

EL-Hassan Moustafa Gaber Mokhamer

Professor of Molecular Biology
Zoology Department-Faculty of Science
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**Biography****Academic Qualifications:-**

1. Doctor of philosophy in Applied Medical Chemistry, Medical Research Institute, Alexandria University (2007)
2. Master degree in Applied Medical Chemistry, Medical Research Institute, Alexandria University (2004)
3. Diploma in Analytical Biochemistry, Faculty of science, Alexandria University (1994).
4. Bachelor of Science degree in Biochemistry, Faculty of Science, Alexandria University (1990).

Professional Experiences & Positions held:-

1. Vice Dean for Community Service and Environmental Development (11/2025- Now)
2. Professor of Molecular Biology, Zoology Department, Faculty of Science, Damanhour University (7/2025)
3. Assistant professor of Physiology, Zoology department, Faculty of Science, Damanhour University (9/2019- 7/2025)
4. Lecturer of Molecular Biology, Zoology Department, Faculty of Science, Damanhour University (4/2016- 9/2019)
5. Lecturer of Biochemistry and Molecular Biology at the Department of Pharmacology and Toxicology, faculty of pharmacy, Pharos University in Alexandria (9/2010-3/2016).
6. Executive Manager of Drug Research Centre, Faculty of Pharmacy, Pharos University in Alexandria (PUA) (2014-2016)
7. Student activities consultant, Faculty of Pharmacy, Pharos University in Alexandria (PUA) (9/2010- 2/2014).
8. Lecturer of Cancer Chemistry course for postgraduate students, Applied Medical Chemistry Department, Medical Research Institute, Alexandria University. (2009/2010).
9. Research Scientist at Chromatography unit (HPLC, GC), Medical Technology Centre, Medical Research Institute, Alexandria University. (2001-2010)
10. External Collaborator, Department of Public Health and Cell Biology, the Second University of Rome "Tor Vergata", Italy.

	Applications of <i>Molecular biology techniques</i> on Nematode parasites. (1998-1999). 11. Junior Researcher (Egyptian-Italian Cooperation Project), Department of Public Health and Cell Biology, The Second University of Rome "Tor Vergata", Rome, Italy. (1996-1998). <u>Professional Membership</u> - Egyptian Society of Biochemistry and Molecular Biology. - The Society of Pathological Biochemistry and Hematology.
Research Interests	RNA-Protein interaction. Nutrient control of gene expression. Molecular & Cancer Biology.
Publications	1. Berrilli F, Ceschia G, Basilicata L, De Liberato C, Di Cave D, Mokhamer E, Orecchia P. Monitoraggio parassitologico in Chamelea gallina (Mollusca, Bivalva) in Adriatico. Parassitologia 40(suppl.1),1998. 2. Berrilli F, De Liberato C, Di Cave D, Mokhamer E, Orecchia P. Biodiversity of the metazoan parasite community of A. Anguilla. Bio Mar Medit 1998, 5: 611-13. 3. Mamdouh Elyamany, Aziza Ibrahim, Geylan Fadaly, Lobna Aldesouky, El-Hassan moustafa Gaber. Effects of vitamins (C and E), Glycine and low-level laser therapy on experimental hepatic fibrogenesis. J. of Egypt. Soc. Endocrin., Metab & Diab. 2008(January);40(1):177-190. 4. Lamia M. El-Samad, Zeinab A. El-Moaty and Hassan M. Mokhamer. Effects of Tramadol on the Development of Lucilia sericata (Diptera: Calliphoridae) and Detection of the Drug Concentration in Postmortem Rabbit Tissues and Larvae. Journal of Entomology. 2011;8(4):353-364. 5. Aziza A. Saad, Elhassan Mokhamer, Mohamed Abdel Mohsen, Gaylan Fadaly. Ethanol-induced hepatopathy In rats. J. of Blue Biotechnology 2014;2(2):365-376. 6. Saad AA, Mokhamer EM, Mohsen MAA, Fadaly GA. Attenuation of carbon tetrachloride-induced hepatic fibrosis by glycine, vitamin E and vitamin C. J Exp Integr Med. 2014;4(3):180-186. 7. Aziza A. Saad, Ahmed M. Elnmer, Amany M. EL-Sikaily, EL-Hassan Mokhamer, Mahmoud A. Khamis. Urinary Metabolites and oxidative stress of polycyclic Aromatic hydrocarbons as biomarker of Exposure to environmental marine Pollution.

- International journal of chemical and Environmental Engineering. 2015;6(2):96-104.
8. Aml A.Elnaggar, Moustafa Elnaggar, EL-Hassan **Mokhamer**, Mona A.Ayad. Prognostic value of serum free light chain in Multiple Myeloma.Egyptian Journal of Immunology 2015;22(1):96-78.
 9. Lamia M.ELsamad, EL-Hassan **Mokhamer**, Wafaa Osman, Aya Ali, Mourad L. Shonouda.The ground beetle, Blaps polycresta (Coleoptera: Tenebrionidae) as a Bioindicator of Heavy Metals Soil Pollution.Journal of Advances in Biology. 2015;7(1):1153-1160.
 10. Wafaa Osman, Lamia M. El-Samad, EL-Hassan **Mokhamer**, Aya El-Touhamy, Mourad Shonouda. Ecological, morphological, and histological studies on Blaps polycresta (Coleoptera: Tenebrionidae) as biomonitors of cadmium soil pollution. Journal of Environmental Science and Pollution Research Journal of Environmental Science and Pollution Research .2015;22:14104-14115.
 11. Mourad L. Shonouda, Lamia M. El-Samad, EL-Hassan **Mokhamer**, Noura Toto.Use of oxidative stress and genotoxic biomarkers of aquatic Beetles anaceana globulus (Coleoptra: Hydrophilidae) as bio-monitors of water pollution.Journal of Entomology. 2016(1): 1-10.
 12. **Mokhamer** MH, El-Demerdash FM, Jebur AB. Oxidative Stress and Role of Antioxidants in Diabetes Mellitus. Austin Endocrinol Diabetes Case Rep2016; 1(1): 1006.
 13. El-Samad LM, Radwan EH, **Mokhamer** EHM, Bakr NR. Aquatic beetles Cercyon unipunctatus as bioindicators of pollution in Lake Edku and Mariut, Egypt. Environ Sci Pollut Res Int. 2019 Jan 9. doi: 10.1007/s11356-018-4016-5.
 14. **Mokhamer**, E. H., Yehia, M. M., Ramadan, H. S., & EL-Gendy, O. (2019). Amelioration of the therapeutic efficacy of 5-Fluorouracil loaded chitosan nanoparticles in experimentally induced Hepatocellular Carcinoma. Journal of Medical and Life Science, 1(1), 1-18.
 15. Nehal, M., **Mokhamer**, E. H. M., Zidan, A. A. A., Elgerbed, M., Abdul-Baki, E. A., & Elfarash, G. M. (2019). Analysis of miRNA-21 Relative Expression in Breast Cancer Patients. *European Journal of Applied Sciences*, 11(1), 14-22.
 16. Nehal M. El mashad, Abdel-Aziz A. Zidan, ELHassan M. **Mokhamer**, Abdel Fattah Beltagy, Abdul-Baki, E Azhar Y. Emara. Analysis of Mir-22 Relative Expression in Breast Cancer Patients.Global Journal of Molecular Sciences 14 (1), 01-09
 17. Aziza Saad, Tarek Hussien, Amany El-Sikaily, Mohamed abdel Mohsen, El-Hassan **Mokhamer**, Amany Yousef, Jihan

- Mahmoud. Effect of Polycyclic Aromatic Hydrocarbons Exposure on Sperm DNA in Idiopathic Male Infertility. *Journal of Health and Pollution* 2019; 9(21): 190309.
18. EL-Hassan **Mokhamer**, Eman Radwan, Moataz ELsaka. Oxidative stress and DNA damage in Nile Tilapia (*Oreochromis niloticus*) as biomarkers of aquatic pollution. *Journal of Bioscience and Applied Research* 2019; 5(1); 92 -109.
 19. Kheirallah, D. A. M., El-Samad, L. M., **Mokhamer**, E. H. M., Abdul-Aziz, K. K., & Toto, N. A. H. (2019). DNA damage and oogenesis anomalies in *Pimelia latreillei* (Coleoptera: Tenebrionidae) induced by heavy metals soil pollution. *Toxicology and Industrial Health*, 35(11-12), 688-702.
 20. El-Samad, L. M., **El Hassan, M.**, Kheirallah, D. A., Abdul-Aziz, K. K., & Toto, N. A. (2020). BIOCHEMICAL, molecular, and histological markers in *PIMELIA latreillei* (Coleoptera: Tenebrionidae) for evaluating soil pollution. *Fresenius Environ. Bull.*, 29, 4224-4239.
 21. El-Samad, L. M., El-Ashram, S., Kheirallah, D. A., Abdul-Aziz, K. K., Toto, N. A., & **Mokhamer, E. H. M.** (2021). Relative gene expression, micronuclei formation, and ultrastructure alterations induced by heavy metal contamination in *Pimelia latreillei* (Coleoptera: Tenebrionidae) in an urban-industrial area of Alexandria, Egypt. *Plos one*, 16(6), e0253238.
 22. Khedr, S. I., **El Hassan, M. M.**, Hassan, A. A., El-Feki, A. S., Elkhodary, G. M., & El-Gerbed, M. S. (2021). *Psidium guajava* Linn leaf ethanolic extract: In vivo giardicidal potential with ultrastructural damage, anti-inflammatory and antioxidant effects. *Saudi Journal of Biological Sciences*, 28(1), 427-439.
 23. **Mokhamer, E. H. M.**, Zidan, A. A. A., El. Ghayesh, N. K., & Abdel-Aziz, K. K. (2022). Attenuation of trichloroacetic acid-induced hepatocellular carcinoma by *Artemisia judaica* ethanolic extract in male rats. *The Journal of Basic and Applied Zoology*, 83(1), 2.
 24. Zidane, A. A., Mahmoud, E. A. R., Tarek, M., & **Mokhamer, E. H.** (2024). Molecular evaluation of the anticancer potential of 1, 3, 4-oxadiazole-2-thiones derivative and its synergetic action with *Nigella sativa* seed extract (Thymoquinone) in experimentally induced Murine Lung Cancer Cell Line Model. *Journal of Medical and Life Science*, 6(4), 566-587.
 25. Zidane, A. A., Mahmoud, E. A. R., Hamisa, A., & **Mokhamer, E. H.** (2025). Molecular and Immunological assessment of anticancer activity of 1, 2, 4-triazolo [4, 3-b][1, 2, 4] triazole derivative in combination with *Artemisia Judaica* Extract in Murine Lung cancer model. *Journal of Medical and Life Science*, 7(1), 60-84

	26. Hassab El-Nabi, S. E., Zidan, A. A. A., El Ghayesh, N. K., Abdel Aziz, K. K., & Mokhamer, E. L. (2025). Molecular Evaluation of the Therapeutic Potential of DNA-Based Vaccines Against Experimentally Induced Lung Cancer. <i>Journal of Bioscience and Applied Research</i>, 11(1), 20-36. 27. Hassab El Naby, S. E., Elkhodary, G. M., Elmohalawy, M. E., Abdel-Halim, K. Y., & Mokhamer, E. H. M. (2025). Molecular evaluation of the prophylactic effect of marine sponge (<i>Hyrtios</i> sp.) extract on 1,2-dimethylhydrazine-induced hepatotoxicity in male rats. <i>Biological and Biomedical Journal</i>, 3(1), 212-227.
Conferences and workshops	1. The Annual conference of immunity SIAIC (The second University of Rome Tor Vergata, Italy. Sept 1996. 2. Theoretical and practical course on parasites of the gastrointestinal tract. Milano, Italy. Jan 1997. 3. The XXVIII congress of the Italian society of marine biology with poster "Diversità biologica delle comunità del metazoi parassiti di Anguilla Anguilla". May 1997. 4. National Academy of Lincei. Congress XV giornata dell'Ambiente. "Conservazione e valorizzazione della biodiversita" June 1997. 5. International conference on infectious diseases and public health. Medical Research Institute, Alexandria University, October 1997. 6. Workshop on epidemiology "Diagnosis and management of Fascioliasis" Medical Research Institute, Alexandria University, October 1997. 7. Conference of the MRI on "Recent Diagnostic and Therapeutic Approaches" Medical Research Institute, Alexandria University, October 2003. 8. Training course on "Laboratory hematology", Medical Technology Center, Medical Research Institute, Alexandria University, April 2006. 9. Training course "Basic Molecular Biology" PCR techniques and Western Blot Analysis. Medical Technology center, Medical Research Institute, Alexandria University, May 2006. 10. The Annual Conference of the MRI on "Advances in Medical Research", Medical Research Institute, Alexandria University, November 2006. 11. Workshop on "Medical Research Methodology and Proposal Writing" Medical Research Institute, Alexandria University, May 2007. 12. The Annual Conference of the MRI " Liver Diseases " Medical Research Institute, Alexandria University, November 2007. 13. 2nd Annual Conference" Arabic Association for the Study of Diabetes and Metabolism" 2007.

14. "1st Scientific Conference of Medical Biochemistry Department, Faculty of Medicine, Mansoura University. Feb 2008.
15. Workshop on "Basics and principles of HPLC in Biochemical Analysis", Medical Research Institute, Alexandria University, November 2008 (Organizer).
16. Workshop on "Basics and principles of GC in Biochemical Analysis" Medical Research Institute, Alexandria University, January 2009 (Organizer).
17. Workshop on "Applications of Molecular Biology techniques in immunology" Medical Research Institute, Alexandria University, February 2009. (Organiser)
18. Workshop on "Basic techniques in Cell Culture" Medical Research Institute, Alexandria University, 2009.
19. Workshop on "Basics and Applications of HPLC and GC in Medical biochemistry ", Medical Research Institute, Alexandria University, April 2010 (Organizer).
20. Third Scientific Conference of Medical Biochemistry Department, Faculty of Medicine, Mansoura University." Frontiers of Medical biochemistry and Molecular biology, November 2010.
21. Workshop on "Basics and Applications of HPLC and GC in Medical biochemistry", Medical Research Institute, Alexandria University, May 2011 (Organizer).
22. Workshop on "Molecular epidemiology and phylogenesis" organized by the Italian National Institute of Health, Rome, Italy, in the framework of the training activities of the health governance project funded under the second phase of the Italian-Egyptian Debt for development Swap Program, MRI, Alexandria university, 19-21 March 2012.
23. Continuing Professional Development (CPD) Program in teaching and learning delivered by the Institute of International Education to PUA staff members, 29 - 31 March 2012, at Pharos University in Alexandria.
24. 5th international conference of Medical Research Institute, Alexandria University "Advances in medical research (Obesity). 13- 16 November, 2012.
25. Workshop on "Basics and Applications of HPLC and GC in Medical Biochemistry" Medical Research Institute, Alexandria University, 26-28 March 2013.(Organizer).
26. Workshop on "cell culture and stem cell research", Medical Research Institute, Alexandria University, December 2013.
27. Annual Conference of the Egyptian Society of Biochemistry and Molecular Biology. May 2014 Ain Shams University.
28. The 8th International Conference on Biological Sciences in collaboration with the 21st International Conference of the German Society. Tanta University 12-13 November 2016

29. International conference of analytica 2016, San Antonio, USA
Biochem Anal Biochem 2016, 5:5(Suppl)
30. The second International Conference" Society of Pathological Biochemistry and Hematology. February 2017 Faculty of Science, Menofiya University.
31. The 13th Annual international conference and workshop of The Egyptian Society of Experimental Biology, February 2017.
32. The 6th International Conference on Biological and Environmental Sciences. 22- 26 March 2018 Mansoura- Louxor.
33. The 35th Annual Congress of Faculty of Medicine, Tanta University, 7th International Congress "Reality and Ambition in Advanced Medicine". 3-6 March 2020
34. International conference on climate change. Arab Academy, Friday, Saturday, 2-3 December 2022.
35. Symposium on Medical Science and Diabetes, Faculty of Medicine, Alexandria University, 16-17/12/2022.
36. 6th international conference of the Society of pathological biochemistry and Hematology, convention Center, Faculty of Medicine, Alexandria University, 30th December 2022.
37. 3rd International Conference for Future Studies and Risk Management. (ICFSRM 2022) Climate change, challenges and threats 2-3 DECEMBER 2022.
38. The 6th international conference of the Society of pathological biochemistry and Hematology, convention Center, Faculty of Medicine, Alexandria University, 30th December 2022.
39. Molecular biology workshop "Digital PCR", "Automated DNA and RNA Extraction", Neon transfection system. Faculty of Science, Damanhour University. 3/5 and 8/5/2023.
40. The international conference entitled "Milestone in Cancer Research From Genomics To Practice. Action In Challenging Times". 13-14 May 2023.
41. The 17th annual international conference of the Egyptian Society for Experimental Biology. Ain Shams Innovation Hub, 19 July 2023.
42. Gas Chromatography-Mass Spectrometry Training. Faculty of Science. Damanhour University, On 1-2 July 2024.
43. Molecular Biology Techniques Training. Faculty of Science. Damanhour University, On 8-9 July 2024.
44. Molecular Biology Techniques Training. Faculty of Science. Damanhour University, On 2-3 September 2024.
45. The 7th International Conference of the Society Of Pathological Biochemistry and Hematology, Convention Center, Faculty of Medicine, Alexandria University, Egypt. On 18 October, 2024.
46. Microinjection and IVF techniques workshop. Faculty of Science. Damanhour University, On 13-14 August 2024.

**Professional and
Scientific Activities**

Teaching courses:

Undergraduate Courses:-

1. Cell and Molecular Biology PHR 171
2. Molecular therapeutics PHR 585
3. Fundamentals of Clinical Chemistry PHR 573
4. Molecular Biology I MB 309
5. Molecular Biology II MB 405
6. Molecular Biology of Cancer Z411
7. Bioethics Z413
8. Vertebrates and Genetics Z204
9. General Zoology Z101

Post-graduate courses

1. Enzymology
2. Hematology
3. Endocrinology
4. Pathophysiology
5. Cancer chemistry. (MRI- Alexandria University)
6. Protein Processing
7. Molecular Diagnostics
8. Molecular Biotechnology
9. Molecular biology of RNA
- 10.Regulation of Cell proliferation, Senescence and death.
- 11.Genomics and proteomics
- 12.Epigenetics
- 13.Topics in Developmental Molecular Biology.

Thesis supervision :

1. Thesis for Master's degree, Medical Research Institute, Alexandria University. **Determination of polycyclic aromatic hydrocarbons metabolites as a biomarker of exposure to environmental marine pollution.** Co-supervision with Prof. Aziza A. Saad
2. Thesis for Master's degree, Faculty of Science, Alexandria University. **Evaluation of the effect of environmental pollution on chromosomal and biochemical parameters of**

non-target aquatic insect. Co-supervision with Prof. Murad Shenoda.

3. Thesis for Master's degree, Faculty of Science, Alexandria University, **Biochemical Assay of the Effect of Environmental Pollutants on the Herbivorous Tenebrionid Beetles.** Co-supervision with Prof. Murad Shenoda.
4. Thesis for Ph.D, Faculty of Science, Damanhour University, **Therapeutic effects of Moringa Oleifera on Experimental Type I Diabetic Nephropathy.** Co-supervision with A.. Mohamed Elgerbed.
5. Thesis for Ph.D, Faculty of Science, Damanhour University, **Study on beetle biomarkers as a tool for environmental pollution.** Co-supervision with Prof. Karoline Kamel.
6. Thesis for Master's degree, Faculty of Science, Damanhour University. **Study the relative expression of mi-RNA-22 and its correlation with apoptosis in breast cancer patients.** Co-supervision with Dr. Abdel Aziz Zidan.
7. Thesis for Master's degree, Faculty of Science, Damanhour University. **Identification of the role of mirna-21 and its correlation with T-Cell lymphocytes in breast cancer patients.** Co-supervision with Dr. Abdel Aziz Zidan
8. Thesis for Master's degree, Faculty of Science, Damanhour University. **Study the correlation between miRNA-145 expression and the therapeutic response in liver cancer patients.** Co-supervision with Dr. Abdel Aziz Zidan.
9. Thesis for Master's degree, Faculty of Science, Damanhour University. **Effect of Honey Bee Venom (Apis mellifera) Nanoparticles on Burn Healing in Alloxan-Induced Diabetic Rats.** Co-supervision with Prof.EL-Samad Lamiaa.
10. Thesis for Master's degree, Faculty of Science, Damanhour University. **The anti-oxidant and anti-tumor activity of Artemisia Judaica in tumour-bearing mice.** Co-supervision with Prof.Mohamed EL-gerbed.
11. Thesis for Master's degree, Faculty of Science, Damanhour University. **Evaluation of the ameliorative effect of Flaxseed oil against Thiamethoxam-induced hepatorenal toxicity in male albino rats.** Co-supervision with Prof.Heba Mohamed.
12. Thesis for Master's degree, Faculty of Science, Damanhour University. **Molecular evaluation of the anticancer potential of 1,3,4-oxadiazole-2-thiones derivative and its synergetic action with Nigella sativa seed oil or extract experimentally induced Murine Lung Cancer Cell Line Model.** Co-supervision with Prof.Sayed Abdel Reheem.
13. Thesis for Master's degree, Faculty of Science, Damanhour University. **Molecular and immunological assessment of anticancer activity of a novel 1,2,4-triazolo[4,3-**

b)[1,2,4]triazol derivative in combination with Artemisia judaica extract in Murine lung cancer. Co-supervision with Prof.Sayed Abdel Reheem.

14. Thesis for Ph.D degree, Faculty of Science, Damanhour University. **Molecular Evaluation of the Protective Effect of Marine-Derived Bioactive Compounds on Experimentally-Induced Hepatotoxicity.** Co-supervision with Prof.Gehan EL-Khoudary.
15. Thesis for Ph.D degree, Faculty of Science, Damanhour University. **Molecular Evaluation of Anti-tumor DNA-Based Vaccine Impact on Experimentally Induced Lung Carcinoma.**Co-supervision with Ass. Prof. Abdel Aziz Zidan.
16. Thesis for Ph.D degree, Faculty of Science, Damanhour University. **Determine the impact of IL-23 cytokine on the functional response of T-cells in melanoma tumor-bearing mice.** Co-supervision with Ass. Prof. Abdel Aziz Zidan.
17. Thesis for Master's degree, Faculty of Science, Damanhour University. **Determine the impact of IL-9 cytokine on the proliferative response of T-cells in melanoma tumor bearing mice.** Co-supervision with Ass. Prof. Abdel Aziz Zidan.
18. Thesis for Master's degree, Faculty of Science, Damanhour University. **Determine the effect of tumor-derived immune suppressive cells on the activity of T-cells in melanoma tumor-bearing mice.** Co-supervision with Ass. Prof. Abdel Aziz Zidan.
19. Thesis for Master's degree, Faculty of Science, Damanhour University. **Assessment of Hepatoprotective Effect of Thymus vulgaris Aqueous Extract against 1,2-Dimethylhydrazine-induced Oxidative Stress and Hepatic Damage in male albino rats.**Co-supervision with Ass. Prof. Mohamed EL-Ghazaly.
20. Thesis for Master's degree, Faculty of Science, Damanhour University. **Molecular Evaluation of the Prophylactic effect of rice bran oil against carbon tetrachloride-induced oxidative stress and liver injury in rats.** Co-supervision with Dr. Noha Samak.
21. Thesis for Master's degree, Faculty of Science, Damanhour University. **Assessment of Marine Species-Derived Bioactive Agents in Mitigating Chemically-Induced Hepatotoxicity in Rats.** Co-supervision with Dr. Heba Khalifa and Dr. Nada Shaaban.