



## CURRICULUM VITAE

**AFAF ABDELMOHSEN ABDELKADER, MD**

### \*PERSONAL DATA:

- **Name:** AFAF ABDELMOHSEN ABDELKADER.
- **Date of Birth:** 11/08/1977.
- **Place of Birth:** EGYPT.
- **Nationality:** Egyptian.
- **Cell Phone:** (+2) 01006606272
- **E-mail:** [afaf.abdelkader@fmed.bu.edu.eg](mailto:afaf.abdelkader@fmed.bu.edu.eg)  
[afafakader400@yahoo.com](mailto:afafakader400@yahoo.com)
- **Google scholar:** <https://scholar.google.com/citations?user=ocJTUqoAAAAJ&hl=en>
- **Scopus:** <https://www.scopus.com/authid/detail.uri?authorId=57204531011>
- **Research Gate:** [https://www.researchgate.net/profile/Afaf\\_Abelkader](https://www.researchgate.net/profile/Afaf_Abelkader)
- **ORCID :** <https://orcid.org/0000-0002-0460-3402>

### \* CURRENT INSTITUTIONAL AFFILIATION :

- **Title:** Associate professor of Forensic Medicine and Clinical Toxicology.
- **Office:** Department of Forensic Medicine and Clinical Toxicology, Faculty of Medicine, Benha University.
- **Address:** Benha -Qalyuobia, **EGYPT.**

### \*EDUCATION:

| Conferring Institution                               | Degree                         | Field                                     | Year |
|------------------------------------------------------|--------------------------------|-------------------------------------------|------|
| American University of Continual Education           | Professional Diploma           | Research Statistics                       | 2017 |
| Faculty of Medicine, Benha University, <b>EGYPT.</b> | MD degree                      | Forensic Medicine and Clinical Toxicology | 2013 |
| Faculty of Medicine, Benha University, <b>EGYPT.</b> | Master degree ( <i>M.Sc.</i> ) | Forensic Medicine and Clinical Toxicology | 2007 |
| Faculty of Medicine, Benha University, <b>EGYPT.</b> | Bachelor degree<br>"Very good" | Medicine and Surgery                      | 2001 |

### \*ACADEMIC APPOINTMENTS :

| Institution                                          | Position                                                                                | Date |
|------------------------------------------------------|-----------------------------------------------------------------------------------------|------|
| Faculty of Medicine, Benha University, <b>EGYPT.</b> | <b>Associate Professor</b> at the Department of Forensic Medicine & Clinical Toxicology | 2020 |
| Faculty of Medicine, Benha University, <b>EGYPT.</b> | <b>Assistant Professor</b> at the Department of Forensic Medicine & Clinical Toxicology | 2013 |
| Faculty of Medicine, Benha University, <b>EGYPT.</b> | <b>Assistant lecturer</b> at the Department of Forensic Medicine & Clinical Toxicology  | 2007 |
| Faculty of Medicine, Benha University, <b>EGYPT.</b> | <b>Demonstrator</b> at the Department of Forensic Medicine & Clinical Toxicology        | 2004 |

**\*ACADEMIC RANK :**

| h-index | i10 - index | Citations | Peer-reviewing international journals                                                                                                                                                                                                                                                          | Awards | Original articles |
|---------|-------------|-----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|-------------------|
| 10      | 10          | 430       | 1-Environmental science and pollution research<br>2-Toxicology mechanism<br>3-Forensic Science, Medicine and Pathology<br>4-Drug Design, Development and Therapy.<br>5-Frontiers in Molecular Biosciences<br>6- Journal of Applied Animal Research<br>7-Ecotoxicology and Environmental Safety | 7      | 23                |

**\*CLINICAL SPECIALTY/ BOARD CERTIFICATION :**

- Licensed by the Egyptian Ministry of Health in 2002.
- Work at Benha poison treatment and toxicological research unit.

**\*SCIENTIFIC INTERESTS :**

- Forensic medicine.
- Forensic science.
- Nanotechnology.
- Environmental toxicology (epigenetics, aquatic toxicology, pollution, environmental safety, health risk assessment).
- Analytical Toxicology.
- Protective medicine.

**\*SKILLS:**

**Methodological skills:**

- Chromatographic techniques (GC-MS/MS and LC-MS/MS).
- Spectroscopy techniques (AA and ICP-MS).
- Western Blot technique.
- PCR techniques (Conventional PCR, Real-time PCR, RFLP-PCR).
- Nanotechnology
- Histopathology (Paraffin embedding, sectioning, staining, digital imaging, and scoring).
- Immunohistochemistry (techniques and application).
- Statistical analyses.
- Scientific writing and data interpretation.

**Language Skills:**

| Language   | Reading       | Speaking      | Writing       |
|------------|---------------|---------------|---------------|
| 1- Arabic  | Mother tongue | Mother tongue | Mother tongue |
| 2- English | Very good     | Very good     | Very good     |

**\*AWARDED SCHOLARSHIPS, HONORS and PRIZES:**

- Listed as "*Distinguished Faculty Member*" since 2006.
- **Excellence in scientific publishing** from Benha University for the best research papers published in good impacted international journals in 2018, 2019, 2020, 2021, 2022, and 2023 **EGYPT**.

- **Benha University citation award** in 2020, 2021, 2022, and 2023 **EGYPT**.

- *Internship at Lanzhou Veterinary Research Institute (CAAS)* in 2018, **CHINA**.

**\* CONFERENCES :**

1. 2<sup>nd</sup> Annual scientific conference of forensic medicine and clinical toxicology department, physical pitfalls in medical practice, how to protect yourself ?, 2022
2. The 9th Annual Conference of Forensic Medicine and Clinical Toxicology Department, Ain Shams University, 2020
3. Concepts and applications of Liquid and Gas Chromatography-Mass Spectrometry Techniques Seminar, 2020.
4. The 1st Conference of Forensic Medicine and Clinical Toxicology Department, Benha University, 2018
5. The 6th Scientific International Conference Faculty of Veterinary Medicine, Benha University, 2018.
6. The Role of Poison Control Centers in Management of Regional Poisoning Risks, 2016
7. The 1st annual conference of clinical toxicology, Cairo university 2016.
8. The 2nd International Joint Seminar between Egypt and Japan, Environmental Toxicity, and mental health. Damanhour University, Behaira, EGYPT, April-2016.
9. The 5th Arab Conference on Medical Liability, March 2016, Faculty of Medicine, Alexandria University.
10. International Joint Conference between Cairo University, Egypt and Hamburg University, Germany. Gender Based Violence. Cairo, Egypt, Nov-2015.
11. Mansoura university international Toxicology conference MITC (September 2015).
12. New ERA in Forensic Medicine and Clinical Toxicology (October 2015).
13. 15th Summer school on Domestic violence, 2015.
14. The 4th Arab conference on medical liability, 2014, Faculty of Medicine, Alexandria University.
15. ESCT 3rd annual conference (Addiction and substance abuse: Fact and Challenges) (April 2014).
16. The annual medical congress Benha faculty of medicine, 2010
17. 7th Scientific conference of Forensic medicine & Clinical toxicology (2009).
18. 17th Scientific conference of Egyptian Association of Biological science and Anthropology (The anthropologic difference between male & female) April 2009.
19. 24th annual congress of Tanta university, 2009
20. The Egyptian international conference of medical and forensic sciences under patronage of ministry of justice in collaboration with the Egyptian society of forensic sciences, 2008
21. 2nd Egyptian international congress of medical and forensic sciences in collaboration with the Egyptian society of forensic science, 2007.
22. 2nd International conference on natural toxins (December 2006).
23. Post graduate seminars of toxicology.

**\*Work Shops :**

24. Strategic leadership, 2023
25. TOT (Co-trainer), faculty and leadership development center, benha university, 2023
26. Principles and applications of fluorescent microscope, 2022
27. Tissue procession and diagnostic role of Electron microscope, 2022
28. The Art of Chromatography and Analytical Capabilities: Background and Techniques, 2019
29. Application of Nanotechnology in Drug Delivery System and Biomedical, 2019
30. Western blotting in protein identification, 2019
31. International Training Workshop on Important Transboundary Animal Disease (TAD) Diagnosis Technology, China, 2018.
32. Clinical Pharmacology Department Workshop "Pulmonary Diseases: Methodology of Experimental Animal Models" 2018
33. Detection of drugs of abuse in biological samples & GCMS confirmation, 2018.
34. Research statistics (SPSS) Research statistics (SPSS) 2017
35. "Fingerprints: Comparison and Interpretation" 2017
36. Training course in Proteomics, 2016.
37. The 2nd International Joint Seminar between Egypt and Japan "Environmental Toxicity and Mental Health" 2016.
38. Forensic DNA hands on workshop (November 2015).

39. HPLC workshop (September 2015)
40. Description of programs and curriculum maps - higher education (2014)
41. Acupuncture as an adjuvant therapy in some cases of poisoning and addiction (May 2009).
42. Workshop on research ethics (2008).
43. Workshop on "stem cell research", 2008
44. Practical Training at Ain Shams Toxicological Center for 6 months (2005).

#### **\*RECENT PUBLICATIONS :**

##### Original articles:

1. Obeid Shanab, Laila Mostafa, Ahmed Abdeen,\* , ..... , **Afaf Abdelkader\***, **Modulatory mechanisms of copperII-albumin complex toward N-nitrosodiethylamine-induced neurotoxicity in mice via regulating oxidative damage, inflammatory, and apoptotic signaling pathways**, , *Ecotoxicology and Environmental Safty*, 270, 2024, 115841. (Impact Factor: ).
2. Ahmed Abdeen, Rasha Elsabagh, Sawsan S. Elbasuni, Alshaimaa M. Said, **Afaf Abdelkader**, .....,
3. **Microalgae (Chlorella vulgaris) attenuates aflatoxin-associated renal injury**, *Frontiers in Pharmacology*, 14, 2023, 1291965. (Impact Factor: ).
4. Hanaa M. Hassan, Asmaa M. Abdeen, Ibrahim Y. Abdelrahman, Walied Abdo4 , Saher S. Mohammed, Ahmed Abdeen\*, **Afaf Abdelkader \*** , ....., **Radioprotective potential of whey protein against gamma irradiation-induced lingual damage**, *Frontiers in Pharmacology*, 14, 2023,1293230. (Impact Factor: ).
5. Gamal A Atia, Hany K Shalaby, ....., **Afaf Abdelkader** ....et al., **Macro, Micro, and Nano-Inspired Bioactive Polymeric Biomaterials in Therapeutic, and Regenerative Orofacial Applications**, *Drug Design, Development and Therapy*,17, 2023, 2985–3021. (Impact Factor: ).
6. Obeid Shanab, Samir M. El-Rayes, Waleed F. Khalil, Noha Ahmed, **Afaf Abdelkader\*** ....., Ahmed Abdeen, **Nephroprotective effects of Acacia senegal against aflatoxicosis via targeting inflammatory and apoptotic signaling pathways**, *Ecotoxicology and Environmental Safty*, 262, 2023, 115194. (Impact Factor: )  
**(\*Corresponding)**
7. Ola A. Habotta, Ahmed Abdeen, Aya A. El-Hanafy, ..... **Afaf Abdelkader**, Mohamed R. Mahdi, Shaaban A. El-Mosallamy, **Sesquiterpene nootkatone counteracted the melamine-induced neurotoxicity via repressing of oxidative stress, inflammatory, and apoptotic trajectories**, *Biomedicine & Pharmacotherapy*, 165, 2023, 115133 (Impact Factor: ).
8. Tamer Al-Shafie, Engy A Mahrous, Mostafa Shukry, Mohammad Y Alshahrani,.....**Afaf Abdelkader**, Mennatullah A Ali, **a proposed association between improving energy metabolism of hepg2 cells by plant extracts and increasing their sensitivity to doxorubicin**, *Toxics*, 11 (2): 182, 2023. (Impact Factor: 4.47).
9. Noha Ahmed, Samir M El-Rayes, Waleed F Khalil, Ahmed Abdeen, **Afaf Abdelkader**, et al., **Arabic Gum Could Alleviate the Aflatoxin B1-provoked Hepatic Injury in Rat: The Involvement of Oxidative Stress, Inflammatory, and Apoptotic Pathways**, *Toxins*, 14 (9),2022. (Impact Factor: 5.07)
10. Marwa A. Saad, Hagar S. Abd-Rabou, Ebrahim Elkhtab, Ahmed M. Rayan, Ahmed Abdeen, **Afaf Abdelkader**, Samah F. Ibrahim and Heba Hussien, **Occurrence of Toxic Biogenic Amines in Various Types of Soft and Hard Cheeses and Their Control by Bacillus polymyxa D05-1**, *Fermentation*, 8(7),2022. (Impact Factor: 5.1)
11. Amany Abdelnaby, Nabila Abdel-Aleem, Ayman Mansour, **Afaf Abdelkader\***, Amany N. Ibrahim, Safwa M. Sorour, Enas Elgendy, Heba Bayoumi, Shaymaa M. Abdelrahman, Samah Ibrahim, Ilhaam Alsaati and Ahmed Abdeen, **The combination of Tamarindus indica and coenzyme Q10 can be a potential therapy preference to attenuate cadmium-induced hepatorenal injury**, *Frontiers in Pharmacology, Sec. Predictive Toxicology*, 2022 (Impact Factor: 5.8) **(\*Corresponding)**
12. Marwa Morad, **Afaf Abdelkader**, Omnia Abdullah, Mohamed Elsheshtawy, Atef Fouda, **DNA Methylation As A Coming Clue For Age Prediction**, *Biannual Forensic Sciences And Toxicology Journal*, 2022
13. Mohamed Aboubakr, Said M. Elshafae, Ehab Y. Abdelhiee, Sabreen E. Fadl, Ahmed Soliman , **Afaf Abdelkader**, Mohamed M. Abdel-Daim, Khaled A. Bayoumi, Roua S. Baty, Enas Elgendy, Amira Elalfy, Bodour Baioumy,

Samah F. Ibrahim and Ahmed Abdeen, **Antioxidant and Anti-Inflammatory Potential of Thymoquinone and Lycopene Mitigate the Chlorpyrifos-Induced Toxic Neuropathy**, *Pharmaceuticals*, 2021, 14 (9), 940 (Impact Factor: 5.9)

14. Mohamed Aboubakr, **Afaf Abdelkader\***, Ola A. Habotta, Nisreen Adel, Mahmoud A. Emam, Ehab Y. Abdelhiee, Obeid Shanab, Khaled Shoghy, Heba Elnoury, Mohamed M. Soliman, Samah F. Ibrahim, Ahmed Abdeen, **Cefepime and diclofenac sodium combined treatment potentiated multiple organ injury: Role of oxidative damage and disrupted lipid metabolism**, *J Biochem Mol Toxicol.*, 2021; e22929. (Impact Factor: 3.6) (**\*Corresponding**)
15. Ahmed Abdeen , Amira Samir, Ashraf Elkomy, Mohamed Aboubaker, Ola A. Habotta, Ahmed Gaber, Walaa F. Alsanie, Omnia Abdullah, Heba A. Elnoury, Bodour Baioumy, Samah F. Ibrahim, **Afaf Abdelkader**, **The potential antioxidant bioactivity of date palm fruit against gentamicin-mediated hepato-renal injury in male albino rats**, *Biomedicine & Pharmacotherapy*, 143, 2021, 112154. (Impact Factor: 6.5)
16. Mohamed M. Abdel-Daim, Ahmed Abdeen, Maroua Jalouli, **Afaf Abdelkader**, Ameer Megahed, Abdullah Alkahtan, Rafa Almeer, Norah M. Alhoshani, Norah S. Al-Johani, Saad Alkahtani, Lotfi Aleya, **Fucoidan supplementation modulates hepato-renal oxidative stress and DNA damage induced by aflatoxin B1 intoxication in rats**, *Science of the Total Environment*, 2021. (Impact Factor: 7.9)
17. Mostafa Ali Elmadawy, Omnia A Abdulah, Walaa Bayoumie El Gazzar, Enas Sebaey Ahmad, Seham Gouda Ameen, **Afaf Abdelkader**, **Telomere length and signal joint T-cell receptor rearrangement excision circles as biomarkers for chronological age estimation**, *Biomarkers*, 2020. (Impact Factor: 2.65)
18. Ahmed Abdeen, **Afaf Abdelkader**, Dina Elgazzar, Mohamed Aboubakr, et al., **Coenzyme Q10 supplementation mitigates piroxicam-induced oxidative injury and apoptotic pathways in the stomach, liver, and kidney**, *Biomedicine and Pharmacotherapy*, 130: 110627, 2020. (Impact Factor: 6.5)
19. Ahmed Abdeen, Omayma Abou-Zaid, Hussein Abdel-Maksoud, Mohamed Aboubakr, **Afaf Abdelkader**, et al., **Cadmium overload modulates piroxicam-regulated oxidative damage and apoptotic pathways**, *Environmental Science and Pollution Research*, 2019. (Impact Factor: 4.2)
20. Abdeen, A., Aboubakr, M, Elgazzar, D., Abdo, M., **Afaf Abdelkader**, Ibrahim, S., Elkomy, **Rosuvastatin attenuates piroxicam-mediated gastric ulceration and hepato-renal toxicity in rats**, *Biomedicine and Pharmacotherapy*, 110, 895-905, 2019. (Impact Factor: 6.5)
21. Ahmed Abdeen, **Afaf Abdelkader**, Abdo M, Wareth G, et al., **Protective effect of cinnamon against acetaminophen-mediated cellular damage and apoptosis in renal tissue**, *Environmental Science and Pollution Research*, 1, 240-249, 2019 (Impact Factor: 4.2)
22. Ashraf Elkomy, Mohamed Aboubakr, Ahmed Abdeen, **Afaf Abdelkader**, Haitham Hekal, **Paracetamol induced hepato-renal toxicity and amelioration by cinnamon in Rats**. *International Journal of Pharmacology and Toxicology*, 4, 187-190, 2016.
23. Hamed El Sawaf, Marcelle Ramsis, Nermeen Adly, **Afaf Abdelkader**, Rabab F Hindawy, Asmaa yassen, **Vitreous Potassium Concentration as A Predictor of Postmortem Interval in Severe Burn Deaths at Alexandria Mortuary**, *Egyptian Journal of Forensic Science and Applied Toxicology*, 2019, 19 (3):25- 48
24. Rana M.M Refaat, Marcelle R. Haroun, Abeer A.I. Sharaf Eldin, Asmaa A.Y. Hussein and **Afaf Abdelkader**, **Medico legal Aspects of Traumatic Head Injuries in Benha University Hospital (Prospective Analytical Study)**, *Egyptian Journal of Forensic Science and Applied Toxicology*, 2019. (**\*Corresponding**)
25. Abeer Abdelwahab, Ola Haggag, Atef Fouda, Tagreed Abdulsamee, **Afaf Abdelkader**, **Biochemical , Histopathological and Immunohistochemical Study of Burn Lesions in Patients Admitted to Benha Educational Hospital: A Prospective Study 2009 - 2010**, *the Egyptian Journal of Forensic Sciences and Applied Toxicology*, 2013, 13 (2): pp. 83 – 106.

26. Abeer Abdelwahab, Ola Haggag, Atef Fouda, Tagreed Abdulsamee, **Afaf Abdelkader**, **Prospective Epidemiological Study of Hospitalized Burn Patients Admitted to Benha Educational Hospital (2009 - 2010)**. The Egyptian Journal of Forensic Sciences and Applied Toxicology, 2013 vol.13 Issue 1, pp. 181 – 200.

**- Submitted manuscripts:**

- 1- **Afaf Abdelkader**, Ahmed Abdeen, et al., **Gender difference assessment of human hyoid bone using 3D MDCT images in a sample of Adult Egyptian population**, submitted to *Forensic Science International*. (Impact Factor: 2.0) (**\*Corresponding**)
- 2- Samah Arafa; Omar Hewedy; Sahar Badr El-Din; Sanaa S Hamam; Asmaa F. Sharif; Reem Mohsen Elkholy; Ghada Zaghoul Shebl; Shimaa Abdelsattar; **Afaf Abdelkader**, **The potential carcinogenic effect of Flubendiamide insecticide on human prostate cell line and the ameliorative role of *Trichoderma aureoviride* Nano-selenium metabolites**, submitted to *Environmental Health Perspectives* (Impact Factor: 11.7)
- 3- Obeid Shanab, Laila Mostafa, Ahmed Abdeen, Ahmed Y. Nassar, ..... **Afaf Abdelkader**, **Modulatory mechanisms of CopperII-albumin complex toward N-nitrosodiethylamine-induced neurotoxicity in mice**, submitted to *Toxins* . (Impact Factor: 5.07) (**\*Corresponding**)

**Books:**

- Contributor of handbook of forensic medicine, Benha faculty of medicine-Benha University, 2014-2015.
- Contributor of handbook of clinical toxicology, Benha faculty of medicine-Benha University, 2014-2015.
- Contributor of practical book of forensic medicine, Benha faculty of medicine-Benha University, 2014-2015.
- Contributor of forensic medicine questions book, 2015-2016.

**Theses:**

1. **Afaf Abdelkader**, Abeer Abdelwahab, Ola Haggag, Atef Fouda, Tagreed Abdulsamee, Biochemical , Histopathological, Immunohistochemical and Epidemiological Study of Burn Lesions in Patients Admitted to Benha Educational Hospital: A Prospective Study 2009 - 2010, **MD's Thesis** (Forensic Medicine and Clinical Toxicology), Faculty of Medicine, Benha University, 2013.
2. **Afaf Abdelkader**, Mohamed Kamel, Marcell Ramsis, Magdy Kharroub, Mahmoud Lotfy, Kerosene Poisoning in Children, Retrospective Study, **Master's Thesis** (Forensic Medicine and Clinical Toxicology), Faculty of Medicine, Benha University, 2007.

**\*TEACHING EXPERIENCE AND OTHER INSTITUTIONAL ACTIVITIES :**

- **Forensic sciences** curriculum undergraduate students and MSc and MD programs which includes:
  - DNA profiling, Asphyxia, Causes of death, Signs of death, Identification, Bloodstain, Semen examination, Firearm wound, Wounds, Head injury.
- **Toxicology** curriculum undergraduate students and MSc and MD programs which includes:
  - General toxicology, Pesticides, Heavy metals, Mycotoxins, Therapeutics, Food poisoning, Volatile gases poisoning, Animal poisons, Radiation, Corrosives poisoning, Genotoxicity, Drug of abuse.
  - Chromatography and spectroscopy-spectrometry techniques.
- Professional diploma** of analytical toxicology and forensic chemistry
  - Clinical toxicology introduction, forensic medicine introduction, medical ethics, forensic chemistry & analytical toxicology

**\*PROFESSIONAL ACTIVITIES :**

- Member of programs and courses committee, quality unit, Faculty of medicine
- Participation in setting the new research plans in our institute.

-Trainer at faculty and leadership development center, benha university

**\*PROFESSIONAL MEMBERSHIPS :**

- The Egyptian Society of Clinical Toxicology, EGYPT. (since April 2014).
- The Society of Natural Toxins, EGYPT. (since October 2006).
- Egyptian Association for Science biological anthropology (since April 2009).
- Cultural relation Committee (2015)
- Libraries Committee (2020)

**\*FUNDED PROJECTS:**

| S | Title                                                                                                                                               | Role   | Status | Duration  | Fund                              | Funder     |
|---|-----------------------------------------------------------------------------------------------------------------------------------------------------|--------|--------|-----------|-----------------------------------|------------|
| 1 | Center of Excellence for Screening of Environmental Contaminants (CESEC)                                                                            | CO-PI  | Done   | 2019-2022 | 1.5 Million \$<br>(22,000,000 LE) | STDF       |
| 2 | Genotoxicity and Carcinogenicity of Fish and Canned Tuna Consumption as Main Sources for Methylmercury Exposure: Proteomic and Transcriptomic Study | Member | Done   | 2017-2019 | 200,000 LE                        | Benha Univ |

**\*COMMUNITY SERVICE :**

- Conducting awareness campaigns in some local alimentary schools for students and teachers about how to keep our health, how to avoid the environmental pollution, how to recognize safe foods to eat, how to keep their kidneys healthy, ...etc.
- Conducting awareness campaigns about the risk of smoking and Addiction at different faculties of Benha University.
- Conducting awareness campaigns about the risk of misuse of anabolic drugs between athletes at different faculties of Benha University.