# **GOVARIS** Alexander

# Assistant Professor "Hygiene of Foods of Animal Origin"



Surname: Govaris
Name: Alexander
Father's name: Konstantinos
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#### **EDUCATION**

**Degree in Veterinary Medicine** (January 1979), School of Veterinary Medicine, Aristotle University of Thessaloniki

**Doctor of Philosophy** (July 1985), The Strathclyde University, Food Science Division, Department of Bioscience and Biotechnology, Glasgow, United Kingdom **Diplomate** (June 2004), European College of Veterinary Public Health

## PROFESSIONAL ACTIVITIES

#### Military Service

1979-1981 Greek Air Forces. Veterinary officer responsible for the Hygienic inspection of the Food supplies.

<u>Olympus Dairy Plant of Larisa, Agricultural Cooperative Union of Larisa, Larisa, Greece</u> 1994- 1999 Quality Control and Production Manager, responsible for the quality control of milk and dairy products.

# **Undergraduate teaching**

- 1. <u>Departments of Animal Production and Agricultural Engineering, School of Agricultural Technology, Educational and Technical Institute (TEI) of Larisa</u>
- 1986-1991. Adjunct Professor in Animal production for Food Products
- 2. <u>School of Agricultural Science of Animal and Plants</u> <u>Production, University of Thessaly, Volos, Greece.</u>
- 1992 1994 Adjunct full time Assistant Professor on Hygienic inspection of Fish Products and Food Technology
- 1994-1999 Adjunct Part time Assistant Professor on Hygienic inspection of Fish Products and Food Technology
- 3. <u>Laboratory of Hygiene of Foods of Animal Origin, Faculty of Veterinary Medicine, University of Thessaly, Karditsa, Greece.</u>
- 1997-1999 Adjunct Assistant Professor in Hygiene of Foods of Animal Origin
- 1999- 2006 Assistant Professor in Hygiene of Foods of Animal Origin 2006-present Associate Professor in Hygiene of Foods of Animal Origin.

## Postgraduate teaching

- "Applied Public Health and Environmental Hygiene", Faculty of Medicine, University of Thessaly, 2007-present
- "Prevention of foodborne and waterborne diseases and Good Manufacturing Practice", Faculty of Medicine, University of Thessaly, 2007-present
- "Aquaculture and Aquatic animal Health" Faculty of Veterinary Medicine, 2006present
- "Sustainable management of Aquatic Environment", School of Agricultural Studies, Department of Ichthyology and Aquatic Environment, University of Thessaly, Volos (2007)

## ADMINISTRATIVE ACTIVITIES

Administrative duties at University of Thessaly: Head of Department, Department of Hygiene of Foods of Animal Origin, Veterinary Faculty, University of Thessaly (1999-today); member, various committees, Veterinary Faculty, University of Thessaly (1999-today); Member of the General Assembly of the Faculty of Veterinary Medicine (1999-today); Member of the General Assembly of Bioscience and Biotechnology Faculty (2007-2009); Vice Dean of the Faculty of Veterinary Medicine, University of Thessaly (September 2010 – today).

<u>Member of scientific committees.</u> Member of the executive board of geotechnical scientists of central Greece (2009-today). Member of Institute of Food Science and Technology of Greece. Member of Veterinary Medical Association of Greece. Member of the Institute of Hygiene and Technology Scientists of Food of Greece.

External examiner of PhD theses: T. Karuppayee (ICAR Centre, Sri Parasakthi College for Women, Courtallam-627 802): Biochemical and microbiological quality of commercial brands of packaged milk sold in and around Courtallam a tourist spot, T.N., India. Ilectra Fragkou (Faculty of Veterinary Medicine, University of Thessaly). Petros Androulakis (School of Veterinary Medicine, Aristotle University of Thessaloniki, Greece);

<u>Guest-editor for special thematic volumes in scientific journals</u>: *Small Ruminant Research*, (September 2010-today).

<u>Member of editorial board of scientific journals</u>: Journal of the Hellenic Veterinary Medical Society (2008- today).

Reviewer in scientific journals: Journal of the Hellenic Veterinary Medical Society, Geotechnical Scientific issues (In Greek), Turkish Journal of veterinary and animal Science. Food Microbiology, Journal of Dairy Research, Italian Journal of Food Science and Technology, Food Chemistry, Journal of Agriculture and Food Chemistry, Journal of Food processing and Technology, Food Technology and Biotechnology, LWT- Food Science and technology, Journal of Food Safety, Small Ruminant Research, Canadian Journal of Microbiology, Czech Journal of Food Sciences.

<u>Prefecture of Karditsa, Greece</u>. Member of the board of the development of the rural area of Karditsa (2007-2009).

<u>Food safety authority of Greece (EFET)</u>: Member of the scientific team for the evaluation of risks from drugs in feeds (2007-2009).

<u>International Dairy Federation (IDF)</u>. Member of the scientific working team on the occurrence and fate of STEC in raw milk and raw cheese products.

# RESEARCH

#### Research interests

- The antioxidant effect of essential oils in foods of animal origin.
- The antimicrobial effect of essential oils against food-borne pathogens in foods of animal origin.
- The occurrence of STEC in foods of animal origin.
- The behavior of STEC, Salmonella or other food-borne pathogens in foods of animal origin.
- Aflatoxins.
- Staphylococcus aureus and staphylococcal enterotoxins.
- Modified air packaging.

# Research grants

## Director of the following programs:

- 1. "the Fate of Escherichia coli O157:H7 in the Greek cheeses of protected name of origin (PNO), Feta, anthotyros and Myzithra" In collaboration with the dairy plant "Olympus", Larisa, Greece. (Research committee of University of Thessaly, 1999-2000. € 1800).
- 2. "The occurrence and survival of enteropathogenic Escherichia coli O157:H7 in milk and milk products in Greece and Slovakia" In collaboration with Department of Food Hygiene and Technology, and Department of Microbiology and Immunology, The University of Veterinary Medicine, Košice, The Slovak Republic, and Dairy Plant "Trikki", Trikala, Greece. (supported by Ministry of Development of Greece, General secretariat of Research and Technology, 2002-2004, € 30814).
- 3. "The effect of essential oils in the preservation of meat and meat products" (supported by Ministry of Education of Greece within "HRAKLEITOS" research program, collaborative action supported by the European Union, 2005-2008, € 32109).
- 4. "Study of enteropathogenic Escherichia coli O157:H7 in carcasses of ruminants and pigs slaughtered in Greece" (supported by Ministry of Education of Greece within "PYTHAGORAS" research program, collaborative action supported by the European Union, 2007-2009, € 50,000).
- 5. Quality and hygienic improvement of foods packaged under modified air packaging conditions with the combination of the natural compounds of nisin or essential oils of Greek herbs. In collaboration with Dairy Plant "Trikki", Trikala, Meat process company "Iason", Agios Vissarios, Karditsa, Pasteurized egg company "Avgo", Larisa, a group of confectioners of Farsala, ETAT AE, Athens. Supported by Ministry of Development of Greece, General secretariat of Research and Technology, 2007-2009, € 200000).
- 6. The occurrence of Staphlococcus aureus in ovine and caprine milk in Thessaly. In collaboration with the cheese plant "Tyras" SA, Trikala. Supported by Tyras SA, 2008-2009, € 7000.
- 7. The effect of the addition of essential oils on pork souvlaki during storage under modified air packaging. In collaboration with Meat process company "lason", Agios Vissarios, Karditsa, Supported by Ministry of Education of Greece, General secretariat of Research and Technology,  $2010, \in 7000$ .
- 8. The effect of the pasteurization on the stability of ω-3 fatty acids. In collaboration with Pasteurized egg company "Avgo", Larisa, Supported by Ministry of Education of Greece, General secretariat of Research and Technology, 2010, € 7000.
- 9. Effect of modified air packaging on quality and microbial safety of the traditional cheese manouri. In collaboration with the cheese production company Skopos AE, Volos, Supported by Ministry of Education of Greece, General secretariat of Research and Technology, approved, € 7000. 10. Effect of modified air packaging on quality and microbial safety of the traditional cheese Graviera of Agrafa. In collaboration with the cheese production company Kissas AE, Mouzaki, Supported by Ministry of Education of Greece, General secretariat of Research and Technology, approved, € 7000.

## Participation in the following programs

- 1. "Supplementation of garlic (Allium sativum) and garlic by products in feeding of the sheep" in collaboration with the National Agricultural Research Foundation of Greece, 2005-2006.
- 2. "the use of probiotics for the prevention of diarrhoeac diseases and improvement of production of sheep" in collaboration with the Department of Animal Health, Veterinary Faculty, University of Thessaly, 2004-2005.
- 3. "Study of the presence of Staphylococcus aureus in goat's and ewe's milk and staphylococcal enterotoxins in feta cheese (Research Committee, University of Thessaly), 2010-2011.
- 4. Biosecurity measures and good farming practices for the improvement of the milk quality and safety. (supported by Olympos dairy plant, Research Committee, University of Thessaly), 2010-2012.

# **Supervision of PhD theses**

- 1. **Nikolaos M. Solomakos** (2007) The antimicrobial effect of essential oils of herbs and nisin added in beef meat
- 2. **Evropi Botsoglou.** The effect of plant extracts on lipid and protein oxidation of meat.(In final stages of writing)

## **PUBLICATIONS**

- **1. Govaris,A.** and Scholefield, J. (1984).Reduced energy usage in retort pouch processing. In Engineering and Food Vol. 2 (edited by B. M. Mckenna). Proceedings of the Third International Congress on Engineering and Food, Dublin, 1983. pp 1003-1011. Barking, Essex; Elsevier Applied Science Publishers.
- **2. Govaris, A.** (1985). Microcomputer process control and process evaluation of retort pouch products. PhD thesis, Food Science Division, Department of Bioscience and Biotechnology, Strathcyde University, Glasgow, U.K.
- 3. **Govaris AK.**, Scholefield J. (1988): Comparison of a computer evaluation with a standard evaluation of retort pouch thermal-processing. *International Journal of Food Science and Technology*, 23, 6:601-606.
- 4. **Govaris A.** (1989). Sterilization methods of plastic canned foods. Food and Beverages 14: 129-130.
- **5. Govaris A,.** (1990). Evaluation of steam-air thermal processing of non rigid canned foods. Proceedings of 3<sup>rd</sup> Greek Congress of Food Science and Technology Congress. December 1990. Athens pp. 168-169.
- 6. **Govaris AK**. (1991) Computer control and evaluation of steam air retort pouch process. Lebensmittel-Wissenschaft und Technologie, 24, 558-663.
- 7. **Govaris A**. and Gounaris A. (1996). Determination of composition of raw cow's, ewe's and goat's milk mixtures used for production of Feta cheese. Proceedings of 7th Greek Veterinary Congress, November 1996, Thessaloniki, Greece, pp 58.
- 8. Gounaris A and **Govaris A** (1996). Effect of ripening time on the analysis of Feta cheese for the determination of milk composition. Proceedings of  $7^{th}$  Greek Veterinary Congress, November 1996, Thessaloniki, Greece, pp 59.
- 9. Simeonidou S., **Govaris A.**, Vareltzis K. (1997) Effect of frozen storage on the quality of whole fish and fish fillets of horse mackerel (*Trachurus trechurus*) and Mediterranean hake ( *Merluccius mediterraneus*). *Z. Lebensm. Unters.*, 24, 6: 405-410.
- 10. Simeonidou S., **Govaris A.,** Vareltzis K. (1997). Quality assessment of seven Mediterranean fish species during storage on ice. *Food Research International*, 36, 7: 479-484.
- 11. **Govaris A.**, V. Roussi, P. Koidis and N.A. Botsoglou. (2001) Distribution and stability of Aflatoxin M1 during processing, ripening and storage of Telemes cheese. *Food Additives and Contaminants*, 18: 437-443.
- 12. **Govaris A.,** Koidis P., Papatheodorou K. (2001) The fate of *Escherichia coli* O157: H7 in Myzithra, Anthotyros, and Manouri whey cheeses during storage at 2 and 12°C. *Food Microbiology*, 18, 5: 565-570.

- 13. **Govaris A.**, Papageorgiou D., Papatheodorou K. (2002) Behaviour of *Escherichia coli* O157:H7 during manufacture and ripening of Feta and Telemes cheeses. *Journal of Food Protection*, 65, 4: 609-615.
- 14. **Govaris A.,** Koidis P., Papatheodorou K. (2002). Behaviour of *Escherichia coli 0157(ratio):H7* in sour milk, cow's milk yoghurt and ewe's milk yoghurt. *Journal of Dairy Research*, 69, 4:655-660.
- 15. **Govaris A.,** Koidis P., and Papatheodorou K. (2002). Survival of *Escherichia coli* O 157:H7 in Feta cheese and its brine during refrigerated storage. Journal of Hellenic Veterinary Medical Society 53(1): 24-32
- 16. Roussi V., **Govaris A.,** Varagouli A., Botsoglou N.A. (2002) Occurrence of aflatoxin M<sub>1</sub> in raw and market milk commercialized in Greece. *Food Additives and Contaminants*, 19, 9: 863-868.
- 17. **Govaris A.**, Ppageorgiou D, and Papatheodorou K. (2002). Survival of *Escherichia coli* O 157:H7 butter during refrigerated storage. Journal of Hellenic Veterinary Medical Society 53(2): 147-161.
- 18. **Govaris A** and Ambrosiadis I. (2002). Evaluation of thermal processing of meat products in cylindrical metal cans by means of the General Method and a Computer Method. Journal of Hellenic Veterinary Medical Society 53(2): 103-112
- 19. Kritas SK, Burriel AR, Tzivara AH, **Govaris A**, Kyriakis SC, Karatzias H, Vlemmas J **(**2003) Prevention of scours in neonatal kids after modification of management and experimental vaccination against *Escherichia coli*. *Small Ruminant Research*. 50 (1-2): 51-56
- 20. **Govaris A.**, Roussi V., Koidis, P., Botsoglou N.A. (2002) Distribution and stability of aflatoxin M<sub>1</sub> during production and storage of yoghurt. *Food Additives and Contaminants*, 19, 11: 1043-1050.
- 21. **A. Govaris**,N.A. Botsoglou, , E.N. Botsoglou, G. Papageorgiou (2004) Dietary supplementation versus direct post mortem addition of oregano essential oil and vitamin E on lipid oxidation in cooked turkey meat patties during refrigerated storage *International Journal of Food Sciences and Nutrition* 55: 115-123
- 22. Botsoglou N.A., **Govaris A.**, Botsoglou E., Grigoropoulou S.H., Papageorgiou G. (2003) Antioxidant activity of dietary oregano essential oil and a-tocopheryl acetate supplementation in long-term frozen turkey meat. *Journal of Agricultural and Food Chemistry*, 51, 10: 2930-2936.
- 23. Botsoglou N.A., Grigoropoulou S.H., Botsoglou E.N., **Govaris A.**, Papageorgiou G. (2003) The effects of dietary oregano essential oil and a-tocopheryl acetate in lipid oxidation in raw and cooked turkey during refrigerated storage. *Meat Science*, 65, : 1193-1200.
- 24. Papageorgiou G., Botsoglou N.A., **Govaris A.**, Giannenas I., Iliadis S., Botsoglou E.N.(2003) Effect of dietary oregano essential oil and alpa-tocopheryl acetate supplementation on iron-induced lipid oxidation of turkey breast, thigh, liver and heart tissues. *Journal of Animal Physiology and Animal Nutrition*, 87, 9: 324-335.
- 25. Papageorgiou G., Botsoglou N.A., **Govaris A.**, Giannenas I., Iliadis S., Botsoglou E.N.(2003). Iron-induced lipid oxidation of turkey liver, heart, breast, and thigh tissues in responce to dietary supplementation with oregano oil and alpha-tocopheryl acetate. *Free Radical Research*, 37, 67.
- 26. Govaris A and Athanasopoulou F. (2003) Fish processing establishments and hygiene legislation of fish products in Greece. HYGIENA ALIMENTORUM XXIV "Poultry, Eggs, Fish and Game-Sources of Safe Foods, June 4-6, 2003, Štrbské Pleso Vysoké Tatry SLOVAKIA, Proceedings of "HYGIENA ALIMENTORUM XXIV" pp. 288
- 27. Alexopoulos, I.E. Georgoulakis, A. Tzivara, C.S. Kyriakis, A. Govaris, S.C. Kyriakis (2004) Field evaluation of the effect of a probiotic containing *Bacillus licheniformis* and *Bacillus subtilis* spores on the health status, performance, and carcass quality of grower and finisher pigs. Journal of Veterinary Medicine series A 51:306-312.
- 28. **Govaris A.**, Solomakos N., Rodi A, and Papageorgiou D. (2004) Occurrence of *Escherichia coli* 0157:H7 in raw cow's milk in Greece. 3<sup>rd</sup> Greek Symposium of Hygiene and Technology of Foods, Legislation, Safety, Hygiene and quality of Foods, Veterinary Medical Society of Greece. 18-19 March 2004 Athens, Volume 2, pp 49-51.
- 29. Solomakos N, **Govaris A** (2004). Oregano, thyme and sage, as natural additives to foods. Journal of Hellenic Veterinary Medical Society 55(1): 75-81.
- 30. N.A. Botsoglou, **A. Govaris**, I. Giannenas, E. Botsoglou, G. Papageorgiou. (2004) The incorporation of dehydrated rosemary leaves in the rations of turkeys and their impact on the oxidative stability of the produced raw and cooked meat *Journal of Animal Physiology and Animal Nutrition* 55:115-123
- 31. Oregano herb versus oregano essential oil as feed supplements to increase the oxidative stability of turkey. P. Florou-Paneri, G. Palatos, A. Govaris, D. Botsoglou, I. Giannenas, I. Ambrosiadis. International Journal of Poultry Science, 2005, 4(11):866-871

- 32. Govaris, A., Botsoglou, E., Florou-Paneri., P., Moulas, A., Papageorgiou, G. 2005. Dietary supplementation of oregano essential oil and  $\alpha$ -tocopheryl acetate on microbial growth and lipid oxidation of turkey breast fillets during storage. International Journal of Poultry Science, 2005, 4(12):969-975.
- 33. Ragias V., Govaris, A., Athanassopoulou, F., Sabatakou, O., 2005. The pathological evaluation of saddled sea bream (Oblada melanura) caught by explosives, and their chemical and qualitative changes during storage on ice. Folia Veterinaria 49, 3: 155-160.
- 34. Performance of chickens and oxidative stability of the produced meat as affected by feed supplementation with oregano, vitamin C, vitamin E and their combinations. P. Florou-Paneri, I. Giannenas, E. Christaki, A. Govaris, N. Botsoglou. Archiv fur Geflugelkunde, 2006, 70(3): 232-240
- **35.** Kritas, S.K., **Govaris**, A., Christodoulopoulos, G., Burriel, A.R. 2006. Effect of Bacillus licheniformis and Bacillus subtilis supplementation of ewe's feed on sheep milk production and young lamb mortality. *Journal of Veterinary Medicine Series A: Physiology Pathology Clinical Medicine* 53 (4), 170-173.
- 36. **Govaris**, A., Florou-Paneri, P., Botsoglou, E., Giannenas, I., Amvrosiadis, I., Botsoglou, N. 2007. The inhibitory potential of feed supplementation with rosemary and/or  $\alpha$ -tocopheryl acetate on microbial growth and lipid oxidation of turkey breast during refrigerated storage. *LWT Food Science and Technology* 40 (2), 331-337.
- **37.** Botsoglou, N.A., **Govaris**, A., Giannenas, I., Botsoglou, E., Papageorgiou, G. 2007. The incorporation of dehydrated rosemary leaves in the rations of turkeys and their impact on the oxidative stability of the produced raw and cooked meat. *International Journal of Food Sciences and Nutrition* 58 (4), 312-320.
- 38. Solomakos, N., **Govaris**, A., Koidis, P., Botsoglou, N. 2008. The antimicrobial effect of thyme essential oil, nisin and their combination against Escherichia coli 0157:H7 in minced beef during refrigerated storage. *Meat Science* 80 (2), 159-166.
- **39.** Solomakos, N., **Govaris**, A., Koidis, P., Botsoglou, N. 2008. The antimicrobial effect of thyme essential oil, nisin, and their combination against Listeria monocytogenes in minced beef during refrigerated storage. *Food Microbiology* 25 (1), 120-127.
- 40. Solomakos, N., **Govaris**, A., Angelidis, A.S., Pournaras, S., Burriel, A.R., Kritas, S.K., Papageorgiou, D.K. 2009. Occurrence, virulence genes and antibiotic resistance of Escherichia coli 0157 isolated from raw bovine, caprine and ovine milk in Greece. *Food Microbiology* 26 (8), 865-871.
- **41. Govaris**, A., Solomakos, N., Pexara, A., Chatzopoulou, P.S. 2010. The antimicrobial effect of oregano essential oil, nisin and their combination against Salmonella Enteritidis in minced sheep meat during refrigerated storage. *International Journal of Food Microbiology* 137 (2-3), 175-180.
- 42. Botsoglou, E., **Govaris**, A., Christaki, E., Botsoglou, N. 2010. Effect of dietary olive leaves and/or  $\alpha$ -tocopheryl acetate supplementation on microbial growth and lipid oxidation of turkey breast fillets during refrigerated storage. *Food Chemistry* 121 (1), 17-22.
- 43. **Govaris**, A., Botsoglou, E., Moulas, A., Botsoglou, N. 2010. Effect of dietary olive leaves and rosemary on microbial growth and lipid oxidation of turkey breast during refrigerated storage. South African Journal of Animal Sciences 40, 145-155.
- 44. Botsoglou, E., **Govaris**, A., Moulas, A., Botsoglou, N. 2010. Oxidative stability and microbial growth of turkey breast fillets during refrigerated storage as influenced by feed supplementation with olive leaves, oregano and/or  $\alpha$ -tocopheryl acetate. British Poultry Science 51, 760-768.
- 45. Govaris, A., Botsoglou, E., Sergelidis, D., Chatzopoulou, P.S., 2011. Antibacterial activity of oregano and thyme essential oils against *Listeria monocytogenes* and *Escherichia coli* 0157:H7 in feta cheese packaged under modified atmosphere. LWT- Food Science and Technology 44, 1240-1244.
- 46. Solomakos N and Govaris A (2005) Bacteriocins and their use in Foods. Proceedings of the 4<sup>th</sup> Hellenic Veterinary Congress on Farm Animals, Thessaloniki, Greece, p. 111-112.
- 47. Govaris A. 2005. Aflatoxins and ochratoxins in foods of animal origin European College of Veterinary Public Health, Annual Scientific Conference and Annual General Meeting, *Identifying the new, controlling the old*, Glasgow, 25<sup>th</sup> –26<sup>th</sup> November 2005.
- 48. Solomakos N and Govaris A (2005) Use of essential oils and bacteriocins as natural additives for seafood preservation. Proceedings of the  $2^{nd}$  Hellenic Congress on Hydrobiology and Fishery, Volos, Greece, p. 139-144.
- 49. Govaris A, Solomakos N, Rodi A and Botsoglou E (2005) Occurence of *Escherichia coli* O157:H7 in raw ewe's milk in Greece. Proceedings of the 6<sup>th</sup> International Sheep Veterinary Congress, Crete, Greece, p. 185-186.

- 50. Solomakos N, Govaris A, Koidis P and Botsoglou N (2005) The fate of *Escherichia coli* O157:H7 in refrigerated stored sheep meat treated with oregano essential oil, nisin and their combination. Proceedings of the 6<sup>th</sup> International Sheep Veterinary Congress, Crete, Greece, p. 291-292.
- 51. Solomakos N, Govaris A (2005) Nisin and its food application. *Journal of the Hellenic Veterinary Medical Society*. 56(2):122-129.
- 52. Solomakos N, Govaris A, Koidis P, Botsoglou N (2006) The behaviour of *Escherichia coli* 0157:H7 in refrigerated stored sheep meat treated with oregano essential oil, nisin and their combination. Proceedings of the 10<sup>th</sup> National Veterinary Congress, Athens, Greece, p. 19.
- 53.M. Yiagnisis, M.N. Alexis, A. Govaris, N. Ioakimidou and F. Athanassopoulou, 2010. Effect of different water renewal rates and oxygen levels on the intestinal microflora of European sea bass *Dicentrarchus labrax* L.and acute stress tolerance. Abstract CD. Aquaculture Europe 2010, Seafarming tomorrow, October 5-8, Porto, Portugal.
- 54. Yiagnisis M, M. N. Alexis, Govaris A., Bitchava K. and F. Athanassopoulou, 2010. The effect of different oxygen levels on the European sea bass health under conditions of acute stress. 2010 International Aquatic Veterinary Conference, Athens, Greece-July 12-19.
- 55. Yiagnisis M., Alexis M.N., Bitchava K., Govaris A. and Athanassopoulou F., 2009. Impact of different levels of oxygen on the aeribial intestinal microflora of sea bass (*Dicentrarchus labrax* L.) 9th Panhellenic Symposium on Oceanography and Fisheries, Patra, 13-16 May, Proceedings.
- 56. M.Yiagnisis, M.N. Alexis, K. Bitchava, A. Govaris and F. Athanassopoulou. Effect of dietary oregano essential oil supplementation on combined infections by pathogenic bacteria-parasites (Sea lice and Copepods) in European sea bass *Dicentrarchus labrax* L., 2009. The 14<sup>th</sup> EAFP International Conference "Diseases of Fish and Shellfish", Sep 14- 19, 2009, Prague, Czech Republic. Book of Abstracts, O-123 p.139.
- 57.M. Yiagnisis, M. Alexis, A. Govaris and F. Athanasopoulou, 2007. Impact of acute stress on the intestinal microflora of European sea bass *Dicentrarchus labrax* and possible translocation. Book of Abstracts p.349. 13<sup>th</sup> International Conference on fish and shellfish diseases. 17<sup>th</sup>-21<sup>st</sup> September 2007, Grado, Italy.
- 58. Govaris A, Solomakos N, Rodi A, Papageorgiou DK (2006) Occurrence of *Escherichia coli* 0157:H7 in raw goat's milk in Greece. Proceedings of the 10<sup>th</sup> National Veterinary Congress, Athens, Greece, p. 39.
- 59. Solomakos N, Govaris A, Koidis P and Botsoglou N (2006) The behaviour of *Escherichia coli* O157:H7 in Refrigerated Stored Beef Meat Treated with Oregano Essential Oil, Nisin and Their Combination. Poster in Annual Scientific Conference and Annual General Meeting of the European College of Veterinary Public Health (ECVPH), Lyon, France.
- 60. Solomakos N, Govaris A, Koidis P and Botsoglou N (2007) Antimicrobial Activity of Oregano Essential Oil, Nisin And Their Combination Against *Salmonella enteritidis* In Refrigerated Stored Beef Meat. Proceedings of the 5<sup>th</sup> International Congress on Food Technology, Thessaloniki, Greece, Vol. 2, p 563 568.
- 61. Govaris A, Solomakos N, Pexara A (2007) Ochratoxin A in foods of animal origin. *Journal of the Hellenic Veterinary Medical Society.* 58(4):313-320.
- 62. Yagnisis M, Alexis M, Solomakos N, Govaris A, Golomazou H, Athanassopoulou F (2007) *Vibrio* species of medical importance, isolated from seawater and marine fish in Greece. Proceedings of the 13th National Congress on Ichthyology. p. 515-518.
- 63. Govaris, A., Giannouli, P., Sakkas, L., Hantziaras, I., Solomakos, N., Pexara, A., Quality and hygienic improvement of foods packaged under modified air packaging conditions with the combination of the natural compounds of nisin or essential oils of Greek herbs. 1<sup>st</sup> Greek congress of Veterinary Medicine of Productive Animals, Hygiene and Safety of Foods of Animal Origin, Consumer Protection. 14-16 March 2008. Pp 183-184.
- 64. Govaris, A., Giannouli, P., Sakkas, L., Hantziaras, I., Solomakos, N., Pexara, A., Garofalakis, G. Improvement of quality and hygiene of village sausage and halva of Farsala in modified air packaging. 1st Greek Congress of Food Packaging. Poster, 17-18 March 2008, Athens.
- 65. Yagnisis M, Alexis M, Solomakos N, Bithava, K., Govaris A, Athanassopoulou F. The effect of the essential oil of oregano supplemented in feed on the intestinal microflora of *Sparus aurata*. 1<sup>st</sup> Greek congress of Veterinary Medicine of Productive Animals, Hygiene and Safety of Foods of Animal Origin, Consumer Protection. 14-16 March 2008. Pp. 75-76.
- 66. Solomakos N, Govaris A, Koidis P and Botsoglou N (2008) The Antimicrobial Effect of Thyme Essential Oil, Nisin And Their Combination Against *Staphylococus aureus* In Minced Beef. Proceedings of the HYGIENA ALIMENTORUM XXIX Quality of Meat and Meat Products, Štrbské Pleso, Slovakia, p. 66 69.

- 67. Solomakos N, Govaris A, Koidis P and Botsoglou N (2008) The antimicrobial effect of thyme essential oil, nisin and their combination against *Staphylococus aureus* in minced beef. Proceedings of the 1<sup>st</sup> Hellenic Congress on meat and products thereof, Athens, Greece, p. 309-312.
- 68. Govaris A, Solomakos N, Botsoglou E (2008) Hygienic improvement of pork meat packed under modified atmosphere conditions with the addition of nisin. Proceedings of the 1<sup>st</sup> Hellenic Congress on meat and products thereof, Athens, Greece, p. 144-146.
- 69. Solomakos N, Govaris A, Koidis P and Botsoglou N (2008) The combined antimicrobial effect of rosemary essential oil and nisin against Staphylococcus aureus in refrigerated stored beef meat. Proceedings of the ECVPH Conference 2008, Thessaloniki, Greece, p. 41.
- 70. Solomakos N, Pexara A, Govaris A (2009) The antimicrobial effect oregano essential oil, nisin and their combination against *Salmonella* Typhimurium in sheep meat. Proceedings of the 11<sup>th</sup> National Veterinary Congress, Athens, Greece, p. 339-340.
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- **76.** Pexara, A., Govaris, A. (2011) Staphylococcus aureus: an important foodborne pathogen. 2nd Greek Veterinary Congress for Farm Animal Medicine, Food Safety and Hygiene, Consumer Protection Proceedings p.
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- **83.** Govaris, A., Angelidis, A.S., Katsoulis, K., Pournaras, S., 2011. Occurrence, virulence genes and antimicrobial resistance of *Escherichia coli* O157 in bovine, caprine and ovine carcasses in Greece. Journal of Food Safety, In press.

#### **Publications in books**

- 1. Evropi Botsoglou, Alexandros Govaris, Ilias Giannenas, Nickolaos Botsoglou (2010) Use of Saffron (Crocus sativus L.) as a Feed Additive for Improving Growth and Meat or Egg Quality in Poultry SPECIAL ISSUE: Saffron. Guest Editor: Amjad M. Husaini (Division of Plant Breeding & Genetics, Sher-e-Kashmir University of Agricultural Sciences & Technology of Kashmir, India).
- 2. E. Botsoglou, I. Giannenas, A. Govaris, N. Botsoglou. The use of herbs and their extracts in aquaculture. Advances in Mediterranean Marine Aquaculture. Edited by P. Angelidis. In press.

## PRIZES AND DISTINCTIONS

- Scholarship by the State Scholarships Foundation of Greece (IKY) for PhD studies abroad (1982-1985)
- Invited keynote lecturer at the congress of the Hellenic Veterinary Medical Association, 18-20 March 2011, Thessaloniki, Greece. (2011)
- Invited keynote lecturer at the congress of the Hellenic Veterinary Medical Association, 20-22 March 2009, Athens, Greece.(2009)
- Invited keynote lecturer at the conference of the European College of Veterinary Public Health, 25<sup>th</sup> −26<sup>th</sup> November 2005, Glasgow, UK.
- Invited keynote lecturer at HYGIENA ALIMENTORUM XXIX Quality of Meat and Meat Products, Štrbské Pleso, Slovakia, (2008).
- Invited keynote lecturer at 1<sup>st</sup> Hellenic Congress on meat and products thereof, Athens, Greece. 2008.
- Invited keynote lecturer at 1<sup>st</sup> Greek congress of Veterinary Medicine of Productive Animals, Hygiene and Safety of Foods of Animal Origin, Consumer Protection. 14-16 March. Athens. 2008.
- Invited keynote lecturer at the 2<sup>nd</sup> Hellenic Congress on meat and products thereof, Athens, Greece. 2010.
- "Konstantinos Tarlatzis" prize by the Hellenic Veterinary Medical Society (Mar. 2009)
- The Laboratory of Hygiene of Foods of Animal Origin, Faculty of Veterinary Medicine, University of Thessaly is a Competent Organization according to network of organizations to Article 36 of Regulation 178/2002, after my application, EFSA, Parma, 2009.