



Usama Mahmoud, [PhD]

Associate professor of Animal Behavior and Management, Faculty of Veterinary Medicine, Assiut University, Assiut 71526 Egypt. Visiting Postdoc Research Scholar, Firat university, Elazig, Turkey. Former Visiting Postdoc Research Scholar, College of Veterinary Medicine, Purdue University, USA (2019-2020). Former Visiting scholar in Department of Animal Sciences (USDA-ARS Livestock Behavior Research Unit), Purdue University. USA (2013-2015).

Birth date 22 May 1983

Married

Asyut, Egypt

CURRENT CONTACT INFORMATION

Address: Department of Animal Nutrition and Nutritional Diseases, Faculty of Veterinary Medicine, Firat University, Elazig 23119, Turkey.

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CURRENT POSITION

- Postdoc visiting researcher, Firat university, Elazig, Turkey.
- Associate professor of Animal Behavior and Management, Faculty of Veterinary Medicine, Assiut University, Assiut 71526 Egypt.

EDUCATION

2011-2015: Ph.D. of Animal Behaviour and Management. Joint supervision between Purdue University, USA & Assiut University, Egypt:

- Awarded a competitive Ph.D. channel system scholarship to conduct the research and writing parts of the Ph.D. thesis at Purdue University, USA (**PhD supervisor: Prof. Todd Applegate and Prof. Heng Wei Cheng**).
- Thesis title: " Some Behavioral and Physiological Indications of Propolis as Anti-Heat Stressor and Growth Promoting Factor in Broilers". **Ph.D. award date: May 31/2015.**

2007-2010: Master of Animal Behaviour and Management:

- Faculty of Veterinary Medicine, Assiut University, Department of Animal Hygiene & Zoonoses, Egypt.
- Thesis title: "Studies on some behavioural patterns of quails with special reference to effect of heat stress on behaviours, performance, and some blood parameters: January 31/2010.

2001-2005: Bachelor's degree in veterinary medical sciences. Faculty of Veterinary Medicine, Assiut University, Egypt.

- Competitively selected after graduation to hold a permanent position as a demonstrator (animal behavior and management) in the Department of Animal Hygiene & Zoonoses, Assiut University, initially as.

ACADEMIC & RESEARCH EXPERIENCE

April 2025-July 2026: Visiting Postdoc Research Scholar, Department of Animal Nutrition and Nutritional Diseases, Faculty of Veterinary Medicine, Firat University, Elazig 23119, Turkey.

Email: siflazoglu@firat.edu.tr. Advisor: Dr. Prof. Pinar Tatli Seven

Research Topics: Effect of Zinc Oxide Nanoparticles Supplementation on behavior, Fattening Performance, Meat Quality, Antioxidant Status, Caspase-3 Expression and Some Blood Parameters in Goose Birds Exposed to Lead Toxicity

9/2020-uptill now: Associate professor of Animal Behaviour and Management, Assiut University, Department of animal, poultry and aquatic life behaviour and management, Egypt

- Conducted independent research on effects of heat stress and necrotic enteritis on poultry behaviour and the feeding and environmental enrichment strategies for their control.
- Supervised undergraduate and graduate research projects and theses.
- Submitting for research funding

10/2019-4/2020: Visiting Postdoc Research Scholar, Purdue University, Department of Comparative Pathobiology, USA. Advisor: Dr. Mohamed Seleem

- Research Topics: In vitro evaluation for the effects of curcumin, probiotics, and Synbiotics on *Clostridium perfringens*

06/2015-09/2020: Assistant professor of Animal Behaviour and Management, Assiut University, Department of animal and poultry behaviour and management, Egypt

- Conducted independent research on effects of heat stress and necrotic enteritis on poultry behaviour and feeding strategies for their control.
- Supervised undergraduate and graduate research projects and theses.

04/2013-04/2015: Visiting PhD. Research Scholar, Purdue University, Department of Animal science, USA. Advisor: Prof. Todd Applegate and Prof. Heng Wei Cheng

- Research Topics: Some Behavioral and Physiological Indications of Propolis as Anti-Heat Stressor and Growth Promoting Factor in Broilers.

2010-2013: Assistant Lecturer of animal behaviour and management, Assiut University, Department of Animal Hygiene & Zoonoses.

2005-2010: Demonstrator of animal behaviour and management, Assiut University, Department of Animal Hygiene & Zoonoses.

- Research topic: Studies on some behavioural patterns of quails with special reference to the effect of heat stress on behaviours, performance, and some blood parameters **(2007-2010).**

TEACHING, MENTORING, AND SUPERVISION EXPERIENCE

9/2020-uptill now: Associate professor of Animal Behaviour and Management, Assiut University, and Assistant professor (Lecturer) of Animal Behaviour and Management, Assiut University 2015-2020.

- Co-supervised three Animal Behavior and Management PhD theses and one Master theses, registered for preliminary courses, research work not determined yet (2023-2026).
- Co-supervised four Animal Behavior and Management Master theses (Finished):
 - 1) Effect of elevated platform on behavioural and welfare indices in broilers raised under different stocking densities, 2023.
 - 2) The effect of cow and sheep ruminal juice transfaunation on performance, behavior and some physiological changes in fattening lambs, 2023.
 - 3) Effect of date syrup "Dibs" on health status and production of broiler chickens raised during summer season, 2021.
 - 4) Effect of Mannan-Oligosaccharides and β -Glucans Combination on Behaviour, Performance and Some Blood Parameters of Broiler Chickens Exposed to Heat Stress, 2017.
- Co-supervised one poultry disease PhD theses (Finished):
The role of zinc oxide (ZO- NPs) nanoparticles as alternatives to antibiotics for prevention of necrotic enteritis in broiler chickens, 2020.

Lectured Animal Behaviour and Management course for the 1st and 2nd -year undergraduate students for 16 semesters +200 students each semester.

Courses includes:

- 1- Animal and poultry behavior
 - 2- Animal and poultry management
 - 3- Fish behavior and management
 - 4- Animal welfare
- Supervised the practical course of Animal Behavior and Management.
 - Taught the following courses for graduate students:
 - 1) Poultry behavior and management
 - 2) Equine behavior and management
 - 3) Laboratory animal behavior and management

2013-2015: Visiting PhD scholar (Purdue University)

Usama Mahmoud, Curriculum Vitae, JULY 7, 2025

- Mentored PhD students in Cheng's lab (Purdue University, USA).
- Mentored/assisted a PhD student in the Department of animal science in Heng Wei Cheng lab (USDA animal behavior research unit, west Lafayette, IN) .

2006-2013: Teaching Assistant (Demonstrator and Assistant Lecturer, Assiut University University).

- Taught the laboratory course of animal and poultry behaviour and management for undergrad.
- Mentored the new instructors.
- Mentored animal and poultry behaviour and management master students.

EXAMINING

2015-2023

- Prepared and assessed exams for undergrad and postgrad students.
- Internal examiner of animal and poultry behaviour and management for undergrad and postgrad students in Assiut University.
- External Examiner of animal and poultry behaviour and management for undergrad students in New Valley University, Sohag University, Aswan University, EL Minya University and Bader University.

SCHOLARY ACTIVITIES: Invited reviewer for the following journals:

- a) Tropical Animal Health and Production
- b) Journal of Advanced Veterinary Research
- c) Asian research journal for agriculture

AWARDS

- The best delivery of a research article. 13th scientific conference of the zoological society (14-15 October 2017)
- Fellowship from the Cultural affairs & Missions sector, EGYPT: (2013-2015) Purdue PhD visiting researcher scholar in animal science department.
- Fellowship from the Cultural affairs & Missions sector, EGYPT: (2019-2020) Purdue visiting postdoc researcher scholar in College of Veterinary Medicine, Department of Comparative Pathobiology.
- Fellowship from the world academy of science (UNESCO), TUBITAK, Turkey (TUBITAK-TWAS): (2025-2026) Visiting Postdoc Research Scholar, Department of Animal Nutrition and Nutritional Diseases, Faculty of Veterinary Medicine, Firat University, Elazig 23119, Turkey. 2216B - TUBITAK-TWAS POSTGRADUATE AND POSTDOCTORAL FELLOWSHIP PROGRAMMES
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Funded projects

- 1- Funded Joint Egyptian Japanese Scientific Cooperation - workshop and seminar / International Cooperation Grants (Call 5) 2020 - Total budget: 85.000 LE pounds - Role: member - Project title: Emerging public health issues in developed and developing countries challenges and overcome - Project Number: 42846 - Project outcomes: establishing a video conference unite- Faculty of Vet. Medicine
- 2- Funded Project and research grant (August 2018- July 2020) from Assiut University, affairs of graduate and research. - Total budget: 100.000 LE pounds - Role: PI - Project title: Effects of Dietary Zinc Oxide and Silver Nanoparticles on Growth Performance and Health Status of Broilers. a. Project Number: 2018-aun-f VetMed-7

Research Interests: Poultry and Animal Welfare, Stress, Behavior , and Management

PUBLICATION HIGHLIGHTS:

POULTRY RESEARCH PUBLICATION

- Mahmoud, M. A., Said, A. E. A. A., Abd-Elhafeez, H. H., Soliman, S. A., & Mahmoud, U. T. (2025).** Maize stover burning exposure accountable for remarkable environmental and health risk in broiler chickens. *BMC Veterinary Research*, 21(1), 199.
- Mahmoud, U. T., Tuytens, F. A. M., Farghal, M., El-Reda, G. A., & EL Shoukary, R. D. (2025).** Impact of restraining position on tonic immobility in broiler chickens and mule ducks. *Applied Animal Behaviour Science*, 282, 106499. <https://doi.org/10.1016/J.APPLANIM.2024.106499>
- Mahmoud, U.T.,** Abd El-Reda, G.A., Ali, F.A.Z. et al. Plasma activated water effects on behavior, performance, carcass quality, biochemical changes, and histopathological alterations in quail. *BMC Vet Res* 20, 391 (2024). <https://doi.org/10.1186/s12917-024-04231-4>
- Al-Sultan, S. I., Hereba, A. R. T., Hassanein, K. M. A., Abd-Allah, S. M. S., **Mahmoud, U. T.,** & Abdel-Raheem, S. M. (2022). The impact of dietary inclusion of silver nanoparticles on growth performance, intestinal morphology, caecal microflora, carcass traits and blood parameters of broiler chickens. *Italian Journal of Animal Science*, 21(1), 967–978. <https://doi.org/10.1080/1828051X.2022.208352>
- Fawaz, R., Ibrahim, R. S., Ali, N. M., **Mahmoud, U. T.,** & Amen, O. A. (n.d.). Effect of dietary zinc oxide nanoparticles on growth performance and clostridium perfringens infection in broiler chickens. *Bulgarian Journal of Veterinary Medicine*, 2021. <https://doi.org/10.15547/bjvm.2021-0073>
- Mahmoud, U. T.,** M. A. M. Mahmoud, M. Abd-Elkareem, F. A. M. Ahmed, and N. S. A. Khalil, “Prebiotics reduce feather pecking behavior, and improve trace element profile and redox balance in Mule ducks,” *J. Vet. Behav.*, vol. 43, pp. 28–38, May 2021, [doi: 10.1016/j.jveb.2021.03.001](https://doi.org/10.1016/j.jveb.2021.03.001).
- M. A. M. Mahmoud, D. Yahia, D. S. Abdel-Magiud, M. H. A. Darwish, M. Abd-Elkareem, and **U. T. Mahmoud**, “Broiler welfare is preserved by long-term low-dose oral exposure to zinc oxide nanoparticles: preliminary study,” *Nanotoxicology*, pp. 1–16, Apr. 2021, [doi: 10.1080/17435390.2021.1905099](https://doi.org/10.1080/17435390.2021.1905099).
- **Usama T. Mahmoud,** Madeha H.A. Darwish, Fatma Abo Zakaib Ali, Omar A. Amen, Manal A.M. Mahmoud, Omar B. Ahmed, Ghada Abd El-Reda, Mohamed A. Osman, Aly A. Othman, Mostafa F.N. Abushahba & Ramadan D. El Shoukary (2021) Zinc Oxide Nanoparticles Prevents Multidrug Resistant Staphylococcus-Induced Footpad Dermatitis in Broilers, *Avian Pathology*, DOI: [10.1080/03079457.2021.1875123](https://doi.org/10.1080/03079457.2021.1875123)
- **Mahmoud UT,** Abdel-Mohsein HS, Mahmoud MAM, et al (2020) Effect of zinc oxide nanoparticles on broilers’ performance and health status. *Trop Anim Health Prod* 1–12. <https://doi.org/10.1007/s11250-020-02229-2>
- Fatma M. Mohamed, Aml A.M. Bakheet, Ali A. Othman, **Usama T. Mahmoud,** Omar A. Amen (2020) In vitro effect of zinc oxide nanoparticles on Staphylococcus aureus isolated from Layer Chickens. *SVU- International Journal of Veterinary Sciences*, 3 (2): 14-25. DOI: [10.21608/svu.2020.28106.1047](https://doi.org/10.21608/svu.2020.28106.1047)
- Usama T. Mahmoud;** Rasha Hassan; Omar Amen; Ghada Abdel-Raheem; Diya Al-Rammamneh (2020) Effect of Prebiotic on the Behavioural Patterns, Performance, Carcass Characteristics, Antibody Titer and Some Blood Parameters of Mule Ducks. *SVU- International Journal of Veterinary Sciences*, 3 (1): 27-38. DOI: [10.21608/svu.2019.16763.1028](https://doi.org/10.21608/svu.2019.16763.1028)
- **Farghly, M.F.A., Mahmoud, U.T.,** 2018. “Access to outdoor swimming pond during summer season improved Muscovy duck’s performance and health status.” *Livestock Science*. 211, 98–103. [doi:10.1016/j.livsci.2018.03.008](https://doi.org/10.1016/j.livsci.2018.03.008)
- **U.T. Mahmoud,** O.A. Amen, T.J. Applegate, H.W. Cheng: Brazilian Propolis Effects on Growth, Productivity Performance, Gut Characteristics and Physiological Changes in Broiler Chickens. *International Journal of Poultry Science* 04/2017; 16(5):169-179., DOI:[10.3923/ijps.2017.169.179](https://doi.org/10.3923/ijps.2017.169.179)
- **U.T. MAHMOUD,** H.W. CHENG, T.J. APPLGATE: *Functions of propolis as a natural feed additive in poultry.* *World's Poultry Science Journal* 01/2016; -1(1):1-12., DOI:[10.1017/S0043933915002731](https://doi.org/10.1017/S0043933915002731)
- **Usama Taha Mahmoud,** Mootaz Ahmed Mohamed Abdel-Rahman, Madeha Hosni Ahmed Darwish, Todd Jay Applegate, Heng-wei Cheng: *Behavioral changes and feathering score in heat stressed broiler chickens fed diets containing different levels of propolis.* *Applied Animal Behaviour Science* 03/2015; 166(1)., DOI:[10.1016/j.applanim.2015.03.003](https://doi.org/10.1016/j.applanim.2015.03.003)
- Usama T. Mahmoud, Manal A. M. Mahmoud, Hosnia S. Abdel-Mohsein, Omar A. Amen (2018) AGRIMOS® Prebiotics: Effect on Behavior, Performance, Cecal Microbial Population and Humeral Immunity in Broiler Chickens. *Journal of Advanced Veterinary Research*, 8,3, 49-59
- Sohair M. M. Rageb, Elham A. Abd-Allah, Nasser S. Abou Khalil, Fatma M. Abdel-Maksoud Usama Mahmoud: Effects of Mannan-oligosaccharide and β -Glucan Prebiotic on the Brain Oxidant/Antioxidant Balance in Broilers under Natural Egyptian *Summer Conditions*. *Egypt. Acad. J. Biolog. Sci. (B. Zoology)*, 10(1), 35-46

- Usama T. Mahmoud, Nasser Sayed Abou khalil, Marwa S.A. Elsayed: *Behavioral and Physiological Effects of Mannan-oligosaccharide and β -glucan Prebiotic Combination on Heat Stressed Broiler Chickens*. Journal of Advanced Veterinary Research 07/2017; 7(3):81-86.
- U.T. Mahmoud, O.A. Amen, D.H. Saleh, M.A. ABDEL-Rahman: *The Effects of Rayeb Milk On Performance, Behaviour And Cecal Lactobacilli Count In Broiler Chickens During Starter Period*. Assiut Vet. Med. J. (special issue) 17 Sci. Cong. 2016, Fac. Vet. Med., Assiut Univ., Egypt.
- Omar B. Ahmed, Usama T. Mahmoud, Manal A.M. Mahmoud, Mohamed R. Fath El-Bab: *Histomorphological Changes Associated with Different Doses of Chinese Propolis in the Bursa of Fabricius of Chickens*. Journal of Advanced Veterinary Research 01/2016; 6(1):1-6.
- Usama T. Mahmoud, Mohamed R. Fahmey, Mootaz A. Abdel-Rahman, Madeha Hosney A. Darwish: *Effect of Propolis Supplementation on Serum Calcium, Phosphorus and Proteins Concentrations in Heat Stressed Broilers*. Journal of Advanced Veterinary Research 07/2014; 4(3):117-122.
- Manal A.M. Mahmoud, Hosnia S. Abdel-Mohsein, Usama T. Mahmoud: *Effect of Chinese Propolis Supplementation on Ross Broiler Chicks: Microbial Population in Fecal Matter and Litter*. Journal of Advanced Veterinary Research 04/2014; 4(2):77-84.
- Hosnia S. Abdel-Mohsein, Manal A.M. Mahmoud, U.T. Mahmoud: *Influence of Propolis on Intestinal Microflora of Ross Broilers Exposed to Hot Environment*. Advances in Animal and Veterinary Sciences 01/2014; 2(4):204-211.
- Usama T. Mahmoud, Mootaz A.M. Abdel-Rahman, Madeha H.A. Darwish: *Effects of Propolis, Ascorbic Acid and Vitamin E on Thyroid and Corticosterone Hormones in Heat Stressed Broilers*. Journal of Advanced Veterinary Research 01/2014; 4(1):18-27.
- Usama T. Mahmoud, Mootaz Ahmed Abdel-Rahman, Madeha Hosney A. Darwish: *The Effect of Chinese Propolis Supplementation on Ross Broiler Performance and Carcass Characteristics*. Journal of Advanced Veterinary Research 10/2013; 3(4):154-160.
- Usama T. Mahmoud, M. A. M. Abdel-Rahman, Madeha Hosney A. Darwish, G.M. Mossad: *The Effect of Heat Stress on Blood Picture of Japanese Quail*. Journal of Advanced Veterinary Research 04/2013; 3(2):69-76.
- Usama T. Mahmoud: *Silver Nanoparticles in Poultry Production*. 10/2012; 2(4):303-306.
- Usama T. Mahmoud, Mootaz A.M. Abdel-Rahman, Madeha H.A. Darwish, G.M. Mossad: *The Effect of Separate-Sex Rearing of Slaughter Quail on Serum Corticosterone Level*. Journal of Advanced Veterinary Research 07/2012; 2(3):206-207.
- Usama Mahmoud: *Silver Nanoparticles in Poultry Production (Review Article)* Journal of Advanced Veterinary Research. 2/2012: 303-306

SHEEP, BUFFALO, FISH AND RATS RESEARCH PUBLICATION

- Abd El-Reda, G., **Mahmoud, U. T.**, Mahmoud, M. A., Ali, F. A. Z., Abdel-Maksoud, F. M., & El-Hossary, F. M. (2025). Effect of plasma-activated water on body weight, behavior, biochemical profile, intestinal microbiota, and liver and kidney histopathology in mice. Discover Applied Sciences, 7(5), 1-17.
- Mahmoud AS, Sayed AEDH, **Mahmoud UT**, Mohammed AAA, Darwish MHA. Impact of zinc oxide nanoparticles on the behavior and stress indicators of African catfish (*Clarias gariepinus*) exposed to heat stress. BMC Vet Res. 2024 Oct 17;20(1):474. doi: 10.1186/s12917-024-04302-6.
- Abd El-Reda GA, **Mahmoud UT**, Ali FAZ, Abdel-Maksoud FM, Mahmoud MAM, El-Hossary FM. Neurobehavioral toxicity of Cold plasma activated water following oral gavage in mice. Neurotoxicology. 2024 Aug 30;105:45-57. doi: 10.1016/j.neuro.2024.08.007. Epub ahead of print.
- Elrawy, A., Mohammed, ; Ahmed, Sabra, M. S., **Usama Mahmoud**, & Darwish, M. (2023). Impact Of Rumen Juice Transfaunation on Behavioral Activities, Performance Parameters and Kidney Function In Fattening Lambs. In *Assiut Veterinary Medical Journal Assiut Vet. Med. J* (Vol. 69, Issue 178).
- **A. Ibrahim, U. T. Mahmoud, M. M. Ali, and S. M. M. Ragab, "Evaluation of the subcapsular technique for primary closure castration in donkeys (*Equus asinus*)," Sci. Rep., vol. 11, no. 1, p. 14080, Dec. 2021, doi: 10.1038/s41598-021-93585-y.**
- Ahmed Mohammed; Hayam Hamdy; Ghada Abdelrady; Mahmoud Seliman; **Usama Mahmoud** (2020) Effect of zinc oxide nanoparticles on anxiety-related behaviors in male rats. SVU- International Journal of Veterinary Sciences, 3 (1): 123-132. DOI: 10.21608/svu.2020.22360.1041
- **Ahmed Ibrahim, Usama T. Mahmoud, Nasser S. Abou Khalil, Hussein A. Hussein, Magda M. Ali: A pilot study on surgical trimming impact on severely overgrown claws in sheep: Behavioral, physiological, and ruminal function aspects. Journal of Veterinary Behavior Clinical Applications and Research 01/2018; 23:66 - 75., DOI:10.1016/j.jveb.2017.10.011**

- **Omar Bauomy Ahmed, Usama Taha Mahmoud, Sara Elganady, Allam Mohamed Nafady, Salah Mohamed Hassan Afifi:** *Immunomodulatory effect of gelatin-coated silver nanoparticles in mice: Ultrastructural evaluation.* Ultrastructural Pathology 10/2016; 40(6).
- **Arafat Khalphallah, Ashraf M. Abu-Seida, Mohammed Abdelhakiem, Enas Elmeligy, Usama T. Mahmoud:** *Laboratory, Radiographic and Ultrasonographic Findings of Acute Traumatic Reticuloperitonitis in Buffaloes (Bubalus bubalis).* Asian Journal of Animal and Veterinary Advances 10/2016; 11(11)., DOI:10.3923/ajava.2016.675.683
- **Usama T. Mahmoud, Nasser S. Abou Khalil, Marwa S. A. El-Sayed:** Acute behavioral and biochemical responses of sheep to S/C ivermectin injection. Acta fytotechn zootechn, 22, 2019 (1): 1–6 DOI:10.15414/afz.2019.22.01.1-6
- Arafat Khalphallah, Enas Elmeligy, Al-Lethie A Al-Lethie, Bahaa Eldin A. Abdellaah, Ahmed Hafez, Usama T. Mahmoud, Mustafa Shukry: Effect of Epidural Washout with Saline on Reversing Epidural Anesthesia with Lidocaine 2% with or without Adrenaline in Dogs. Advances in Animal and Veterinary Sciences 06/2018; 6(5)., DOI:10.17582/journal.aavs/2018/6.5.207.212
- Usama Taha Mahmoud, Madeha H.A. Darwish: *Effect of Pair Housing Versus Individual and Group Housing on Behavioural Patterns of Buffalo Calves.* Journal of Advanced Veterinary Research 01/2018; 8(1):12-15.
- Al-Lethie A Al-Lethie, Sayed F El-Hawari, Khaled A S El-Khabaz, Enas Elmeligy, Arafat Khalphallah, Usama T Mahmoud: *Evaluation of Clinical Recovery And Healing Of Oral Lesions By 3 Different Therapeutic Regimens In Cattle With Foot And Mouth Disease (FMD).* Assiut Veterinary Medical Journal 1/2018, (156): 89-95
- Arafat Khalphallah, Enas Elmeligy, Sayed F. El-Hawari, Usama T. Mahmoud: *Clinical, laboratory and ultrasonographic findings in Egyptian buffalo (Bubalus bubalis) with caecal and colonic dilatation.* 11/2016; 4(1)., DOI:10.1016/j.ijvsm.2016.10.001

SUBMITTED MANUSCRIPTS

1. Mohamed F.A. Farghly, Khaled A. Metwally, Mohamed Sh. Abogabal, Khalid M. Mahrose4, Marwa M.H. Rabie, Pinar Tatli Seven, Usama T. Mahmoud Evaluating Basil Straw as a Sustainable Bedding Alternative for Broiler Management. BMC Veterinary journal (Under-review).
2. Usama T. Mahmoud, Ghada Abd El-Reda, Madeha Ahmed Hashim, Rasha I.M. Hassan, Manal A.M. Mahmoud, Sherief M.S. Abd-Allah, Nasser S. Abou Khalil. Sprouted barely effects on behavior, performance, carcass quality, biochemical changes, and intestinal microbial and histopathological alterations in quail. BMC Veterinary journal (Under-review).

CONFERENCES & PRESENTATIONS

The UFAW International Animal Welfare Conference 2025- in 24 to 26 June (ONLINE).

Usama T. Mahmoud, Madeha. H.A. Darwish, Hosnia S. Abdel-Mohsein, Ghada Abd El-Reda, Manal A.M. Impact of Silver Nitrate Nanoparticles on Behavior, Performance, and Serum Corticosterone Levels in Summer-Raised Broilers. The International Conference of Veterinary Medicine of Assiut University. Faculty of Veterinary Medicine Assiut University In cooperation with Faculty of Veterinary Medicine Badr University Assiut , Egypt. The 19th Scientific Congress 4-5 March, 2024 .The Veterinary Medicine and Egypt Vision 2030

Usama T. Mahmoud, Manal A.M. Mahmoud: The acute effect of Maize waste smoke on the behavioral and blood indicators in broiler chickens. The second international conference on multidisciplinary research (ICMR). Hurgada, Egypt.1/2018

Usama Mahmoud, Rasha I. Hassan, Ghada Sh. Abdel-Raheem: *Effect of prebiotic on the behavioral patterns of Mallard ducks.* The 13th scientific conference of the zoological society A. R. Egypt; 10/2017

Usama Mahmoud, O. A. Amen, D.H. Saleh, M.A. Abdel-Rahman: *The effects of Rayeb milk on performance, behaviour and cecal lactobacilli count in broiler chickens during starter period.* Faculty of Veterinary Medicine, Assiut University, The 17th Scientific Congress "The Role of Scientific Research in The Livestock Development and Food Safety ", Faculty of Veterinary Medicine, Assiut University; 12/2016

Usama Mahmoud, M.A. Abdel-Rahman, M. H.A. Darwish, T. J. Applegate, H. W. Cheng: *Effect of propolis supplementations on behavioral activities of heat stressed broiler chickens.* 2015 International

Poultry Scientific Forum, Georgia World Congress Center, Atlanta, Georgia; 01/2015

O.A. Amen, U. T. Mahmoud, M.A. Abdel-Rahman, M. H.A. Darwish, T. J. Applegate, H. W. Cheng: *The effect of Brazilian propolis on serum thyroid hormones in broilers reared under chronic heat stress*. 2015 International Poultry Scientific Forum, Georgia World Congress Center, Atlanta, Georgia; 01/2015

Usama Mahmoud, M.A. Abdel-Rahman, M. H.A. Darwish, T. J. Applegate, H. W. Cheng: *The effect of Brazilian Propolis on leg health in broilers reared under heat stress*. 2015 International Poultry Scientific Forum, Georgia World Congress Center, Atlanta, Georgia; 01/2015

Susan D. Eicher, H.W. Cheng, Usama T. Mahmoud: *Propolis Reduces Expression of Cell Surface CD14 in Phagocytic Cells in Chickens during Heat Stress*. 2014 Annual Joint Meeting of Society for Leukocyte Biology & International Endotoxin and Innate Immunity Society, Salt Lake City, Utah, USA.; 10/2014

Usama Mahmoud, M. A. Abdel-Rahman, M. H. A. Darwish, T. J. Applegate, M. H. Rostagno, H. W. Cheng: *The effect of Brazilian propolis on body weight, weight gain, and gut microflora in broilers reared under heat stress*. Poultry Science Association 2014 Annual Meeting, Corpus Christi, Texas, USA; 07/2014

MEMBERSHIPS

- 1) International Society for Applied Ethology (ISAE)
- 2) The zoological society A. R. Egypt
- 3) Asian council of science editor

SELECTED WORKSHOPS

Training and Workshops:

- 1- Teacher preparation course. Training Section of the General Administration of Graduate Studies and Research .Assiut university 13-24 april 2008
- 2- Research Ethics. Faculty and Leadership Development Center (FLDC)- Assiut university 28-30 April, 2008.
- 3- Code of Ethics. Faculty and Leadership Development Center (FLDC)-Assiut University, 17-19/ May, 2008
- 4- Credit hour system. Faculty and Leadership Development Center (FLDC)-Assiut university 28-30 march, 2009.
- 5- How to compete for a research fund. Faculty and Leadership Development Center (FLDC)--Assiut university 11-13 April, 2009
- 6- International publishing of research. Faculty and Leadership Development Center (FLDC)-Assiut University 23-25 may, 2009.
- 7- Research team management. Faculty and Leadership Development Center (FLDC)-Assiut University 20-22 June, 2009.
- 8- The security and safety of laboratory, Maintenance of scientific instruments unit, Assiut univerisity.. 21-30 March 2011.
- 9- E- Learning, Faculty and Leadership Development Center (FLDC)-Assiut University. 12-20 June , 2011
- 10- Time and Conference Management. Faculty and Leadership Development Center (FLDC)-Assiut University. 25-27 June , 2011
- 11- Materials science and nanotechnology. Training and continuous learning unit. Faculty of science. Assiut University (31/03/2012)
- 12- E- Learning (advanced). Faculty and Leadership Development Center (FLDC)-Assiut University. 15- 16 August 2015.
- 13- Publication of research in international journals. Faculty and Leadership Development Center (FLDC)-Assiut University, 14-15 May 2017.
- 14- Scientific Research funding and grants. Faculty and Leadership Development Center (FLDC)- Assiut University, 21-22 May 2017.
- 15- Financial aspects in university environment. Faculty and Leadership Development Center (FLDC)- Assiut University, 22-23 August 2017.

ADMINISTRATIVE AND LEADERSHIP

2023-uptill now: Member of The Center for Education, Guidance and External Communication, Faculty of Vet. Medicine, Assiut University

2015-2023: Member of the quality assurance program and Secretary of the animal, poultry and aquatic life behaviour and management, Assiut University

2007-2023: Member of the quality assurance program in Faculty of Vet. Medicine, Assiut Uni

PUBLIC ENGAGEMENT

2010-2023: Public health education at Assiut Governorate villages (Veterinary extension convoys)(via talking about the poultry and farm animals' behaviour and management. (Arranged by social societies in Assiut).

Research skills

- 1) Conduct G power analysis and utilize SPSS software for data analysis.
- 2) Use Solomon coder for behavior tracking and analyze behavior data through video tracking. As well as direct observation techniques
- 3) Perform blood sample collection, operate spectrophotometers, and conduct ELISA and PCR techniques.
- 4) Analyze total bacterial count, Enterococcus, and Lactobacilli.
- 5) Collect and fix tissue samples, section using a microtome, and perform staining and image analysis.
- 6) Manage and house poultry, sheep, buffalo, cattle, mice, rats, and quail.
- 7) Administer anesthesia to poultry and mice.
- 8) Write and submit research papers for publication, with more than 35 published articles in high-ranked journals.
- 9) Prepare and submit proposals for research funding.
- 10) Demonstrate proficiency in English.
- 11) Proficient in computer use and office software.
- 12) Design and plan scientific experiments.
- 13) Efficiently manage and prioritize tasks to meet deadlines.
- 14) Exhibit effective communication and teamwork abilities.

REFERENCES

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