS+ (Scientific coordinator: I. Bizelis)</u>

19.6/2/2023 – 31-12-2025: Scientific coordinator of the program: Improving the sustainability of livestock farms in the Region of Crete through the sustainable management of herds and the implementation of an integrated traceability system up to the final production and distribution of the product based on local breeds of goats and sheep. Action 2 of Measure 16 «Collaboration» in local level, funded from the Ministry of Rural Development and Foods (Program of Agricultural development 2014-2020).

# **RESEARCH INTERESTS – FUTURE OBJECTIVES**

In 2019, a collaboration with Professor Emeritus E.G. Cothran and R. Juras (Assistant Research Professor) from A&M Texas University began. In the context of this collaboration, in November 2020, the candidate Ms. Katsoulakou-Emilio Myrina submitted an application for the preparation of a doctoral thesis on the genetic relationships of indigenous populations/breeds of horses, which is currently in progress (title: Genetic identification of Greek horse breeds/populations using molecular markers; P. Koutsouli (supervisor), R. Juras, G.P. Laliotis).

In July 2023, the candidate Ms Georgatou Spyridoula submitted an application for a doctoral thesis on the genetic relationships of indigenous populations/breeds of Greek sheep. The thesis is currently in progress (title: Genetic identification of indigenous Greek sheep breeds; P Koutsouli (supervisor), I. Medugorac and N. Poulakakis).

In January 2024, I submitted a proposal to ELIDEK (Gene footprints on contemporary Greek cattle breeds from the early past) in the Scientific Area: Life Sciences, Scientific Field: Ecology, Evolution, Population and Environmental Biology. This proposal is in the process of being reviewed.

My research interests remain in the fields of biodiversity, genetic diversity, and genetic structure of small populations, genetic relationships between indigenous populations in cattle, goats, sheep and horses, the study of phylogeny between domesticated and corresponding wild populations, and the levels of inbreeding in small isolated populations. Furthermore, I am interested in the study of genetic polymorphisms and their association with distinct morphological (e.g. ear length, tail length) or physiological characters (resistance to high temperature, adverse environments, resistance to parasites) in farm animals.