



## **Curriculum Vitae**

*Dr. Mohamed Abdelmoneim Mohamed Elhefny*

*Lecturer of Medical Biochemistry and Molecular Biology,*

*Biochemistry and Molecular Biology Unit, Cancer Biology Department*

*National Cancer Institute, Cairo University*

*Date of birth:* 16<sup>th</sup> of Dec., 1968.

*Nationality:* Egyptian.

*Marital status:* Married since 1994.

*Maternal status:* Four children

*Address:* 6<sup>th</sup> October City - P.O. Box 5, Giza, Great Cairo, Egypt.

*Mailing address:* Cancer Biology department, National Cancer Institute,  
Fom El-Khalig, Cairo, Egypt.

*Tel: Home:* +202-38342 903

Work: +202-2366 4644

*Cellular phone:* +201015465536

*Fax:* + 202-2364 4720

*E-mail:* [mohdhefny@cu.edu.eg](mailto:mohdhefny@cu.edu.eg) – [maabdelrahman@uqu.edu.sa](mailto:maabdelrahman@uqu.edu.sa)

[mohdhefny@yahoo.com](mailto:mohdhefny@yahoo.com)

*Languages:* Arabic, and English.

### ***Education:***

**1990: B.Sc. Biochemistry.**

Faculty of Science, King Abdul-Aziz University, Jeddah, Saudi Arabia.

**2005: M.Sc. Biochemistry.**

Faculty of Science, Ain Shams University, Cairo, Egypt.

**2010: Ph.D. Biochemistry.**

Faculty of Medicine, Azerbaijan Medical University, Baku, Azerbaijan.

## ***Employment Record:***

### **1990-2003: Biochemist**

Biochemistry Lab., King Abdul-Aziz University, Jeddah, Saudi Arabia.

### **2003-2006: Demonstrator of Biochemistry**

Cancer Biology dept. National Cancer Inst., Cairo Univ.

### **2006-2010: Ph.D. student,**

Clinical Biochemistry department, Faculty of Medicine, Azerbaijan Medical University.

### **2010-2014: lecture of Biochemistry**

Cancer Biology department, National Cancer Institute, Cairo University.

### **10/2014-12/2019: Head of Medical Genetics Department.**

Medical Genetics department, Umm Al-Qura University, Saudi Arabia.

### **09/2015-12/2019: Vice dean**

Faculty of Medicine–Al-Qunfudah, Umm Al-Qura University, Saudi Arabia

### **09/2014-until now: Assistance professor of Medical Genetics**

Medical Genetics department, Umm Al-Qura University, Saudi Arabia.

## ***Professional Profile:***

A strong desire to work in the latest and upcoming technology areas in the field of Biochemistry using my strong foundation in biological sciences and an interest in the field of biochemistry, Creative biochemistry looking to become part of a team work with a research group. Offer hands on experience with research and development as well as up to date knowledge of many research tools.

## ***Technical skills:***

### ***a. Analytical Biochemistry Skill***

A strong working background in protein biochemistry, molecular biology, analytical spectroscopy, enzyme kinetics, protein isolation and purification, Enzyme assay, Ion exchange chromatography, gel filtration, SDS and native polyacrylamide gel electrophoresis, paper chromatography, HPLC, PCR and RT-PCR.

### ***b. Analytical chemistry skill***

Particularly chromatography & mass spectrometry. Experience of working in a HPLC laboratory would be a distinct advantage. Ultraviolet and visible absorption Spectrophotometer, LC-MS,MS.

## ***Key Skills:***

Data analysis, excellent research design, writing, and verbal presentation skills.

## ***Scientific Activities and Contributions:***

**I- Performing medical analysis and tumour markers at a New Oncology Center,**  
Azerbaijan Medical University.

## **II-Teaching Activities:**

### **1-Biochemistry courses for the following degrees:**

- Ph.D. for Medical Biochemistry, Virology, Pharmacology

### **2 – Egyptian fellowship of surgical oncology courses:**

Apoptosis, Angiogenesis, Type of Mutations, Detection of Mutations

### **3- Biochemistry courses for the following degrees:**

- B.Sc. of Biochemistry, Chemistry and Biology, Faculty of science, King Abdul- Aziz University.

## **III- Practical Experience in the field of Molecular Biology in Cancer Research:**

1. Expertise in the cell culture techniques, DNA isolation and electrophoresis.
2. Expertise in electroporation process and its application in drug delivery.
3. Expertise in tumor markers using ELISA, RIA and MEIA techniques.
4. Conducting research in the field of nanotechnology in molecular biology and culturing of tumour cells. Moreover, I have good knowledge in the basic biochemistry, Epigenomes and sophisticated protein isolations like nuclear histone.
5. I have good knowledge in basic clinical laboratory protocols; i.e. cell culture techniques, blood handling and basic cellular biology techniques as well as related assays such as molecular biology techniques (SDS-PAGE, etc.).
6. I can do my work closely with the scientific group and external trial sponsors to coordinate the receipt and processing in the clinical trials and other approved projects.
7. I have experience in Cancer research International standards and I am aware about the laboratory conditions.
8. I assist in the implementation of new clinical trials and actively participate in general laboratory duties within the clinical trial group.

## ***Training Courses:***

**I- Shared in** training courses, workshops and seminars concerning the following topics:

- 1- Cancer biology.
- 2- Angiogenesis.
- 3- Apoptosis
- 4- Cell Culture
- 5- Molecular biology.
- 6- Essential protein techniques in cell biology.

**II-Attended** & met the standards required for completion of many training courses:

- Bioinformatics
- Thinking Skills
- Effective Presentation
- Code of Ethics
- International Publishing of Research
- Recent Trends in Teaching
- Compete for a Research Fund
- Legal & Financial Aspect in University Environment
- Self-Motivation
- Safety in clinical labs
- Item analysis for theoretical exam (MCQ) and OSCE
- Application of Blueprint
- Sector of Effective Personality
- Credit hours
- Time Management
- Planning
- Communication Skills
- Targets Achievement
- Positive Thinking
- Sector of Success courses
- Design of e-courses
- Quality management
- Course assessment
- Student- centered learning
- Item writing in course specification

**III- N.L.P. Diploma**  
 Power of Memory Diploma  
 Mind Mapping Diploma

**Conferences:**

Attended more than 40 national and international scientific conferences, either as an **audient, a speaker.**

**Memberships and Achievements:**

- ☺ Member of the Egyptian Society of Biochemistry.
- ☺ Member of the Society of Clinical Biochemistry Azerbaijan.
- ☺ Member of the Society of Friends of Cancer Patients.
- ☺ Member of the Saudi Heart Association.
- ☺ Member of the Saudi Biological Society.

**Supervision of Post Graduate Research:**

| <b>N O</b> | <b>Research Title</b>  | <b>Institution</b>  | <b>Year</b> | <b>Master/Ph.D.</b> |
|------------|--|---|-------------|---------------------|
| 1.         | Biochemical Study On Foxp3 Gene Expression In Patients With Hepatocellular Carcinoma (HCC) .                         | Faculty of Science, Cairo University, Department of Biochemistry. | 2012        | Master              |
| 2.         | Serum Micro RNAs as biomarkers for detection of liver fibrosis in HCV patients.                                      | Faculty of Science, Cairo University, Department of Biochemistry. | 2012        | Master              |
| 3.         | Comparison Study between the effect of Peg-Interferon with some Natural herbals on HCV virus patients.               | Faculty of Science, Cairo University, Department of Biochemistry. | 2012        | Master              |
| 4.         | Biochemical Study of heart type fatty acid binding protein as biomarker in diagnosis of acute myocardial infarction. | Faculty of Science, Cairo University, Department of Biochemistry  | 2012        | Master              |
| 5.         | Ex-vivo study on somatic stem cells isolated from rat liver.   | NCI, Cairo University   | 2013        | Ph.D.               |
| 6.         | Evaluation of Microsatellite Instability In Patients with Breast Cancer in Egypt.                                    | Faculty of Science, Cairo University, Department of Biochemistry  | 2013        | Master              |

### **List of Publications:**

1. Mohamed A.El-Hefny, Afandiyev A.M., Azizova G.I. ***Angiogenic activity of vascular endothelial growth factor (VEGF) in breast cancer***. Azerbaijan Journal of Oncology and Hematology, 2008; 2: 45-50.
2. Afandiyev A.M., El-Hefny M.A., Karimova S.T. ***Oxidant/ Antioxidant Status of Preoperative Patients with Breast Cancer***. Azerbaijan Metabolism journal, 2009; 10(2): 39-43.
3. Mohammed A. El- Hefny. ***Study of the level of vascular endothelial growth factor in patients with breast cancer***. International Conference of the 90<sup>th</sup> jubilee, Azerbaijan medical university-Department of Human Anatomy, 2009; 213-216.
4. Mohamed A.El-Hefny, Sevil T. Karimova and Arif M. Afandiyev. ***Lipid Peroxidation and Antioxidant Status in Breast Cancer Patients before and after therapy***. Medical Journal of Cairo University, 2009; 77(3): 37-42.
5. Arif M. Afandiyev, Mohamed A.El-Hefny, Sevil T. Karimova. ***Investigation of Serum Ferritin in Breast Cancer Patients Before and After Therapy***. Azerbaijan Journal of pharmacology and pharmacotherapy, 2009; 2: 17-23.
6. Mohamed A.El-Hefny, Sevil T. Karimova, Laman R.Talisinskaya. ***Investigation of Serum VEGF in breast cancer and Hepatitis C Virus Patients***. Scientific Medical Journal (EGYPT), 2010; 22(3): 23-30.
7. El-Hefny M.A, Afandiev A.M, Quliyev M.R, Abelova R.G, Mamedova B.M. Study of serum ceruloplasmin in breast cancer patients before and after therapy. Azerbaijan Metabolism journal, 2010; 14(2): 39-43.
8. Mohamed A.El-Hefny, Arif M. Afandiyev, Mehman R. Quliev, Sevil T. Karimova. ***Oxidant/Antioxidant Status in Pre and Postoperative Breast Cancer Patients***. The 2<sup>nd</sup> International Conference on Biological & Enviromental Sciences (Egypt), 2010.
9. Mohamed A. El-Hefny, Sevil T. Karimova, Akif K.Hajiyev, Arif M. Afandiyev. ***Studying of Serum VEGF, CEA and CA 15-3 in Pre and Postoperative Breast Cancer Patients***. Medical Journal (Georgia), 2010; 2(1): 61-64.
10. El-Hefny, M., "***Levels of vascular endothelial growth factor (VEGF) in none and triple-negative breast cancer patients*** ", 1st USIM International Conference on Medicine and Health (ICMH2012), Faculty of Medicine and Health Sciences, Sains University, Malizya , 19-20 may 2012.

11. Mohamed Abdelmoneim El-Hefny, Arif Mostaffa Afandiyev, Sevil Karimova, Tarek Dardeer. *Evaluation of Vascular Endothelial Growth Factor (VEGF) levels and Survival among Triple-Negative Breast Cancer (TNBC) and non-TNBC Cases*. International Journal of Advanced Scientific and Technical Research 2013; 3(6):22-35.
12. Motawa E. El-Houseini, Eman R. Amer, Mohamed A. Elhefny, Heba Mohammed, Hani H. Mohammad. *Effect of Some Differentiation-inducing Agents on wild type Fragment-1(Waf-1)/P21 and Cycline D1(CD1)expressions in Leukemic cells propagated ex-vivo*. International Journal of Pharmaceutical Science and Health Care 2014; 4(3).
13. *Wafaa A, Nasser E. A, Mohamed A. Elhefny, and Doaa E. Potential toxicity of Egyptian Ashwagandha: significance for their therapeutic bioactivity and anticancer properties*. International Journal of Science and Research (IJSR) 2014; 3(12).
14. *Wafaa A.Ahmed, Om-Hashem M.A, Mohamed A. Elhefny, Abo Elnasr, A.A. and Nasr El Syed. The First Molecular Insights to the Effect of Ashwagandha and Propolis on Cancer cells: comparative study*. International Conference on Advances in Agricultural, Biological & Environmental Sciences (AABES-2015) July 22-23, 2015 London (UK).
15. Mohamed El-Hefny, *Shawky Fouad, Tarek Hussein, Rehab Abdel-Hameed, Heba Effat, Haitham Mohamed and Abdel Hady Abdel Wahab. Circulating microRNAs as predictive biomarkers for liver disease progression of chronic hepatitis C (genotype-4) Egyptian patients*. Journal of medical virology 2018;7:1-9. DOI:10.1002/jmv.25294.
16. *Tarek. R. Hassan, Amr Saad Mohammed, Mohammed Ali El Desouky Mahmoud Abdel-Aziz Ibrahim and Mohamed A. Elhefny. Evaluation of cellular tumor suppressor protein p53 antigen and 5- Methylcytosine (methylated DNA) as a Diagnostic Biomarker for Hepatocellular Carcinoma in Egypt*. J Biochem Tech (2019) (3): 98-104 ISSN: 0974-2328.
17. *Ashraf A. Ewis1, Doaa M. Khalil, Ahmed E. Arafa, Zynab M. Abdel Salam, Mohamed A. Elhefny and Amal El-Badawy. Validation of a rapid screening diagnostic kit for field investigations of hepatitis C viral infection*. MJMR, 2019; 30(3):214-219.

### Projects:

1. Inhibition of telomerase activity *in vitro* using sirna for further development of telomerase- based cancer therapy
2. Foxp3 gene expression in patients with hepatocellular carcinoma (hcc)
3. Study of anticancer activities of saudi juniperus procera – derived secondary metabolites and their impacts on epigenetic molecular mechanisms controlling growth of human cancerous cell