

CURRICULUM VITAE

Dr. Michael Atef Fawzy Abdel-malak

Assistant Professor of Biochemistry Department,

Faculty of Pharmacy, Minia University, Egypt.



I- Information

• Personal Information:

- **Name:** Michael Atef Fawzy Abdel-malak
- **Date of Birth:** 01.07. 1983
- **Nationality:** Egyptian
- **Marital Status:** Married
- **Military Status:** Exempt
- **Home Address:** 35 Mahmoud Abdel-Razik street, Minia, Egypt
- **Work Address:** Biochemistry Department, Faculty of Pharmacy, Minia University, Minia 61519, Egypt.
- **Position:** Assistant Professor

• Contact Information:

- **Mobile:** (+2)-01203121112
- **Phone:** (+2)-086-2349870 (Home); (+2)-086-2347759 (Work).
- **E-mail:** michael.fawzy777@yahoo.com, michael.fawzy777@mu.edu.eg

II- Education

- 1- B.Sc. of Pharmaceutical Sciences, excellent with the degree of honour, Faculty of Pharmacy, Minia University, Egypt, 2005.
- 2- M.Sc. of Biochemistry, Faculty of Pharmacy, Minia University, Egypt, 2010, entitled "Role of Olive Leaves in Modulating the Metabolic Disorders of Hepatocarcinoma in Rats ".
- 3- Ph.D. of Biochemistry, Faculty of Pharmacy, Minia University, Egypt, 2015, entitled "Discrimination Between Primary and Secondary Hepatic Malignancies Relying on Sero Markers ".

III- Positions

1- Demonstrator (2005–2010):

Biochemistry Department, Faculty of Pharmacy, Minia University.

2- Assistant lecturer (2010–2015):

Biochemistry Department, Faculty of Pharmacy, Minia University.

3- Lecturer (2015 -2021):

Biochemistry Department, Faculty of Pharmacy, Minia University.

4- Assistant Professor (2021 up till now):

Biochemistry Department, Faculty of Pharmacy, Minia University.

IV- Experience

• **Teaching Experience:**

a) (2005–2015): participating in teaching the practical courses and laboratory tutorials of:

1- General Biochemistry, Applied and clinical Biochemistry, Molecular biology techniques for 1st, 2nd, 3rd, and 4th year students, Faculty of Pharmacy, Minia University.

2- Biochemistry (I), Biochemistry (II), Clinical Biochemistry, Cell Biology, and Clinical Nutrition for students of clinical pharmacy programme, Faculty of Pharmacy, Minia University.

b) (2015–2025): participating in teaching the theoretical courses of:

1- General Biochemistry, Applied and clinical Biochemistry, Molecular biology techniques for 1st, 2nd, 3rd, and 4th year students, Faculty of Pharmacy, Minia University.

2- Biochemistry (I), Biochemistry (II), Clinical Biochemistry, Cell Biology, and Clinical Nutrition for students of clinical pharmacy programme, Faculty of Pharmacy, Minia University.

3- General Biochemistry for 3rd year students, Faculty of Pharmacy, Deraya University.

Molecular biology: This is an introductory course for molecular biology that covers the theoretical bases of DNA, RNA, and proteins in addition to basic Practical Molecular Biology techniques such as PCR and electrophoresis and advanced techniques like isothermal titration calorimetry.

Biochemistry-I: It is an introductory course that covers fundamental theoretical concepts of Biochemistry and applications of the Biochemistry in life; the chemistry of carbohydrates, amino acids, proteins, lipids and steroids; enzymes and enzyme regulations.

Biochemistry-II: This course is covering the metabolic pathways of biomolecules including; carbohydrates, lipids, steroids, amino acids, proteins in addition to their regulation and their clinical application.

Clinical Biochemistry: The course provides students with an overview of the metabolic disorders related to metabolism of carbohydrates, lipids, steroids, amino acids, proteins, nucleoproteins, nucleic acids and hemoproteins. The lectures also provide students with an overview of the pathophysiology, diagnosis and treatment of Bronchial asthma, Chronic obstructive pulmonary disease, Viral Hepatitis, Anemia, Renal failure, Gastrointestinal diseases,

and Obesity

• **Research Experience:**

1-General Basic Molecular Biology Techniques:

DNA extraction, gene polymerase chain reaction (PCR), detection of Single Nucleotide Polymorphisms (SNPs) via RFLP technique (Restriction Fragment Length Polymorphism), and ELISA.

2-Protein Biology:

Separation and identification of proteins using western blotting technique.

V- Publications:

1) Modulation of inducible nitric oxide synthase pathway by eugenol and telmisartan in carbon tetrachloride-induced liver injury in rats

M Fathy, EMMA Khalifa, MA Fawzy

Life sciences 216, 207-214 (2019)

2) Hepatoprotective potential of Malvaviscus arboreus against carbon tetrachloride-induced liver injury in rats

OH Abdelhafez, MA Fawzy, JR Fahim, SY Desoukey, M Krischke, MJ Mueller, UR Abdelmohsen

PloS one 13 (8) (2018)

3) Eugenol Exerts Apoptotic Effect and Modulates the Sensitivity of HeLa Cells to Cisplatin and Radiation

M Fathy, MA Fawzy, H Hintzsche, T Nikaido, T Dandekar, EM Othman

Molecules 24 (21), 3979 (2019)

4) Effect Of High Lithium Carbonate Doses On Rat Brain Content Of Some Neurotransmitters

NM Abdel-Hamid, MA Al-Saffar, MA Fawzy

International Journal of Advanced Research and Publications 1 (5), 395 (2017)

5) Antioxidant, anti-inflammatory and anti-fibrotic effects of Boswellia serrate gum resin in CCl4-induced hepatotoxicity

HM Eltahir, MA Fawzy, EM Mohamed, MA Alrehany, AM Shehata, MM Abouzied

Experimental and Therapeutic Medicine 19 (2), 1313-1321 (2020)

6) Metabolomic profiling and biological investigation of *Tabebuia Aurea* (Silva Manso) leaves, family Bignoniaceae

BK Mahmoud, ANE Hamed, MN Samy, UR Abdelmohsen, EZ Attia, **MA Fawzy**, RH Refaey, MA Salem, SM Pimentel-Elardo, JR Nodwell, SY Desoukey, MS Kamel

Natural Product Research, 1-6 (2019)

7) Diagnostic utility of leptin and insulin-like growth factor binding protein-2 in hepatocellular carcinoma of diabetic and non-diabetic Egyptian patients

MM Abouzied, MH Nazmy, RM Mohamed, **MA Fawzy**, HM Eltahir

Tropical Journal of Pharmaceutical Research 16 (1), 211-218 (2017)

8) A survey on herbal management of hepatocellular carcinoma

NM Abdel-Hamid, MH Nazmy, AW Mahmoud, **MA Fawzy**, M Youssof

World journal of hepatology 3 (7), 175 (2011)

9) Evaluation of hepatoprotective and anticancer properties of aqueous olive leaf extract in chemically induced hepatocellular carcinoma in rats

NM Abdel-Hamid, **MA Fawzy**, MA El-Moselhy

Am. J. Med. Med. Sci 1 (1), 15-22 (2011)

10) Estimation of leucine aminopeptidase and 5-nucleotidase increases alpha-fetoprotein sensitivity in human hepatocellular carcinoma cases

MM Abouzied, HM Eltahir, **MA Fawzy**, NM Abdel-Hamid, AS Gerges,

Asian Pac J Cancer Prev 16 (3), 959-963 (2015)

11) A suggested guiding panel of seromarkers for efficient discrimination between primary and secondary human hepatocarcinoma

NM Abdel-Hamid, MM Abouzied, MH Nazmy, **MA Fawzy**, AS Gerges

Tumor Biology 37 (2), 2539-2546 (2016)

12) Novel Panel of Early Diagnostic Markers for Experimental Hepatocellular Carcinoma

NM Abdel-Hamid, MA El-Moselhy, **MA Fawzy**

Journal of Health Science 2 (2), 14-18 (2012)

13) P53 and endoglin, two biomarkers for predicting HBV and hepatocellular carcinoma in Egyptian patients

SS Al thagfan, AH Abdel Qawy, **MA Fawzy**, A Ali, MM. Abdel-Latif, HM Eltahir, HM Elbadawy, YM Alahmadi, OMohafz, MM Abouzied , MH Nazmy.

Journal of Advanced Biomedical and Pharmaceutical Sciences 3 110-115 (2020)

14) Impact of interleukin IL-6 rs-1474347 and IL-10 rs-1800896 genetic polymorphisms on the susceptibility of HCV Egyptian patients to hepatocellular carcinoma

RM Abd El-Baky, HF Hetta ,G Koneru, M Ammar, EA Shafik , DA Mohareb, MA El-Masry, HK Ramadan , MZ Abu Rahma ,**MA Fawzy** and M Fathy

Immunologic Research (2020)

15) Pantoprazole Attenuates MAPK (ERK1/2, JNK, p38)–NF-KB and Apoptosis Signaling Pathways after Renal Ischemia/Reperfusion Injury in Rats

Michael A. Fawzy , Sherif A. Maher, Sally M. Bakkar, Mahmoud A. El-Rehany and Moustafa Fathy

International Journal of Molecular Sciences 22(19) 10669 (2021)

16) A PDCD1 role in the genetic predisposition to NAFLD-HCC?".

Nardeen Eldafashi, Rebecca Darlay, Ruchi Shukla, Misti Vanette McCain , Robyn Watson, Yang Lin Liu, Nikki McStraw, Moustafa Fathy , **Michael Atef Fawzy**, Marco Y. W. Zaki , Ann K. Daly, João P. Maurício , Alastair D. Burt, Beate Haugk, Heather J. Cordell , Cristiana Bianco , Jean-François Dufour, Luca Valenti, Quentin M. Anstee and Helen L. Reeves.

Cancers 13(6): 1412 (2021)

17) Role of JNK, ERK, and p38 MAPK signaling pathway in protective effect of sildenafil in cyclophosphamide-induced placental injury in rats.

Walaa Yehia Abdelzaher, Haitham Ahmed Bahaa, Reham Elkhateeb, Medhat Atta, **Michael Atef Fawzy**, Amira F. Ahmed, Remon Roshdy Rofaail .

Life sciences 293:120354 (2022)

18) Vincamine modulates the effect of pantoprazole in renal ischemia/reperfusion injury by attenuating MAPK and apoptosis signaling pathways.

Fawzy MA, Maher SA, El-Rehany MA, Welson NN, Albezrah NK, Batiha GE, Fathy M.

Molecules.18;27(4):1383 (2022)

19) Idebenone regulates sirt1/Nrf2/TNF- α pathway with inhibition of oxidative stress, inflammation, and apoptosis in testicular torsion/detorsion in juvenile rats.

Abdelzaher, Walaa Yehia, Gomaa Mostafa-Hedeab, Abdel Hamid Sayed AboBakr Ali, **Michael Atef Fawzy**, Amira F. Ahmed, Mohamed Ahmed Bahaa El-deen, Nermeen N. Welson, and Dina A. Aly Labib

Human & experimental toxicology 41: 09603271221102515 (2022)

20) Antioxidant, hepatoprotective and nephroprotective activities of Gazania rigens against carbon tetrachloride-induced hepatotoxicity and nephrotoxicity in rats.

Gomaa, Alshymaa Abdel-Rhman, Mamdouh Nabil Samy, Eman Zekry Attia, Mina Ezzat Attia, **Michael Atef Fawzy**, Samar Yehia Desoukey, and Mohamed Salah Kamel

Tradit Med Res 7: 44. (2022)

21) Leukotriene receptor antagonist, montelukast ameliorates L-Name-induced pre-eclampsia in rats through suppressing the IL-6/Jak2/STAT3 signaling pathway.

Abdelzaher, Walaa Yehia, Gomaa Mostafa-Hedeab, Haitham Ahmed Bahaa, Ahmad Mahran, **Michael Atef Fawzy**, Sara Mohamed Naguib Abdel Hafez, Nermeen N. Welson, and Remon Roshdy Rofaail

Pharmaceuticals 15, 8: 914 (2022)

22) Phosphodiesterase inhibitor, Vinpocetine, guards against doxorubicin induced cardiotoxicity via modulation of HIF/VEGF and cGMP/cAMP/SIRT signaling pathways.

Refaie, Marwa MM, Maram El-Hussieny, Elshymaa A. Abdel-Hakeem, Michael A. Fawzy, Eman Shaaban Mahmoud Abd El Rahman, and Sayed Shehata.

Human & Experimental Toxicology 41: 09603271221136209 (2022)

23) Nephroprotective effect of AT-MSCs against cisplatin-induced EMT is improved by azilsartan via attenuating oxidative stress and TGF- β /Smad signaling.

Fawzy, Michael A., Olivia N. Beshay, Amany Abdrehim Bekhit, Sara Mohamed Naguib Abdel-Hafez, Gaber El-Saber Batiha, Yousef A. Bin Jordan, and Moustafa Fathy

Biomedicine & Pharmacotherapy 158: 114097 (2023)

24). "Quercetin potentiates the hepatoprotective effect of sildenafil and/or pentoxifylline against intrahepatic cholestasis: Role of Nrf2/ARE, TLR4/NF- κ B, and NLRP3/IL-1 β signaling pathways.

Fawzy, Michael A., Gehad Nasr, Fares EM Ali, and Moustafa Fathy

Life Sciences 314: 121343 (2023)

25) The IL-6/HO-1/STAT3 signaling pathway is implicated in the amelioration of acetaminophen-induced hepatic toxicity: A neonatal rat model.

Rofaeil, Remon Roshdy, Nermeen N. Welson, Michael A. Fawzy, Amira F. Ahmed, Medhat Atta, Mohamed Ahmed Bahaa El-deen, and Walaa Yehia Abdelzaher

Human & Experimental Toxicology 42: 09603271231151376 (2023)

26) In Vitro Anticancer Activity of Novel Ciprofloxacin Mannich Base in Lung Adenocarcinoma and High-Grade Serous Ovarian Cancer Cell Lines via Attenuating MAPK Signaling Pathway.

Fawzy, Michael A., Rania H. Abu-Baih, Gamal El-Din A. Abuo-Rahma, Islam M. Abdel-Rahman, Azza AK El-Sheikh, and Maiada H. Nazmy.

Molecules 28, 3: 1137 (2023)

27) Protective effect of eicosapentaenoic acid against estradiol valerate-induced endometrial hyperplasia via modulation of NF- κ B/HIF-1 α /VEGF signaling pathway in rats.

Abdelzaher, Walaa Yehia, Mohamed A. Ibrahim, Marwa Hassan, Nashwa Fathy Gamal El-Tahawy, Michael Atef Fawzy, and Heba M. Hafez

Chemico-Biological Interactions 373: 110399 (2023)

28) Diacerein modulates TLR4/NF- κ B/IL-1 β and TRPC1/CHOP signalling pathways in gentamicin-induced parotid toxicity in rats.

Ali, Dalia Mohamed, Mohamed H. Mahmoud, Rehab Ahmed Rifaai, Michael Atef Fawzy, Medhat Atta, Nermeen N. Welson, Gaber El-Saber Batiha, Athanasios Alexiou, Marios Papadakis, and Walaa Yehia Abdelzaher

Journal of Cellular and Molecular Medicine 27, 12: 1735-1744 (2023)

29) Molecular mechanisms mediate roflumilast protective effect against isoprenaline-induced myocardial injury.

Refaie, Marwa Monier Mahmoud, Manar Fouli Gaber Ibrahim, Michael Atef Fawzy, Elshymaa A. Abdel-Hakeem, Eman Shaaban Mahmoud Abd El Rahman, Nagwa M. Zenhom, and Sayed Shehata. *Immunopharmacology and Immunotoxicology* 45, 6: 650-662 (2023)

30) Molecular mechanism of empagliflozin cardioprotection in 5-fluorouracil (5-FU)-induced cardiotoxicity via modulation of SGLT2 and TNF α /TLR/NF- κ B signaling pathway in rats.

Refaie, Marwa Monier Mahmoud, Sayed Shehata, Maram El-Hussieny, Michael Atef Fawzy, Nagwa Zenhom Mustafa Ahmed, Heba Marey, Asmaa Mohammed Hishmat, Turki Alkully, and Eman Shaaban Mahmoud Abd El Rahman. *Toxicological Research: 1-13* (2023)

31) Atorvastatin protects against cyclophosphamide-induced thyroid injury in rats via modulation of JNK/ERK/p38 MAPK signaling pathway.

Abdelzaher, Walaa Yehia, Seham A. Abdel-Gaber, Michael Atef Fawzy, Abdel Hamid Sayed Abo Bakr Ali, Mina Ezzat Attya, and Ayman Geddawy. *International Immunopharmacology* 124: 111061 (2023)

32) Curative Effect of AD-MSCs against Cisplatin-Induced Hepatotoxicity in Rats is Potentiated by Azilsartan: Targeting Oxidative Stress, MAPK, and Apoptosis Signaling Pathways.

Bekhit, Amany Abdlrehim, Olivia N. Beshay, Michael A. Fawzy, Sara Mohamed Naguib Abdel-Hafez, Gaber El-Saber Batiha, Farid S. Ataya, and Moustafa Fathy. *Stem Cells International* 2023 (2023).

33) The impact of epithelial to mesenchymal transition in kidney fibrosis.

Beshay, Olivia N., Amany Abdlrehim Bekhit, Michael A. Fawzy, and Moustafa Fathy. *Bulletin of Pharmaceutical Sciences. Assiut* 46, 1: 497-505 (2023)

34) Cognitive impairment in Diabetes Mellitus.

Ragaa, Ahmed, Nermin Aly Hamdy, Michael A. Fawzy, Noran Hamza, and Zahraa Wally. *Journal of advanced Biomedical and Pharmaceutical Sciences: 81-85* (2023)

35) The prospective potential of fluoroquinolones as anticancer agents.

AbuBaih, Rania Hamdy, Michael Atef Fawzy, and Maiiada Hassan Nazmy. *Journal of Modern Research* 5, 1: 4-10 (2023)

36) LC-MS-based identification of bioactive compounds and hepatoprotective and nephroprotective activities of Bignonia binata leaves against carbon tetrachloride-induced injury in rats.

Samy, Mamdouh Nabil, Ashraf Nageeb Elsayed Hamed, Basma Khalaf Mahmoud, Eman Zekry Attia, Usama Ramadan Abdelmohsen, Michael Atef Fawzy, Mina Ezzat Attya, and Mohamed Salah Kamel. *Natural Product Research* 36, 5: 1375-1379 (2022)

37) Metabolomic profiling and biological investigation of Tabebuia Aurea (Silva Manso) leaves, family Bignoniaceae.

Mahmoud, Basma Khalaf, Ashraf Nageeb Elsayed Hamed, Mamdouh Nabil Samy, Usama Ramadan Abdelmohsen, Eman Zekry Attia, Michael Atef Fawzy, Rana Hosny Refaey et al.

Natural product research 35, 22: 4632-4637 (2021)

38) Renal Ischemia-Reperfusion Injury Molecular Mechanisms and Therapeutic Targets.

Maher, Sherief A., Michael A. Fawzy, Mahmoud A. El-Rehany, and Moustafa Fathy

Minia Journal of Medical Research 32, 2: 42-49 (2021)

39) The association between the survivin gene -31G/C polymorphism and risk of hepatocellular carcinoma in Egyptian population.

Eltahir, H., S. A. Maher, M. Elrihany, H. I. Mohamed, A. wahid, A. A. Alamri, S. Al thagfan, M. M. Abouzied, A.-G. S. Shalkami and M. A. Fawzy.

Journal of advanced Biomedical and Pharmaceutical Sciences 7(3): 103-108. (2024)

40) One-pot synthesis and pharmacological evaluation of new quinoline/pyrimido-diazepines as pulmonary antifibrotic agents

Michael Atef Fawzy, Karim Hagag Ibrahim, Ashraf A Aly, Asmaa H Mohamed, Sara Mohamed Naguib Abdel Hafez, Walaa Yehia Abdelzaher, Eslam B Elkaeed, Aisha A Alsouk, El-Shimaa MN Abdelhafez

Future Medicinal Chemistry journal 1–20. (2024)

41) The ameliorative effect of vinpocetine against gentamicin-induced uterine-injury in rats involves the inflammasome/caspase-1/IL-1 β pathway

Ayman Geddawy, Mina Ezzat Attia, AbdelRahman Hegazy, Mostafa Kamal AbdElhaseeb, Michael Atef Fawzy, Medhat Atta, Fatma F Ali, Walaa Yehia Abdelzaher

Molecular Biology Reports 51 (1): 655

VI- Conferences

1. Novel panel of seromarkers for discrimination between primary and secondary human hepatocarcinoma, MA Fawzy , NM Abdel-Hamid, MM Abouzied, MH Nazmy, AS Gerges

The 4th International Conference of Medical Research and Health Challenge in Arab World, Ain Sokhna, Egypt, 13th -16th September, 2014.

2. Participation of MINIA PHARMACY SCIENTIFIC CONFERENCE (MPSC), Minia, Egypt, 25-26 September 2024

VII- Workshops

Attended and successfully completed the following workshops of the Faculty and Leadership Development Center (FLDC), Minia University, Egypt:

1- Skills of Thinking (2007).

- 2- Basic skills of word. Excel and powerpoint (2014).
- 3- Skills of Effective Communication (2007).
- 4- Skills of Effective Presentation (2009).
- 5- Skills of Effective Teaching (2007).
- 6- Quality Assurance and Accreditation (2008).
- 7- Organization of Scientific Conferences (2013).
- 8- International Scientific Publishing (2013).
- 9- Applying Technology in Teaching (2007).
- 10- Systems of Exams and Students evaluation (2019).
- 11- Meetings and Time Management (2008).
- 12- Strategic Planning (2019).
- 13- Endnote (2014).
- 14- Design of Personal Websites (2019).
- 15- Advanced Power Point (2020).
- 16- Consumption reduction (2010).
- 17- Anti-corruption strategy (2019).
- 18- Statistical Analysis Using SPSS (2020).
19. Green chemistry in pharmaceutical sciences (2019)
20. Bioinformatics (2024)
21. 2D NMR (2023)
22. Laboratory safety (2023)
23. Professional ethics and etiquette (2024)
24. University administration (2024)
25. Dealing with students with special needs (2024)
26. Design and updates of Personal Websites (2024).

VIII- Awards and Activities

1. Minia university publication award (2016)
2. Minia university publication award (2018)
3. Minia university publication award (2021)
4. Minia university publication award (2023)
5. Minia university publication award (2024)
6. Assistant of the CIQAP project grant (funded from the Egyptian Higher Ministry of Education; 5 million Egyptian pounds) Faculty of Pharmacy, Minia University (2011).
7. Invited speaker at the Molecular Biology workshop, Faculty of Pharmacy, Minia University (2016)