

# CURRICULM VITAE AHMED WAHID, Ph.D.

# Associate Professor, tenured post Acting Head of Pharmaceutical Biochemistry Department

Department of Pharmaceutical Biochemistry Faculty of Pharmacy Alexandria University

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## **ACADEMIC PROFILE**

I am currently an Associate Professor of **Biochemistry** and **Molecular Biology** in the department of Pharmaceutical Biochemistry, Faculty of Pharmacy, Alexandria University, Egypt. I am also a **Member in the National committee of Biochemistry and Molecular Biology** of the Academy of Scientific Research and Technology (ASRT), Egypt.

In 2018 I founded the Pharmaceutical Biochemistry department in the Faculty of Pharmacy-Alexandria University. The undergraduate studies began in the department in 2019, and the bylaws for the postgraduate studies in the department were established in 2020.

I have gained an experience in a wide range of Biochemical, Biophysical and Virological techniques in the field of **Molecular Biology** during my Ph.D. studies in **Manchester University in the United Kingdom**, Postdoc fellowship in **Pasteur institute in France**, and academic visit to CVR (Centre for Virus Research) in the **University of Glasgow in Scotland**. Three high profile research-led departments that allowed me to widen my scientific knowledge in these fields and helped me to develop skills necessary to obtain research funding for my own independent laboratory.

My research broadly covers liver diseases. Since June 2013, I am heading a research team. The main focus of the team is to develop basic research to screen new medicinal compounds and possible new genetic diagnostic biomarkers, with specific themes in the field of virology, that could be of potential use to help identify host factors that are associated with treatment and/or diagnosis.

I am an experienced teacher at both the undergraduate and postgraduate levels with a great experience in the fields of curriculum development and course design which were both enhanced via participation in the capacity building of higher education Erasmus plus programs (2013-2020).

## **EDUCATION / TRAINING**

2015-2016 Visiting Researcher, "Neutralizing antibodies targeting the viral E2 glycoprotein of 4a HCV genotype".

Centre for Virus Research (CVR), The University of Glasgow, Scotland, United Kingdom.

#### 2011-2013 Postdoctoral fellowship, "Role of the envelope glycoprotein disulfide

bonds during the HCV life cycle".

Pasteur institute, Lille, France.

#### 2005-2009 Ph.D. in Molecular Biology, "Molecular basis of PKR inhibition by

adenovirus VA RNA<sub>I</sub>".

Faculty of Life Sciences, The University of Manchester, United Kingdom.

#### 2003-2005 Masters in Biochemistry, "Biochemical role of Diphenyl-Dimethyl-

Bicarboxylate (DDB) with some antioxidants in carbon tetrachloride

intoxicated rats".

Faculty of Pharmacy, Minia University, Egypt.

#### 1994-1999 **Bachelor of Pharmaceutical Sciences.**

Faculty of Pharmacy, Alexandria University, Egypt.

## **CURRENT AND PREVIOUS POSTS**

#### 2019-now **Executive Manager of the central lab facility**

Faculty of Pharmacy-Alexandria university, Egypt.

#### 2019-now Founder and Acting Head of Pharmaceutical Biochemistry department

Faculty of Pharmacy, Alexandria University, Egypt.

#### 2019-now **Associate Professor**

Department of Pharmaceutical Biochemistry-Faculty of Pharmacy, Alexandria University, Egypt.

#### Member in the National committee of Biochemistry and Molecular Biology 2018-now

Academy of Scientific Research and Technology, Egypt.

#### **Associate Professor** 2017

Department of Pharmacology and Toxicology-Faculty of Pharmacy, Alexandria University, Egypt.

#### 2010-2016 Lecturer

Biochemistry Department-Faculty of Pharmacy, Minia University, Egypt.

#### 2013-2015 **Executive Manager of the special Molecular Biology Unit (MBU)**

Faculty of Pharmacy-Minia university, Egypt.

#### 2011-2013 **Postdoc Research fellow in Pasteur institute**

Molecular and cellular virology of Hepatitis C (HCV) lab, Center for infection and immunity, Lille (CIIL), Inserm U1019, CNRS UMR8204, Univ. Lille Nord de France, Lille, France.

#### **Executive Manager of the training unit** 2009-2010

Faculty of Pharmacy-Minia University, Egypt.

#### 2005-2009 Research associate

Faculty of Life Sciences, The University of Manchester, United Kingdom.

2003-2005 Assistant lecturer

Biochemistry Department-Faculty of Pharmacy, Minia University, Egypt.

2000-2003 Demonstrator

Biochemistry Department-Faculty of Pharmacy, Minia University, Egypt.

2000 Demonstrator

National Research Institute, Giza, Egypt.

## AWARDS, GRANTS AND ACHIEVEMENTS

April 2019 Co-Principal Investigator (Co-PI) of an Academic Thesis Research

Fund, Faculty of Pharmacy, Alexandria University (50,000 L.E;

3000 USD).

"A comparative study for the effect of different antidiabetic drugs on experimentally-induced non-alcoholic fatty liver disease in

rats".

April 2019 Co-Principal Investigator (Co-PI) of an Academic Thesis Research

Fund, Faculty of Pharmacy, Alexandria University (50,000 L.E;

3000 USD).

"Role of ion channels in modulation of morphine antinociceptive

effect in experimental liver fibrosis".

September 2018 Travel grant from Alexandria University (2000 USD).

BASL 2018 conference, YORK, UK.

"Tumor necrosis factor alpha (TNF-α) and RNA protein kinase (PKR) SNPs are genetic biomarkers for the HCV outcome among Egyptian

patients".

June 2017-April

2019

Member in the team of the project "IT based International Diploma and professional certificate in clinical toxicology (ITCT) (1 million

Euros).

Erasmus plus CBHE grant number "561915-EPP-1-2015-1-EG-

EPPKA2-CBHE-JP".

2016 Minia university publication award.

2015-2016 (September-

March)

Post-doctoral fellowship grant (on competitive basis) in Glasgow

University.

Egyptian cultural affairs and Missions Sector-Egyptian Higher Ministry

of Education.

"Identification and characterization of sequences in hepatitis C virus

envelope glycoprotein E1 which affect virus neutralization".

2014 PI of a research project funded by the Egyptian higher ministry of

education; 1.5 Million Egyptian pounds (95000 USD).

"The impact of mutations that might be present in the viral genome of HCV infected Egyptian patients (genotype 4a) on the progress of the

disease".

January 2014 Co-Principal Investigator (Co-PI) of a Research Support Grant

funded from the scientific research developing unit of Beni-Seuf university (40,000 L.E; 6000 USD).

"Effect of mutations in the host factor double stranded RNA activated protein kinase on the interferon response of HCV infection in Egyptian patients (genotype 4a)".

2014 Minia university publication award.

(January 2013-Septembre 2015) Minia university coordinator of Joint Master Biotechnology project (JMbiotech) (1 million Euros).

Tempus grant Project No.: 543865-TEMPUS-1-2013-1-EG-TEMPUS-

JPCR.

2011-2013 ANRS postdoctoral fellowship grant, France.

The French National Agency for Research on AIDS and Viral Hepatitis (ANRS; Agence Nationale de Recherche sur le Sida et les hepatitis).

2011 (January-June)

Assistant Manager of the CIQAP project grant funded from the Egyptian Higher Ministry of Education (5 million Egyptian pounds;

320,000 USD).

Faculty of Pharmacy-Minia university.

2008 Publication award

Egyptian cultural bureau, Egyptian embassy, London, UK.

2005-2009 Egyptian Government Ph.D. Scholarship

Egyptian Cultural affairs and Missions Sector - Egyptian Higher

Ministry of Education.

2000 Recipient of a teaching assistance scholarship

Biochemistry Department, University of Minia, Egypt.

## RESEARCH

I have experienced a wide range of techniques in Molecular and Cellular Biology fields including:

## 1-General Basic Molecular Biology Techniques:

Transformation of competent bacterial cells with DNA, conducting different types of gel electrophoresis, small and large scale DNA plasmid preparation, precipitation and phenol-chloroform extraction of nucleic acids, site-directed mutagenesis, gene polymerase chain reaction (PCR) and cloning, detection of Single Nucleotide Polymorphisms (SNPs) via RFLP technique (Restriction Fragment Length Polymorphism), ELISA, Flowcytometry, and MTT assays.

# 2-General Basic Cell Biology Techniques:

HCV<sub>CC</sub> and HCV<sub>PP</sub> cell culture systems, electroporation of RNA into different hepatoma cell lines and transfection of DNA plasmids into eukaryotic cells, Co-immunoprecipitations, and Laser confocal microscopy.

## 3-Protein Biology:

Expression and purification of recombinant proteins using FPLC technique, identification of proteins using western blotting technique, conducting protein kinase inhibition and activation functional assays, isothermal titration calorimetry (ITC), and protein crystallisation.

### **4-RNA Biology:**

RNA *in vitro* transcription reactions, RT-PCR (Reverse Transcription-Polymerase Chain Reaction), 5'-end labelling with <sup>32</sup>P, RNA and RNA-protein complex purification, RNA UV thermal melting studies, and RNA secondary structure probing.

## 5-Molecular Virology of HCV

CD81 Pull down assays, TCID<sub>50</sub> end point dilution assays, Intracellular infectivity assays, Virus purification, Equilibrium density gradient assays, Virus stability assays, immunofluorescence microscopy, Analysis of the sensitivity of viruses to pH treatment, Direct cell to cell transmission assays, Virus neutralization studies.

**6-**I have also conducted experiments involving animal models (rats and mice).

## PRESENTATIONS, WORKSHOPS AND CONFERENCES

- **Invited speaker** in the international conference on Pharmaceutical and Healthcare Sciences (PHS 2019), **Alexandria, Egypt**.
  - "Pharmacogenomic biomarkers for personalised liver diseases treatment: current and future prospectives".
- **2019 Invited speaker** in the International conference on Traditional & Alternative Medicine, **Rome**, **Italv**.
  - "A study of the hepatoprotective effect of Plantago Psyllium L. seed extract against carbon tetrachloride induced hepatic injury in rats".
- **2019** Accepted poster in international SONA (Society of Neuroscientists of Africa) conference, Lagos, Nigeria.
  - "Investigating the possible synergistic effects of addition of melatonin to Vincristine to HCT-8 Colon cancer cell line".
- **Accepted poster** in the Fifth international conference on Parkinson disease and Movement disorder, **New York, USA**.
  - "Comparison between the efficacies of pomegranate with different combinations against development of parkinsonism using rotenone model in rats".
- **Poster presenter** in BASL 2018 Annual meeting, University of York, **York**, **UK**. "Tumor necrosis factor alpha (TNF-α) and RNA protein kinase (PKR) SNPs are genetic biomarkers for the HCV outcome among Egyptian patients".
- 2018 Chemical Security Vulnerability Assessment and Risk Mitigation For Chemical Industries workshop, Cairo, Egypt.
- 2018 Electronic learning management systems (e-LMS) workshop at Ministry of communication and information technology, Cairo, Egypt.
- 2018 International diploma for Clinical Toxicology workshop (Erasmus plus project), Newcastle, UK.
- 2018 International diploma for Clinical Toxicology E-learning workshop (Erasmus plus project), Malta.
- 2017 Introduction to e-courses development, Alexandria, Egypt.

- **Invited speaker** at the Biotechnology and its applications in Medical and Microbial sectors conference, National research institute, **GIZA**, **Egypt**.
- **2016 Invited speaker** at the Molecular Biology workshop, Faculty of Pharmacy, Minia university, **Minia**, **Egypt**.
- 2016 21th Glasgow Virology Workshop, Glasgow, Scotland, UK.
- The Fourth National Workshop; TEMPUS project; Joint Master degree in Biotechnology (JM Biotech), **Alexandria**, **Egypt**.
- **Speaker** at the Fifth international conference of Pharmaceutical and drug industries research, **Cairo**, **Egypt**.
- 2015 The Third National Workshop; TEMPUS project; Joint Master degree in Biotechnology (JM Biotech), Fayoum, Egypt.
- **Speaker** at the 12<sup>th</sup> National conference "Role of Biochemistry and Molecular Biology in drug discovery and disease diagnosis", **Cairo, Egypt**.
- 2014 International workshop of Joint Master Biotechnology degree (JM Biotech; Tempus project), Marsa Alam, Egypt.
- The Second National Workshop for the Tempus project EG partner for the establishment of a new joint master degree in Biotechnology applied to agricultural, environmental and pharmaceutical sciences, Cairo, Egypt.
- 2014 International workshop of Joint Master biotechnology project (Tempus), Hurgada, Egypt.
- **2013 Invited speaker** at (la 13<sup>ème</sup> Réunion du Réseau national hépatites de l'ANRS), **Paris, France**.
- 2012 Invited speaker at the first cross-border symposium on hepatitis C, Ghent, Belgium.
- **2012 Invited speaker** at the AC29 meeting (Mécanismes d'entrée des virus des hépatites dans leurs cellules cibles), **Paris, France**.
- **Poster presenter** at the 19<sup>th</sup> international symposium on hepatitis C virus and related viruses, **Venice**, **Italy**.
- Twelve<sup>th</sup> meeting of the ANRS for HCV and HBV, **Paris, France**.
- 2011 55<sup>th</sup> annual meeting "Inhibition of PKR by Adenovirus-associated RNA I", Biophysical Society, **Baltimore**, **USA**.
- The obesity conference held by the Medical Association for the study and management of obesity diseases, four seasons hotel, **Alexandria**, **Egypt**.
- **Speaker** at the British Crystallographic Association-Biological Structures Group meeting, **Newcastle**, **UK**.
- 2008 Speaker at the Faculty of Life Sciences Symposium, University of Manchester

- symposium, Manchester, UK.
- 2007 Speaker at the Northern protein structural workshop, Carlisle, UK.
- **2007 Poster presenter** at the Faculty of Life Sciences Symposium, University of Manchester, **Manchester**, **UK**.
- 2006 Seminar at the Faculty of Life Sciences Symposium, University of Manchester, Manchester, UK.

# SELECTED PUBLICATIONS

H-index: 13 Impact points: 95 No. of citations: 483

| Year | Paper   |
|------|---|
| 2020 | A study of the hepatoprotective effect of Plantago psyllium L. seed extract against Carbon tetrachloride induced hepatic injury in rats. Mekky M Abouzied, Shaymaa M Mahmoud, Ahmed Wahid, Amr E Ahmed, Ahmed M Okasha, Hanan A Soliman, Sultan S Al Thagfan, Eman Z Attia. J Appl Biomed X:X   DOI: 10.32725/jab.2020.006.   |
| 2020 | Study of the possible synergistic protective effects of Melatonin and Pregabalin in Vincristine induced peripheral neuropathy Wistar Albino rats. Soliman A, Wahid A, Wahby MM, Bassiouny A. Life Sci. 2020 Mar 1;244:117095. doi: 10.1016/j.lfs.2019.117095. Epub 2019 Dec 7.  |
| 2020 | Dietary fiber of psyllium husk (Plantago ovata) as a potential antioxidant and hepatoprotective agent against CCl4-induced hepatic damage in rats. A. Wahid, S.M.N. Mahmoud, E.Z. Attia, A.E.S.A. Yousef, A.M.M. Okasha, H. A. Soliman. Volume 130, May 2020, Pages 208-214.  |
| 2019 | Impact of IL-27p28 (rs153109) and TNF-α (rs1800629) Genetic Polymorphisms on the Progression of HCV Infection in Egyptian Patients. Tharwat E, Gad GFM, Nazmy MH, Mohamed HI, Hamza N, Wahid A, Ibrahim ARN. Immunol Invest. 2019 Apr;48(3):255-267. doi: 10.1080/08820139.2018.1510958. Epub 2018 Sep 11.  |
| 2019 | RNA protein kinase SNP at -226 C <t 08820139.2018.1493496.="" 10.1080="" 2018="" 2019="" 6.<="" a="" a.="" abdel="" ahmed="" amany="" among="" and="" apr;48(3):211-221.="" aug="" bekhit,="" biomarker="" clearance="" doi:="" egyptian="" epub="" f.="" fadl,="" for="" gamal="" hamzawy,="" hcv="" immunol="" invest.="" is="" khalifa,="" m.="" mohamad="" mustafa="" of="" patients.="" sayed="" td="" the="" wahab.="" wahid,=""></t> |
| 2018 | Two novel SNPs in the Promoter region of PKR gene in Egyptian Hepatitis C Patients and their impact on disease outcome and response to treatment. Dina El-Dahshan, Doaa Bahy, Wahid A, Amr E. Ahmed, and Amro Hanora. Arab J Gastroenterol. 2018 Sep;19(3):106-115. doi: 10.1016/j.ajg.2018.06.002. Epub 2018 Sep 20.   |

| 2016 | MBOAT7 rs641738 increases risk of liver inflammation and transition to fibrosis in chronic hepatitis C. Thabet K, Asimakopoulos A, Shojaei M, Romero-Gomez M, Mangia A, Irving WL, Berg T, Dore GJ, Grønbæk H, Sheridan D, Abate ML, Bugianesi E, Weltman M, Mollison L, Cheng W, Riordan S, Fischer J, Spengler U, Nattermann J, Ahmed Wahid, Rojas A, White R, Douglas MW, McLeod D, Powell E, Liddle C, van der Poorten D, George J, Eslam M; International Liver Disease Genetics Consortium. Nat Commun. 2016 Sep 15;7:12757. doi: 10.1038/ncomms12757. |
|------|--|
| 2016 | Hepatoprotective activity of ethanolic extract of Salix subserrata against CCl4-induced chronic hepatotoxicity in rats. Ahmed Wahid, Hamed AN, Eltahir HM, Abouzied MM. BMC Complement Altern Med. 2016 Jul 29;16:263. doi: 10.1186/s12906-016-1238-2.   |
| 2016 | Serum serotonin as unexpected potential marker for staging of experimental hepatocellular carcinoma. Abdel-Hamid NM, Shehata DE, Abdel-Ghany AA, Ragaa A, Ahmed Wahid. Biomed Pharmacother. 2016 Jul 14;83:407-411. doi: 10.1016/j.biopha.2016.07.005.   |
| 2016 | Exploration of acetanilide derivatives of 1-(ω-phenoxyalkyl)uracils as novel inhibitors of Hepatitis C Virus replication. Magri A, Ozerov AA, Tunitskaya VL, Valuev-Elliston VT, Ahmed Wahid, Pirisi M, Simmonds P, Ivanov AV, Novikov MS, Patel AH. Sci Rep. 2016 Jul 12;6:29487.   |
| 2016 | Association of Interleukin-27.rs 153109 Single Nucleotide Polymorphism with Spontaneous Resolution of Hepatitis C Virus - Genotype 4a Infection in Egyptian Patients versus persistence of chronic liver infection. Mariam M. Fawzy, Ahmed Wahid, Maiiada H. Nazmy, Mohamed Hashem, Imam Waked, Sayed F. Abdelwahab. APJCP. 2016.17(4) 2093-2097.  |
| 2016 | Jerusalem Artichoke in combination with Pegylated Interferon Alfa-2a and Ribavirin reverse hepatic fibrosis in rats through inhibition of the p53, BAX, and TGF-β protein expression levels. Nabil Mohie Abdel-Hamid, Ahmed Wahid, Maiiada Hassan Nazmy, and Marwa Abdel-Moniem Eisa. APJCP. 2016.17(4)1979-1985.  |
| 2016 | New pathways driving the experimental hepatoprotective action of tempol (4-hydroxy-2,2,6,6-tetramethylpiperidine-1-oxyl) against acute hepatotoxicity. N.M. Abdel-Hamid, Ahmed Wahid, E.M. Mohamed, M.A. Abdel-Aziz, O.M. Mohafez, Sally Bakar. Biomedicine & Pharmacotherapy 79 (2016) 215–221.   |
| 2015 | Monoclonal antibodies: Principles and applications of immunodiagnosis and immunotherapy for hepatitis C virus. Tabll A, Abbas AT, El-Kafrawy S, Ahmed Wahid. World J Hepatol. 2015 Oct 8; 7(22): 2369-83.  |
| 2013 | Additional glycosylation within a specific hypervariable region of subtype 3a of hepatitis C virus protects against virus neutralization. Sadia Anjum#, Ahmed Wahid#, Muhammad Sohail Afzal, Anna Albecka, Khaled Alsaleh, Tahir Ahmed, Thomas F. Baumert, Czeslaw Wychowski, François Penin, Jean Dubuisson. Journal of infectious diseases. J. Infect Dis. 2013 Dec;208(11):1888-97. doi: 10.1093/infdis/jit376. Epub 2013 Aug 1. # Both authors contributed equally to this work.   |
| . —  |  |

| 2013 | Virus-neutralizing antibodies to hepatitis C virus. Ahmed Wahid, Dubuisson J. J Viral Hepat. 2013 Jun;20(6):369-76. doi: 10.1111/jvh.12094. Epub 2013 Apr 4.   |
|------|--|
| 2013 | The antimalarial ferroquine is an inhibitor of hepatitis C virus. Vausselin T, Calland N, Belouzard S, Descamps V, Douam F, Helle F, François C, Lavillette D, Duverlie G, Ahmed Wahid, Fénéant L, Cocquerel L, Guérardel Y, Wychowski C, Biot C, Dubuisson. Hepatology. 2013 Jul;58(1):86-97. doi: 10.1002/hep.26273. Epub 2013 May 14. |
| 2012 | Disulfide bonds in hepatitis C virus glycoprotein e1 control the assembly and entry functions of e2 glycoprotein. Ahmed Wahid, Helle F, Descamps V, Duverlie G, Penin F, Dubuisson J. J Virol. 2013 Feb;87(3):1605-17. doi: 10.1128/JVI.02659-12. Epub 2012 Nov 21.  |
| 2011 | A survey on herbal management of hepatocellular carcinoma. Abdel-Hamid NM, Nazmy MH, Ahmed Wahid, Fawzy MA, Youssof M. World J Hepatol. 2011 Jul 27; 3(7):175-83.  |
| 2011 | Inhibition of PKR by Adenovirus-Associated RNA I. Katherine Launer-Felty, C. Jason Wong, Ahmed Wahid, Graeme L. Conn and James L. Cole. Biophysical Journal 02/2011; 100(3). 232a-233a.  |
| 2010 | Magnesium-Dependent Interaction of PKR with Adenovirus VAI RNA. Katherine Launer-Felty, C. Jason Wong, Ahmed Wahid, Graeme L. Conn and James L. Cole. J Mol Biol. 2010 Oct 1; 402(4): 638-44.  |
| 2009 | The PKR-binding domain of adenovirus VA RNAI exists as a mixture of two functionally non-equivalent structures. Ahmed Wahid, Coventry VK, Conn GL. Nucleic Acids Res. 2009 Sep; 37(17): 5830-7.  |
| 2008 | Systematic deletion of the Adenovirus-associated RNAI terminal stem reveals a surprisingly active RNA inhibitor of double-stranded RNA-activated protein kinase. Ahmed Wahid, Coventry VK, Conn GL. J Biol Chem. 2008 Jun 20; 283(25): 17485-93.   |
| 2007 | Lactate dehydrogenase isoenzyme pattern in the liver tissue of chemically-injured rats treated by combinations of diphenyl dimethyl bicarboxylate. Laila Faddah, Nabil Abdel-Hamid, Yaser Abul-Naga, Sanaa Ibrahim, Ahmed Wahid. J Appl Biomed. 2007; (5): 77-80.  |
| 2002 | Possible hepatoprotective combinations of diphenyl dimethyl bicarboxylate (DDB) with some antioxidants in carbon tetrachloride intoxicated rats. Faddah LMH; Abul-Naga,YA; Abdel-Hamid, NM and Ahmed Wahid. The Egyp J of Biochem and Mol Biol. 2002; (20): Special Issue: 105 – 113.  |

# ACADEMIC ACTIVITIES

 A reviewer for the following peer-reviewed journals: DNA and Cell Biology, Phytomedicine, Peer J, Saudi Pharmaceutical Journal, Journal of Gastroenterology, Journal of advanced Biomedical and Pharmaceutical Sciences, Hepatology Research, Journal of Cancer Chemotherapy and Pharmacology, and Zeitschrift für Naturforschung C, BioMed Research International, Experimental Biology and Medicine, Current Alzeheimer Research, Journal of king Saud university journal.

- Msc and PhD of Biochemistry graduate mentorship:
  - 1. Alhusseiny Mekky: Msc student, Faculty of Pharmacy-Minia university.
  - 2. Marwa Abd Elmoneim: Msc student, Faculty of Pharmacy-Minia university.
  - 3. Mariam Mahrous: Msc student, Faculty of Pharmacy-Minia university.
  - 4. Khalid Thabet: PhD student, Faculty of Pharmacy-Minia university.
  - 5. Moustafa Hamzawy: Msc student, Faculty of Pharmacy-Minia university.
  - 6. **Doaa Bahy:** Msc student, Faculty of postgraduate-Beni-Suef university.
  - 7. **Ibram Tharwat:** Msc student, Faculty of Pharmacy-Minia university.
  - 8. Ahmed Soliman: Msc student, Faculty of science-Alexandria University.
  - 9. **Yassmin El-Dafrawi:** Msc student, Institute of graduate studies and research-Alexandria university.
  - 10. **Shimaa Naguib:** Msc student, Faculty of postgraduates- Beni-Suef university.
- A member in the Master thesis examination board of 3 students.
- Created the curriculum development plan of the faculty of pharmacy-Minia university in the context of the CIQAP (Continuous Accredetation and Quality Assurance Project; 2011).
- Visiting scientist to the **University of Barcelona** (December 2014; checking different IT learning tools, and new lab oriented teaching methods that can be used in the implementation of Joint Master Biotechnology degree (JM biotech) in Minia university).
- A member of the British Association for the Study of the Liver (BASL), United Kingdom (2016-2017).
- The International Relation and Agreements Office (IRAO) co-ordinator for the Pharmacology and Toxicology and Pharmaceutical Biochemistry departments in the Faculty of Pharmacy-Alexandria university (March 2017-June 2019).
- Vice director of the International Relation and Agreement Office (IRAO) (June 2017-June 2019).
- A member in the committee for selection of Pharmacy undergraduate students participating in the summer school and clinical training at ITB-Indonesia and UiTM- Malaysia (April 2017, April 2018, April 2019).
- Scientific evaluator for the promotion evaluation to an Associate Professor degree for the **Arab American University (Jenin, Palestine)**.
- Scientific evaluator for the **British council** to judge the Newton-Musharafa PhD program applications (2017/2018, 2018/2019, and 2019/2020).
- Scientific evaluator for the **STDF** (Science and Technology Development Fund), A national Egyptian funding agency for scientific research projects.
- Scientific evaluator for the **ATRF** (Academic Thesis Research Funding), the faculty of Pharmacy, Alexandria university.
- Internal evaluator for Cell biology and Clinical Pharmacokinetic courses, Faculty of Pharmacy, Alexandria University (2017/2018).

- Academic evaluator for posters in the first scientific forum for graduate studies, Faculty of Pharmacy, Alexandria university (2019).
- Academic evaluator for posters in the second Pharos university in Alexandria international conference on Multidisciplinary approaches in Pharmaceutical sciences (ICMAPS-2020).
- Editorial Board member for Bioscientific Review and Madridge journal of analytical sciences and instrumentation.
- Board member in the Central lab of faculty of Pharmacy-Alexandria university (March 2018-December 2019).
- Executive manager of the Central lab of faculty of Pharmacy-Alexandria university (December 2019-now).
- Member in the National committee of Biochemistry and Molecular Biology, Academy of Scientific Research and technology (October 2018-now).
- A member in the scientific committee of the "National Conference of Biochemistry and Molecular Biology: Recent Trends in Biochemistry & Molecular Biology: Towards Vision 2030". **The American university in Cairo**, New Cairo, EGYPT, September 14-15, 2019.
- A Judge in the "National Conference of Biochemistry and Molecular Biology: Recent Trends in Biochemistry & Molecular Biology: Towards Vision 2030". **The American university in Cairo**, New Cairo, EGYPT, September 14-15, 2019.
- Executive manager for the central lab of the faculty of pharmacy-Alexandria University, **December 2019**-now.

## TEACHING EXPERIENCE

- **-Clinical lab investigations (Pharm D postgraduate students)**: This course provides postgraduate students with an overview of the different laboratory based different investigations and an interpretation to the results.
- **-Occupational, industrial, and environmental toxins (Clinical toxicology diploma postgraduate students):** This course is designed to provide students with an up-to-date review of occupational, industrial, and environmental toxins that can affect human health. The study unit covers exposure pathways, absorption, distribution and storage of environmental toxins. Furthermore, the risk management options at pre- and post-release stages of industrial toxins are discussed through a case-based approach. It also addresses the environmental health issues of specific concern to pregnant women and children's health.
- -Molecular Biology of human disease (Biochemical analysis diploma postgraduate students): This course includes the theory and application of nucleic acid extraction and molecular diagnostic tools, including Polymerase Chain Reaction (PCR), reverse transcription, probe hybridization, and microarray technology.
- -Metabolic disorders (Biochemistry Master students): This course includes detailed clinical correlations with metabolism of different important biomolecules. Inborn errors of metabolism will be also studied together with the application of DNA technology to their study. In addition, genetic aspects of metabolic diseases will be highlighted.
- -Biomarkers of diseases (Biochemistry PhD students): This course describes the molecular

and biochemical mechanisms that underlie a number of important human diseases. It includes descriptions of many of the investigative methods to diagnose these diseases and describe how knowledge of diseases processes can lead to new therapeutic approaches and treatments.

- -Advanced Molecular Biology (Biochemistry PhD students): This course will discuss in details advanced topics of molecular biology that is related to research methodologies. This course is aimed at developing knowledge in current and/or leading edge techniques that are commonly used for research into cell and molecular biology with a focus on human disease.
- -Advanced Pharmacogenomics (Biochemistry PhD students): Pharmacogenomics is the study of how human genetic variation impacts drug response. This course will provide the background to understand the pharmacogenomics, including the methods used in research and the current issues in discovery and implementation of pharmacogenomics.
- **-Biochemistry-I** (Clinical pharmacy undergraduate students): 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 (Clinical pharmacy undergraduate students): 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 (Clinical pharmacy undergraduate students): 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.

## REFERENCES

TO BE GIVEN UPON REQUEST