ANTONIA MATARAGKA

Nationality: Greek

Tel.: (+30) 6936942517

Date of birth: 23/03/1984

Gender: Female

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Address: Naiadon 35, 17561 Athens (Greece)

EDUCATION AND TRAINING

Postdoctoral researcher

Agricultural University of Athens [01/12/2019 – 30/11/2021]

Field(s) of study: Molecular Microbiology

Investigation of the association of the *SLC11A1* promoter gene polymorphisms with resistance of sheep to paratuberculosis.

PhD in Agricultural Sciences

Agricultural University of Athens [10/11/2014 – 21/11/2018]

Field(s) of study: Molecular Microbiology

Final grade : 10.0

Subject of PhD Thesis: Investigation to determine variation in feacal shedding of *Mycobacterium avium* subspecies *paratuberculosis* in sheep with natural exposure to paratuberculosis.

BSc in Agricultural Science

Agricultural University of Athens [2014]

Final grade : 7.08

Graduation dissertation title: Comparative molecular detection of DNA belonging to *Leishmania* spp. on samples of blood and bone marrow of dogs, by the Polymerase Chain Reaction (PCR).

Graduation dissertation grade: 10.0

WORK EXPERIENCE

Registered Analyst at the Laboratory of Microbiology and Molecular Analysis

Agricultural University of Athens [01/01/2016 – Current]

Application of ISO17025 Quality Protocol (accreditation certificate 1042; approved in 2016).

Training on the organization and implementation of the ISO17025 Quality Protocol

Agricultural University of Athens [2013 – Current]

With respect to the following techniques:

- Detection of antibody specific for *Mycobacterium avium* subsp. *paratuberculosis* (ELISA).
- Detection of DNA belonging to genus *Leishmania* spp. (house real-time PCR).
- Detection of DNA belonging to *Mycobacterium avium* subsp. *paratuberculosis* (house real-time PCR).
- DNA isolation from faeces and milk samples for the detection of *Mycobacterium avium* subsp *paratuberculosis*.
- DNA isolation from blood, bone marrow and lymph nodes.

Education and traineeship at the Agricultural Veterinary Hospital of Zakynthos

Veterinary Directorate of Zakynthos [01/07/2015 – 31/08/2015]

Education and traineeship in the provision of health services to productive animals, implementation of infectious disease control programs, vaccination, treatment, and control of its outcome (Supervisor Dr. Efthimiou - Veterinarian).

Education and traineeship at the Agricultural Veterinary Hospital of Zakynthos

Veterinary Directorate of Zakynthos [01/07/2014 – 31/08/2014]

Education and traineeship in the provision of health services to productive animals, implementation of infectious disease control programs, vaccination, treatment, and control of its outcome (Supervisor Dr. Efthimiou - Veterinarian).

ORGANISATIONAL SKILLS AND MANAGEMENT

Supervising laboratory staff during the Erasmus student internships

- 2019-20: Ivanna Pallante (Italy).
- 2016-17: Casie Smyth (United Kingdom), Shannon Leetham (United Kingdom).
- 2015-16: Ingrida Reneckyte (Estonia), Ieva Mizereviciute (Estonia), Ausra Baksinskaite (Estonia), Eva Hutter (Austria), Agnė Šližytė (Lithuania), Monika Gilyte (Lithuania).

Supervising the experimental session of dissertation studies

Dissertation studies from 2014 until today at the Department of Anatomy and Physiology of Farm Animals - Faculty of Animal Science and Aquaculture - A.U.A.:

- Diagnostic investigation for the detection of mycobacteria in samples of fish feeds and tissue from sea bream and sea bass.
- Detection of *Staphylococcus aureus* in ovine raw milk.
- Study of genetic predisposition of honey bee (*Apis melifera*) in nosemasis.
- Detection of the *SOD1* gene mutation, associated with canine degenerative myelopathy of the Belgian Shepherd breed, in Greece
- Detection of *Mycobacterium avium* subsp. *paratuberculosis* in food of animal origin intended for consumption by children in Greece.
- Diagnostic indicators of ovine paratuberculosis during the perinatal period.
- Factors determining the genetic predisposition of sheep to paratuberculosis.
- Investigation of the presence of *c1067C> G* polymorphism in the coding region of the goat *SLC11A1* gene.
- *In vitro* study of the effect of exposure to *mycobacterium avium* subsp *paratuberculosis* in the expression of genes contributing to the natural antibacterial protection of the goat.

Supervising laboratory staff during the laboratory exercises

- Microbiology (undergraduate): 2016-2020.
- Animal Hygiene (undergraduate): 2014-2020.
- Animal Diseases (undergraduate): 2014-2020.

PROJECTS

- Molecular microbiological methods of analysis
- Multiparametric detection of biomolecules
- Innovation and Entrepreneurship - Utilization of research at the Agricultural University of Athens
- Molecular services for the detection of diagnostic markers to the animal medical center
- Molecular services for the detection of diagnostic markers to the attica zoological park
- Disseminating Innovative Solutions for Antibiotic Resistance Management – DISARM
- Emblematic action for bees

PUBLICATIONS

- Prospective epidemiological, clinical, and clinicopathologic evaluation of *Bartonella* spp. and haemoplasma infection in cats from Greece.

Kokkinaki, K.G., Saridomichelakis, M.N., Skampardonis, V., **Mataragka, A.**, Ikonomopoulos, J., Leontides, L., Mylonakis, M.E., Steiner, J.M., Suchodolski, J.S., Xenoulis, P.G.

Comparative Immunology, Microbiology and Infectious Diseases (under review)

- Antimicrobial drug resistance in sheep farms in Greece: assessment of the current situation and investigation towards improving surveillance and control.

Tzimotoudis N., **Mataragka A***., Mavrommatis A., Malesios C., Anastasiadi V., Galanis D., Timofte D., Zendri F., Tsiplakou E., Zervas G., Ikonomopoulos J.

Preventive Veterinary Medicine (under review)

- Diagnostic investigation for the detection of mycobacteria in samples of fish feeds and tissue from sea bream and sea bass with severe tubercular lesions.

Mataragka, A*., Tzimotoudis, N., Kolygas, M., Karavanis, E., Ikonomopoulos, J.

Aquaculture 546:737283 (2022). doi: 10.1016/j.aquaculture.2021.737283

- Allele and genotype frequencies of the *SOD1* gene polymorphism associated with canine degenerative myelopathy, in Belgian Malinois dogs in Greece.

Mataragka, A., Ikonomopoulos, J., Zervas, G.S., Vamvakidis, C.D., Tzimotoudis, N., Hager-Theodorides, A-L., Gazouli, M., Kominakis, A.

Veterinary World 14(6):1472-1479 (2021). doi: 10.14202/vetworld.2021.1472-1479

- Detection of the Deformed Wing Virus of bees using the polymerase chain reaction: a review with reference to method performance.

Mataragka, A., Leetham, S., Smyth, C.S., Decaro, N., Charistos, L., Bouga, M., Ikonomopoulos, J.

Journal of Apicultural Research (2020). doi: 10.1080/00218839.2019.1702324

- Comparative evaluation of the performance of the PCR assays commonly used for the determination of sex in avian species.

Mataragka, A., Balaskas, C., Sotirakoglou, K., Ikonomopoulos, J.

Journal of King Saud University–Science 32:228-234 (2020). doi: 10.1016/j.jksus.2018.04.020

- A randomized, blinded, controlled clinical trial comparing the efficacy of aminosidine (paromomycin) allopurinol combination with the efficacy of meglumine antimoniate-allopurinol combination for the treatment of canine leishmaniosis due to *Leishmania infantum*.

Kasabalis, D., Chatzis, M.K., Apostolidis, K., Petanides, T., Athanasiou, L.V., Xenoulis, P.G., **Mataragka, A**., Ikonomopoulos, J., Leontides, L.S., Saridomichelakis, M.N.

Experimental Parasitology 214:107903 (2019). doi: 10.1016/j.exppara.2020.107903

- Assessment of the use of PCR as an early diagnostic indicator of bovine tuberculosis in dairy farms.

Mataragka, A., Fytani, V., Sotirakoglou, K., Katsiolis, A., Dile, C., Ikonomopoulos, J.

Mycobacterial Diseases 9:273 (2019). doi: 10.4172/2161-1068.1000273

- Genetic factors conferring sensitivity or resistance to leishmaniosis: comparative assessment in animals and humans.

Ikonomopoulos, J., **Mataragka, A.**

Sustainable Development, Culture, Traditions Journal, Special Volume in Honor of Professor George I. Theodoropoulos 49-57 (2019). doi: 10.26341/issn.2241-4002-2019-sv-6

- Parturition affects test-positivity in sheep with subclinical paratuberculosis; investigation following a preliminary analysis.

Mataragka, A., Sotirakoglou, K., Gazouli, M., Triantaphyllopoulos, K.A., Ikonomopoulos, J.

Journal of King Saud University–Science 31:1399-1403 (2019). doi: 10.1016/j.jksus.2019.02.009

- Effect of *β*-Lactoglobulin gene polymorphism, lactation stage and breed on milk traits in Chios and Karagouniko sheep breeds.

Triantaphyllopoulos, K.A., Koutsouli, P., Kandris, A., Papachristou, D., Markopoulou, K.E., **Mataragka, A.**, Masouras, T., Bizelis, I.

Annals of Animal Science 17(2):371-384 (2017). doi: 10.1515/aoas-2016-0058

- Faecal shedding of *Mycobacterium avium* subspecies *paratuberculosis* reduces before parturition in sheep?

Mataragka, A., Leousi, E., Liandris, E., Ntafis, V., Leontides, L., Aggelidou, E., Bossis, I., Triantaphyllopoulos, K.A., Theodoropoulou, I., Ikonomopoulos, J.

Small Ruminant Research 147:32-36 (2017). doi: 10.1016/j.smallrumres.2016.11.017

- Detection of *mycobacterium avium* subsp. *paratuberculosis* in cheeses from small ruminants in Tuscany.

Galiero, A., Fratini, F., **Mataragka, A.,** Turchi, B., Nuvoloni, R., Ikonomopoulos, J., Cerri, D.

International Journal of Food Microbiology 217:195-199 (2016). doi: 10.1016/j.ijfoodmicro.2015.10.029

- Detection of Leishmania-specific DNA and surface antigens using a combination of functionalized magnetic beads and cadmium selenite quantum dots.

Andreadou, M., Liandris, E., Gazouli, M., **Mataragka, A.,** Tachtsidis, I., Goutas, N., Vlachodimitropoulos, D., Ikonomopoulos, J.

Journal of Microbiological Methods 123:62-67 (2016). doi: 10.1016/j.mimet.2015.11.019

- Detection of mycobacterial DNA by a specific and simple lateral flow assay incorporating cadmium selenide quantum dots. Cimaglia, F., Liandris, E., Gazouli, M., Sechi, L., Chiesa, M., De

Lorenzis, E., Andreadou, M., Taka, S., **Mataragka, A.**, Ikonomopoulos, J.

Molecular and Cellular Probes 29:534-536 (2015). doi: 10.1016/j.mcp.2015.06.001

CONFERENCES

- The 3’ untranslated region of the Solute Carrier Family 11 member 1 gene (*SLC11A1*), a promising genetic marker of sensitivity of sheep to paratuberculosis.

Mataragka, A., Ikonomopoulos, J.

Oral presentation: ***3rd International Conference of the European College of Veterinary Microbiology*** (ICECVM), Webinar, 2021

- The 3’ untranslated region of the Solute Carrier Family 11 member 1 gene (*SLC11A1*), a promising genetic marker of resistance or sensitivity of sheep to paratuberculosis?

Mataragka, A., Tzimotoudis, N., Ikonomopoulos, J.

Oral presentation: ***2nd International Conference of the European College of Veterinary Microbiology*** (ICECVM), Webinar, 2020

- Preliminary investigation for the causation of tuberculous lesions in sea breams in Greece.

Mataragka, A., Tzimotoudis, N., Kolygas, M.N., Karavanis, E., Galanis, D., Anastasiadi, V., Pallante, I., Ikonomopoulos, J.

Oral presentation: ***2nd International Conference of the European College of Veterinary Microbiology*** (ICECVM), Webinar, 2020

- Disseminating Innovative Solutions for Antibiotic Resistance Management.

Mavrommatis, A., **Mataragka, A.**, Ikonomopoulos, J., Tsiplakou, E., Zervas, G.

Poster: ***2nd International Conference of the European College of Veterinary Microbiology*** (ICECVM), Webinar, 2020

- Antimicrobial resistance of *E. coli* isolates collected from water samples.

Tzimotoudis, N., **Mataragka, A.**

Poster: ***2nd International Conference of the European College of Veterinary Microbiology*** (ICECVM), Webinar, 2020

- Investigation to determine variations in faecal shedding of *Mycobacterium avium* subspecies *paratuberculosis* (MAP) in sheep, with regards to parturition.

Antonia Mataragka, Kyriaki Sotirakoglou, John Ikonomopoulos.

Oral presentation: ***1st International Conference of the European College of Veterinary Microbiology*** (ICECVM), Athens, 2019.

- PCR conducted on pooled milk samples collected from the older animal of dairy farms constitutes a sensitive early diagnostic indicator of bovine tuberculosis.

Antonia Mataragka, Virginia Fytani, Kyriaki Sotirakoglou, John Ikonomopoulos.

Poster: ***1st International Conference of the European College of Veterinary Microbiology*** (ICECVM), Athens, 2019.

- Εκτίμηση του παρασιτκού φορτίου δειγμάτων αίματος και μυελού των οστών σκύλων με υποψία λεϊσμανίωσης, χρησιμοποιώντας την ίδια μέθοδο αλυσιδωτής αντίδρασης της πολυμεράσης πραγματικού χρόνου με διαφορετικής προέλευσης χημικά αναλώσιμα.

Αντωνία Ματαράγκα, Στυλιανή Μιχοπούλου, Γεωργία Διακούδη, Βασίλειος Ντάφης, Ιωάννης Οικονομόπουλος.

Oral presentation: ***13ο Πανελλήνιο Κτηνιατρικό Συνέδριο***, Athens, 2015.

- Μελέτη της θετικότητας στην παραφυματίωση σε κλειστή εκτροφή προβάτων, σε σχέση με τον τοκετό.

Ελισάβετ Λεούση, **Αντωνία Ματαράγκα,** Γεωργία Διακούδη, Ιωάννης Οικονομόπουλος.

Oral presentation: ***13ο Πανελλήνιο Κτηνιατρικό Συνέδριο***, Athens, 2015.

- Εκτίμηση του πραγματικού ποσοστού προσβολής από *Mycobacterium avium* subsp *paratuberculosis* γιδιών ή προβάτων εγχώριων φυλών, καθώς και της διαγνωστικής αξιοπιστίας της τεχνικής της αλυσιδωτής αντίδρασης της πολυμεράσης για ομαδοποιημένα δείγματα κοπράνων. Λεωνίδας Λεοντίδης, Πολυχρόνης Κωστούλας, Ελισάβετ Αγγελίδου, **Αντωνία Ματαράγκα**, Ιωάννης Οικονομόπουλος.

Oral presentation: ***13ο Πανελλήνιο Κτηνιατρικό Συνέδριο***, Athens, 2015.

LANGUAGE and COMPUTER SKILLS

English

Certificate of Proficiency in English, The University of Michigan

French

DELF 1 (Unite A1), IFA

DELF 4 (Unite A4), IFA

Computer skills

Microsoft Office Specialist Certificate

Databases: NCBI, OMIM, PubMed, BLAST, Ensembl

Primer Design

RECOMMENDATIONS

Name: John Ikonomopoulos

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Professor at the Agricultural University of Athens - Faculty of Animal Science and Aquaculture - Department of Anatomy and Physiology of Farm Animals.

Name: Styliani Chadio-Mantzari

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Professor at the Agricultural University of Athens - Faculty of Animal Science and Aquaculture - Department of Anatomy and Physiology of Farm Animals.