

# PANAGIOTA TYRNENOPOULOU, DVM, PhD, MRCVS

## Assistant Professor

### **Equine Clinical Medicine**

Department of Veterinary Medicine, School of Health Sciences, University of Thessaly  
Trikalon 224, Karditsa 43100, Greece

**Mobile:** +30 697 813 2333

Email: [ptyrnenop@uth.gr](mailto:ptyrnenop@uth.gr)

ORCID: <https://orcid.org/0000-0003-2325-3791>

Web of Science Researcher ID AAI-9162-2020

## Education

**Ph.D., School of Veterinary Medicine, Aristotle University of Thessaloniki (A.U.Th.), 2019**

**Dissertation:** Investigation of the rheological properties of synovial fluid obtained from normal horses and horses with osteoarthritis. Preliminary characterization of novel biomaterials for management of osteoarthritis

Dissertation advisors: Diakakis Nikolaos, Papazoglou Lysimachos, Aggeli Amalia

Employed as **Clinical Research Associate**. Research project: Correlation between equine colic and weather changes (A.U.TH Research committee), 2013-2014

Employed as **Clinical Research Associate**. Research project: Evaluation of intra-articular injection of autologous platelet lysate in horses with osteoarthritis of the distal interphalangeal joint (A.U.TH Research committee), 2013-2014

**Resident**, Equine Unit, Faculty of Veterinary Medicine, Aristotle University of Thessaloniki, 2012-2013

**D.V.M.**, Faculty of Veterinary Medicine, Aristotle University of Thessaloniki, 2011

## **Assistant Professor, University of Thessaly, January 2021 to date**

Faculty of Veterinary Science

**Courses:** Husbandry, Orthopaedic surgery, Soft tissue surgery, Internal Medicine, Diagnostic imaging, Clinical practice in anaesthesia, surgery and diagnostic imaging I, Clinical practice in anaesthesia, surgery and diagnostic imaging II, Obstetrics and Reproduction I, Obstetrics and Reproduction III

**Adjunct teaching staff (P.D. 407/1980), University of Thessaly,  
Winter 2020–2021**

**Courses:** Orthopaedic surgery, Clinical practice in anaesthesia, surgery and diagnostic imaging I, Obstetrics and Reproduction I, Obstetrics and Reproduction III

## **PUBLICATIONS AND NUMBER OF CITATIONS**

Articles in peer-reviewed scientific journals: 20

Presentations (Oral, Poster) in scientific meetings: 45

Total citations: 134

h-index: 6

## **PUBLICATIONS IN INTERNATIONAL SCIENTIFIC JOURNALS**

1. Tyrnenopoulou, P., Kalatzis, D., Kiouvrekis, Y., Flouraki, E., Foliass, L., Loukopoulos, E., ... & Chalvatzis, N. (2026). Development of an explainable machine learning computational model for the prediction of severe complications after orchietomy in stallions. *Animals*.
2. Tyrnenopoulou, P., Flouraki, E., Foliass, L., Loukopoulos, E., Starras, A., Chalvatzis, N., ... & Kalatzis, D. (2026). Complications following orchietomy in stallions in field conditions: Descriptive results and predictors in a study of 612 cases. *Animals*.
3. Margeti, C., Kazakos, G., Skampardonis, V., Galatos, A. D., Zacharopoulou, T., Tsioli, V., ... & Flouraki, E. (2024). The effect of a subsequent dose of dexmedetomidine or other sedatives following an initial dose of dexmedetomidine on sedation and quality of recovery in cats: Part I. *Veterinary Sciences*.
4. Tyrnenopoulou, P., Tsilipounidaki, K., Florou, Z., Gkoutinoudis, C.-G., Tyropoli, K., Starras, A., ... & Diakakis, N. (2024). Detection of gastrointestinal pathogens with zoonotic potential in horses used in free-riding activities during a countrywide study in Greece. *Animals*.
5. Margeti, C., Kazakos, G., Galatos, A. D., Skampardonis, V., Zacharopoulou, T., Tsioli, V., ... & Flouraki, E. (2024). The effect of a subsequent dose of dexmedetomidine or other sedatives following an initial dose of dexmedetomidine on electrolytes, acid–base balance, creatinine, glucose, and cardiac troponin I in cats: Part II. *Veterinary Sciences*.
6. Tyrnenopoulou, P., & Diakakis, N. (2023). Equine herpes virus-1: A clinician’s perspective. *Journal of the Hellenic Veterinary Medical Society*.
7. Athanasiou, L. V., Katsogiannou, E. G., Tyrnenopoulou, P., Gougoulis, D., Apostolidis, K. N., Papadakis, E., ... & Kazakos, G. (2023). Evidence of horse exposure to *Anaplasma phagocytophilum*, *Borrelia burgdorferi*, and *Leishmania infantum* in Greece through detection of IgG antibodies in serum and saliva. *Biomolecules*.
8. Tyrnenopoulou, P., & Fthenakis, G. C. (2023). Clinical aspects of bacterial distribution and antibiotic resistance in the reproductive system of equids. *Antibiotics*.
9. Tyrnenopoulou, P., Boufiss, P. T., Fthenakis, G. C., & Papadopoulos, E. (2021). Interactions between parasitic infections and reproductive efficiency in horses. *Parasitologia*.
10. Karadima, V., Billi, T., Tyrnenopoulou, P., Diakakis, N., ... & Apostolopoulou, E. P. (2021). Sand colic: A retrospective study of six cases. *Journal of the Hellenic Veterinary Medical Society*.
11. Diakakis, N., & Tyrnenopoulou, P. (2021). Equine sarcoids: A therapeutic challenge. *Hellenic Journal of Companion Animal Medicine*.
12. Tyrnenopoulou, P., Diakakis, N., Rizos, E., Chaintoutis, S., Patsikas, M. N., Papadopoulos, P., ... & Aggeli, A. (2021). Analysis of factors influencing the qualitative characteristics of equine synovial fluid. *Journal of the Hellenic Veterinary Medical Society*.
13. Billi, T., Karadima, V., Tyrnenopoulou, P., Apostolopoulou, E. P., Brellou, G. D., ... & Diakakis, N. (2021). Surgical excision of a malignant metastatic melanoma located in a skeletal muscle of the lateral thorax of a horse. *Veterinary Medicine and Science*.

14. Tyrnenopoulou, P., Rizos, E., Chaintoutis, S., Patsikas, M., Papadopoulou, P., Polizopoulou, Z., ... & Diakakis, N. (2020). Alterations in the viscoelastic properties of equine synovial fluid from fetlock joints with naturally occurring osteoarthritis. *Medicine (AVSM)*.
15. Matisioudis, N., Rizos, E., Tyrnenopoulou, P., Papazoglou, L., Diakakis, N., ... & Aggeli, A. (2019). Comparative studies of hyaluronic acid concentration in normal and osteoarthritic equine joints. *Fluids*.
16. Tyrnenopoulou, P., Diakakis, N., Psalla, D., Traversa, D., Papadopoulos, E., ... & Antonakakis, M. (2019). Successful surgical management of eosinophilic granuloma on the urethral process of a gelding associated with *Habronema* spp. infection. *Equine Veterinary Education*.
17. Tyrnenopoulou, P. C., Rizos, E. D., Kritsepi-Konstantinou, M., Papadopoulou, P. L., Patsikas, M. N., Papazoglou, L. G., ... & Diakakis, N. E. (2019). Quantitative characterization of viscoelastic properties of synovial fluid from forelimb joints of orthopedically normal Thoroughbreds and warmblood horses. *American Journal of Veterinary Research*.
18. Tyrnenopoulou, P., Diakakis, N., Aggeli, A., Papazoglou, L., & Rizos, E. (2018). Rheological characterization in synovial fluid of Thoroughbred and Warmblood horses with osteoarthritis. *Veterinary Surgery*.
19. Tyrnenopoulou, P., Rizos, E., Papadopoulou, P., Patsikas, M., Kritsepi-Konstantinou, M., ... & Papazoglou, L. (2018). The role of hyaluronic acid in viscoelastic properties of equine pathological synovial fluid. *Orthopaedic Proceedings*.
20. Diakakis, N., & Tyrnenopoulou, P. (2017). Correlation between equine colic and weather changes. *Journal of the Hellenic Veterinary Medical Society*.
21. Diakakis, N., Tyrnenopoulou, P., Dimitrakopoulou, F., Koutinas, C., & Patsikas, M. (2017). A case of bacteremia due to *Peptostreptococcus anaerobius* in a Westphalian stallion. *Journal of Equine Veterinary Science*.
22. Tyrnenopoulou, P., Diakakis, N., Karayannopoulou, M., Savvas, I., & Koliakos, G. (2016). Evaluation of intra-articular injection of autologous platelet lysate in horses with osteoarthritis of the distal interphalangeal joint. *Veterinary Quarterly*.
23. Tyrnenopoulou, P., Karayannopoulou, M., Angelopoulou, S., Pyrros, A., Mparous, E., ... & Koliakos, G. (2016). Successful management of an equine carpal chip fracture using adipose-derived stromal vascular fraction. *Iranian Journal of Veterinary Research*.
24. Tyrnenopoulou, P., Diakakis, N., Angelopoulou, S., Pyrros, A., Mparous, E., ... & Koliakos, G. (2015). Clinical application of adipose-derived stromal vascular fraction in Thoroughbred horses with superficial digital flexor tendonitis. *Journal of the Hellenic Veterinary Medical Society*.
25. Tyrnenopoulou, P., & Diakakis, N. (2014). Alternative treatment for proximal suspensory desmitis in the hind limb: A retrospective study in seven horses. *Journal of the Hellenic Veterinary Medical Society*.

## Conference Presentations & Invited Talks

1. **Tyrnenopoulou, P., Diakakis, N., Papatheodorou, G.** Equine rhabdomyolysis: retrospective study of 17 cases. 4th Veterinary Forum, Hellenic Companion Animal Veterinary Society, March 2013, The Met Hotel, Thessaloniki, Greece
2. Papatheodorou, G., Diakakis, N., **Tyrnenopoulou, P.** Hyperlipemia in a Greek mare: a case report. 4th Veterinary Forum, Hellenic Companion Animal Veterinary Society, March 2013, The Met Hotel, Thessaloniki, Greece
3. **Tyrnenopoulou, P., Diakakis, N., Papatheodorou, G.** Correlation between equine colic and weather changes. 5th Veterinary Forum, Hellenic Companion Animal Veterinary Society, March 2014, Grand Hotel Palace, Thessaloniki, Greece

4. Tyropoli, K., Diakakis, N., Brellou, G., Tsamadias, A., **Tyrnenopoulou, P.**, Papatheodorou, G., Chalvatzis, P. Testicular torsion in a stallion. 5th Veterinary Forum, Hellenic Companion Animal Veterinary Society, March 2014, Grand Hotel Palace, Thessaloniki, Greece
5. Tsamadias, A., Diakakis, N., Brellou, G., Papadopoulos, I., Tyropoli, K., Papatheodorou, G., **Tyrnenopoulou, P.** First reported case of equine sarcocystiosis in Greece. 5th Veterinary Forum, Hellenic Companion Animal Veterinary Society, March 2014, Grand Hotel Palace, Thessaloniki, Greece
6. **Tyrnenopoulou, P.**, Diakakis, N., Karayannopoulou, M., Koliakos, G. Evaluation of intra-articular injection of autologous platelet lysate (PL) in horses with osteoarthritis: retrospective study. 5th Veterinary Forum, Hellenic Companion Animal Veterinary Society, March 2014, Grand Hotel Palace, Thessaloniki, Greece
7. **Tyrnenopoulou, P.** (invited speaker) Chronic cough in the horse. 6th Veterinary Forum, Hellenic Companion Animal Veterinary Society, March 2015, Helexpo Conference Center, Athens, Greece
8. Katsiorchi, A., Diakakis, N., **Tyrnenopoulou, P.**, Ntaskagianni, P. Equine tetanus treatment with midazolam and dimethyl sulfoxide (DMSO). 6th Veterinary Forum, Hellenic Companion Animal Veterinary Society, March 2015, Helexpo Conference Center, Athens, Greece
9. Ntaskagianni, P., Diakakis, N., Katsiorchi, A., **Tyrnenopoulou, P.** Equine chronic diarrhea in Greece: a retrospective study of 29 cases. 6th Veterinary Forum, Hellenic Companion Animal Veterinary Society, March 2015, Helexpo Conference Center, Athens, Greece
10. Gogos, C., Tyropoli, K., Diakakis, N., **Tyrnenopoulou, P.** Skin grafting for treating a metatarsal injury in an Arabian colt. 6th Veterinary Forum, Hellenic Companion Animal Veterinary Society, March 2015, Helexpo Conference Center, Athens, Greece
11. Plithi, E., Diakakis, N., **Tyrnenopoulou, P.**, Christodoulidi, D. Equine upward fixation of the patella: retrospective study of 13 cases. 7th Veterinary Forum, Hellenic Companion Animal Veterinary Society, March 2016, Grand Hotel Palace, Thessaloniki, Greece
12. Christodoulidi, D., Diakakis, N., Psalla, D., Papadopoulos, I., **Tyrnenopoulou, P.**, Plithi, E. Surgical management of eosinophilic granuloma on the urethral process of a gelding associated with Habronema spp. 7th Veterinary Forum, Hellenic Companion Animal Veterinary Society, March 2016, Grand Hotel Palace, Thessaloniki, Greece
13. **Tyrnenopoulou, P.**, Diakakis, N., Patsikas, M., Koutinas, C., Dimitrakopoulou, F., Plithi, E., Christodoulidi, D. A case of bacteremia due to Peptostreptococcus spp. in a Westphalian stallion. 7th Veterinary Forum, Hellenic Companion Animal Veterinary Society, March 2016, Grand Hotel Palace, Thessaloniki, Greece
14. Rizos, E., Goudoulas, T., **Tyrnenopoulou, P.**, Diakakis, N., Aggeli, A. Development of an optimized experimental protocol for the systematic rheological investigation of equine synovial fluid. 13th International Conference on Nanosciences & Nanotechnologies, 5–8 July 2016, Thessaloniki, Greece
15. **Tyrnenopoulou, P.** (invited speaker) West Nile encephalitis: pathogenesis, diagnosis, treatment and current status in Greece. 8th Veterinary Forum, Hellenic Companion Animal Veterinary Society, March 2017, Helexpo Conference Center, Athens, Greece
16. **Tyrnenopoulou, P.**, Diakakis, N., Patsikas, M., Manoli, M., Papaioannou, M., Brellou, G., Vlemmas, I. Interesting case of a progressive equine ethmoid hematoma. 8th

- Veterinary Forum, Hellenic Companion Animal Veterinary Society, March 2017, Helexpo Conference Center, Athens, Greece
17. Manoli, M. O., Diakakis, N., **Tyrnenopoulou, P.**, Papaioannou, M. A., Polizopoulou, Z. Radial nerve paralysis in a foal. 8th Veterinary Forum, Hellenic Companion Animal Veterinary Society, March 2017, Helexpo Conference Center, Athens, Greece
  18. Papaioannou, M. A., Diakakis, N., **Tyrnenopoulou, P.**, Manoli, M. O. Successful treatment of exuberant granulation tissue in the metacarpus of an Arabian horse: case report. 8th Veterinary Forum, Hellenic Companion Animal Veterinary Society, March 2017, Helexpo Conference Center, Athens, Greece
  19. **Tyrnenopoulou, P.** (invited speaker) Equine gastric ulcer syndrome. 9th Veterinary Forum, Hellenic Companion Animal Veterinary Society, March 2018, Grand Hotel Palace, Thessaloniki, Greece
  20. Stylianidou, I., Diakakis, N., **Tyrnenopoulou, P.**, Katsiorchi, A. Sand colic: retrospective study of 5 cases. 9th Veterinary Forum, Hellenic Companion Animal Veterinary Society, March 2018, Grand Hotel Palace, Thessaloniki, Greece
  21. Katsiorchi, A., Stylianidou, I., **Tyrnenopoulou, P.**, Diakakis, N. Equine stringhalt and fibrotic myopathy. 9th Veterinary Forum, Hellenic Companion Animal Veterinary Society, March 2018, Grand Hotel Palace, Thessaloniki, Greece
  22. **Tyrnenopoulou, P.**, Diakakis, N., Katsiorchi, A., Stylianidou, I. Retrospective study of palmar digital neurectomy in 7 horses. 9th Veterinary Forum, Hellenic Companion Animal Veterinary Society, March 2018, Grand Hotel Palace, Thessaloniki, Greece. Best Presentation Award
  23. **Tyrnenopoulou, P.**, Diakakis, N., Rizos, E., Aggeli, A., Papazoglou, L. Rheological characterization in synovial fluid of Thoroughbred and Warmblood horses with osteoarthritis. Annual Scientific Meeting, ECVS (European College of Veterinary Surgeons), July 5–7, 2018, Athens, Greece. Poster accepted for presentation. Abstract published in *Veterinary Surgery* (July 2018)
  24. **Tyrnenopoulou, P.**, Rizos, E., Papadopoulou, P., Patsikas, M., Kritsepi-Konstantinou, M., Papazoglou, L., Aggeli, A., Diakakis, N. The role of hyaluronic acid in viscoelastic properties of equine pathological synovial fluid. 26th EORS Annual Meeting, 25–28 September 2018, Galway, Ireland. *Orthopaedic Proceedings (The Bone & Joint Journal)*
  25. **Tyrnenopoulou, P.**, Rizos, E., Kritsepi-Konstantinou, M., Papadopoulou, P., Patsikas, M., Papazoglou, L., Aggeli, A., Diakakis, N. Evaluation of equine osteoarthritis using viscoelastic properties of synovial fluid: variation between normal and pathological metacarpophalangeal synovial fluid. 26th EORS Annual Meeting, 25–28 September 2018, Galway, Ireland
  26. **Tyrnenopoulou, P.** (invited speaker) Equine laminitis: pathophysiology and current treatment options. 10th Veterinary Forum, Hellenic Companion Animal Veterinary Society, March 2019, Wyndham Grand Athens, Greece
  27. Karadima, V., Diakakis, N., **Tyrnenopoulou, P.**, Billi, T. Standing surgical removal of an equine sialolith. 10th Veterinary Forum, Hellenic Companion Animal Veterinary Society, March 2019, Wyndham Grand Athens, Greece
  28. Billi, T., Diakakis, N., Karadima, V., **Tyrnenopoulou, P.**, Apostolopoulou, E. Unusual location of a melanoma within skeletal muscles of a gray horse. 10th Veterinary Forum, Hellenic Companion Animal Veterinary Society, March 2019, Wyndham Grand Athens, Greece

29. Diakakis, N., Fousekis, E., **Tyrnenopoulou, P.**, Karadima, V., Billi, T., Sklavenitou, D. Successful treatment of septic arthritis in a horse. 10th Veterinary Forum, Hellenic Companion Animal Veterinary Society, March 2019, Wyndham Grand Athens, Greece
30. **Tyrnenopoulou, P.**, Diakakis, N., Polizopoulou, Z., Papazoglou, L., Cerón, J. SAA, PON-1 and haptoglobin concentrations in equine synovial fluid, before and after intra-articular administration of hyaluronic acid and betamethasone. Joint Congress of Veterinary Pathology and Veterinary Clinical Pathology, 25–28 September 2019, Burgers' Zoo Arnhem, The Netherlands
31. Billi, T., Pantazis, K., Lazaropoulou, E., **Tyrnenopoulou, P.**, Diakakis, N. Successful management of post-traumatic septic arthritis in a foal. 11th Forum of Veterinary Medicine of Companion Animals, Thessaloniki, May 2022
32. **Tyrnenopoulou, P.** (invited speaker) Neonatal foal colic. 11th Forum of Veterinary Medicine of Companion Animals, Thessaloniki, May 2022
33. **Tyrnenopoulou, P.** (invited speaker) Hoof injuries: current concepts in primary care. 15th Panhellenic Veterinary Congress, Athens, November 2022
34. **Tyrnenopoulou, P.** (invited speaker) Equine colic: new data on diagnosis and management. 15th Panhellenic Veterinary Congress, Athens, November 2022
35. Boufis, P., **Tyrnenopoulou, P.** Clinical case of sialolithiasis in a horse. 12th Forum of Veterinary Medicine of Companion Animals, Thessaloniki, April 2023
36. **Tyrnenopoulou, P.**, Vathi, N., Tseliou, A., Diakakis, N. Segmental postectomy in the horse: a retrospective study of 7 cases. 12th Forum of Veterinary Medicine of Companion Animals, Thessaloniki, April 2023
37. Tseliou, A., Vathi, N., **Tyrnenopoulou, P.**, Diakakis, N. Generalized osteomyelitis of the third phalanx in a horse following a hoof abscess. 12th Forum of Veterinary Medicine of Companion Animals, Thessaloniki, April 2023
38. **Tyrnenopoulou, P.** (invited speaker) Body weight management in the geriatric horse. 12th Forum of Veterinary Medicine of Companion Animals, Thessaloniki, April 2023
39. **Tyrnenopoulou, P.** (invited speaker) Clinical assessment and management of equine colic. Forum 24 of Veterinary Medicine of Companion Animals, Thessaloniki, April 2024
40. **Tyrnenopoulou, P.** (invited speaker) Assessment of the recumbent horse. Forum 25 of Veterinary Medicine of Companion Animals, Thessaloniki, March 2025
41. **Tyrnenopoulou, P.**, Folias, L., Gougoulis, D., Flouraki, E., Diakakis, N., Athanasiou, L. V. The influence of exercise on selected biomarkers in trail-riding and athletic horses. XXI International Society for Animal Clinical Pathology Congress, May 2024, Heraklion, Crete, Greece
42. Margeti, C., Kazakos, G., Galatos, A. D., Skampardonis, V., Zacharopoulou, T., Tsioli, V., **Tyrnenopoulou, P.**, Loukopoulos, E., Papatsiros, V. G., Flouraki, E. The effect of a subsequent dose of dexmedetomidine or other sedatives following an initial dose of dexmedetomidine on electrolytes, acid–base balance, creatinine, and troponin in cats. XXI International Society for Animal Clinical Pathology Congress, 14–18 May 2024, Heraklion, Crete, Greece
43. **Tyrnenopoulou, P.** (invited speaker) Equine hepatopathies, 16th Panhellenic Veterinary Congress, Thessaloniki, October 2025

## Reviewer

1. Animals
2. Veterinary Sciences
3. Journal of Hellenic veterinary medical society