

Vasiliki G. Sapanidou
DVM, MSc, PhD
Assistant Professor
Department of Animal Science
School of Animal Biosciences
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Short CV
And
List of Publications

Athens, May 2025

Education

20/7/2009: Doctor of Veterinary Medicine (7,51/10) Aristotle University of Thessaloniki (A.U.Th).

2/2022-12/9/2023: Transinstitutional postgraduate course «**Biomedical and Molecular Sciences in Diagnosis and Treatment of Diseases**», Medical School, Democritus University of Thrace (9,48/10). Thesis: “**Comparative Study of Pterostilbene and Erythropoietin Effects on motility, viability and acrosomal integrity of thawed bovine spermatozoa**”

Doctoral thesis and postdoctoral research

18/11/2015: PhD “Excellent”. Thesis: “**The effect of Crocus Sativus L. carotenoids on bovine sperm quality characteristics and in vitro fertilization**”

14/4/2020-4/2/2022: Postdoctoral research “**The effect of crocin when it is used as an additive in semen extender on bovine sperm quality**”.

31/10/2023-21/3/2025: Postdoctoral research “**Investigation of the effect of crocin when it is used as an additive in semen extender on cell signaling pathways of bovine spermatozoa**”.

Teaching experience

2017-2018, 2019-2020, 2023-2024: Temporary Teaching staff at the Veterinary School of A.U.Th. and the Department of Agriculture of University of Western Macedonia

Distinctions and Scholarships

2018: Participation at the 18o Award Book της Royan International Institute: Biomedicine and stem cells

2012: Scholarship from the Research Committee of A.U.Th. as a PhD student

Research Projects.

Participation in 3 research projects with funding

Participation in conferences

– 27th Annual Conference of the European Society for Domestic Animal Reproduction, 12-14th September, Belgrade, Serbia, **2024**

- Joint Meeting Hellenic Physiology Society/ American Physiology Society. 5-6th October, Athens, Greece, **2023**
- 25th Annual Conference of the European Society for Domestic Animal Reproduction, 28th September- 2nd October, Thessaloniki, Greece, **2022**
- 17th Annual Conference of the European Society for Domestic Animal Reproduction, 12th-14th September, Bologna, Italy, **2013**
- 16th Annual Conference of the European Society of Domestic Animal, 29th August- 1st September **2012**

Reviewer

1. Acta Veterinaria Eurasia
2. Animal Reproduction Science
3. Food and Chemical Toxicology
4. Journal of the Hellenic Veterinary Medical Society
5. Scientific Reports
6. Journal of Nanobiotechnology

List of Publications

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SciProfiles: 3075225

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A. In peer review journals

1. **V Sapanidou**, MP Tsantarliotou, K Feidantsis, EE Tzekaki, G Kourousekos, SN Lavrentiadou (**2025**). Supplementing Freezing Medium with Crocin Exerts a Protective Effect on Bovine Spermatozoa Through the Modulation of a Heat Shock-Mediated Apoptotic Pathway. *Molecules* 16: 30, 1329.
2. C Chavas, **VG Sapanidou**, K Feidantsis, SN Lavrentiadou, D Mavrogianni, I Zarogoulidou, DJ Fletouris, MP Tsantarliotou (**2024**) Treatment with Pterostilbene Ameliorates the Antioxidant Status of Bovine Spermatozoa and Modulates Cell Death Pathways. *Antioxidants* 22:1437.
3. **V Sapanidou**, B Asimakopoulos, T Lialiaris, SN Lavrentiadou, K Feidantsis, G Kourousekos, MP Tsantarliotou (**2024**). The Role of Erythropoietin in Bovine Sperm Physiology. *Animals* 26: 2175.
4. S Lavrentiadou, **V Sapanidou**, E Tzekaki, I Margaritis, M Tsantarliotou (**2023**). Melatonin protects bovine spermatozoa by reinforcing their antioxidant defenses. *Animals* 13: 3219. <https://doi.org/10.3390/ani13203219>. **Invited paper in Special Issue** "Management of Stress Impact on Domestic Animals Physiology and Welfare".
5. **V Sapanidou**, M Tsantarliotou, S Lavrentiadou, E Tzekaki, I Efraimidis, T Lialiaris, B Asimakopoulos (**2023**). The beneficial effects of pterostilbene on post-thawed bovine spermatozoa. *Animals*. 13, 2713. **Invited paper in Special Issue**: "Frozen Semen in Ruminants".
6. **V Sapanidou**, M Tsantarliotou, S Lavrentiadou (**2023**). A review of the use of antioxidants in bovine sperm preparation protocols. *Animal Reproduction Science*, 251, 107215.
7. **V Sapanidou**, S Lavrentiadou, M Errico M, D Fletouris, I Panagiotidis, I Efraimidis, I Zervos, I Taitzoglou, B Gasparini, M Tsantarliotou (**2022**). The addition of crocin in the freezing medium extender improves post-thaw semen quality. *Reproduction in Domestic Animals* 57, 269–276.

8. M Tsantarliotou, S Lavrentiadou, D Psalla, I Margaritis, M Kritsepi-Konstantinou, I Zervos, M Latsari, **V Sapanidou**, I Taitzoglou, Z Sinakos (2019). Suppression of plasminogen activator inhibitor-1 (PAI-1) activity by crocin ameliorates lipopolysaccharide-induced thrombosis in rats. *Food & Chemical Toxicology* 125.
9. M Tsantarliotou, **V Sapanidou** (2018). The importance of antioxidants in sperm quality and in vitro embryo production. Invited article in *Journal of Veterinary Andrology* 3, 1-13.
10. **V Sapanidou**, I Taitzoglou, I Tsakmakidis, I Kourtzelis, D Fletouris, A Theodoridis, S Lavrentiadou, M Tsantarliotou (2016). Protective effect of crocetin on bovine spermatozoa against oxidative stress during in vitro fertilization. *Andrology*, 4, 1138–1149.
11. **V Sapanidou**, I Taitzoglou, I Tsakmakidis, I Kourtzelis, D Fletouris, A Theodoridis, I Zervos, M Tsantarliotou (2015). Antioxidant effect of crocin on bovine sperm quality and in vitro fertilization. *Theriogenology*, 84, 1273–1282.
12. **V Sapanidou**, I Margaritis, N Siahos, K Arsenopoulos, E Dragatidou, I Taitzoglou, I Zervos, A Theodoridis, M Tsantarliotou (2014). Antioxidant effect of a polyphenol-rich grape pomace extract on motility, viability, and lipid peroxidation of thawed bovine spermatozoa. *J. Biol. Res (Thessaloniki, Greece)*, 21(1), 19.
13. M Tsantarliotou, T Poutahidis, D Markala, G Kazakos, **V Sapanidou**, S Lavrentiadou, I Zervos, I Taitzoglou, Z Sinakos (2013). Crocetin administration ameliorates endotoxin-induced disseminated intravascular coagulation in rabbits. *Blood coagulation & fibrinolysis: an international journal in haemostasis and thrombosis*, 24(3), 305–310.

✉Corresponding author

B. In conferences

1. Ch Chavas, **V Sapanidou**, I Zarogoulidou, S Lavrentiadou, D Mavrogianni, P Drakakis, M Tsantarliotou (2024). Pterostilbene augments the antioxidant capacity of thawed bovine spermatozoa. 27th Annual Conference of the European Society for Domestic Animal Reproduction, 12-14th September, Belgrade, Serbia (Poster Presentation)
2. **V Sapanidou**, M Tsantarliotou, S Lavrentiadou, E Tzekaki, I Efraimidis, T Lialiaris, B Asimakopoulos (2023). Joint Meeting Hellenic Physiology Society/ American Physiology Society. Erythropoietin promotes in vitro sperm capacitation of bovine spermatozoa. 5th-6th October, Athens, Greece. (Oral presentation). *Physiological Reviews*.

3. S Lavrentiadou, **V Sapanidou**, I Margaritis, I Panagiotidis, M. Tsantarliotou (2022). Melatonin increases viability of spermatozoa and provides protection against post-thawing hydrogen peroxide-induced oxidative stress. 25th Annual Conference of the European Society for Domestic Animal Reproduction, 28th September-2nd October, Thessaloniki, Greece (Poster Presentation). *Reproduction in Domestic Animals* 57 (4), 101-2.
4. S Lavrentiadou, M Errico, **V Sapanidou**, A Arseniadou, I Panagiotidis, I Efraimidis I, I Zervos, I Taitzoglou, B Gasparini, M Tsantarliotou (2021). Addition of crocin in the freezing medium improves bovine sperm characteristics. 25th Annual Conference of the European Society for Domestic Animal Reproduction, 12th-17th September, Thessaloniki, Greece (Poster Presentation). *Reproduction in Domestic Animals* 57 (1), 109.
5. F Piscopo, **V Sapanidou**, R Esposito, S Lavrentiadou, V Longobardi, B Gasparini, M Kosior, M Tsantarliotou (2020). Effect of a pro-fertility mix on frozen-thawed sperm quality in bovine. Association for Applied Animal Andrology, Bologna, Italy (Poster Presentation). *Animal Reproduction Science* 220:106375.
6. M Tsantarliotou, **V Sapanidou**, I Margaritis, MA Karatzia, I Taitzoglou, S Lavrentiadou, I Zervos (2016). Beneficial effects of crocin against H₂O₂-induced oxidative stress on bovine sperm motility and viability. 10th Biennale Conference 24th-26th June, Tours, France (Poster Presentation) *Animal Reproduction Science* 169:119.DOI: 10.1016/j.anireprosci.2016.03.059
7. **V Sapanidou**, D Fletouris, I Kourtzelis, Z Abas, I Taitzoglou, I Tsakmakidis, I Zervos, M Tsantarliotou (2013). Crocin reduced oxidative stress and DNA damage of frozen/thawed bull spermatozoa. 17th Annual Conference of the European Society for Domestic Animal Reproduction, 12th-14th September, Bologna, Italy (Oral Presentation). *Reproduction in Domestic Animals* 48(s1):69
8. **V Sapanidou**, Z Abas, I Taitzoglou, I Tsakmakidis, I Zervos, S Lavrentiadou, M Tsantarliotou (2012). Crocin promotes in vitro sperm capacitation of bovine sperm. *Fertility & Antioxidants*, 6-7th December, Paris, France (Oral Presentation).
9. M Tsantarliotou, **V Sapanidou**, Z Abas, I Taitzoglou, S Lavrentiadou, I Zervos (2012): Melatonin prevents the reduction of bovine sperm motility under H₂O₂ induced oxidative stress. *Fertility & Antioxidants*, 6th-7th December Paris, France (Poster Presentation).
10. **V Sapanidou**, I Taitzoglou, I Tsakmakidis, Z Abas, I Zervos, S Lavrentiadou, M Tsantarliotou (2012). Crocin improves frozen/thawed bovine sperm motility and viability. 16th Annual Conference of the European Society for Domestic Animal Reproduction, 29th August-1st September, Dublin, Ireland (Poster Presentation). *Reproduction in Domestic Animals* 47 (5): 108
11. M Tsantarliotou, M De Blasi, S Lavrentiadou, **V Sapanidou**, L Boccia, S Di Francesco, B Gasparini (2011). Plasminogen activator activity in buffalo in vitro matured oocytes after vitrification-warming. Annual Conference of the International Embryo Transfer Society, 7th–

10th January, Phoenix, Arizona, USA (Poster Presentation). *Reproduction Fertility and Development* 24, 134, 10.1071/RDv24n1Ab46.

12. M De Blasi, M Rubessa, G Albero, S Lavrentiadou, **V Sapanidou**, B Gasparrini, M Tsantarliotou (2011): Reactive oxygen species in vitrified bovine in vitro-matured oocytes. (Poster Presentation). Annual Conference of the International Embryo Transfer Society, 7th–10th January, Phoenix, Arizona, USA (Poster Presentation). *Reproduction Fertility and Development* 24, 134, 10.1071/RDv24n1Ab46.

13. M Tsantarliotou, Th Poutahidis, D Markala, G Kazakos, **V Sapanidou**, S Lavrentiadou, I Zervos, I Taitzoglou, Z Sinakos (2011). Endotoxin-induced disseminated intravascular coagulation (DIC) in rabbits: Crocetin prevents plasminogen activator activity (PAA) in kidneys. Proceedings: *Molecular and Cellular Biology of Plasminogen Activation*. 9-13 July, Cambridge, UK.

14. G Kazakos, I Savvas.,T Anagnostou ,E Flouraki., K Pavlidou, **V Sapanidou** (2010). Use of a eutectic mixture of lidocaine 2.5% and prilocaine 2.5% as a local anesthetic in rabbits. Association of Veterinary Anaesthetists, Autumn Meeting, 2nd-4th September, Santorini, Greece (Poster Presentation). *Veterinary Anaesthesia and Analgesia* 38, 27

C. Book Chapters

1. Chapter 41-44, Translation in Greek. “Cunningham’s Textbook of Veterinary Physiology”

D. Guest Editor

1. Special Issue “Modulation of Biochemical, Cellular and Physiological Mechanisms in Response to Oxidative Stress in Animals”, **Antioxidants**