

CURRICULUM VITAE

PERSONAL INFORMATION

Full Name: Stergiani DALAMITRA

Gender: Female

Place of Birth: Katerini, Pieria, Greece

Address: Terma Kontopoulou Street, 53100 Florina, Greece

Phone: +30 2385054641

Email: sdalamitra@uowm.gr

Marital Status: Married, two children

Title: Assistant Professor in "Animal Genetic Improvement"

School of Agricultural Sciences, Department of Agriculture, University of Western
Macedonia Florina, Greece

Government Gazette No: 1513/Γ/23-04-2025

EDUCATION

General High School

General High School of Kontariotissa (1982-1988) - Grade: 'Very Good'

BSc in Agricultural Technology of Department of Animal Production

Technological Educational Institute of Larissa (1988-1992) - GPA: 7.5/10

Thesis: Investigation of the Digestibility of the Shrub *Atriplex halimus* Using the 'in sacco' Technique of Orskov.

Conducted at the Mediterranean Agronomic Institute of Zaragoza, Spain.

MSc in Animal Production

School of Agriculture, University of Aberdeen, UK (1993-1994)

Thesis: Investigation of the Effect of Nutrition and Health on Dairy Milk Quality.

Study focused on the impact of dietary changes on milk production, fat, protein, and fatty acid content, including antibiotic residues and their impact on milk safety.

PhD in Agriculture

PhD in Agriculture - Animal Production, specializing in Epidemiology, Ecology, and the Use of Genetic Analysis and Molecular Techniques in Investigating Mastitis in Dairy Cows.

School of Agriculture, University of Aberdeen, UK (1995-2001)

Thesis: Epidemiology, Ecology, and Persistence of **Staphylococcus aureus** in Dairy Cows and Their Environment.

Research involved molecular genetic methods such as Pulsed Field Gel Electrophoresis (PFGE) to study bacterial persistence and transmission routes within dairy farms.

Collaboration with the Veterans Affairs Boston Health Care System to compare *S. aureus* isolates from cows and human patients.

Awards & Distinctions

- 1988-89: Distinction in Mathematics, Meat Production & Farm Animal Exploitation.
- 1990-91: Distinction in Animal Reproduction.
- 1992: Distinction in Bachelor's Thesis.
- 1998: Sir Maitland Award.

PROFESSIONAL EXPERIENCE

Senior Research Associate

University of Norwich, UK (2001-2004)

Research Project: "Sustainable Conservation of Animal Genetic Resources in Marginal Rural Areas: Integrating Molecular Genetics, Socio-Economic, and Geostatistical Approaches."

Teaching Experience (Undergraduate & Postgraduate)

Scientific Associate, Department of Agriculture, University of Western Macedonia (formerly TEI) (2010-Present)

Courses Taught:

- Animal Genetics
- Animal Breeding
- Food Microbiology
- Biometry
- Scientific Methodology
- Dairy Technology
- Swine Production
- Poultry Farming
- Pig Farming
- Technology & Quality Control of Milk and Its Products
- Applied Animal Reproduction
- Alternative Livestock Farming
- Applications of Informatics in Agricultural Sciences

Teaching Experience (Erasmus Program & Adjunct Teaching)

- Erasmus Students (Various Academic Years)
 - Academic Teaching Experience for Young PhD Holders (Funded by ESPA Program)
-

RESEARCH PROJECTS)

University of Norwich, UK (2001-2004)

Econogene Project: Sustainable Conservation of Animal Genetic Resources in Marginal Rural Areas: Integrating Molecular Genetic, Socio-Economic, and Geostatistical Approaches.

Funded by the European Union under the Quality-of-Life V Framework Programme. This project combined molecular genetic analysis, biodiversity studies, socio-economic evaluations, and geostatistics to conserve genetic traits in sheep and goats and support rural development in marginal agro-systems across Europe.

The genetic diversity of small ruminants was extensively studied at the molecular level, examining numerous local Mediterranean breeds and identifying genes essential for creating genetic maps prioritizing conservation traits such as disease resistance and biodiversity.

Key objectives of the program included:

- Expanding existing knowledge of sheep and goat biodiversity using new molecular technologies, studying numerous previously unclassified breeds (50 sheep and 40 goats).
- Investigating the role of geographical structure in genetic diversity and differences among classified and unclassified breeds.
- Identifying populations that require urgent genetic conservation.
- Studying the socio-economic conditions under which these breeds exist and exploring development opportunities.
- Identifying areas where sustainable conservation of valuable breed traits has a high likelihood of success, assisted by genetic mapping.
- Estimating the economic value of biodiversity in these breeds to determine appropriate management and economic strategies.
- Proposing guidelines and actions for economically sustainable conservation of local breeds.

University of Aberdeen, UK (1995-2001)

PhD Project: The Epidemiology, Ecology, and Persistence of *Staphylococcus aureus* in the Dairy Cow Environment.

This research focused on the occurrence and persistence of the bacterium *Staphylococcus aureus* in dairy farms with high somatic cell counts. In cases where the bacterium was isolated from farms over a year, the molecular genetic method Pulsed Field Gel Electrophoresis (PFGE) was used to study, explore, and analyze whether the farms were infected by the same or different clones of this bacterium. PFGE was also employed to examine the genetic diversity of *Staphylococcus aureus* across various farms in different geographical regions affected by mastitis caused by this bacterium. Additionally, PFGE was used to determine whether various body parts of cows (e.g., teats, nostrils, vagina, and hooves) or farm workers could serve as reservoirs from which this bacterium could spread.

Another aspect of the PhD research was the isolation of *Staphylococcus aureus* from human patients at the Veteran Affairs Boston Health Care System and comparing them with isolates from dairy farms in Scotland using PFGE. Various studies were conducted on the survival mechanisms of the bacterium.

A proposed mechanism in this research is the formation of L-forms, which allow the bacterium to survive within the cow's udder during antibiotic treatment in cases of clinical mastitis or the dry period.

University of Aberdeen, UK (1993-1994)

MSc Project: Effect of Cow Diet and Health on Milk Quality.

The effect of different dietary changes in cows on milk production, fat, protein, and fatty acid composition was studied during this research. Additionally, the water content in milk was measured using the Freezing Point Depression method during dietary changes. This study also examined the health status of cows, particularly during chronic and acute mastitis, in relation to milk quality. A specific focus was placed on antibiotic treatment of clinically infected udders to determine whether antibiotics were transferred from the infected to the healthy part of the udder.

Technological Educational Institute of Larissa, Greece (1988-1992)

BSc Project: Investigation of the Digestibility of the Shrub Atriplex halimus Using the 'in sacco' Technique of Orskov.

Conducted at the Mediterranean Agronomic Institute of Zaragoza, Spain

The effect of different dietary changes in cows on milk production, fat, protein, and fatty acid composition was studied during this research. Additionally, the water content in milk was measured using the Freezing Point Depression method during dietary changes. This study also examined the health status of cows, particularly during chronic and acute mastitis, in relation to milk quality. A specific focus was placed on antibiotic treatment of

clinically infected udders to determine whether antibiotics were transferred from the infected to the healthy part of the udder.

SCHOLARSHIPS

- *European Social Fund*: One-year academic scholarship for the completion of Master's studies.
 - *Sir Maitland Award*: Financial award during PhD studies.
-

LANGUAGES

- English: Fluent
 - Spanish: Proficient
-

ACADEMIC ACTIVITIES

Presentation of the e-poster “Microbiological quality assessment of nine selected spices in North Greece and Thrace” at the 24th International Conference on Food Technology and Proceedings in October 2020.

Supervision of undergraduate and postgraduate theses within the MSc and BSc programs of the TEI of Western Macedonia, later University of Western Macedonia.

Participation in seminars and discussions organized by the University of Norwich as part of academic duties.

Engagement in a structured and effective postgraduate program during studies, including:

- ✓ **Departmental Seminars:** Weekly organization by the School of Agriculture at the University of Aberdeen and the Scottish Agriculture College.
- ✓ **Project Presentations:** Monthly presentation of research results to professors and students.
- ✓ **Journal Club Meetings:** Discussion of recent publications in various scientific journals.

Member of the *British Society of Animal Production Meeting (B,S,A,P.)* in Scarborough, UK (1996).

Poster presentation: “The Epidemiology of *Staphylococcus aureus* in the Cow Using Pulsed Field Gel Electrophoresis” at the *British Mastitis Conference*, Warwick, UK (1998).

PUBLICATIONS

1. Bruford Peter, Ch., M., Perez, T., Dalamitra, S., Hewitt, G., Erhardt, G., and the Econogene Consortium (2007) **Genetic diversity and subdivision of 57 European and Middle-Eastern sheep breeds**. *Animal Genetics* 38:37–44. [I.F. 2,4 (2022)]
2. Colli, L., Joost, S., Negrini, R., Nicoloso, L., Crepaldi, P., Ajmone-Marsan, P., & Econogene Consortium. (2014). **Assessing the spatial dependence of adaptive loci in 43 European and Western Asian goat breeds using AFLP markers**. *PLoS One*, 9(1), e86668. [I.F. 30752 (2021)]
3. Lenstra J. A., P. Ajmone Marsan, M. Bruford, T. Perez, A. Georgoudis, K. Karetou, G. Hewitt, S. Dalamitra, M. Taylor and the Econogene Consortium (2005) **Evolutionary and Demographic history of sheep and goats suggested by nuclear, mtDNA and Y-chromosome**. *The Role of Biotechnology*, Villa Gualino, Turin, Italy – 5-7 March
4. Lenstra, J. A., Tigchelaar, J., Biebach, I., Econogene Consortium, Hallsson, J. H., Kantanen, J., ... & Sæther, N. (2017). **Microsatellite diversity of the Nordic type of goats in relation to breed conservation: how relevant is pure ancestry?**. *Journal of animal breeding and genetics*, 134(1), 78-84. [I.F. 2,8 (2024)]
5. Joost, S., Bonin, A., Bruford, M.W., Després, L., Conord, C., Econogene Consortium (Dalamitra, S.), Erhardt, G., Taberlet, P., Econogene Consortium (2007) **A Spatial Analysis Method (SAM) to detect candidate loci for selection: towards a landscape genomics approach to adaptation**, *Molecular Ecology*, 16:3955–3969. [I.F. 4,9 (2022)]
6. Bertaglia, M., Joost, Econogene Consortium (Dalamitra, S.), S., Roosen, J., and the Econogene Consortium (2007). **Identifying European Marginal Areas in the Context of Local Sheep and Goat Breeds Conservation: A Geographic Information System Approach**, *Agricultural Systems*, 94:657-670. [I.F. 6,6 (2022)]
7. Cañon J., D. Garcia, M.A. Garcia-Atance, G. Obexer-Ruff, L.A. Lenstra, P. Ajmone-Marsan, Econogene Consortium (Dalamitra, S.), S. Dunner, and the Econogene Consortium (2006) **Geographical partitioning of goat diversity in Europe and the Middle East**. *Animal Genetics* 37, 327-334 [I.F. 2,4 (2022)]
8. Naderi S., Rezaei H.R., Taberlet P, Zundel S., Rafat S. A., Naghash H. R., El-Barody M. A. A., Ertugrul O., Pompanon F., and the Econogene Consortium (2007) **Large-Scale Mitochondrial DNA Analysis of the Domestic Goat Reveals Six Haplogroups with High Diversity**. *PLoS ONE* | Issue 10 | e1012. www.plosone.org [I.F. 3,752 (2021)]

-
9. Hoda, A., Hyka, G., Dunner, S., Obexer-Ruff, G. and Econogene Consortium (2011) **Genetic Diversity of Albanian Goat Breeds based on Microsatellite Markers** *Arch. Zootec.* 60 (231): 607-615 [I.F. 0.46 (2022)]
10. Laloë Denis^{1*}, Katayoun Moazami-Goudarzi¹, Johannes A. Lenstra², Paolo Ajmone Marsan³, Pedro Azor⁴, Roswitha Baumung⁵, Daniel G. Bradley⁶, Michael W. Bruford⁷, Javier Cañón⁸, Gaudenz Dolf⁹, Susana Dunner⁸, Georg Erhardt¹⁰, Godfrey Hewitt¹¹, Stergiani Dalamitra¹¹, Juha Kantanen¹², Gabriela Obexer-Ruff⁹, Ingrid Olsaker¹³, Clemen Rodellar¹⁴, Alessio Valentini¹⁵, Pamela Wiener¹⁶, European Cattle Genetic Diversity Consortium and Econogene Consortium (2010) **Spatial Trends of Genetic Variation of Domestic Ruminants in Europe** *Diversity*, 2, 932-945; doi:10.3390/d2060932 [I.F. 2,1 (2023)]
11. Bruford M. W. and the Econogene Consortium (Dalamitra, S.) (2005) **Strategies for Integrating Husbandry, Genetics, Geographic and Socio-Economic Data for Sustainable Conservation. The Role of Biotechnology**, Villa Gualino, Turin, Italy – 5-7 March
12. Pariset, L., Joost, S., Marsan, P. A., & Valentini, A. (2009). **Landscape genomics and biased F ST approaches reveal single nucleotide polymorphisms under selection in goat breeds of North-East Mediterranean**. *BMC Genetics*, 10(1), 7. [I.F. 2,759 (2021)]
13. Pariset L., I. Cappuccio, P. Ajmone Marsan, S. Dunner, G. Luikart, G. Obexer-Ruff, C. Peter, D. Marletta, F. Pilla, A. Valentini, and the Econogene Consortium (Dalamitra, S.) (2006) **Assessment of population structure by single nucleotide polymorphisms (SNPs) in goat breeds**. *Journal of Chromatography B*, 833:117–120. [I.F. 2,8 (2022)]
14. Canali, G., and the Econogene Consortium (Dalamitra, S.) (2005) **Common agricultural policy reform and its effects on sheep and goat market and rare breeds conservation**, *Small Ruminants Research*, 62:207–21 [I.F. 1,8 (2022)]
15. Pariset, L., Cappuccio, I., Ajmone-Marsan, P., Bruford, M., Dunner, S., Cortes, O., Erhardt, G., Prinzenberg, E.-M., Gutscher, K., Joost, S., Pinto-Juma, G., Nijman, I.J., Lenstra, J.A., Perez, T., Valentini, A., and the Econogene Consortium (2006) **Characterization of 37 Breed-Specific Single-Nucleotide Polymorphisms in Sheep**, *Journal of Heredity*, 97:531-534. [I.F. 4,412 (5 YEARS)]
16. Cappuccio I., L. Pariset, P. Ajmone-Marsan, S. Dunner, O. Cortes, G. Erhardt, G. Lühken, K. Gutscher, S. Joost, I.J. Nijman, J.A. Lenstra, P.R. England, S. Zundel, G. Obexer-Ruff, A. Beja-Pereira, A. Valentini, and the Econogene Consortium (2006) **Allele frequencies and diversity parameters of 27 single nucleotide polymorphisms within and across goat breeds**. *Molecular Ecology Notes*, 6:992-997. [I.F. 4,9 (2022)]
17. Pariset L., I. Cappuccio, S. Joost, M.S. D'Andrea, D. Marletta, P. Ajmone Marsan, A. Valentini, and the Econogene Consortium (2006) **Characterization of single nucleotide**

-
- polymorphisms (SNPs) in sheep and their variation as an evidence of selection.**
Animal Genetics, 37(3): 290-292 [I.F. 2,4 (2022)]
18. Pariset L., A. Cuteri, C. Ligda, P. Ajmone Marsan, A. Valentini and ECONOGENE Consortium (2009) **Geographical patterning of sixteen goat breeds from Italy, Albania and Greece assessed by Single Nucleotide Polymorphisms** *BMC Ecology* 9:20 [I.F. 3,2 (2022)]
19. Dalamitra, S., Kesidou, K., Papadaki Ch. and Mitlianga P. (2020). **Microbiological quality assessment of nine selected spices in North Greece and Thrace**. Food technology 24th International Conference, Webinar, Conference Series LLC. LTD., UK
20. Papadaki Ch., Kesidou, K. Dalamitra, S. and Mitlianga P. (2020). **Preliminary report on antioxidant activity of spices commercialized in north Greece**. Food technology 24th International Conference, Webinar, Conference Series LLC. LTD., UK

EXPERIENCE IN PART-TIME EMPLOYMENT

University Teaching Assistant, teaching second- and third-year students at the University of Aberdeen in the course *Animal, Crop, and Food Microbiology* for four years (1996-2000).

Part-time employment for two months at the Milk Quality Laboratory of SYNERGAL, Larissa (1991).

Full-time employment for three months at the Agricultural Bank of Katerini (1992).

Private mathematics tutor for middle school students in Aberdeen, UK.

COMPUTER SKILLS

Fully competent with Microsoft Office package (IC3 - Internet and Computing Core Certification)

Florina, 25/05/2025



Stergiani DALAMITRA