#### Athina Basioura

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During her undergraduate studies in the School of Veterinary Medicine, professor Basioura was inspired by Reproduction and decided to extend her knowledge in this scientific field. After receiving the Veterinary Medicine degree (DVM) from Aristotle University of Thessaloniki, she was a postgraduate veterinarian in the Unit of Biotechnology of Reproduction (UBR), Farm Animals Clinic, Aristotle University of Thessaloniki for the next two years. During her Internship in the UBR, she had the opportunity to be trained in the Assisted Reproduction Technologies and in Clinical Veterinary Practice of Farm Animals Reproduction, to assist on laboratory/clinical courses and to participate in two research projects. This experience was her first opportunity to be involved in research about male/female infertility and made her decide for further PhD studies. During the last months of her internship, her application for a PhD thesis in the scientific field of Biotechnology and Physiopathology of Swine Reproduction was accepted and she continued her PhD studies in the same laboratory supervised by Prof. Ioannis Tsakmakidis. Her PhD thesis' objective was to examine the effect of antioxidant supplementation on the fertilizing capacity of extended and cryopreserved boar semen. It was conducted in collaboration with the Department of Medicine and Animal Surgery, University of Murcia, Murcia, Spain, where she performed part of her thesis experiments supervised by Prof. Inmaculada Parrilla. During her stay in the University of Murcia, she had, also, the opportunity to be further trained in flow cytometric sperm analysis and semen cryopreservation protocols. As a PhD student, she was awarded with a competitive PhD fellowship from the State Scholarships Foundation (IKY), Greece. She defended her PhD dissertation (full accepted with excellent; 10/10), meanwhile she had been granted with a competitive fellowship for Young Researchers from the Greek Government (General Secretariat for Research and Innovation, Ministry of Economy and Development). This project was the occasion for obtaining knowledge in nanomedicine application in swine and small ruminant reproduction. She was a postdoctoral researcher in the UBR participating in a research project about Biomedicine in Animals' Reproduction and she had the opportunity to collaborate with the Department of Physics, Aristotle University of Thessaloniki. During her pre- and post-doctoral career, she has been involved in research projects with private funding (3) or competitive projects (4). In addition, she has been a teaching assistant in laboratory and clinical courses at School of Veterinary Medicine, Aristotle University of Thessaloniki (11 academic years), Faculty of Veterinary Science, University of Thessaly (2 academic years), and International Hellenic University (5 academic years). Currently, she has been assistant professor of farm animals' reproduction, University of Western Macedonia, Greece.

Her research activities have been contributed 19 articles in peer-reviewed journals (7 as first author; 2 as second author), and 14 abstracts published in SCI/JCR-indexed journals. She has joined in International Conferences announcing her research findings as oral/poster presentations or as invited speaker. She has been a member of scientific societies [i.e., the European Society for Domestic Animal Reproduction (ESDAR), the Geotechnical Chamber of Greece] and has served as editor and reviewer in international peer-reviewed journals indicating her proactive attitude towards science.

#### **Education**

22/11/2018

**Doctor of Philosophy (PhD) in Veterinary Medicine. University:** School of Veterinary Medicine, Aristotle University of Thessaloniki, Greece. **Phd thesis title:** Effect of astaxanthin on extended and cryopreserved boar semen. **Evaluation:** Full accepted with "Excellent" (10/10).

26/03/2012

**Degree in Veterinary Medicine (DVM). University:** School of Veterinary Medicine, Aristotle University of Thessaloniki, Greece. **Evaluation:** Good (6,21/10).

# **Current Position**

Since 08/09/2021

**Assistant professor**, Scientific area: Farm animals' reproduction with emphasis to diagnosis and improvement of fertilizing capacity, Department of Agriculture, School of Agricultural Sciences, University of Western Macedonia, Florina, Greece.

### **Previous positions**

13/2/2020-

20/11/2022 Greece. Biomedicine applications (infrared thermography, sensors), development of possible biomarkers for an objective prognosis of fertilizing capacity. Project title: "Investigation of boar semen fertilizing capacity changes applying biomedical techniques". 30/07/2018-Young Researcher. Geotechnical Chamber of Greece-Branch of West Macedonia and Aristotle 31/03/2021 University of Thessaloniki, Greece. Biotechnological applications for genetics preservation and protection of autochthonous populations of sheep breed which is under danger of extinction. Project title: "Protection of autochthonous populations Pelagonia Sheep breed in the crossSheep breed". 20/06/2018-Young Researcher. School of Veterinary Medicine, Aristotle University of Thessaloniki, Greece. 25/03/2020 Nanotechnology applications on semen processing. Project title: "Investigation of nanotechnology applications on farm animals' semen processing". 01/11/2018-**Veterinary practitioner**, reproduction services and management of rabbit farm, Cyprus. 20/11/2018

Post-doctoral Researcher. School of Veterinary Medicine, Aristotle University of Thessaloniki,

- 24/06/2018- **Senior consultant** (training projects, veterinary services, pig farm management), DANAG 11/07/2018 AGRITECH CONSULTING (Zhengzhou) CO., LTD, Jinan, China.
- 19/02/2014- **PhD student.** School of Veterinary Medicine, Aristotle University of Thessaloniki, Greece. 22/11/2018
- 01/02/2012- **Internship.** School of Veterinary Medicine, Aristotle University of Thessaloniki, Greece. Trained in veterinary clinical practice, artificial insemination, techniques for sperm quality and function evaluation, CASA system, proteomics, *in vitro* maturation/fertilization/embryo culture, micro manipulator.

#### **Peer-Reviewed Articles**

# Prof. Basioura **has published 19 papers** that are provided below:

- Aikaterini Saratsi, Foteini Samartzi, Ioannis Panagiotidis, Athina Basioura, Dimitrios Tsiokos, Christina Ligda and Constantinos A. Rekkas 2023. Post-Thaw Parameters of Buck Semen Quality after Soy Lecithin Extender Supplementation with Fumaric Acid. Veterinary Sciences 10(9), 569. DOI: <a href="https://doi.org/10.3390/vetsci10090569">https://doi.org/10.3390/vetsci10090569</a>
- **2.** Stravogianni, V., Samaras, T., Boscos, C. M., <u>Basioura, A.</u>, Markakis, I., & Tsakmakidis, I. A. 2022. Investigating Visual Monitoring of the Scrotum as a Supplementary Tool for Boar Semen Quality Evaluation. *Veterinary Sciences* 10(1), 9. DOI: <a href="https://doi.org/10.3390/vetsci10010009">https://doi.org/10.3390/vetsci10010009</a>
- **3.** Tassis, P. D., Reisinger, N., Nagl, V., Tzika, E., Schatzmayr, D., Mittas, N., <u>Basioura, A.</u>, Michos, I., & Tsakmakidis, I. A. 2022. Comparative Effects of Deoxynivalenol, Zearalenone and Its Modified Forms De-Epoxy-Deoxynivalenol and Hydrolyzed Zearalenone on Boar Semen In Vitro. *Toxins* 14(7), 497. DOI: <a href="https://doi.org/10.3390/toxins14070497">https://doi.org/10.3390/toxins14070497</a>
- **4.** Stravogianni, V., Samaras, T., Boscos, C. M., Markakis, J., Krystallidou, E., **Basioura, A.**, & Tsakmakidis, I. A. 2022. The use of animal's body, scrotal temperature and motion monitoring in evaluating boar semen production capacity. *Animals* 12(7), 829. DOI: <a href="https://doi.org/10.3390/ani12070829">https://doi.org/10.3390/ani12070829</a>
- **5.** <u>Basioura, A.</u>, Brellou, G. D., Tsakmakidis, I., Vlemmas, I., Boscos, C. M., & Giadinis, N. 2022. Varicocele in an Adult Ram: Histopathological Examination and Sperm Quality Evaluation. *Veterinary Sciences* 9(2), 86. DOI: <a href="https://doi.org/10.3390/vetsci9020086">https://doi.org/10.3390/vetsci9020086</a>
- **6.** Stravogianni, V., Markakis, I. A., <u>Basioura, A.</u>, Boscos, C. M., Tsakmakiais, I. A., & Amaras, T. S. 2022. The Use of Triaxial Accelerometers During the Semen Collection Process in Boars. Conference paper in 11<sup>th</sup> International Conference on Modern Circuits and Systems Technologies (MOCAST), 1-4. DOI: 10.1109/MOCAST54814.2022.9837724

- **7.** Athina Basioura, George Tsousis, Constantin Boscos, Ioannis Tsakmakidis. 2021. Efficiency of three boar sperm enrichment techniques. *Reproduction in Domestic Animals* 56(8), 1148–1151. DOI: <a href="https://doi.org/10.1111/rda.13976">https://doi.org/10.1111/rda.13976</a>
- **8.** Ilias Michos, Maria Tsantarliotou, Constantin M. Boscos, Georgios Tsousis, <u>Athina Basioura</u>, [...], and Ioannis A. Tsakmakidis. 2021. Effect of boar sperm proteins and quality changes on field fertility. *Animals* 11(6), 1813. DOI: <a href="https://doi.org/10.3390/ani11061813">https://doi.org/10.3390/ani11061813</a>
- Tsakmakidis, I. A., Samaras, T., Anastasiadou, S., <u>Basioura, A.</u>, et al. 2021. Toxic and microbiological effects of iron oxide and silver nanoparticles as additives on extended ram semen. *Animals* 11 (4), 1011. DOI: <a href="https://doi.org/10.3390/ani11041011">https://doi.org/10.3390/ani11041011</a>
- **10.** Panagiotis D. Tassis, Ioannis A. Tsakmakidis, [...], <u>Athina Basioura</u> and Dian Schatzmayr. 2020. Individual and combined *in vitro* effects of deoxynivalenol and zearalenone on boar semen. *Toxins* 12 (8), 495. DOI: <a href="https://doi.org/10.3390/toxins12080495">https://doi.org/10.3390/toxins12080495</a>
- **11.** I.A. Tsakamakidis, Th. Samaras, S. Anastasiadou, <u>A. Basioura</u>, et al. 2020. Iron oxide nanoparticles as an alternative to antibiotics additive on extended boar semen. *Nanomaterials* 10 (8), 1568. DOI: <a href="https://doi.org/10.3390/nano10081568">https://doi.org/10.3390/nano10081568</a>
- **12.** <u>A. Basioura</u>, G. Tsousis, C. Boscos, A. Lymberopoulos, I. Tsakmakidis. 2020. Method agreement between three different chambers for comparative bull semen computer assisted sperm motility analysis. *Polish Journal of Veterinary Sciences* 23 (3), 325-331. DOI: <a href="https://doi.org/10.24425/pjvs.2020.133649">https://doi.org/10.24425/pjvs.2020.133649</a>
- **13.** <u>A. Basioura</u>, I.A. Tsakmakidis, E.A. Martinez, J. Roca, J. Li, M.F. Molina, A. Theodoridis, C.M. Boscos, I. Parrilla. 2020. Effect of astaxanthin in extenders on sperm quality and functional variables of frozen-thawed boar semen. *Animal Reproduction Science* 218, 106478. DOI: https://doi.org/10.1016/j.anireprosci.2020.106478
- **14.** <u>Basioura A</u>, [...], Boscos CM. 2020. Effect of iron oxide and silver nanoparticles on boar semen CASA motility and kinetics. *Journal of the Hellenic Veterinary Medical Society* 71 (3), 2331-2338. DOI: <a href="https://doi.org/10.12681/jhvms.25084">https://doi.org/10.12681/jhvms.25084</a>
- **15.** <u>Athina Basioura</u>, Georgios Tsousis, Constantin Boscos, Aristotelis Lymberopoulos, Ioannis Tsakmakidis. 2019. Method agreement between three different chambers for comparative boar semen computer assisted sperm analysis. *Reproduction in Domestic Animals* 54 (S4), 41-45. DOI: <a href="https://doi.org/10.1111/rda.13494">https://doi.org/10.1111/rda.13494</a>
- **16.** <u>A. Basioura</u>, C.M. Boscos, I. Parrilla, G. Tsousis, I.A. Tsakmakidis. 2018. Effect of astaxanthin on the quality of boar sperm stored at 17° C, incubated at 37° C or under *in vitro* conditions. *Reproduction in Domestic Animals* 53 (2), 463-471. DOI: https://doi.org/10.1111/rda.13133
- **17.** I.A. Tsakmakidis, M. Tsantarliotou, I.A. Michos, <u>A.G. Basioura</u>, G. Tsousis, C.M. Boscos. 2017. Selected steps of swine ICSI method to overcome seasonal effect and achieve acceptable early embryonic development, a preliminary study. *Polish Journal of Veterinary Sciences* 20 (3), 607-609. DOI: <a href="https://doi.org/10.1515/pjvs-2017-0075">https://doi.org/10.1515/pjvs-2017-0075</a>
- **18.** Vasiliki Alexiou, <u>Athina G. Basioura</u>, Georgios Tsousis, Eleni D. Tzika, Constantin M. Boscos, Georgios Vatzias, and Ioannis A. Tsakmakidis. 2017. The effect of dilution temperature by two extenders with different specifications on boar semen quality. *Veterinarski Arhiv* 87 (2), 197-208.
- **19.** Michos I.A., <u>Basioura A.G.</u>, Boscos C.M., Tsakmakidis I.A. 2013. Proper use and impact of "Computer Assisted Semen Analysis" technique on semen evaluation of farm animals. *Journal of the Hellenic Veterinary Medical Society* 64 (4), 267-274. DOI: <a href="https://doi.org/10.12681/jhvms.15506">https://doi.org/10.12681/jhvms.15506</a>

# **Invited Speaker**

- 1. Athina Basioura, Artificial insemination in sheep, Union of Pelagonia sheep, Florina-Greece, June 2022.
- **2.** I.A. Tsakmakidis, T. Samaras, S. Anastasiadou, <u>A. Basioura</u>, [...], C.M. Boscos. Effect of iron oxide nanoparticles as alternative to antibiotics on boar semen. The 17<sup>th</sup> Sypmosium, Health care, Selection and Reproduction of Swine, Silver Lake Veliko Gradiste Serbia, 30 May-1 June 2019.

#### **Oral Presentations**

#### **International Conferences**

- 1. <u>A. Basioura</u>, G. Tsousis, C. Boscos, A. Lymberopoulos, I. Tsakmakidis. Method agreement between three different chambers for comparative boar semen CASA analysis. The 15<sup>th</sup> International Congress of the Spanish Association for Animal Reproduction (AERA), Toledo, Spain, November 2019.
- 2. <u>Basioura A.</u>, Boscos C., Parrilla I., Tsousis G., Tsakmakidis I. Effect of astaxanthin on boar semen stored at 17° C for 48 h and incubated at 37° C or under *in vitro* conditions. Oral presentation, 1st Workshop, Department of Animal Medicine and Surgery, Faculty of Veterinary Medicine, University of Murcia, Murcia-Spain, December 2016.
- **3.** Tsakmakidis I., Tsantarliotou M., Michos I., <u>Basioura A.</u>, Boscos K. ICSI as method to overcome season effect on swine gametes' quality for *in vitro* embryo production. The 19<sup>th</sup> International Congress on Biotechnology in Animal Reproduction (ICBAR), Novisad, Serbia, September 2015.

#### **National Conferences**

- 1. <u>Athina Basioura</u>, Theodoros Samaras, Sofia Anastasiadou, Aikaterini Ntemka, Ilias Michos, Konstantinos Simeonidis, Isidoros Karagiannis, Georgios Tsousis, Mavroeidis Angelakeris, Constantin Boscos and Ioannis Tsakmakidis. Iron oxide nanoparticles' use on boar semen as an alternative to antibiotics. The 15<sup>th</sup> Pan-Hellenic Veterinary Congress, Athens-Greece, November 2022.
- 2. V. Stravogianni, <u>A. Basioura</u>, D. Loukovitis, G. Tsousis, D. Chatziplis, I. Tsakmakidis, A.G. Lymberopoulos. Determination of semen quality and genetic parameters in boars of high and low field fertility. Oral presentation, 7<sup>th</sup> Pan-Hellenic Congress: Technology of Animal Production, Thessaloniki-Greece, February 2019.
- **3. Basioura A.**, Brellou G., Tsakmakidis I., Vlemmas I., Boscos C., Giadinis N. Effect of varicocele on fertility capacity of ram (case report). Poster presentation, 14<sup>th</sup> Pan-Hellenic Veterinary Congress, Thessaloniki-Greece, May 2018.
- **4. Basioura A.**, Boscos C., Parrilla I., Tsousis G., Tsakmakidis I., Effect of astaxanthin on boar semen stored at 17° C for 48 h and incubated at 37° C or under *in vitro* conditions. Oral presentation, 4<sup>th</sup> Pan-Hellenic Congress on Veterinary Science of Farm Animals and Food Hygiene, Volos-Greece, May 2017.
- **5.** Tsakmakidis I., Tsandarliotou M., Michos I., <u>Basioura A.</u>, Boscos C., ICSI as method to overcome season effect on swine gametes' quality for in vitro embryo production. Oral presentation, 13<sup>th</sup> Pan-Hellenic Veterinary Congress, Athens-Greece, May 2015.
- **6.** <u>Basioura A.</u>, Michos I., Tsousis G., Boscos C., Tsakmakidis I., Comparative study of boar semen enrichment methods. Oral presentation, 13<sup>th</sup> Pan-Hellenic Veterinary Congress, Athens-Greece, May 2015.
- **7.** <u>Basioura A.</u>, Michos I., Tsakmakidis I., Contribution of sperm DNA integrity to boar fertility. Oral presentation, 4<sup>th</sup> Pan-Hellenic Congress: Technology Animal Production, Thessaloniki-Greece, February 2013.
- **8.** Michos I., <u>Basioura A.</u>, Tsakmakidis I., Proper use and impact of "Computer Assisted Semen Analysis" technique on semen evaluation of farm animals. Oral presentation, 4<sup>th</sup> Pan-Hellenic Congress: Technology of Animal Production, Thessaloniki-Greece, February 2013.

### **Poster Presentations**

### **International Conferences**

- 1. V. Stravogianni, T. Samaras, C. Boscos, J. Markakis, E. Krystallidou, <u>A. Basioura</u>, A. Lymberopoulos and I. Tsakmakidis. The use of scrotal contractions/relaxations video monitoring in evaluating boar semen production capacity. Poster presentation in 25<sup>th</sup> European Society for Domestic Animal Reproduction (ESDAR) Conference, Thessaloniki-Greece, 28 September-2 October 2022.
- **2.** A.G.Lymberopoulos, A. Papanikou, <u>Ath. Basioura</u>, I.A. Tsakmakidis D. Roustemis. Phenotypic Characterization of Greek Indigenous Buffalo. Poster presentation in 25<sup>th</sup> European Society for Domestic Animal Reproduction (ESDAR) Conference, Thessaloniki-Greece, 28 September-2 October 2022.

- **3.** CA Rekkas, A Saratsi, I Panagiotidis, F Samartzi, <u>A Basioura</u>, D Tsiokos, Ch Ligda. Effect of fumaric acid addition to soy lecithin extender on post-thaw parameters of buck semen quality. Poster presentation in 25<sup>th</sup> European Society for Domestic Animal Reproduction (ESDAR) Conference, Thessaloniki-Greece, 28 September-2 October 2022.
- **4.** V. Stravogianni, T. Samaras, C. Boscos, <u>A. Basioura</u>, I. Markakis, E. Krystallidou, I. Tsakmakidis. Efficacy of biomedical techniques on boars' evaluation to produce high quality semen. Poster presentation in 19<sup>th</sup> International Congress on Animal Reproduction (ICAR), Bologna-Italy, 26-30 June 2022.
- **5.** A. Tsakmakidis, P.D. Tassis, V. Nagl, N. Reisinger, E. Tzika, G. Schatzmayr, <u>A. Basioura</u>, I. Michos, D. Schatzmayr. In vitro effects of de-epoxy deoxynivalenol and hydrolyzed zearalenone on boar. Poster presentation in European Society for Domestic Animal Reproduction (ESDAR) Online Conference, October 2021.
- **A. Basioura**, G. Tsousis, C. Boscos, A. Lymberopoulos, I. Tsakmakidis. A comparative study of three different chambers for bull semen computer assisted sperm motility analysis. Poster presentation in European Society for Domestic Animal Reproduction (ESDAR) Online Conference, 11-16 October 2021.
- 7. V. Stravogianni, <u>A. Basioura</u>, D. Loukovitis, I.A. Tsakmakidis, G. Tsousis, D. Chatziplis, A.G. Lymberopoulos. Determination of semen quality and genetic parameters in boars of high and low field fertility. The 23<sup>rd</sup> European Society for Domestic Animal Reproduction (ESDAR) Conference, St. Petersburg, Russia, September 2019.
- **8.** <u>A. Basioura</u>, [...], C.M. Boscos. Effect of iron and silver nanoparticles on boar semen kinetics. The 23<sup>rd</sup> European Society for Domestic Animal Reproduction (ESDAR) Conference, St. Petersburg, Russia, September 2019.
- **9.** <u>Basioura A.</u>, Parrilla I., Martinez E., Roca J., Li J., Molina M., Boscos C., Tsakmakidis I. Effect of astaxanthin on frozen thawed boar semen. A preliminary study. The 22<sup>nd</sup> European Society for Domestic Animal Reproduction (ESDAR) Conference, Cordoba, Spain, September 2018.
- **10.** <u>Basioura A.</u>, Boscos C., Parrilla I., Tsousis G., Tsakmakidis I. Effect of astaxanthin on boar semen incubated at 37° C and under *in vitro* conditions for 1 h. The 14<sup>th</sup> International Congress of the Spanish Association for Animal Reproduction (AERA), Barcelona, Spain, November 2017.
- **11.** <u>Basioura A.</u>, Boscos C., Parrilla I., Tsousis G., Tsakmakidis I. Effect of astaxanthin on extended boar semen stored at 17° C for 48 h. The 21<sup>st</sup> European Society for Domestic Animal Reproduction (ESDAR) Conference, Bern, Switzerland, August 2017.
- **12.** <u>Basioura A.</u>, Michos I., Tsousis G., Boscos C., Tsakmakidis I., Comparative study of boar semen enrichment methods. The 17<sup>th</sup> European Society for Domestic Animal Reproduction (ESDAR) Conference, Bologna, Italy, September 2013.

#### **National Conferences**

- 1. <u>Basioura A.</u>, Parrilla I., Martinez E., Roca J., Li J., Molina M., Boscos C., Tsakmakidis I. Effect of astaxanthin on frozen thawed boar semen. A preliminary study. Poster presentation, 14<sup>th</sup> Pan Hellenic Veterinary Congress, Thessaloniki Greece, May 2018.
- 2. K. Mavropoulou, Th. Menka, C.M. Douga, <u>A. Basioura</u>, G. Tsousis, E. Tzika, P. Tassis, C. Boscos, I. Tsakmakidis. Season effect in relation with methods of fertilization on the reproductive outcome of a pig farm. Poster presentation, 14<sup>th</sup> Pan-Hellenic Veterinary Congress, Thessaloniki-Greece, 11-13 May 2018.

# **Mobility experience**

17/01/2022-07/02/2022	Training in molecular biology techniques that were mastered on bull semen and equine endometrium, such as gene and protein analysis (PCR, immunohistochemistry, Western blot analysis, ELISA assay). Faculty of Veterinary Medicine, University of Lisbon, Lisbon, <b>Portugal</b> .
01/11/2018-20/11/2018	Veterinary practitioner, reproduction services and management of rabbit farm, <b>Cyprus</b>

24/06/2018-11/07/2018 Senior consultant (training projects, veterinary services, pig farm management),

DANAG AGRITECH CONSULTING (Zhengzhou) CO., LTD, Jinan, China.

27/09/2016-10/04/2017 Swine biotechnology of reproduction, flow cytometry analysis of sperm parameters,

semen cryopreservation Department of Animal Medicine and Surgery (ERASMUS+ Programme for studies). University of Murcia, Murcia, Spain.

# Participation in applied research

**1. Project:** Artificial insemination with boar semen without antibiotics. Participating entity: Swedish University of Agricultural Sciences. Duration: 01/02/2023-in progress.

# Participation in industrial innovation

- **1. Project:** Effect of deoxynivalenol, zearalenone, and fumonisin on boar semen quality parameters. Participating entity: Biomin GmbH. Duration: 20/07/2015-19/07/2018.
- **2. Project:** Comparative study of boar semen enrichment methods. Participating entity: NUEVO S.A. Duration: 06/11/2013-05/11/2014.

### Participation in R&D projects funded through competitive calls of public entities

Prof. Basioura has participated in 4 R&D projects, such as:

Greece.

- 1. **Project:** Investigation of boar semen fertilizing capacity changes applying biomedical techniques. Funding entity: Hellenic Foundation for Research and Innovation (H.F.R.I.). Participating entity: Aristotle University of Thessaloniki. Duration: 21/01/2020-20/11/2022.
- **2. Project:** Protection of autochthonous populations Pelagonia Sheep breed in the crossSheep breed. Funding entity: European Union and National Funds of Greece. Participating entity: Geotechnical Chamber of Greece-Branch of West Macedonia. Duration: 30/07/2018-31/03/2021.
- **3. Project**: Investigation of nanotechnology applications on farm animals' semen processing. Funding entity: European Social Fund (ESF) and Greek National Resources. Participating entity: Aristotle University of Thessaloniki. Duration: 20/06/2018-25/03/2020.
- **4. Project:** Seasonal effect in swine oocyte's efficiency for *in vitro* embryo production by intra-cytoplasmic sperm injection (ICSI). Funding entity: Research Committee of Aristotle University of Thessaloniki. Participating entity: Aristotle University of Thessaloniki. Duration: 01/01/2012-31/03/2013.

# **Teaching experience**

Academic year 2021/2022	Assistant professor, program of under-graduate studies (scientific methodology, 1st
until now	semester; apiculture, 6 <sup>th</sup> semester; farm animals' reproduction, 7 <sup>th</sup> semester; applied
	reproduction, 8th semester) Department of Agriculture, School of Agricultural
	Sciences, University of Western Macedonia, Florina, Greece.

Academic year 2021/2022, Teaching in the program of under-graduate studies (5<sup>th</sup> & 6<sup>th</sup> semester, Obstetrics and Reproduction I and II), Faculty of Veterinary Science, University of Thessaly.

**24/06/2018-11/07/2018** Teacher in training courses for pig farm management, DANAG AGRITECH CONSULTING (Zhengzhou) CO., LTD, Jinan, China.

Academic year 2018/2019

Teaching in Master Science of post-graduate studies, Innovative and sustainable agricultural production systems. Scientific Field: In vitro embryo production, Basic rules of sperm evaluation by CASA system-Relationship of CASA evaluated sperm variables and fertility, Sperm quality and fertilizing capacity evaluation by specialized laboratory assays. International Hellenic University, Thessaloniki,

Academic year 2012/2013 until now	Teaching assistant on laboratory and clinical courses (farm animals' reproduction), Farm Animals Clinic, School of Veterinary Medicine, Faculty of Health Sciences, Aristotle University of Thessaloniki, Thessaloniki, Greece.
Fellowships	
20/06/2018-25/03/2020	<b>Scholarship for Young Researchers</b> . Funding entity: European Social Fund (ESF) and Greek National Resources. Participating entity: Aristotle University of Thessaloniki, Greece.
15/05/2017-14/06/2018	PhD Thesis Scholarship. State Scholarships Foundation (IKY), Greece.
<b>Professional Courses</b>	
2022	Course: Molecular analysis techniques. Faculty of Veterinary Medicine, University of Lisbon, Lisbon, Portugal.
2021	Course: Good Clinical Practice (GCP) for Veterinary Clinical Trials. Tufts Clinical and Translational Science Institute, United States of America.
2017	Courses: Flow cytometry/Semen cryopreservation. University of Murcia, Spain.
2014	<b>Courses: Sheep Artificial Insemination</b> . Aristotle University of Thessaloniki, Greece.
2012	Courses: Sperm Class Analyzer® (MICROPTIC S.A., Barcelona, Spain). Aristotle University of Thessaloniki, Greece. (Certified user).
	Courses: Intra-cytoplasmic sperm injection by micro manipulator. Aristotle University of Thessaloniki, Greece. (Certified user).

## **Professional Activities**

- Ad hoc reviewer for Animals (MPDI), Animal Reproduction Science (ELSEVIER), Biosystems Engineering (ELSEVIER), Canadian Journal of Animal Science (CANADIAN SCIENCE PUBLISHING), Cells (MPDI), Cell & Tissue Banking (SPRINGER), Cryobiology (ELSEVIER), Czech Academy of Agricultural Sciences, Journal of Hellenic Veterinary Medical Society, Livestock Science (ELSEVIER), Open Journal of Animal Sciences (Scientific Research Publishing), Reproduction in Domestic Animals (WILEY), Small Ruminant Research (ELSEVIER), Systems Biology in Reproductive Medicine (TAYLOR & FRANCIS), Theriogenology (ELSEVIER), Toxicology *in vitro* (ELSEVIER), Tropical Animal Health and Production (SPRINGER), Veterinary Medicine International (Hindawi), Veterinary Research Communications (SPRINGER), Veterinary Sciences (MPDI).
- Editorial Advisory Board member of Reproduction in Domestic Animals (WILEY).
- Editor, Veterinary Sciences, MDPI Special issue "Sperm Biotechnology in Animals Reproduction".
- Member of European Society for Domestic Animal Reproduction (since 2013).
- Member of Geotechnical Chamber of Greece (since 2012).