Fatma Ahmed Shaban Ali



Assistant lecturer of Veterinary Hygiene, Department of Animal, Poultry hygiene and Environmental sanitation, Assiut University (Egypt) Email: fatmaahmed@aun.edu.eg Phone: +2 01002468970 Nationality: Egyptian. Gender: Female. Marital status: Single. Office Address: Faculty of veterinary medicine, Assiut University, Assiut, Egypt.

Academic Employments

Current

Assistant Lecturer of Animal Hygiene, Department of Animal, Poultry hygiene and Environmental sanitation, Faculty of Veterinary Medicine, Assiut University, Assiut, Egypt.

Previous

Demonstrator of Animal Hygiene, Department of Animal, Poultry hygiene and Environmental sanitation, Faculty of Veterinary Medicine, Assiut University, Assiut, Egypt.

Education

2022- Master of Veterinary Medical Sciences (M.V.Sc.) (Animal hygiene):

Thesis title: " Natural flavonoids supplement for immune-boosting against Campylobacter resistome.", Faculty of Veterinary Medicine, Assiut University, Egypt. The main objective of this study was to control Campylobacteriosis; as it is a zoonotic disease causing major public health problems including immune system complications such as Cancer & Guillain-Barre syndrome. Campylobacteriosis could lead to an increased risk of cancer especially in the gastro-intestinal tract. Campylobacter promotes colorectal cancer. Extraintestinal manifestations of Campylobacter bacteremia are quite rare and may include meningitis, endocarditis, septic arthritis, osteomyelitis hematologic malignancy, liver Cirrhosis and renal disease. Animal studies demonstrated the ability of Rosemary essential oil (REO) to reduce stress, fatigue, and inflammation. Nevertheless, the impact of REO and the underlying mechanism on enhancing the immune response during Campylobacter infection is not fully investigated. Hence, the present study aims to investigate the underlying mechanisms of REO oral supplementation in Campylobacter-infected mice.

2019- register topic of Master of Animal hygiene

Thesis title: Natural flavonoids supplement for immune-boosting against Campylobacter resistome.

2017- Registration in the Master's degree of Animal hygiene

Assiut University, Assiut, Egypt

2012-2016 Bachelor of Veterinary Science (B.V.Sc.), ranked 2nd among graduates of the year 2016, with excellent degree with Honor Assiut University, Assiut, Egypt.

Major: Animal Science Minor: Biology

Studied courses

- 2017-2018 Courses for getting master degree:
 - Animal hygiene (excellent)
 - Hygiene of Animal housing (very good)
 - Environmental pollution and sanitation (excellent)
 - Pesticides and public health (very good)
 - Immunity and stress (excellent)
 - Biostatistics (very good)

Other training courses during preparatory Master courses:

- Principles of protein analysis and Western Blotting technique; Laboratory of Immunology, Zoology Department, Faculty of Science, Assiut University, Assiut, Egypt.
- Practical part of Immunity course; Laboratory of Immunology, Zoology Department, Faculty of Science, Assiut University, Assiut, Egypt.
- How to Image Analysis using Image J (quantification of (protein, collagen fibers, etc..) expression in tissues.
- How to do Statistical analysis using Graph pad prism softwares package, SPSS.
- How to use Endnote program.

Special skills in computer

Windows, Microsoft word, Excel, Power point, internet.

Work Experience

2017-2022 Teaching assistant (demonstrator) at Assiut University, Assiut, Egypt Teaching Activities (from 2017 till present) practical part of Undergraduate courses:

1- Animal and Poultry Hygiene course for the 4th and 5th grade students in

Faculty of Vet. Medicine, Assiut University.

2- Environmental Hygiene course for the 4th and 5th grade students in Faculty of

Vet. Medicine, Assiut University.

3- Animal and poultry Hygiene course for Third year students of Faculty of

Agriculture, Assiut University.

 4- Veterinary sanitation course for Third year students of Faculty of Agriculture, Assiut University.

Research activities <u>Member of Assiut university project</u>)from 2017-2019) Project title: The effect of Diatary zinc oxide and Silver Nanoparticles

Project title: The effect of Dietary zinc oxide and Silver Nanoparticles on Growth

Performance, health status and meat quality of Broilers.

2022-present

t senior teaching assistant (assistant lecturer)

Assiut University, Assiut, Egypt

- Taught practical part of Animal hygiene syllabus.
- Attended different seminars and scientific discussions.
- Participated in development of syllabus.
- Participated in summer training for students in the laboratory on microbiology, different types of disinfectants, and how to design animal housing.
- Participated in the college's quality program, including preparing reports and describing courses.
- Provided guidance to undergraduate students.
- Counselled students experiencing difficulties in the course.

2018-2022 Attended training courses in the faculty and leadership Development center- Assiut University

- How to acquire Communication skills.
- How to design effective presentation.
- Application of information technology in teaching.
- Design and conduction statistical analysis in scientific research.
- Recent trends in the development of higher educational institutions.
- Conference organization.

Lab. Experiences:

- Isolation & identification of pathogenic microorganisms.
- Total bacterial count & Bacterial growth curve.
- Minimum Inhibitory Concentration& Minimum Bacterial Concentration.
- Antibiotic susceptibility using agar disk diffusion assay.
- Polymerase Chain Reaction (Multiplex-PCR).
- DNA Sequencing and phylogenetic analysis
- Gas chromatography/mass spectrometry (GC/MS).
- Lab animal Husbandry (BALB/c mice).
- Lab animal sacrificed & samples Collection.
- Leukocyte separation for flow cytometery
- Enzyme linked Immunosorbent Assay (ELISA).
- Histological investigation by Hematoxylin and eosin, Masson's trichrome, Direct sirrus red, Alciencs blue and PAS staining.
- Immunohistochemistry staining.
- SDS PAGE
- Western Blot Assays.

- Nanoparticles (ZONPs) synthesis
- Poultry (broiler chicks) Husbandry
- Experimental design
- Poultry sacrificed & samples Collection (Liver, spleen, intestine and bursa of fabricuous).
- Hematology; Biochemical parameters (Total protein, Albumin, Glucose, Total Cholesterol, Tri Glyceride, HDL-C, Creatinine, Uric acid, Phosphorus, Calcium)& Newcastle disease HI assay
- GIT Microbial Analysis (Total Coliform count, Total Lactobacillus spp. count, Total Anaerobic count)
- HA, HI titre assay for evaluation of avian vaccination program (eg. Hitchner B1, Gumbro, colone, Newcastle, H5).

• Attended workshops

- The sixty-first session to prepare the university teacher on public and private teaching methods, during the period of 26-31/1/ 2019, Faculty of Education, Assiut University.
- COMET ASSAY PRINCIPLES & APPLICATIONS, during the period of 27-28/2/2019, The Molecular Biology Research Unit of Assiut University.
- Isolation, Culturing and Banking of mesenchymal stem cells from adipose tissue and compact bones, during the period of 15-16 March 2020, Molecular cell biology lab., Zoology Dept., faculty of Science, Assiut University.
- Immunohistochemistry for use in laboratory diagnostics and scientific research, 9/8/2020, WEBEX (E-learning), faculty of Veterinary Medicine, Assiut University.
- Immunohistochemistry& Image Analysis using Image J, during the period of 16-17 December 2020, faculty of Veterinary Medicine, Assiut University.
- Lamp RT-PCR for rapid identification of viral RNA, 20th December 2020, Molecular cell biology lab., Zoology Dept., faculty of Science, Assiut University.
- Updated protocols for isolation and culture of mesenchymal stem cells using enzymatic and explant methods, during the period of 12-13th March 2023, organized in Molecular Cell Biology Lab., Zoology Dept., Faculty of Science, Assiut University.
- The workshop on the national program to confront rumors and their impact on national security under the slogan (Stand up with us) within the framework of coordination and cooperation between the Directorate of Youth and Sports (Civil Education Department) and Assiut University May 2023.
- Attended seminars, scientific lectures
- Seminar entitled Fish and Human health, Faculty of Vet. Med. Assiut University, Assiut Egypt, 15 April 2019.
- Scientific lecture entitled Smart Nano and Nano-in- Microsystems for pharmaceutical and Biomedical Applications, Faculty of Pharmacy & Faculty of Vet. Med. Assiut University, Assiut Egypt, 10 December 2019.

- Veterinary medicine seminar entitled Corona and sisters....next most intense, Faculty of Vet. Med. Assiut University, Assiut – Egypt, 15 March 2020.
- Scientific seminar entitled Laboratory Analysis of Proteins, Fats, Fibers, Mycotoxins, Water Analysis, In Addition To Laboratory Diagnosis of Poultry

and Livestock Farms, Baytara For Pharmaceutical Technologies, 5th Industrial Zone, Sadat City, El monofeya – Egypt, 28 January 2023.

- Scientific lecture entitled Analysis of the Active Substances through The Veterinary Center for Food and Feed (BCFF) using High Performance Liquid Chromatography (HPLC), Atomic Absorption/ Spectrophotometer, Automated Fiber Analyzer (A 200) and Protein, Fat, Mycotoxin Directors, Baytara For Pharmaceutical Technologies, 5th Industrial Zone, Sadat City, El monofeya – Egypt, 28 January 2023.
- Scientific lecture entitled Veterinary Drug Registration, Baytara For Pharmaceutical Technologies, 5th Industrial Zone, Sadat City, El monofeya – Egypt, 28 January 2023.
- Scientific lecture entitled Veterinary Viral Vaccines and their Evaluation Methods, Research Institute of veterinary serums and vaccines. Abbasia, Cairo – Egypt, 29 January 2023.
- Scientific lecture entitled Veterinary Bacterial Vaccines, Research Institute of veterinary serums and vaccines. Abbasia, Cairo Egypt, 29 January 2023.
- Scientific lecture entitled Applications of Biotechnology in Vaccines& Reverse Genetics of Avian Influenza Virus, Research Institute of veterinary serums and vaccines. Abbasia, Cairo Egypt, 29 January 2023.
- Scientific lecture entitled DNA Vaccination, Research Institute of veterinary serums and vaccines. Abbasia, Cairo Egypt, 29 January 2023.
- Scientific lecture entitled Introduction to tissue culture cell line, The Molecular Biology Research Unit of Assiut University, 19 March 2023.
- Scientific lecture entitled Tissue culture requirements and methods, The Molecular Biology Research Unit of Assiut University, 20 March 2023.
- Scientific lecture entitled Applications of tissue culture in research, medicine and industry, The Molecular Biology Research Unit of Assiut University, 21 March 2023.
- Seminar entitled (Proper food and Human building) on the occasion of World Food Safety Day, Faculty of Vet. Med. Assiut University, Assiut Egypt, 13 June 2023.

• Attended conferences

- The 18th Scientific Conference of the Faculty of Vet. Med. (The importance of scientific research and community participation in the development of livestock locally and regionally). Assiut University, Assiut Egypt, during the period of 5-7 November 2019.
- The 7th Conference for Young Scientists in Basic and Applied Sciences, Faculty

of Science, Assiut University, 10-11 May 2022.

- Conference proceedings with oral presentation
- Usama T. Mahmoud, Fatma Shaban, Manal A.M. Mahmoud, Hosnia S. Abdel– Mohsein, Omar A. Amen, Sohair M. M. Rageb, Hanan S.A. Waly, Mohamed.A. Osman, Madeha H.A. Darwish; Effect of zinc oxide nanoparticles on biochemical parameters, vaccine response and ceacal microbial population in broiler. The 18th Scientific Conference of the Faculty of Vet. Med. Assiut University, Assiut – Egypt, 5-7 November 2019.
- Fatma A. Shaban Ali, Manal A. M. Mahmoud, Hosnia S. Abdel-Mohsein, and Gamal Badr; The potential therapeutic effect and underlying mechanism of Rosemary essential oil against Campylobacteriosis in mice model. The 7th Conference for Young Scientists in Basic and Applied Sciences, Faculty of Science, Assiut University, 10-11 May 2022.

Visited Institute

• The 1st veterinary exhibition in Upper Egypt 2019, Teaching Veterinary Hospital, Faculty of Vet. Med. Assiut University, Assiut – Egypt, 21-23 February 2019.

• Baytara For Pharmaceutical Technologies, 5th Industrial Zone, Sadat City, El monofeya – Egypt, 28 January 2023 for learning about the factory's activity in the manufacture of veterinary pharmaceuticals . It also analyzes food and feed ingredients for feed factories and major projects, in addition to laboratory diagnosis of poultry and livestock farms .

• Research Institute of veterinary serums and vaccines, Abbasia, Cairo – Egypt, 29 January 2023 for training on Veterinary Vaccines and their Evaluation Methods.

• Cairo International Book fair 2023, Egypt International Exhibition Centre in New Cairo, Egypt, 30 January 2023.

- Brooke Hospital for Animals, Cairo Egypt, 30 January 2023.
- Animal Reproduction Research Institute, Al Haram, Giza Governorate, Egypt, 31 January 2023.

• Languages

- English: Good command, written & spoken.
- IELTS training course certificate from International British Institute (IBI) estimate (very good).
- Arabic: Mother tongue.
- French: fair

Fields of interest:

- Studying the efficiency of various chemical and natural antimicrobial, immune-boosting agents.
- Studying the pathogenesis of immune system complications such as Cancer,

diabeties, liver fibrosis and inflammation and finding solutions to them.

- Studying the issues of major public health concern as antibiotic resistance, biofilm, heat stress and finding solutions to them.
- Animal Biochemistry
- Experimental design & Tissue culture.
- Monitoring the environmental pollution of water, air and various kinds of foods. Bacteriological and chemical analysis of water and air.
- Studying the hygienic importance of air and water in transmitting the causative agents of various diseases to both animal and man.

Community services

- Sharing in the veterinary medical convoys during the undergraduate studies.
- Inspection of the animals' meat in the slaughter houses.
- Participating in Awareness-raising campaigns against environmental pollutants, ectoparasites and related diseases & about the importance of hygiene measurements; biosecurity, disinfection, eradication of ectoparasites, combating of contagious diseases.
- Participating in the volunteer works in my city.
- Member of the Veterinarians Syndicate (General in Cairo and the subsidiary in Assiut)(from 2017 till now).

Personal character:

-Active and hard worker

-Responsible

-Have the ability to work under stress

-Ambitious - Very patient

-Love working in a teams

References

For more information kindly contact:

• Prof.Dr. Asmaa Abdel-Nasser Ahmed Hussein,

Professor of Zoonoses, Assiut University, Egypt

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• Prof.Dr. Yasmin O.El-Amir,

Professor of Pathology and Clinical Pathology, Assiut University, Egypt (Email: yasomar78@.gmail.com Or Yas-oma@aun.edu.eg)

• Dr. Manal T. Hussein,

Assistant professor of Cell and Tissue, Assiut University, Egypt (Email: <u>manal.hussein@aun.edu.eg Or manal.tawifik</u> <u>48@gmail.com</u>).