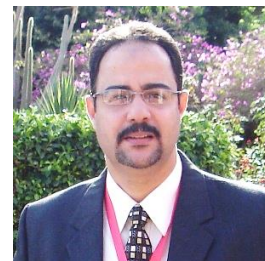


NASR-ELDIN MOHAMED AREF

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EDUCATIONAL BACKGROUND

- **Doctor of Philosophy** in Large Animal Clinical Sciences, College of Veterinary Medicine, Michigan State University (MSU), USA. 2003-2008.
- **Master of Internal Medicine**, Faculty of Veterinary Medicine, Assiut University, Assiut-Egypt. 1995-1998.
- **Bachelor of Veterinary Sciences**, Faculty of Veterinary Medicine, Assiut University, Assiut-Egypt. 1989-1994.

ACADEMIC POSITIONS

- **Sept. 2018- present:** Professor of Veterinary Internal Medicine, Faculty of Veterinary Medicine, Assiut University, Assiut-Egypt and Misurata University, Misurata-Libya 2024-2025.
- **June-Dec 2022:** Research Scholar in Mammalian NutriPhysioGenomics Laboratory, College of Agricultural, Consumer and Environmental Sciences, University of Illinois at Urbana Champaign, USA.
- **Feb-Aug. 2018:** Research Scholar on Gut Microbiome and Antibiotics Resistance Project. College of Veterinary Medicine, University of Illinois at Urbana Champaign, USA.
- **2013-2018:** Assistant Professor of Veterinary Internal Medicine, Faculty of Veterinary Medicine, Assiut University, Assiut-Egypt.
- **2008-2013:** Lecturer of Veterinary Internal Medicine, Faculty of Veterinary Medicine, Assiut University, Assiut-Egypt.
- **2003-2008:** Research Assistant/PhD Candidate on STa – Antibodies/Vaccine Project, National Food Safety Toxicology Center, MSU, USA.
- **1998-2002:** Assistant Lecturer of Veterinary Internal Medicine, Faculty of Veterinary Medicine, Assiut University, Assiut-Egypt.
- **1995-1998:** Demonstrator of Veterinary Internal Medicine, Faculty of Veterinary Medicine, Assiut University, Assiut-Egypt.

INSTITUTIONAL POSITIONS

- **2014-2015:** Vice Dean for Education & Student Affairs, Faculty of Vet. Med, New Valley, Assiut University.
- **2012-2014:** Vice Director of Quality Assurance Unit, Faculty of Veterinary Medicine, Assiut University, Assiut-Egypt.
- **2009-2011:** Coordinator of strategic plan teamwork group for Continuous Improvement and Quality Assurance Project (CIQAP), Faculty of Veterinary Medicine, Assiut University, Egypt.



TEACHING EXPERIENCES

Institution	Rank	From	To	Course taught Undergraduate	Course taught Postgraduate
Assiut University	Demonstrator	1995	2002	Practical part of Veterinary Internal Medicine, Practical part of Clinical Laboratory Diagnosis	None
Assiut University	Lecturer	2008	2013	<ul style="list-style-type: none"> • General Animal Medicine • Diseases of ruminants • Diseases of Equine and Pet animals 	<ul style="list-style-type: none"> • Renal & Liver Function Tests • Diagnostic metabolic disorders • Diagnosis of liver and kidney diseases
Assiut University New Valle, University and Sohag University	Assistant Professor	2013	2018	<ul style="list-style-type: none"> • General Animal Medicine • Diseases of ruminants • Diseases of Equine and pet animals • Veterinary Internal Medicine Part 2 	<ul style="list-style-type: none"> • Equine Medicine • Renal & Liver Function Tests • Molecular Biology • Disturbance of body fluid, electrolytes, and acid-base balance • Immunological Diagnostics • Neonatal animals' diseases • Special studies in ruminants' diseases • Diagnostic Biochemistry • Vet. Internal Medicine
Assiut University New Valle, University and Sohag University	Professor	2018	2024	<ul style="list-style-type: none"> • General Animal Medicine • Diseases of Ruminants • Diseases of Equine and Pet Animals • Veterinary Internal Medicine Part 1 	<ul style="list-style-type: none"> • Immunological Diagnostics • Disturbance of body fluid, electrolytes and acid-base balance • Special Studies in Diseases of Ruminant Animals
Misurata University	Professor	2024	2025	<ul style="list-style-type: none"> • Veterinary Medicine I • Veterinary Medicine II • Infectious Diseases I • Infectious Diseases II • Clinical pathology • Immunology • Medical terminology 	



M.V.Sc. COURSES AND THESIS

COURSES

1. General Internal Veterinary Medicine with grade Excellent
2. Special Laboratory Diagnosis with grade Excellent
3. Bacterial and Viral Diseases of Neonatal Calves with grade Very Good
4. Non-Infectious Diseases of Neonatal Calves with grade Excellent
5. Statistics with grade Very Good

THESIS

“Clinical Approach to Neonatal Calf Diarrhea with Special Reference to Acid- Base Balance and Rehydration Therapy” MVSc. of Veterinary Internal Medicine, Faculty of Veterinary Medicine, Assiut University, Assiut- Egypt. June 1998. The study aimed to:

- Classify neonatal calf diarrhea according to severity of dehydration and metabolic acidosis.
- Correlate clinical signs with blood indices of acid-base balance and other laboratory parameters of dehydration.
- Establish a therapeutic regime for proper medical intervention under field conditions.

PH.D. COURSES AND DISSERTATION

COURSES

1. Advanced Internal Veterinary Medicine
2. Diseases of Intensive Production
3. Herd Medicine
4. Advanced Clinical Laboratory Diagnosis
5. Basic Biochemistry
6. Protein Structure and Function
7. Veterinary Immunology
8. Veterinary Microbiology and Infectious Diseases
9. Principles of Drug-Tissue Interaction
10. Introduction to Descriptive and Analytic Epidemiology
11. Design & Conduct of Epidemiological Studies & Clinical Trials
12. Special Problems in Large Animal Medicine
13. Epidemiology of Food-Borne Diseases and Food Safety
14. Statistics

DISSERTATION

“Design and Evaluation of Immunogenic *Escherichia coli* Heat-Stable Enterotoxin (STa) and Characterization of the Immune Response in Laboratory Animals” Ph.D. of Large Animal Clinical Sciences, CVM, MSU, USA May 2008. The study’s objectives:

- Purification and characterization of ETEC-STa
- Design and molecular characterization of an immunogenic STa
- Production of neutralizing mammalian (IgG) antibodies against STa

CLINICAL AND LABORATORY RESEARCH SKILLS

- **Clinical skills**
 - Clinical diagnosis and management of infectious and non-infectious diseases of large and small ruminants.
 - Critical care and management of compromised neonatal farm animals.
 - Metabolic profiling and dairy herd health monitoring and management.



- Body fluid resuscitation: Body fluid, electrolyte and acid base imbalance evaluation and management.
- Diagnostic application of ultrasonography in ruminants.
- Diagnostic and therapeutic use of stomach tube.
- Intravenous catheterization.
- Urinary catheterization.
- **Clinical Hematology and Biochemistry**
 - Blood and serum sample collection, analysis and data interpretation of
 - Hematology (Manual DLC, manual and automated CBC) using Abbott Cell Dyne-1700 and Medonic CA620 Vet hematology analyzer.
 - Biochemistry (Liver and renal function tests, lipid profile, total protein, blood glucose,...etc) using Phillips Pye Unicam and Optizen UV/Visible spectrophotometer.
 - Blood gas and acid-base balance using Ciba-Corning Blood Gas Analyser 238 and ABL5 Blood Gas Analyser.
- **Clinical Endocrinology and Immunology**
 - Hormonal bioassay
 - Immunoassay
 - Acute phase proteins
 - Oxidants/antioxidants

using ELISA (Stat Fax 2100 and Molecular Devices “ThemoMax” Microplate Reader with SOFT max Pro 2.6.1).
- **Molecular Biology**
 - **Primer design**
 - Nucleotide BLAST and other applications to acquire unique primer.
 - Testing and validation of the selected primer
 - PCR (Eppendorf Mastercycler gradient system)
 - Gel electrophoresis (Bio-Rad Electrophoresis cell and Gel Doc XR+ Gel Documentation System)
 - RNA sequence (University facilities)
 - **qPCR processing and calculation** (Perfecta SYBR Green, QuantStudio™- Real-Time PCR System)
 - **Tissue RNA extraction** (Qiagen miRNeas mini kit Mini, BeadBeater 24 Disruptor, Eppendorf centrifuge).
 - **RNA concentration assay** (Nanodrop ND-1000 UV/VIS Spectro-photometer system)
 - **Tissue protein extraction** (Thermo Scientific kit, Mini BeadBeater 24 Disruptor, Eppendorf centrifuge).
 - **Protein concentration assay** (Nanodrop ND-1000 UV/VIS Spectro-photometer system)
 - **RNA quality assessment** (260/280 ratio and RQN)
 - **cDNA** (Eppendorf Mastercycler gradient system)
 - **Western blot** (Bio-Rad Electrophoresis Cells and Gel Doc XR+ Gel Documentation System)
- **Bioprocessing: Microbial fermentation and bioactive peptide production and purification**
 - **Microbial fermentation:** Scale up culturing (36L Bellco and Winpact bioreactor systems) and growth kinetics monitoring.
 - **Protein purification:**
 - **Tangential flow filtration** (Millipore TGF system)
 - **Dialysis**



- **Chromatography techniques** (Batch adsorption, RP-HPLC, SE-HPLC, GFC, using Waters HPLC System).
- **Polyclonal antibody production and evaluation**
 - Mammalian (IgG) and avian egg- yolk (IgY) antibodies production & assessment
 - Rabbit/mice Immunization
 - Blood sample collection and processing
 - IgG antibody harvesting and assessment
 - Neutralization testing using suckling mouse assay
 - Non-competitive ELISA.
 - Avidity ELISA.
- **General Laboratory Skills**
 - Safety and conduct in laboratory
 - Experimental design - sampling, replication, etc.
 - Accurate experimental manipulations and record keeping
 - Calculation of molarities, dilutions, etc.
 - Report writing, summary and conclusions.
- **Study design, construction and testing of hypotheses and conduct clinical trials.**

PUBLICATIONS

Bioprocessing and molecular biology papers

1. Mohamed Donia, **Nasr-Eldin M. Aref**, Mohamed Zeineldin, Mohamed Abou Al-azm, Ameer Megahed, Blair Benjamin, Brian Aldridge, James Lowe (2025). Impact of parenteral ceftiofur on developmental dynamics of early life fecal microbiota and antibiotic resistome in neonatal lambs. *Antibiotics*, 14, 434.
2. **Nasr-Eldin M. Aref***, Abdel-Raheem A. Abdel-Raheem, Hanaa F. Kamaly, Soher Z. Hussien (2018): Clinical and sero-molecular characterization of *Escherichia coli* with an emphasis on hybrid strain in healthy and diarrheic neonatal calves in Egypt. *Open Veterinary Journal*, 8 (4) 351-359.
3. **Nasr-Eldin M. Aref***, Maha Nasr, Rehab Osman (2018): Construction and immunogenicity analysis of nanoparticulated conjugate of heat-stable enterotoxin (STa) of enterotoxigenic *Escherichia coli*. *International journal of biological macromolecules* 106, 730-738.
4. **Nasr-Eldin M. Aref***, Maha Nasr, Rihab Osman (2017): Novel heat-stable enterotoxin (STa) immunogen based on cationic nanoliposomes: Preparation, characterization and immunization. *Journal of Vaccine and Vaccination*, 8:(2).1-8.
5. **Nasr-Eldin M. Aref*** and A. Mahdi Saeed, (2012): Generation of high-titer of neutralizing polyclonal antibodies against heat-stable enterotoxin (STa) of enterotoxigenic *Escherichia coli*, *Vaccine*, Vol.30 - No.45, pp. 6341- 6346.
6. **Nasr-Eldin M. Aref*** and A. Mahdi Saeed (2012): An enhanced protocol for expression and purification of heat-stable enterotoxin of enterotoxigenic *Escherichia coli*, *J of Biochemistry and Molecular Toxicology*, Vol 26-No 4, 168-175.
7. **Nasr-Eldin M. Aref*** and A. Mahdi Saeed, (2011): Design and characterization of highly immunogenic heat-stable enterotoxin of enterotoxigenic *Escherichia coli* K99+, *Journal of Immunological Methods*, 366, 100-105.
8. **Nasr-Eldin M Aref**, Muhammed Khan, Qianming Jiang, and Juan J. Llor*. Alterations in skeletal muscles abundance of protein turnover, stress and antioxidant proteins during the periparturient period in dairy cows fed rumen-protected methionine (Manuscript under preparation).



Clinical and laboratory papers

9. Heba A. Nasr, **Nasr-Eldin M. Aref**, Mahmoud R. Abd Ellah, Mohammed Ahmed Hamdy Abdelhakiem (2024) Cardiac biomarkers as tools in the prediction and diagnosis of traumatic pericarditis and traumatic reticulo-peritonitis in cattle and buffaloes. *BMC Veterinary Research* 20, 329.
10. Ahmed I. Hassanin, Mohamed H. Karam and **Nasr-Eldin M. Aref*** (2025) Cytomorphology, osmotic fragility, G6PD and oxidant/antioxidant status in postparturient hemoglobinuria in dairy cattle and buffaloes. *Bulgarian Journal of Veterinary Medicine* 28 (1) 55.
11. Shima I. Farag, David Cano-Terriza, Moisés González*, Doaa Salman, **Nasr-Eldin M. Aref**, Murad Mubarak, Débora Jiménez-Martín, Ignacio García Bocanegra, Ehab K. Elmahallawy (2023). Serosurvey of selected reproductive pathogens in domestic ruminants from Upper Egypt. *Frontier in Veterinary Sciences* 10, 1-9
12. Arafat Khalphallah*, **Nasr-Eldin M. Aref**, Ashraf M. Abu-Seida, Enas Elmeligy, Sara A. Bayoumi, Al-Iethie A. Al-Iethie, Doaa Salman (2018): Hepatobiliary Diseases in Buffaloes (*Bubalus bubalis*): Clinical, Laboratory and ultrasonographic findings. *Journal of Veterinary Science*, 19(3), 1-000
13. **Nasr-Eldin M. Aref***, Arafat S. Sayed, Ahmed K. Diab, and Maheetab M. Mohamed (2018): Prospective Study of Clinical and Epidemiological Trends of Intestinal Nematodes Infection in Dogs in Upper Egypt. *Assiut Veterinary Medical Journal*, 64 (157), 28-40.
14. **Nasr-Eldin M. Aref***, Ahmad A. Aamer, Shima Hassanin, Mohamed E. Radwan (2018): Evaluation of hemostatic parameters and serum amyloid (A) in horses with abdominal pain. *Assiut Veterinary Medical Journal*, 64 (156), 90-104
15. **Nasr-Eldin M. Aref***, Arafat S. Sadek, Asmaa M. Zahran, Ghada A. Abd-Elal Eman A. Nasser (2017): Flow cytometric analysis of somatic cells and oxidant/antioxidant profile in dairy cows with subclinical mastitis, *Bulgarian Journal of Veterinary Medicine*, 21(3) 347-357
16. **Nasr-Eldin M. Aref***, Mahmoud R. Abd-Ellah, Heba A. Nasr. (2017): Clinical and Laboratory Evaluation of Ruminoreticular Disorders in Cattle. *Assiut Veterinary Medical Journal*, 62 (154) 28-40.
17. **Nasr-Eldin M. Aref***, Ali El-Sebaie and Hammad Z. Hammad. (2016): New Insights on Ill-thriftiness in Early-weaned Buffalo Calves. *The International Journal of Veterinary World*, 12;9(6):579-86.
18. Arafat Khalphallah, **Nasr-Eldin M. Aref***, Enas Elmeligy and Sayed F. El-Hawari (2016): Clinical and Ultrasonographic Observations of Functional and Mechanical Intestinal Obstruction in Buffaloes (*Bubalus bubalis*), *The International Journal of Veterinary World*, 9(5):475-480.
19. **Nasr-Eldin M. Aref*** and Mohamed H. Abdel-Hakeim, (2013): Clinical and Diagnostic Methods for Evaluation of Sharp Foreign Body Syndrome in Buffaloes, *The International Journal of Veterinary World*, 6:9, 586-591.
20. **Nasr-Eldin M. Aref*** and Mohamed H. Abdel-Hakiem, (2013) Azotemia and Metabolic Alkalosis in Calves with Urolithiasis Associated with Urinary Bladder and Urethral Rupture, *Assiut Veterinary Medical Journal*, 59 (137), 86-92.
21. Rasha G. Sayed; Ahmed Abdel-Hameid; **Nasr-Eldin M. Aref***, and Mohammed Sayed (2013) Modulating effect of camel's milk on alloxan-induced experimental diabetes in laboratory animal model, *Assiut Veterinary Medical Journal*. 59 (138), 1-8.
22. **Nasr-Eldin M. Aref*** and Hateem A. Hamdon (2012) Some indices of metabolic profile and oxidative stress in Sohagi ewes during transition period., *Assiut Veterinary Medical Journal*, 58 (132) 217-228.
23. **Nasr-Eldin M. Aref *** and Waleed Senosy (2012) Diagnostic and prognostic value of blood gases and acid base balance in uterine torsion in buffaloes, *Assiut Veterinary Medical Journal*, Vol.58, No.133, pp.174-183.
24. Mohamed A. H. Abdel-Hakiem and **Nasr-Eldin M. Aref*** (2012): Prospective Study on Ano-rectal Anomalies in Neonatal Farm Animals, *Journal of Veterinary Advance, Scope Med*, 2(12) 595-604.



25. **Nasr-Eldin M. Aref*** and Moatamed ElSayed Ali, (2011): Therapeutic effect of vitamin C in endotoxin-induced metabolic acidosis and oxidative stress in lambs., Assiut Veterinary Medical Journal, 57:128, 170-184.
26. **Nasr-Eldin M. Aref***, AbdEllah, M. R., Khamis, G. F, Abd El-Moaety, M. and Aamer, A. A. (2009): Some trace elements and antioxidants profile in Ill-thrift Frisian calves. Assiut Veterinary Medical Journal, 55 (123) 144-153.
27. Ali El-Sebaie, Ali H. Sadiek and **Nasr-Eldin M. Aref*** (1999): Clinical approach to neonatal calf diarrhea: II. Prognostic aspect of rehydration therapy, 5th Cong of Egyptian Society for Cattle Diseases, 28-30/11, Faculty of Veterinary Medicine, Assiut University.
28. Ali El-Sebaie, Ali H. Sadiek and **Nasr-Eldin M. Aref*** (1999): Clinical approach to neonatal calf diarrhea: I. Relationship between the clinical signs and the severity of acidosis, 5th Cong of Egyptian Society for Cattle Diseases, Faculty of Veterinary Medicine, Assiut University, Faculty of Veterinary Medicine, Assiut University.

Editorial

29. **Nasr-Eldin M. Aref** (2012): Vaccine and Vaccination: Impact and Challenges. J Vaccines Vaccination, 3 (3).
30. **Nasr-Eldin M. Aref** (2012): ETEC Vaccine between Reality and Expectations. J Vaccines Vaccination, 3, (5) 8.

DOCTORAL AND MASTER THESES SUPERVISED

1. **Hammad Zaglol Hammad**: Clinical and Laboratory Assessment of Weaning-related Stress and Ill-thriftiness in Buffalo and Cow Calves, Ph.D. Department of Animal Medicine, Faculty of Veterinary Medicine, Assiut University Assiut Egypt, 2015.
2. **Ghada Ahmed Abd-Elal**: Flow Cytometric Cell Counts and Oxidative Stress Associated with Subclinical Mastitis In Dairy Cows. Ph.D., Department of Animal Medicine, Faculty of Veterinary Medicine, Assiut University Assiut Egypt, 2016.
3. **Amal Farag**: Clinical Evaluation and Determination of Some Antioxidants and Immunological Parameters in Vitamin A - Deficient sheep. Ph.D. Department of Animal Medicine, Faculty of Veterinary Medicine, Assiut University Assiut Egypt, 2017.
4. **Heba Abdel-Baset Nasr Sayed**: Some Hematological and Biochemical Studies on Diseases of the Compound Stomach in Cattle and Buffalos. MVSc., Department of Animal Medicine, Faculty of Veterinary Medicine, Assiut University Assiut Egypt, 2017.
5. **Shimaa Hassan Mohammed Hasanin**, Coagulopathy and Some Biomarkers Investigations in Acute Abdominal Pain in Equines. MVSc., Department of Animal Medicine, Faculty of Veterinary Medicine, Assiut University Assiut Egypt, 2017.
6. **Hanaa Fawzy Kamaly**, Clinicolaboratory Study on Aerobic Bacterial Enteritis in Neonatal Calves with Special Reference to E. coli Infection. MVSc., Department of Animal Medicine, Faculty of Veterinary Medicine, Assiut University Assiut Egypt, 2017.
7. **Eman Adel Abdel-Rahman**: Oxidant and Antioxidant Levels in Weak Calves Reared By Small House Holder, MVSc., Department of Animal Medicine, Faculty of Veterinary Medicine, Assiut University Assiut Egypt, 2017.
8. **Mahetab Mahdy Mohamed**: Clinical, Hematological and Biochemical Studies on Intestinal Nematodes in Dogs. MVSc., Department of Animal Medicine, Faculty of Veterinary Medicine, Assiut University Assiut Egypt, 2017.
9. **Heba Mohamed Awadallah Ali**: Impact of Stress of Hard Nomadic from Sudan to Egypt on Health of Camels Convoys and its Related Laboratory Indices. MVSc., Faculty of Veterinary Medicine, Assiut University Assiut Egypt, 2018.



10. **Ahmed Ibrahim Hassanin:** Erythrocytic energy, oxidative stress and stability in post parturient hemoglobinurea. MVSc., Department of Animal Medicine, Faculty of Veterinary Medicine, Assiut University Assiut Egypt, 2019.
11. **Eman Ramadan Mohamed Abdel Mohsen:** Liver Function Tests and Lipid Profile in Post parturient Dairy Cows and Buffaloes. MVSc., Department of Animal Medicine, Faculty of Veterinary Medicine, Assiut University Assiut Egypt, 2019.
12. **Eman Hassan Abdel-naeem:** Cytomorphological Evaluation of Anemia in Dogs, Department of Animal Medicine. MVSc., Faculty of Veterinary Medicine, Assiut University Assiut Egypt, 2020.
13. **Heba Abdel-Baset Nasr Sayed:** Evaluation of cardiac biomarkers in pericarditis of cattle and buffaloes. PhD, Department of Animal Medicine, Faculty of Veterinary Medicine, Assiut University Assiut Egypt, 2022.
14. **Shimaa Ismail Ismail Ali.** Clinical and laboratory studies on some protozoan parasite infections in ruminants at Sohag governorate. MVSc, Department of Animal Medicine, Faculty of Veterinary Medicine, Sohag University Sohag Egypt, 2023.
15. **Moemen Bakhet,** Exploitation of genetics, metabolic profiles, and oxidative stress determinants of pregnant ewes resistance to elevated temperatures to improve productivity in sheep during the heat stress period. PhD. Department of Animal Medicine, Faculty of Veterinary Medicine, Sohag University Sohag Egypt, (Ongoing)

RESEARCH FUNDING

Project: STa- ETEC nanovaccine development

- Address: Faculty of Veterinary Medicine, Assiut University-Egypt
- Role: Principal investigator
- Duration: 2014-2016 (2 years)
- Funding organization: Science Technology Development Fund (STDF)-Egypt

Project: STa – Antibodies/Vaccine Project

- Address: National Food Safety and Toxicology Center, MSU, USA
- Role: Research Assistant/Ph.D. candidate
- Duration: 2007-2008 (2 years)
- Funding organization: National Institute of Health, USA.

PATENT

- A patent out of my PhD work has been issued under the title of “Immunogenic *Escherichia coli* Heat-Stable Enterotoxin” (Pub. #: WO/2010/027473, Appl. #: PCT/US2009/004976), USA 2014.

PEER REVIEW JOURNALS

- Scandinavian Journal of Infectious Diseases, Informa Healthcare Publisher, UK, USA.
- Toxins, MDPI Publisher, Switzerland.
- Frontier in Immunology Journal, Lausanne, Switzerland.
- Bulgarian Journal of Veterinary Medicine, Faculty of Veterinary Medicine, Trakia University, Stara Zagora, Bulgaria.
- Pharmaceutical Sciences, Journal of Developing Drugs, OMICS Group Publishing, USA.
- African Journal of Microbiology Research, Academic Journals Publisher Victoria Island, Lagos.
- Webmed Central Plus, UK, <http://www.webmedcentral.com>
- Microbiology and Immunology, Wiley Publisher.



EDITORIAL BOARD

- Guest Associate Editor of Frontiers in Immunotherapies and Vaccines, Lausanne, Switzerland.
- Journal of Veterinary Science & Research, Medwin Publishers, USA.
- Austin Chromatography Journal, Austin Publishing Group, NJ, USA.
- Immunology Research and Therapy Journal, Scientific Literature, USA.

SCIENTIFIC MEMBERSHIP

- Member of American Association of Bovine Practitioners.
- Member of American Association for the Advancement of Science.
- Member of Egyptian Society for Cattle Diseases.
- Member of Egyptian Society for Equine Diseases.
- Member of Egyptian society for Camel Diseases.

WORKSHOP AND TRAINING COURSES

- Intensive workshop on the uses of electron microscope, Assiut University-Egypt, 1-6 April 2000.
- Navigating the PhD workshop: Demystifying the dissertation, personal management, forming committees, topic & proposals, MSU2003, USA.
- Biological safety and medical waste training courses. MSU. USA.
- Biodiversity of genera and species of fungi which deteriorate food materials with special attention to toxigenic human, animal and plant pathogenic species. Mycology Center, Assiut University, Egypt, 7-11 March, 2009.
- Computer- aided drug design using molecular operating environment program (CADD-MOE). 7-12 Feb. 2009 College of Pharmacy, Assiut University-Egypt.
- Protein analysis and applications. Molecular Biology Research Units, Assiut University, Egypt, 24-25 Oct. 2010.
- Environmental pollutants: Methods of their detection and prevention. Faculty of Veterinary Medicine, Assiut University, Egypt, 18-20/2/2013.
- Amino acid composition analysis. Biochemistry Dept. Faculty of Medicine, Assiut University, Egypt, 2-3/2/2016.
- Animal care and risk assessment. University of Illinois at Urbana Champaign, USA. March 6, 2018.
- Microbial profiling analyses workshop. High-Performance Biological Computing In Biology (HPCBio), Roy J. Carver Biotechnology Center, Institute for Genomic Biology, University of Illinois at Urbana Champaign, USA. 28/9- 18/11, 2023.

QUALITY ASSURANCE TRAINING PROGRAMS IN HIGHER EDUCATION

- Ethics in Education. 8-10 August 2005. Faculty and Leadership Development Center (FLDC) Assiut University, Egypt.
- Credit Hour System. 28-30 June 2008. FLDC, Assiut University, Egypt.
- Technology in Education. 28 -30 June 2008. FLDC, Assiut University, -Egypt.
- Time & Meeting Managements. 8 -10 July 2008. FLDC, Assiut University, Egypt.
- Financial and Law Aspects in University. 12-14 July 2008. FLDC, Assiut University, Egypt.
- Strategic Planning. 15-17 Dec. 2008. FLDC, Assiut University, Egypt.
- International Publishing of Research. 23 -25 May 2009. FLDC, Assiut University, Egypt.
- E-Learning: 6 - 8 June 2009. FLDC, Assiut University, Egypt.
- Institutional Self-Evaluation in Higher Education. 7-11 Nov. 2009, National Authority for Quality Assurance and Accreditation of Education (NAQAE), Ministry of Higher Education, Egypt.



- External Reviewing of Higher Education Institutions. 15-19 Nov. 2009. NAQAE, Ministry of Higher Education, Egypt.
- World Federation for Medical Education. 7-9 Dec. 2009, NAQAE, Ministry of Higher Education, Egypt.

ACADEMIC ACTIVITIES

- Providing comprehensive clinical training for final years of veterinary students at Veterinary Teaching Hospital and Upper Egypt villages, Faculty of Veterinary Medicine, Assiut University, Egypt, 1995-2002, 2008-present.
- Active member of community service program for screening, diagnosis and treatment of animal diseases in Upper Egypt, Faculty of Veterinary Medicine, Assiut University, Assiut, Egypt, 1995-2002, 2008-present.
- Active contribution in the scientific conferences, Faculty of Veterinary Medicine, Assiut University, Egypt, 1995-2002, 2008-present.

AREA OF RESEARCH INTEREST

1. Enterotoxin- Mediated Diarrheal Diseases and Diarrheal Mechanisms
2. Clinical Immunology and Vaccine Development Against Diarrheal Diseases
3. Bioprocessing and Bioactive Molecule Extraction and Purification
4. Molecular biology: Gene detection and expression
5. Acid-Base Balance and Rehydration Therapy

LANGUAGE

1. English (Excellent listening, speaking, reading and writing)
2. Deutsch (Fair)
3. Arabic (native)

COMPUTER SKILLS

1. MS (Word, PowerPoint, Excel)
2. Statistical package software (SPSS)
3. Windows, web page designing and publishing

