



Abdelbary Prince was born in Cairo, Egypt. He received the Master and Ph.D. degrees in Biochemistry and Molecular Biology (BMB). Dr. Prince did his Master and Doctorate research in the laboratory of Dr. Han at Inje University, South Korea and his post-doctoral work as a Mass Spec Specialist in the laboratory of Dr. Cregan at USDA. In 2003, he joined the Department of Biochemistry and Molecular Biology, Faculty of Veterinary Medicine, Cairo University, as a teaching assistant, and in 2023 became Professor of Biochemistry and Molecular Biology at Cairo University. His current research interests include Stem cells research, Proteomics, Mitochondrial Research, Gene therapy and Molecular diagnostics. Dr. Prince is a Fellow of the United States Department of Agriculture, MD, USA; Institute of pharmaco and Toxicogenomics, MHH, Hannover, Germany; National Laboratory of Mitochondrial Signaling, College of medicine, Busan, South Korea. Dr. Prince is the consultant of Veterinary Hospital of Armed Forces of Egypt. While teaching 15 contact hours a semester, advising students, and being involved throughout Cairo University campus, he has maintained successful research. He has participated in organization of many workshops and conferences in the field of Genomics and Proteomics as lecturer and organizer.

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Educational Qualification

2010 Ph.D. Degree in Biochemistry and Molecular Biology (BMB).

[Title of the Ph.D. Thesis:](#)

“Molecular Study on the Effect of Diabetic Oxidative Stress on Cardiac Proteome in OLETF Rats”

Employment History

2023- Present: [Professor of Biochemistry and Molecular Biology, Cairo University.](#)

2004 – 2008: Researcher at the Mitochondrial Lab, College of Medicine, Inje University, South Korea.

2018-2021: Scientific Consultant at Logistics Authority, Armed Forces of Egypt.

2020-2022: Director of Biotechnology Center, Faculty of Veterinary Medicine – Cairo University.

2021-2024: Associate Professor of Medical Research, Armed Forces College of Medicine.

Scientific and administrative activities:

- ✚ Participated in the organization of the training courses on Molecular Biology at the Biotechnology Center, Cairo University.
- ✚ CO-PI in research projects at Laboratory of Molecular Epidemiology (LME), Faculty of Veterinary Medicine, Cairo University and Cancer Biology Department, National Cancer Institute, Cairo University.
- ✚ Teaching the biotechnology courses (specialized programs) at faculty of Science, Cairo University and Faculty of Veterinary Medicine, Benha University.
- ✚ Scientific consultation at the Veterinary Military Hospital and participation in the organization of workshops and training course at the laboratories of the Veterinary Military Hospital.
- ✚ Scientific consultation and participation in the implementation of the ISO 17025 system at the Fayrouz Laboratories at National Company of Fisheries and Aquaculture, Ministry of Defense.
- ✚ Member at Faculty of Pharmacy IACUC, Ain Shams University, Egypt.

Areas of interest: Genomics and Proteomics.

Publications

- 1) Kim, H. K., Park, W. S., Kang, S. H., Warda, M., Kim, N., Ko, J.H., Prince, A., and Han, J. (2007). Mitochondrial alterations in human gastric carcinoma cell line. *Am J Physiol Cell Physiol*. 293(2):C761-71.
- 2) Kim, Y. N., Kim, H. K., Warda, M., Kim, N., Park, W. S., Prince, A., Jeong, D. H., Lee, D. S., Kim, K. T., and Han, J. (2007). Toward a better understanding of preeclampsia: Comparative proteomic analysis of preeclamptic placentas. *Proteomics Clin. Appl*.1(12): 1625–1636.
- 3) Jeong, D. H., Kim, H. K., Prince, A., Lee, D. S., Kim, Y. N., Han, J., and Kim, K. T. (2008). Plasma proteomic analysis of patients with squamous cell carcinoma of the uterine cervix. *J. Gynecol. Oncol*. 19 (3):173-180.
- 4) El-Sayed, A., Prince, A., Fawzy, A., Nadra-Elwgoud, Abdou, M.I., Omar, L., Fayed, A., and Salem, M., (2013). Sero-prevalence of Avian Influenza in Animals and Human in Egypt. *Pakistan Journal of Biological Sciences*, 16: 524-529.
- 5) Fawzy, A., Prince, A., Hassan, A., Fayed, A., Zschöck, M., Naga, M., Omar, M., Salem, M., El-Sayed A. (2013). Epidemiological studies on Johne's disease in ruminants and Crohn's disease in humans in Egypt. *Int. J. of Veterinary Science and Medicine*, 1:79–86
- 6) Prince, A.; Alsaedi, H., El-Hindi, H., and Amer H. (2013). Antioxidant action of barley whole grain in diabetic rats. *J. Stem Cells and Molecular Biology*, 1 (1):13-20.
- 7) Warda, M., Prince, A., Kim, H. K., Khafaga, N., Scholkamy, T., Linhardt, R. J., and Han, J. (2014). Proteomics of old world camelid (*Camelus dromedarius*): Better understanding the interplay between homeostasis and desert environment. *J Adv Res*, 5: 219-242
- 8) Prince, A.; Khan, F. H.; Matthews, B. F.; Natarajan, S. S. (2014). Transcriptome and proteome alterations during the nematode-soybean interaction. *Nematropica* 44(2):137-145.
- 9) Shokry, M. M., Prince, A., Attia, M.Z, Ibrahim, I. M., Farghalli, H. M., Tohamy A. F. and Ayman, A. (2014). Potential of camel-derived hemoglobin oxygen carriers as a blood substitute. *J. of Camelid Science*, 7: 35-47
- 10) Abo El-Yazeed, H.; Effat, M.; El-Hariri, M.; Prince, A.; Alarousy, R.; Eraqi, M.; Hanafy M. and Elsady E. (2015). Extracellular Protein Profile of *Microsporium canis* Secreted Proteolytic Enzymes (Exoantigens). *World Applied Sciences Journal* 33 (12): 1975-1980
- 11) Prince, A., Abdelbary, Gad Mostafa Abdalla, Hasani Ibrahim W., Warda Mohamad, and Elbehairy Adel (2016) Potential Therapeutic role of Mesenchymal Stem Cell in Delayed Wound Healing of Diabetic Rats, , *Der Pharmacia Lettre*, 8,(15) : 62-68.

- 12) El-Senosi, Yakout A., Prince, A., Afify Adel Fathey Tohamy, and "Atwa Hend" Ahmed El-Refaey, (2017) Development of Simple Multiplex Real-Time PCR Assays for Some Probiotics Detection.
- 13) Hussein, S.; Prince, A.; Elbehairy, A.; Kotb, N. S. and Bahaa, M. (2017). Lipopolysaccharide-induced Alterations of Immune-related Genes in Goat. *D. J. of Biomed. Res.* 4(1) pp. 001-005.
- 14) Mohamed, Shokry, Prince, A., M Attia, I Ibrahim, H Farghalli, A Tohamy, and A Mostafa (2017) Camel-Derived Haemoglobin, A New Blood Substitute and Oxygen Therapeutic, *Hematology & Hemotherapy Journal*, Volume 2, Issue 1, p.1-5.
- 15) Hoter, A.; Amiri, M.; Prince, A.; Amer, H.; Warda, M.; Naim, H.Y. (2018). Differential Glycosylation and Modulation of Camel and Human HSP Isoforms in Response to Thermal and Hypoxic Stresses. *Int. J. Mol. Sci.*, 19, 402
- 16) Rizk, H.; Tohamy, A.F; Sayed, W. and Prince, A. (2018). Ameliorative effects of bone marrow derived pancreatic progenitor cells on hyperglycemia and oxidative stress in diabetic rats. *Acta Histochemica*. 120(5):412-419.
- 17) Abo Norag MA, El-Shenawy AM, Fadl SE, Abdo WS, Gad DM, Rashed MA, Prince A. (2018). Effect of phytase enzyme on growth performance, serum biochemical alteration, immune response and gene expression in Nile tilapia. *Fish Shellfish Immunol.* 31;80:97-108.
- 18) Ali, A.; Mistry, B. V.; Ahmed, H. A.; Abdulla, R.; Amer, H. A.; Prince, A.; Alazami, A. M.; Alkuraya, F. S.; and Assiri, A. (2018). Deletion of DDB1- and CUL4- associated factor-17 (Dcaf17) gene causes spermatogenesis defects and male infertility in mice. *Scientific Reports*, 8:9202| DOI:10.1038/s41598-018-27379-0
- 19) Alsaedi, Haidar, Prince, A., Quraishi Dhuha, and Ali Mohamad (2019) Gene expression alterations in delayed wound healing in diabetic rats treatment of stem cells and platelet-rich plasma, *Biochemical and Cellular Archives*, 19 (1), 1783-1790.
- 20) Jorob, Tareq H., Prince, A., El-Gendy Saad M., and Houseini Motawa El E. (2019) Novel potential therapeutic role of Interleukins 2&12 and taurine combination against human hepatoma cells propagated EX-Vivo, *J Adv Pharm Edu Res*, Volume 9 , Issue 3, p.136-144.
- 21) Ezzat, M.; OKBA, M.; AHMED, S.; El-Banna, H.; Prince, A.; Mohamed, S. and Ezzat, S. (2020). In-depth hepatoprotective mechanistic study of Phyllanthus niruri: In vitro and in vivo studies and its chemical characterization. *PloS one*, 15;1: p.e0226185.
- 22) Abdelatty, A. M., Mandouh M. I., Al-Mokaddem A. K., Mansour H. A., Khalil H. M. A., Elolimy A. A., Ford H., Farid O. A. A., Prince, A., Sakr O. G., (2020) Influence of level of inclusion of Azolla leaf meal on growth performance, meat quality and skeletal muscle p70S6 kinase α abundance in broiler chickens, *Animal*, p.1-100.
- 23) Ibrahim, E.; El-Baghdady, K.; Abdelall S.; Warda M.; Prince, A. and Ibrahim M. (2020). Prevalence of multidrug resistance in the Egyptian methicillin-resistant Staphylococcus aureus isolates. *African Journal of Biological Sciences*. 16;1:43-52.
- 24) Fadl, S.; El-Gammal, G.; Sakr O.; Salah A.; Atia A.; Prince A., and Hegazy A. (2020). Impact of dietary Mannan-oligosaccharide and β -Glucan supplementation on growth, histopathology, E-coli colonization and hepatic transcripts of TNF- α and NF- KB of broiler challenged with E. coli O78. *BMC Veterinary Research*, 16:204
- 25) Awad, Els. T., Abdelaziz S. A., Prince, A., and I. M. Ahmed Hussein (2020) Protective Role Of Onion Juice And Gingko Biloba Leaf Extract Against Potassium Oxonate Induced Acute Nephrotoxicity (Hyperuricemia) In Rats, *RJPBCS*, 11(3), 144-150.
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- 27) A.M. El-Nokrashy, Banna R.A.El-, B.M.Edrise, M.M.Abel-Rahim, M.Jover-Cerdá, A.Tomás-Vidal, and Prince, A. (2021) Impact of nucleotide enriched diets on the production of gilthead seabream,

- Sparus aurata fingerlings by modulation of liver mitochondrial enzyme activity, antioxidant status, immune gene expression, and gut microbial ecology, *Aquaculture*, p.535.
- 28) M. Attia, Marwa, Elgendy Mamdouh Y., Prince, A., El-Adawy Mahmoud M., and Abdelsalam Mohamed (2021) Morphomolecular identification of two trichodinid coinfections (Ciliophora: Trichodinidae) and their immunological impacts on farmed Nile Tilapia, *Aquaculture Research*.
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 - 30) Eissa, Alaa E., Abou-Okada M., Alkurdi A. M., Zlitne R., Prince, A., and Abdelsalam M. (2021) Catastrophic mass mortalities caused by Photobacterium damsela affecting farmed marine fish from Deeba Triangle, Egypt, *Aquaculture Research*, p. <https://doi.org/10.1111/are.15284>
 - 31) Attia, M., Marwa, M.Y., Abdelsalam M., Hassan, A., Prince, A., and Younis N.A. (2021) Morphomolecular identification of Heterophyes heterophyes encysted metacercariae and its immunological and histopathological effects on farmed Mugil cephalus in Egypt, *Aquacult Int.*, <https://doi.org/10.1007/s10499-021-00708-3>
 - 32) Al-Mulhim, F., Alqosaibi, A., Al-Muhanna, A., Farid, K., Abdel-Ghany, S., Rizk, H., Prince, A., Isichei, A. and H. Sabit, (2021) CRISPR/Cas9-mediated activation of CDH1 suppresses metastasis of breast cancer in rats, *Electronic Journal of Biotechnology*, 53: 54-60.
 - 33) El Meganen, S., Badawy, M., Prince, A., El-Desouky, M., Gheait, M. (2021) Biomedical Activity of Egyptian Hibiscus sabdariffa L. as Modulator of Alzheimer's Beta-Amyloid1-42 Secretion in a Human Neuroglioma Model. *Egyptian Journal of Chemistry*; doi: 10.21608/ejchem.2021.73716.3659
 - 34) Eissa, A., Mamdouh, E., Ismail A., Sabry N., Prince, A., Mahmoud, A., El-Demerdash, O., Abdelsalam M. and Derwa M. (2021) Streptococcus, Centrocestus formosanus and Myxobolus tilapiaie concurrent infections in farmed Nile tilapia (Oreochromis niloticus), *Microbial Pathogenesis*, 158, p. <https://doi.org/10.1016/j.micpath.2021.105084>, (2021)
 - 35) Abdelatty, A.M., Mandouh, M.I., Mousa, M.R., Mansour, H.A., Ford, H., Shaheed, I.B., Elolimy, A.A., Prince, A., El-Sawy, M.A., AboBakr, H.O. and M. Bionaz (2021) Sun-dried Azolla leaf meal at 10% dietary inclusion improved growth, meat quality, and increased skeletal muscle Ribosomal protein S6 kinase β 1 abundance in growing rabbit. *Animal*, 5(10), 100348
 - 36) Eissa, A., Abdelsalam M., Attia M., Ismail G., Qorany R. and Prince, A. (2021) Morphological, molecular and clinical assessment of different Anisakis species infecting horse Mackerel Trachurus trachurus from South Mediterranean, *Egyptian Journal of Aquatic Biology & Fisheries*, 25 (4), 1085-1098.
 - 37) Sherif, A.H., Prince, A., Adel Seida, A., Saad Sharaf, M. Eldessouki, E.A. and M.A. Harfoush (2021) Moringa oleifera mitigates oxytetracycline stress in Oreochromis niloticus, *Aquaculture Research*, p.10.1111/are.15707.
 - 38) Fathy, M., Abdel-Moein, K. A., Osman, W. A., Erfan, A. M., Prince, A., Elgabaly, A. A., & Saber, M. (2023). International Journal of Veterinary Science, 12(2), 268-271.
 - 39) Farid, M. F., Abouelela, Y. S., Yasin, N. A., Mousa, M. R., Ibrahim, M. A., Prince, A., & Rizk, H. (2022). A novel cell-free intrathecal approach with PRP for the treatment of spinal cord multiple sclerosis in cats. *Inflammation and Regeneration*, 42(1), 1-13.
 - 40) Farid, M. F., Abouelela, Y. S., Yasin, N. A., Al-Mokaddem, A. K., Prince, A., Ibrahim, M. A., & Rizk, H. (2023). Laser-activated autologous adipose tissue-derived stromal vascular fraction restores

spinal cord architecture and function in multiple sclerosis cat model. Stem Cell Research & Therapy, 14(1), 1-16.

- 41) Eissa, A., Korany, R., El Zlitne, R., Magdy, A., Sharaf, M., Abdelbaky, A., Prince, A., Attia, M. Impact of Anisakis pegreffii Infection on Gonadal Health and Gonadosomatic Index of European Hake (Merluccius merluccius). Journal of Applied Veterinary Sciences, 2023; 8(3): 67-74
- 42) Fathy, M., Abdel-Moein, K.A., Osman, W.A., Elkattan, A.M., Prince, A., Samir, A. Occurrence of Toxigenic Clostridium difficile among Diarrheic Sheep and Goats in Rural Settings: Public Health Concern. International Journal of Veterinary Sciences, 2023, 12(2): 268–271
- 43) Eissa, A., Attia, M.M., El Zlitne, R.A., Magdy, A. A., Edrees, A., Sharaf, M. S., Mahmoud, A. E., Prince, A., Afify, E. A., El Behiri, S. and Younis N. A.. The puzzling etiologies of transient black discoloration in Nile Tilapia (Oreochromis niloticus) intensively cultured under RAS system. Aquacult Int 32, 581–592 (2024).
- 44) Khalil, S., Abdellatif, H., Al-Sagan, A., Melegy, T., Prince, A., & El-Banna, R. (2023). Efficiency of xylanase, emulsifier, and guanidinoacetic acid in restoring energy deficit in male broilers fed low metabolisable energy diets. Journal of Advanced Veterinary Research, 14(1), 103-112.
- 45) Negm, A. E., Abo-Raya, M. H., Gabr, A. M., Baloza, S. H., El-Nokrashy, A., Prince, A., Arana, D., Wang, Y., Abdelazeem, S., Albadrani, G. M., Al-Ghadi, M. Q., Abdeen, A., Shukry, M., & El-Sayed Khalafallah, M. M. (2024). Effects of phytase enzyme supplementation on growth performance, intestinal morphology and metabolism in Nile tilapia (Oreochromis niloticus). Journal of animal physiology and animal nutrition, 10.1111/jpn.13939. <https://doi.org/10.1111/jpn.13939>

Collaboration in Scientific Projects

Proteomics projects:

Sponsored by Grants R05-2006-000-00413-0 of the Korea Science and Engineering Foundation and the Research Project on the Production of Bio-organs, Ministry of Agriculture and Forestry, Korea, through the Biohealth Products Research Center (BPRC) of Inje University.

A) Cancer biomarkers discovery project

The purpose of the work was to disclose and characterize the potential cancer biomarkers in plasma form cervical cancer patient.

B) Pre-eclampsia project: To figure out the clinical target proteins that can be used as therapeutic target for prevention and/or treatment of this illness.

C) Ischemic heart disease Project:

Using animal model, we aim to figure out the up and down regulated proteins that contribute in the development of the cardiac protection. This will afford a good chance for better approach towards new safeguarded interference against many cardiac illnesses.

D) Proteomic analysis of HCV associated hepatocellular carcinoma

Sponsored by Grants of Cairo University through Cancer Biology Department, National Cancer Institute, Cairo University. The main goal is the identification of proteomic profile in Egyptian HCV-associated hepatocellular carcinoma.

Genomics projects:

Sponsored by Grants of the Academy of Scientific Research and Technology (ASRT), Egypt, through the Laboratory of Molecular Epidemiology (LME), Faculty of Veterinary Medicine, Cairo University.

A) Mycobacterium Avium Paratuberculosis (MAP) Project

The purpose of the work is to determine the incidence of MAP in different animal species using the molecular tools and to develop a protocol for rapid screening from field samples.

Conferences

Participation in organizing Conferences

General Secretary of the Conference on *Animal Biotechnology and Veterinary Medicine* that was held at Dar Hekma, Egyptian Medical Syndicate, Egypt August 2021.

General Secretary of the International Conference on *Biotechnology and Personalized Medicine* that was held at Cairo University, Egypt, April 2019.

General Secretary of *the International Conference on Molecular Biology and Stem Cells* that was held at Ain Shams University, Egypt, May 2013.

The Symposium *Biotechnology Symposium of Unique Life (SOUL)*, Faculty of Science, Cairo University, Egypt, March 2013

Organization of the *2nd Symposium of Korean Society for Mitochondrial Research and Medicine*, South Korea, November 2007.

Attending Conferences

The Conference *Veterinary Medicine: A step towards better future*, the Armed Forces of Egypt, Military Vet. Hospital, Egypt, November 2019.

The 11th Conference *Towards National Strategy to Control Poultry Industry Problems in Egypt*, the Egyptian Veterinary Poultry Association, Porto Marina, Egypt, April 2019.

The International Conference of Biochemistry & Molecular Biology in the 21st Century *Bridges to translational medicine & pharmaceutical technology*, German University in Cairo (GUC), Egypt, March 2018.

The 2nd International Conference of the Faculty of Pharmacy Ain Shams University *Future Trends in The Development of Pharmaceutical Education and Research*, Novotel Cairo, Egypt, November 2018.

The Conference of the Egyptian Society For Progenitor Cell Research *Advances in Stem Cell Research*, Military Medical Academy, Egypt, May 2017.

The 6th International Conference of the *Egyptian Society of Virology*, Hurghada, Egypt, December 2016.

Poster presentation in the *8th International Proteomics Conference, KHUPO* Jeju, South Korea May, 2008.

Oral presentation in the *9th International Congress on Cell Biology (ICCB) 2008* Seoul, South Korea.

Poster presentation in the *HUPO 7th Annual World Congress Amsterdam 2008* Netherlands, August 2008.

The *International Conference on Pharmacogenomics* BEXCO, South Korea, April 2008.

The 1st International Conference *Emerging Zoonotic Diseases and Human Health* Cairo University, April 2007.

Actively participated in the *6th International Proteomics Conference, KHUPO*, March 2006.

Participation in the international symposium organized by the catholic University of Korea which entitled *Integrated Signal Networking of Metabolic Dysfunction*, March 2008.

Training courses and Workshops

Participation in organizing Workshops:

The workshop *PCR: molecular tool for diagnosis of viral diseases*, Unit of Diagnosis & Treatment of Poultry Diseases, June 2013

The workshop *Gene Expression Analysis*, German University in Cairo (GUC), April 2013

Participation in the workshop organized by the National Center for Biotechnology Information (NCBI) entitled *The NCBI Discovery Workshops*, May 2012.

The training course *Western Blotting*, Biotechnology Center, Cairo University, May 2011.

The training course *Proteomics: Post-genomic Era of Molecular Biology*, Faculty of Pharmacy and Biotechnology, German University in Cairo (GUC), July 2011.

The training course *Molecular Biology Techniques and its Applications in Biotechnology*, Menoufyia University, July 2010.

The training course *Principals and Applications of Biotechnology*, the National Research Centre of Egypt (NRC), October 2009.

Attending Workshops

1. The workshop *Statistical Analysis of Bio-Experiments*, the FLDC, Cairo University, Egypt, January 2018.
2. The workshop *Quality Standards in Teaching*, the FLDC, Cairo University, Egypt, July 2018.

3. The workshop *Competing for Research Funds*, the FLDC, Cairo University, Egypt, July 2018.
4. The workshop *Research Ethics*, the FLDC, Cairo University, Egypt, July 2018.
5. The workshop *Arabic and English Editing in Scientific Research*, the FLDC, Cairo University, Egypt, April 2017.
6. The workshop *Evidence Based Strategy in Medical Practice*, the FLDC, Cairo University, Egypt, July 2018.
7. The workshop *Laboratory Biosafety and Bloodborne Pathogens*, the United States Department of Agriculture (USDA), Maryland, USA entitled July, 2012.
8. The workshop on *Molecular Biology, Bioinformatics and Proteomics, from DNA to Gene Function* organized by Fayoum University, January 2011.
9. The workshop *Examination Systems and Student Assessment*, FLDC, Cairo University, Egypt, April 2010.
10. The workshop *Time and Conference Management*, the FLDC, Cairo University, Egypt, November 2010.
11. The workshop *Statistical Analysis Using SPSS Program*, the Statistical Studies and Research Institute, Cairo University, Egypt, April 2010.
12. The workshop *Conferences Organization*, the FLDC, Cairo University, Egypt, January 2010.
13. The workshop *Educational Technology*, the FLDC, Cairo University, Egypt, February 2009.
14. The workshop *Scientific Publication*, the FLDC, Cairo University, Egypt, October 2009.
15. The workshop *The Credit Hours System*, the FLDC, Cairo University, Egypt, May 2009.
16. The workshop *Effective Presentation Skills*, the FLDC, Cairo University, Egypt, January 2007.
17. The workshop *Scientific Research Methodology*, the FLDC, Cairo University, Egypt, February 2007.
18. The workshop *Effective Teaching*, the FLDC, Cairo University, Egypt, January 2007.
19. The workshop *2D Electrophoresis and Image analysis*, GE Healthcare Biosciences, Korea, 2006.
20. The workshop *Principle and applications of Real Time- qPCR*, Pharma tech Ltd., South Korea, September 2006.
21. The workshop *Thinking Skills*, the FLDC, Cairo University, Egypt, July 2005.
22. The workshop *How to write and publish a scientific paper*, Faculty of Veterinary Medicine, Cairo University, Egypt, March 2005.

Fellowships

- *Pharmaco and Toxicogenomics Institute, Medical School of Hannover, (MHH)*, Germany
- *United States Department of Agriculture (USDA)*, Maryland, USA.
- *Mitochondrial Signaling Lab.*, Inje University, Korea.
- *Biotechnology Center for Services and Research (BCSR)*, Faculty of Veterinary Medicine, Cairo University.
- *Lab of Molecular Epidemiology (LME)*, Faculty of Veterinary medicine, Cairo University.

Awards

- ✓ First Prize Inje University, November 2007.
- ✓ Travel Award KHUPO, Human Proteome Organization, May 2008.

Other Skills

- Computer:**
- Microsoft Word, Microsoft PowerPoint, Microsoft Excel, Adobe Photoshop
 - (Image Master 2D Platinum; Amersham Bioscience, (The software for 2DE gel analysis)
 - Multiguage Program (for Expression analysis).
 - Image J Program for measuring the size and relative percentages.
 - Origin 6 professional and SPSS programs for statistical analysis.
 - FlexControl, Biotoools for MALDI-TOF

Biotechnology Techniques:

- Nucleic acid Extraction, conventional and Real-time PCR.
- Gene cloning.
- Polyacrylamide, Agarose Gel Electrophoresis and Western blotting.
- Protein purification and Isoelectric Focusing.

-Mass Spectrometry (MALDI-TOF) Bruker Ultraflex II.

Memberships

[Human Proteome Organization](#) (HUPO).

[Egyptian Society for Biochemistry and Molecular Biology](#) (ESBMB).

[Egyptian Veterinary Medical Society](#) (EVMS).

General Secretary of [Arab Society of Stem Cells & Molecular Biology](#) (ASSCMB).

References (On Request)