

## **Curriculum vitae**

### **Konstantinos C. Mountzouris**

Professor (*MSc, Ph.D*)

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### **EDUCATION & QUALIFICATIONS**

- Jul 1999: Doctor of Philosophy (*Ph.D*), Department of Food Science & Technology, University of Reading, UK.
- Dec 1995: Master of Science (*MSc*) in Food & Agricultural Biotechnology. Department of Food Science & Technology, University of Reading, UK.
- Jul 1994: *BSc* in Animal Science. Department of Animal Science, Agricultural University of Athens, GR.

### **PROFESSIONAL EXPERIENCE**

- Sep2020 – Present: Professor of Animal Nutritional Biotechnology, AUA.
- June 2016 – Aug 2020: Associate Professor of Animal Nutritional Biotechnology, AUA.
- July 2014 – May2016: Tenured Assistant Professor of Animal Nutritional Biotechnology, AUA.
- Sep 2010 – June 2014: Assistant Professor of Animal Nutritional Biotechnology, AUA.
- Jan 2005 – Sep 2010: Lecturer in Animal Nutritional Biotechnology, AUA.
- Feb 2002 – Dec 2004: Research Fellow. Tasks: development and application of research methods relevant to aspects of modern animal and human nutrition. Worked also as a contract lecturer in teaching undergraduate courses in Monogastric and Ruminant nutrition at AUA.
- Mar 2003 – Feb 2004: Contract Lecturer in teaching Human Nutrition at the Department of Home Economics and Ecology, Harokopio University, Athens.
- Apr 1999 – Mar 2000: Postdoctoral Research Fellow. Research on infant milk formulae modifications targeting the beneficial gut microflora using functional ingredients (industrial R&D project). Food Microbial Sciences Unit, University of Reading, UK.

- Compulsory Military service fulfilled (May 2000 - Jan 2002)

### **RESEARCH TOPICS OF INTEREST**

- Animal nutrition and study of the effects of bioactive (functional) food / feed components and beneficial microorganisms (i.e. probiotics, yeast) on target physiological functions of animals (e.g. growth performance, nutrient digestion and absorption, capacity to resist oxidation, intestinal function, gut

microbiota composition and metabolic activity, immune response - inflammation, gut integrity and relevant gene expressions).

- Evaluation of the efficacy of incorporating various bioactives (e.g. probiotics, prebiotics, organic acids, enzymes and phytochemicals) into the diets of animals as antibiotic free growth promoters.
- Application of enzyme technology and biotechnology for the nutritional upgrade of various feedstuffs and by products of agro-food origin and the production of tailored food / feed bioactive ingredients targeting an improved gut function and health.

#### **FELLOWSHIPS - AWARDS**

- Sep 2008: The B.R.A.I.N award for research work presented in the World Nutrition Forum (2008), September 17-19, Mayerhofen, Austria.
- Jan 2003 – Dec 2003: Greek State Scholarships Foundation, Postdoctoral Research funding in the field of Agricultural Sciences (duration 12 months).
- Feb 1996 – Jan 1999: European Union, Marie Curie Research Training Grants, Agriculture and Fisheries Fair (duration 36 months).

#### **RESEARCH PROGRAMMES**

1. Participation in the research programme entitled: "Efficacy of anti-mycotoxin substances in broiler nutrition", funded by industry, duration 12 months (2/2002-2/2003) with research coordinator Prof. K. Fegeros.
2. Participation in the EU funded research programme CRAFT-QLK5-CT-2002-71662 entitled: "Development of a Competitive Exclusion Product for Poultry Meeting the Regulatory Requirements in the European Union, duration 24 months (2/2003-2/2004) with research coordinator Prof. G. Zervas.
3. Scientific coordinator and principal investigator of the Research Programme entitled: "Microbiological analysis of feed, water and gut samples from broiler chickens fed a new nutritional competitive exclusion product", funded by industry and duration 12 months (7/2005-7/2006).
4. Scientific coordinator and principal investigator of the Research Programme entitled: "Optimisation of feed inclusion levels of probiotic and phytochemical feed additive products in broiler nutrition and investigation of their effects on broiler intestinal ecology and physiology", funded by industry and duration 36 months (4/2007-3/2010).
5. Participation in the research programme entitled "Effects of diet on physicochemical and sensory characteristics of sheep and goat milk from organic farms" funded by the Hellenic General Secretariat for Research and Technology with 24 month duration and programme coordinator Dr. I. Xatzigeorgiou.
6. Participation in the research programme entitled: "Effects of essential oils and benzoic acid administration in broiler performance and gut microflora composition", funded by industry duration 9 months (8/2007 - 4/2008) with programme coordinator Prof. G. Zervas.
7. Participation (2009-2010) in EU funded Research Programme FP6 007081 entitled "Pathogen Combat for Safe Food" with work package coordinator Prof. E. Tsakalidou.
8. Participation in research programme entitled: "Nutritive evaluation of crude glycerol in growing piglets", funded by the AUA – Research Committee, duration 24 months (2010-2011) with programme coordinator Dr. G. Papadomichelakis.
9. Scientific coordinator and principal investigator of the Research Programme entitled: "Investigation of critical biomarkers underpinning the mechanisms behind the beneficial effects of probiotic and phytochemical feed additives on broiler performance and gut health", funded by industry and duration 48 months (9/2011-8/2015).

10. Scientific coordinator and principal investigator of the Research Programme entitled: "Investigation of the efficacy of *Saccharomyces cerevisiae* in broilers under pathogenic challenge", funded by industry and duration 24 months (10/2012-10/2014).
11. Scientific coordinator and principal investigator of the Research Programme entitled: "Matrix value validations for selected feed enzymes in broilers", funded by industry and duration 16 months (9/2015-12/2016).
12. Scientific coordinator and principal investigator of the Research Programme entitled: "Mapping and validating energy and protein matrix values of phytogenics and probiotics for optimum performance efficiency in broilers", funded by industry and duration 31 months (12/2015-8/2018).
13. Scientific coordinator and principal investigator of the Research Programme entitled: "Evaluation of dietary phytogenic inclusion level on broiler growth performance and nutrient digestibility", funded by industry and duration 20 months (5/2016-4/2017).
14. Scientific coordinator and principal investigator of the Research Programme entitled: "Profiling broiler gut for critical indices relevant to gut function and health" funded by industry and duration 12 months (4/2017-4/2018).
15. Scientific coordinator and principal investigator of the Scientific Programme entitled: "Scientific support in research, development and application of feed additives in animal nutrition" funded by industry and duration 14 months (11/2017-12/2018).
16. Scientific coordinator and principal investigator of the Scientific Programme entitled: "Scientific support and evaluation of animal nutrition applications" funded by industry and duration 8 months (4/2019-12/2019).
17. Scientific coordinator and principal investigator of the Research Programme entitled: "Advancing knowledge regarding the energy and protein sparing potential of phytogenics and probiotics at gut and overall broiler level" funded by industry and duration 36 months (9/2019-9/2022).
18. Scientific coordinator and principal investigator of the Research Programme entitled: "Evaluation of feed – flavouring compounds formulations for their effects on broiler performance, gut and liver function biomarkers" funded by industry and duration 18 months (1/2020-6/2021).
19. Scientific coordinator and principal investigator of the Research Programme entitled: "Evaluation of vitamin D3 levels and its metabolites on performance, egg quality and physiological biomarkers in older laying hens" funded by industry and duration 18 months (1/2020-6/2021).
20. Scientific coordinator of the Research Programme entitled: "Mapping the profile of molecular biomarkers relevant for the intestinal antioxidant status and integrity in an intestinal dysbiosis experimental model induced in broilers via nutrition and mycotoxins" Action code ΟΠΣ 5048543 and duration 15 months (end date 16/12/2021) funded by the National Strategic Reference Framework 2014-2020.
21. Scientific coordinator and principal investigator of the Research Programme entitled: "Evaluation of phytogenic premix inclusion level on hen laying performance, egg quality and critical gut, liver and ovaries function biomarkers" funded by industry and duration 30 months (7/2020-12/2022).
22. Participation in research programme entitled: "Acid whey from yogurt: Turning an environmental burden into innovative added value end products" Operational Programme Competitiveness, Entrepreneurship and Innovation 2014-2020 (EPAnEK) Coordinator Prof. Politis (10/2020-4/2023).
23. Scientific coordinator of the Research Programme entitled: "Mapping the inclusion level effect of two feed additives under varying dietary crude protein levels on broiler performance and gut function responses" funded by industry and duration 17 months (3/2021-8/2022).
24. Scientific coordinator of the Research Programme entitled: "Dose response study of a plant bioactive formulation in broiler nutrition» funded by industry and duration 17 months (3/2021-8/2022).
25. Scientific coordinator of the Research Programme entitled: "Multi-efficacy assessment of a dietary plant bioactive formulation in pigs and poultry" funded by industry and duration 25 months (11/2021-12/2023).

## **TEACHING ACTIVITIES**

**Undergraduate Programme:** Involved in the teaching of the following subjects of the new departmental curriculum (2015 onwards):

Nutritional Physiology of Animals, Feed Science and Technology, Farm Animal Nutrition, Biotechnological Applications in Animal Nutrition and Principles of Human Nutrition

**Postgraduate Programme(s):** Involved in a series of lectures dealing with:

1) Applications of Biotechnology in Animal Nutrition, Functional Foods/Feeds and Modern Analytical Techniques within the MSc programme entitled “Livestock Production Systems” with specialisation in “Nutrition & Feedstuffs Technology” of the Faculty of Animal Science and Aquaculture until 2014, and

2) Biotechnological applications in ruminant nutrition within the MSc programme entitled “Integrated Production Management of Milk and Dairy products”, running as a joint interdepartmental course between the Faculty of Animal Science and Aquaculture and the Faculty of Food Science & Technology of AUA (ongoing).

## **SUPERVISION OF UNDERGRADUATE (BSc), POSTGRADUATE (MSc) AND DOCTORATE (PHD) THESIS**

BSc: >40 students, MSc: 7 and PhD: 6

Multiple participations as member of examination committees in BSc, MSc and PhD candidates.

## **OTHER ACADEMIC ACTIVITIES**

- Elected Director of Nutritional Physiology and Feeding Laboratory (until 2024)
- Elected Head of Department of Animal Science (09/2020 – 8/2022)
- Elected Associate Departmental Head (12/2019 – 8/2020)
- Member of the Departmental Bioethics for Research Committee
- Member of the Departmental Quality Assurance Unit Committee
- Scientist in charge for the Departmental Experimental Facility for Broiler Chickens
- Departmental representative for the ERASMUS+ (chair 2010-2013 / assoc. chair 2014 onwards),
- Departmental representative for IAESTE (International Association for the Exchange of Students for Technical Experience) programme.
- Member of committees charged by the University’s Senate with the role to evaluate, select, monitor and supervise delivery of central goods and services

## **OTHER PROFESSIONAL FUNCTIONS - MEMBERSHIPS**

- Editorial board member in *Livestock Science* (Section Editor – non ruminant nutrition)
- Editorial board member in *Animal Production Science* (Associate Editor)
- Editorial board member in *Animal Nutrition*
- Editorial board member in the *Journal of Animal Physiology and Animal Nutrition*
- Member of the Poultry Science Association (USA) Hy-Line International Research Award Committee (2014-2017)
- Expert delegate of the Greek National committee for the section “European Bioeconomy Challenges: Food Security, Sustainable Agriculture and Forestry, Marine and Maritime and Inland Water Research” under Societal Challenge II of the EU framework programme Horizon 2014-2020.

- Expert evaluator of proposals submitted under the “Food Quality and Safety” and "Fork to Farm: Food, Nutrition and Well-being" of the European Union FP6 & FP7 programmes respectively.
- Member of scientific committees assessing the progress of research programmes funded by the Hellenic General Secretariat for Research and Technology.
- Associate Member of the management committee of COST Action 0802 “Feed for Health”.
- Member of 4 professional societies: Poultry Science Association (PSA), World Poultry Science Association (WPSA), Society of Chemical Industry (SCI) and Hellenic Society of Animal Science.
- Invited reviewer in multiple instances by 35 peer review international scientific journals in the field of Animal and Human Nutrition, Animal Physiology, Animal Production, Biotechnology, Immunology and Microbiology

(*Anaerobe, Animal Biotechnology, Animal Feed Science and Technology, Animal Nutrition, Animal Production Science, Animal, British Journal of Nutrition, British Poultry Science, Czech Journal of Animal Science, European Poultry Science, FEMS Immunology & Medical Microbiology, Food Control, Hellenic Animal review Journal (Επιθεώρηση Ζωοτεχνικής Επιστήμης), Hellenic Journal of Nutrition and Dietetics, Italian Journal of Animal Science, International Dairy Journal, International Journal of Microbiology, International Journal of Molecular Sciences, Journal of Agricultural Science and Technology, Journal of Animal and Feed Sciences, Journal of Animal Physiology and Animal Nutrition, Journal of Applied Microbiology, Journal of Applied Poultry Research, Journal of HVMS, Journal of the Saudi Society of Agricultural Sciences, Journal of the Science of Food and Agriculture, Pathogens, Plos One, Poultry Science, Revue de Médecine Vétérinaire, The Journal of Poultry Science, Turkish Journal of Veterinary and Animal Sciences and Veterinary Parasitology, The Nutrition Journal, Veterinary Parasitology*).

## PUBLICATIONS

### PEER REVIEW SCIENTIFIC JOURNALS:

1. **Mountzouris KC**, Fegeros K and Papadopoulos G (1999) Utilisation of fats based on the composition of sow milk fat in the diet of weanling pigs. *Animal Feed Science and Technology*, **77**: 115-124.
2. **Mountzouris KC**, Gilmour SG, Grandison AS and Rastall RA (1999) Modeling of oligodextran production in an ultrafiltration stirred-cell membrane reactor. *Enzyme and Microbial Technology*, **24**, 75-85.
3. **Mountzouris KC**, Gilmour SG, Jay AJ and Rastall RA (1999) A study of dextran production from maltodextrin by cell suspensions of *Gluconobacter oxydans* NCIB 4943. *Journal of Applied Microbiology*, **87**: 546-556.
4. Olano-Martin E, **Mountzouris KC**, Gibson GR and Rastall RA (2000) *In vitro* fermentability of dextran oligodextran and maltodextrin by human gut bacteria. *British Journal of Nutrition*, **83 (3)**: 247-255.
5. Olano-Martin E, **Mountzouris KC**, Gibson GR and Rastall RA (2001) Continuous production of pectic-oligosaccharides in an enzyme membrane reactor. *Journal of Food Science* **66 (7)**: 966-971.
6. **Mountzouris KC**, Gilmour SG and Rastall RA (2002) Continuous production of oligodextrans via controlled hydrolysis of dextran in an enzyme membrane reactor. *Journal of Food Science* **67(5)**: 1767-1771.
7. **Mountzouris KC**, McCartney AL and Gibson GR (2002) Intestinal microflora of human infants and current trends for its nutritional modulation. *British Journal of Nutrition* **87 (5)**: 405-420.
8. **Mountzouris KC** and Gibson GR (2003) Colonisation of the gastrointestinal tract. *Annales Nestle* **61(2)**, 43-54.
9. **Mountzouris KC**, Xypoleas I, Kouseris I and Fegeros K (2006) Nutrient digestibility, faecal physicochemical characteristics and bacterial glycolytic activity of growing pigs fed a diet supplemented with oligofructose or trans-galactooligosaccharides. *Livestock Science* **105**: 168-175.
10. **Mountzouris KC**, Balaskas C, Fava F, Tuohy KM, Gibson GR and Fegeros K (2006) Profiling of composition and metabolic activities of the colonic microflora of growing pigs fed diets supplemented with prebiotic oligosaccharides. *Anaerobe* **12**: 178-185.
11. Tsiplakou E, **Mountzouris KC** and Zervas G (2006) Concentration of conjugated linoleic acid in grazing sheep and goat milk fat. *Livestock Science* **103**: 74-84.

12. Tsiplakou E, **Mountzouris KC** and Zervas G (2006) The effect of breed, stage of lactation and parity on sheep milk fat CLA content under the same feeding practices. *Livestock Science* **105**: 162-167.
13. **Mountzouris KC** (2006) Assessment of the efficacy of probiotics, prebiotics and synbiotics in swine nutrition: a review. *Food Science and Technology Bulletin: Functional Foods* **3**(6): 51-71.
14. **Mountzouris KC**, Tsirtsikos P, Kalamara E, Nitch S, Schatzmayr G and Fegeros K (2007) Evaluation of the efficacy of a probiotic containing *Lactobacillus*, *Bifidobacterium*, *Enterococcus* and *Pediococcus* strains in promoting broiler performance and modulating cecal microflora composition and metabolic activities. *Poultry Science* **86** (2): 309-317.
15. Fasseas MK, **Mountzouris KC**, Tarantilis PA, Polissiou M and Zervas G (2008) Antioxidant activity in meat treated with oregano and sage essential oils. *Food Chemistry* **106** (3): 1188-1194.
16. Maragkoudakis PA, **Mountzouris KC**, Psyrras D, Cremonese S, Fischer J, Cantor MD and Tsakalidou E (2009) Functional properties of novel protective lactic acid bacteria and application in raw chicken meat against *Listeria monocytogenes* and *Salmonella enteritidis*. *International Journal of Food Microbiology* **130**: 219-226.
17. **Mountzouris KC**, Kotzampassi K, Tsirtsikos P, Kapoutzis K and Fegeros K (2009) Effects of *Lactobacillus acidophilus* on gut microflora metabolic biomarkers in fed and fasted rats. *Clinical Nutrition* **28**:318-324.
18. **Mountzouris KC**, Balaskas C, Xanthakos I, Tzivinikou A and Fegeros K (2009) Effects of a multi-species probiotic on biomarkers of competitive exclusion efficacy in broilers challenged with *Salmonella enteritidis*. *British Poultry Science* **50**: 467-478.
19. **Mountzouris KC**, Tsirtsikos P, Palamidi I, Arvaniti A, Mohnl M, Schatzmayr G and Fegeros K (2010) Effects of probiotic inclusion levels in broiler nutrition on growth performance nutrient digestibility, plasma immunoglobulins and cecal microflora composition. *Poultry Science* **89**: 58-67.
20. Maragkoudakis PA., **Mountzouris KC**, Rosu C, Zoumpopoulou G, Papadimitriou K, Dalaka E, Hadjipetrou A, Theofanous G, Strozzi GP, Carlini N, Zervas G and Tsakalidou E (2010) Feed supplementation of *L. plantarum* PCA 236 modulates gut microbiota and milk fatty acid composition in dairy goats – a preliminary study. *International Journal of Food Microbiology* **141**: S109-S116.
21. Papadomichelakis G, **Mountzouris KC**, Paraskevakis N and Fegeros K (2011) Caecum odd-numbered and branched-chain fatty acids in response to dietary changes in growing rabbits. *Journal of Animal Physiology and Animal Nutrition* **95**: 707-716.
22. **Mountzouris KC**, Paraskevas V, Tsirtsikos P, Palamidi I, Steiner T, Schatzmayr G and Fegeros K (2011) Assessment of a phytogenic feed additive effect on broiler growth performance, nutrient digestibility and caecal microflora composition. *Animal Feed Science and Technology* **168**: 223-231.
23. Papadomichelakis G, **Mountzouris KC**, Zoidis E and Fegeros K (2011) Influence of dietary benzoic acid addition on nutrient digestibility and selected biochemical parameters in fattening rabbits. *Animal Feed Science and Technology* **163**: 207-213.
24. Mitsou EK, Kougia E, Nomikos Tz, Yannakoulia M, **Mountzouris KC** and Kyriacou A (2011) Effect of banana consumption on faecal microbiota: A randomised, controlled trial. *Anaerobe* **17**: 384-387.
25. Turunen K, Tsouvelakidou E, Nomikos Tz, **Mountzouris KC**, Karamanolis D, Triantafillidis J and Kyriacou A (2011) Impact of beta-glucan on the faecal microbiota of polypectomized patients: A pilot study. *Anaerobe* **17**: 403-406.
26. Pappas AC, **Mountzouris KC**, Fegeros K and Zervas G (2011) Effects of essential oils and benzoic acid on broiler performance and gut microflora. *Επιθεώρηση Ζωοτεχνικής Επιστήμης (Animal Science Review – Official Journal of the Hellenic Society of Animal Production ( [http://www.eaap.org/Content/greek\\_publication.htm](http://www.eaap.org/Content/greek_publication.htm)))* **41**: 55-64
27. Papadomichelakis G, Zoidis E, **Mountzouris KC**, Lippas T and Fegeros K (2012) Glycerine kinase gene expression, nutrient digestibility and gut microbiota in post-weaned pigs fed diets with increasing crude glycerine levels. *Animal Feed Science and Technology* **177**, 247-252.
28. Tsirtsikos P, Fegeros K, Kominakis A., Balaskas C and **Mountzouris KC** (2012) Modulation of intestinal mucin composition and mucosal morphology by dietary phytogenic inclusion level in broilers. *Animal* **6**: 1049-1057.
29. Tsirtsikos P, Fegeros K, Balaskas C, Kominakis A, and **Mountzouris KC** (2012) Dietary probiotic inclusion level modulates intestinal mucin composition and mucosal morphology in broilers. *Poultry Science* **91**: 1860-1868.
30. Fasseas MK, Fasseas C, **Mountzouris KC** and Syntichaki P (2013) Effects of *Lactobacillus salivarius*, *Lactobacillus reuteri* and *Pediococcus acidilactici* on the nematode *Caenorhabditis elegans* include possible antitumor activity. *Applied Microbiology and Biotechnology* **97**: 2109-2118.

31. Kolomvotsou AI, Rallidis LS., **Mountzouris KC**, Lekakis J, Koutelidakis A, Stamatis ES, Anastasiou MN and Zampelas A (2013) Adherence to Mediterranean diet and close dietetic supervision increase total dietary antioxidant intake and plasma antioxidant capacity in subjects with abdominal obesity. *European Journal of Nutrition*: **52**: 37-48.
32. Koutrotsios G, **Mountzouris KC**, Chatzipavlidis I and Zervakis G (2014) Bioconversion of lignocellulosic residues by *Agrocybe cylindracea* and *Pleurotus ostreatus* mushroom fungi - Assessment of their effect on the final product and spent substrate properties. *Food Chemistry* **161**: 127-135.
33. Simitzis PE, Bronis M, Charismiadou MA, **Mountzouris KC** and Deligeorgis SG (2014) Effect of cinnamon (*cinnamomum zeylanicum*) essential oil supplementation on lamb growth performance and meat quality characteristics. *Animal* **8**: 1554-1560.
34. Chadio S, Katsafadou A, Kotsampasi B, Michailidis G, **Mountzouris KC**, Kalogiannis D Christodoulou V (2014) Effects of maternal undernutrition during late gestation and/or lactation on colostrum synthesis and immunological parameters in the offspring. *Reproduction, Fertility and Development* **28**(3): 384-393 <http://dx.doi.org/10.1071/RD14147>.
35. **Mountzouris KC**, Palamidi I, Tsitsrikos P, Mohnl M, Schatzmayr G and Fegeros K (2015) Effect of dietary inclusion level of a multi-species probiotic on broiler performance and two biomarkers of their caecal ecology. *Animal Production Science*: 55(4): 484-493. <http://dx.doi.org/10.1071/AN13358>
36. **Mountzouris KC**, Tsitsrikos P, Papadomichelakis G, Schatzmayr G and Fegeros K (2015) Evaluation of the efficacy of sequential or continuous administration of probiotics and phytochemicals in broiler diets. *Animal Production Science* **55**(6): 720-728. <http://dx.doi.org/10.1071/AN13359>
37. **Mountzouris KC**, Dalaka E, Palamidi I., Paraskeuas V, Demey V, Theodoropoulos G and Fegeros K. (2015) Evaluation of yeast dietary supplementation in broilers challenged or not with *Salmonella* on growth performance, cecal microbiota composition and *Salmonella* in ceca, cloacae and carcass skin. *Poultry Science* **94**: 2445-2455.
38. Papadomichelakis G, Pappas AC, Zoidis E, **Mountzouris KC** and Fegeros K (2015) Impact of feeding increasing crude glycerine levels on growth performance, glycerine kinase gene expression, nutrient digestibility and litter quality in broiler chickens. *Livestock Science* **181**: 89–95.
39. Antonissen G, Van Immerseel F, Pasmans F, Ducatelle R., Janssens GPJ, De Baere S, **Mountzouris KC**, Su S, Wong EA, De Meulenaer B, Verlinden M, Devreese M, Haesebrouck F, Novak B, Dohnal I, Martel A and Croubels Siska (2015) Mycotoxins deoxynivalenol and fumonisins alter the extrinsic component of Intestinal Barrier in Broiler Chickens. *Journal of Agricultural and Food Chemistry* **63**: 10846–10855.
40. Palamidi I, Fegeros K, Mohnl M, Abdelrahman WHA, Schatzmayr G, Theodoropoulos G and **Mountzouris KC** (2016) Probiotic form effects on growth performance, digestive function and immune related biomarkers in broilers. *Poultry Science* **95**: 1598-1608. <http://dx.doi.org/10.3382/ps/pew052>
41. Koutrotsios G, Larou E, **Mountzouris KC** and Zervakis G (2016) Detoxification of Olive Mill Wastewater and Bioconversion of Olive Crop Residues into High-Value-Added Biomass by the Choice Edible Mushroom *Hericium erinaceus*. *Applied Biochemistry and Biotechnology* **180**: 195-209. doi 10.1007/s12010-016-2093-9
42. Paraskeuas V, Fegeros K, Palamidi I, Theodoropoulos G and **Mountzouris KC** (2016) Phytochemical administration and reduction of dietary energy and protein levels affects growth performance, nutrient digestibility and antioxidant status of broilers. *The Journal of Poultry Science* **53**: 264-273. doi:10.2141/jpsa.0150113
43. Palamidi I, Paraskeuas V, Theodorou G, Breitsma R, Schatzmayr G, Theodoropoulos G, Fegeros K and **Mountzouris KC** (2017) Effects of dietary acidifier supplementation on broiler growth performance, digestive and immune function indices. *Animal Production Science* **57**: 271-281 <http://dx.doi.org/10.1071/AN15061>
44. Paraskeuas V, Fegeros K, Hunger C, Theodorou G and **Mountzouris KC** (2017) Dietary inclusion level effects of a phytochemical characterized by menthol and anethole on broiler growth performance, biochemical parameters including total antioxidant capacity and gene expression of immune related biomarkers. *Animal Production Science* **57**: 33-41 <http://dx.doi.org/10.1071/AN15367>
45. Paraskeuas V, Fegeros K, Palamidi I, Hunger C and **Mountzouris KC** (2017) Growth performance, nutrient digestibility, antioxidant capacity, blood biochemical biomarkers and cytokines expression in broiler chickens fed different phytochemical levels. *Animal Nutrition* <http://dx.doi.org/10.1016/j.aninu.2017.01.005>
46. Vrakas S, **Mountzouris KC**, Michalopoulos G, Karamanolis G, Papatheodoridis G, Tzathas C, Gazouli M (2017) Intestinal bacteria composition and translocation of bacteria in Inflammatory Bowel Disease. *PLoS One* **12**(1), e0170034

47. Mitsou EK, Kakali A, Antonopoulou S, **Mountzouris KC**, Yannakoulia M, Panagiotakos DB and Kyriacou A (2017) Adherence to the Mediterranean diet is associated with the gut microbiota pattern and gastrointestinal characteristics in an adult population. *British Journal of Nutrition* **117**: 1645–1655. doi:10.1017/S0007114517001593
48. Papadomichelakis G, Zoidis E, Pappas AC, **Mountzouris KC** and K. Fegeros (2017) Effects of increasing dietary organic selenium levels on meat fatty acid composition and oxidative stability in growing rabbits *Meat Science* **131**: 132–138.
49. Palamidi I. and **Mountzouris KC** (2018) Diet supplementation with an organic acids-based formulation affects gut microbiota and expression of gut barrier genes in broilers *Animal Nutrition* **4**: 366-377.
50. Manolopoulou E, Aktypis A, Matara C, Tsiomi P, Konstantinou E, **Mountzouris K**, Klonaris S and Tsakalidou E (2018). An overview of sheep farming features and management practices in the region of south western Peloponnese and how they reflect on milk microbial load. *Journal of the Hellenic Veterinary Medical Society*, 69(1), 759-770 <http://dx.doi.org/10.12681/jhvms.16421>
51. Paraskeuas V and **Mountzouris KC** (2019) Broiler gut microbiota and expression of gut barrier genes affected by cereal type and phytogetic inclusion. *Animal Nutrition* **5**: 22-31. <https://doi.org/10.1016/j.aninu.2018.11.002>.
52. Paraskeuas V and **Mountzouris KC** (2019) Modulation of Broiler Gut Microbiota and Gene Expression of Toll-like Receptors and Tight Junction Proteins by Diet Type and Inclusion of PhytoGENICS. *Poultry Science* **98**: 2220-2230. <https://doi.org/10.3382/ps/pey588>.
53. **Mountzouris KC**, Paraskeuas V, Griela E, Papadomichelakis G and Fegeros K (2019) Phytogetic inclusion level effects on broiler carcass yield, meat antioxidant capacity, availability of dietary energy and expression of intestinal genes relevant for nutrient absorptive and cell growth-protein synthesis metabolic functions *Animal Production Science* **60**(2) 242-253 <https://doi.org/10.1071/AN18700>
54. **Mountzouris KC**, Palamidi I, Paraskeuas V, Griela E, and Fegeros K (2019) Dietary probiotic form modulates broiler gut microbiota indices and expression of gut barrier genes including essential components for gut homeostasis. *Animal Physiology and Animal Nutrition* **103**: 1143–1159. DOI: 10.1111/jpn.13112
55. Evdokia K. Mitsou, Georgia Saxami, Emmanuela Stamoulou, Evangelia Kerezoudi, Eirini Terzi, Georgios Koutrotsios, Georgios Bekiaris, Georgios I. Zervakis, **Konstantinos C. Mountzouris**, Vasiliki Pletsas, Adamantini Kyriacou (2020) Effects of rich in  $\beta$ -glucans edible mushrooms on aging gut microbiota characteristics: an in vitro study. *Molecules* Jun 18;25(12):2806. doi: 10.3390/molecules25122806
56. **Mountzouris KC**, Paraskeuas V, and Fegeros K (2020) Priming of intestinal cytoprotective genes and antioxidant capacity by dietary phytogetic inclusion in broilers *Animal Nutrition Journal* <https://doi.org/10.1016/j.aninu.2020.04.003>
57. Evangelia N. Kerezoudi, Evdokia K. Mitsou, Katerina Gioti, Eirini Terzi, Ifigeneia Avgousti, Alexandra Panagiotou, Georgios Koutrotsios, Georgios I. Zervakis, **Konstantinos C. Mountzouris**, Roxane Tenta and Adamantini Kyriacou (2021) Fermentation of *Pleurotus ostreatus* and *Ganoderma lucidum* mushrooms and their extracts by the gut microbiota of healthy and osteopenic women: potential prebiotic effect and impact of mushroom fermentation products on human osteoblasts. *Food Funct.*, 2021, 12, 1529-1546. DOI: 10.1039/d0fo02581j
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59. Sideris, V.; Georgiadou, M.; Papadoulis, G.; **Mountzouris, K.**; Tsagkarakis, A. 2021. Effect of Processed Beverage By-Product-Based Diets on Biological Parameters, Conversion Efficiency and Body Composition of *Hermetia illucens* (L) (Diptera:Stratiomyidae). *Insects*, 12, 475. <https://doi.org/10.3390/insects12050475>
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#### CONFERENCE PROCEEDINGS

Participation with 97 abstracts, posters and short papers in national (37) and international conferences (59).

#### BOOK CHAPTERS



- **Mountzouris K.C** (2007) Nutritional strategies targeting the beneficial modulation of the intestinal microflora with relevance to food safety. In: *Food Safety. A Practical and Case Study Approach*, pp 133-152, eds McElhatton A & Marshall RJ. Springer, USA
- **Mountzouris K.C** and Tsirtsikos P (2009) Prebiotics In: *Handbook of Dairy Foods Analysis*, pp 485-501, eds Toldra F and Nollet L., CRC Press, Boca Raton, USA
- **Mountzouris K.C.**, Paraskevas V and Fegeros K (2009) Phytogetic compounds in broiler nutrition. In: *Phytogenics in animal nutrition*, pp 97-110, ed Steiner T., Nottingham University Press, Nottingham.
- **Mountzouris KC** (2014) Probiotics as alternatives to antimicrobial growth promoters in broiler nutrition: modes of action and effects on performance In: *Probiotics in Poultry Production*, ed Abdelrahman W.H.A., Nottingham University Press, Nottingham.
- **Mountzouris KC** (2022). Prebiotics: Types. In: McSweeney, P.L.H., McNamara, J.P. (Eds.), *Encyclopedia of Dairy Sciences*, vol. 4. Elsevier, Academic Press, pp. 352–358. <https://dx.doi.org/10.1016/B978-0-12-818766-1.00378-0>
- **Mountzouris K.C.**, Paraskeuas V.V., Griela E. (2022) Adaptive Poultry Gut Capacity to Resist Oxidative Stress. In: Kogut M.H., Zhang G. (eds) *Gut Microbiota, Immunity, and Health in Production Animals. The Microbiomes of Humans, Animals, Plants, and the Environment*, vol 4. Springer, Cham. [https://doi.org/10.1007/978-3-030-90303-9\\_12](https://doi.org/10.1007/978-3-030-90303-9_12)

### Invited Speaker / Chair

- Mountzouris KC. **Invited speaker** - talk title: “Animal uses for probiotics and prebiotics: impact on antibiotic use”. 4<sup>th</sup> by invitation meeting of the International Scientific Association for Probiotics and Prebiotics (ISAAP), 16-18 Iouviou 2006, Coleraine Northern Ireland.
- Mountzouris KC. **Invited speaker** - talk title: “Assessment of the efficacy for growth promotion and optimum inclusion level of a multi-species probiotic in broiler nutrition” World Nutrition Forum 2008, September 17-19, Mayerhofen, Austria.
- Mountzouris KC. **Invited speaker** - talk title: “Probiotics as Alternatives for Antimicrobial Growth Promoters in Animal Nutrition”. Expert Talks in Natural growth promoters in view of rising challenges for Animal production, World Nutrition Forum 2010 October 13-16, Salzburg, Austria.
- Mountzouris KC. **Invited speaker** - talk title: “Bioactive feed additives as alternatives to antimicrobial growth promoters: cases of probiotic and phytogetic applications in broilers” Animal Feed Manufacturers Association (AFMA) Forum 2016, March 1-3, Sun City, South Africa
- Mountzouris KC. **Invited speaker** - talk title: “Phytogetic and Probiotic Feed Additives for Broilers: Evidence for Growth Performance Links with Gut Performance Indices. World Nutrition Forum 2016, October 12-15, Vancouver Canada.
- Mountzouris KC **Invited Chair** for the session “Eubiotics (Probiotics, Prebiotics, Organic Acids, Short Chained and Medium Chained Fatty Acids, Essential Oils,) and Phytogetic Feed Additives”. In *Feed Additives 2017*, September 27-29, Marriott Hotel, Frankfurt.
- Mountzouris KC **Invited speaker** - talk title: “Probiotics as key elements of nutritional strategies targeting broiler gut function and health in the post antimicrobial growth promoter era”. 7<sup>th</sup> Beneficial Microbes Conference Pre- and Probiotics for Lifelong Human and Animal Health Conference, 26-28 November 2018, Amsterdam, The Netherlands.
- Mountzouris KC (2019) **Invited speaker** - talk title: “Utilizing Gut Biomarkers for Animal Resilience & Nutritional Efficacy”. *Feed Additives Europe 2019*, September 25-27, Park Inn by Radisson Amsterdam City West, Amsterdam.

- Mountzouris KC. **Invited speaker** - talk title: “Activating poultry cellular fitness to counteract stressors”. In *Poultry World Webinar Nutrition & Health, 2019, October 16, Misset Uitgeverij B.V., Amsterdam* - <https://poultryworld.net/webinar-nutrition-health>
- Mountzouris KC. **Invited speaker** - talk title: “Activating poultry cellular fitness to counteract stressors”. In *Poultry World Webinar Nutrition & Health, 2019, October 16, Misset Uitgeverij B.V., Amsterdam* - <https://poultryworld.net/webinar-nutrition-health>
- Mountzouris KC (2020) **Invited speaker** - talk title: “Dietary modulation of critical cytoprotective genes against oxidation, inflammation and stress in the gut” In the 2020 ARKANSAS NUTRITION CONFERENCE virtual format, held September 1-4, 2020
- Mountzouris KC (2021) **Invited speaker** - talk title: “Counteracting stressors through dietary gut modulation” In Phytobiotics IQ seminar, 2021, March 25, 2021 virtual event.
- Mountzouris KC (2021) **Invited speaker** - talk title: “How to measure oxidative stress and inflammation” In All About Feed Hot Talk series <https://www.allaboutfeed.net/animal-feed/feed-additives/hot-talks-how-to-measure-oxidative-stress-and-inflammation>
- Mountzouris KC (2022) Invited speaker - talk title: “Oxidative stress, gut integrity and inflammation – Recent findings and counteracting mechanisms” In Phytobiotics seminar, 2022, June 22, virtual event.

#### CITATIONS OF PUBLISHED RESEARCH

Based on Google Scholar databases the citations and h index reported are in excess of 4.900 and 29, respectively.