

Ahmed Seif EL-Din Kamel El-Deeb
Associate Professor of Pharmacology & Toxicology



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Languages	English (Oral and Written Proficiency)
Web of Science	AAE-5375-2019
H-Index	7

Academic Degrees

Bachelor of Pharmaceutical Sciences

Bachelor of Pharmacy, 2008, Faculty of Pharmacy, Cairo University.

Master of Science

Pharmacology & Toxicology - Title: Pharmacological study of the possible antidiabetic action of certain phosphodiesterase inhibitors in experimental rats, April 2015, Faculty of Pharmacy, Cairo University.

Doctor of Philosophy

Pharmacology & Toxicology - Title: Effect of Mas receptor on D-galactose-induced cognitive impairment in ovariectomized rats, May 2018, Faculty of Pharmacy, Cairo University.

Postdoctoral International Training and Joint Research

Dr Ahmed had got **Postdoctoral international training funded by Erasmus plus** under supervision of **Professor Dr Matthew Wright (Matthew.Wright@newcastle.ac.uk)** and **Dr Tarek Mamdouh (Tarek.Abdelghany@newcastle.ac.uk)** in **institute of Cellular Medicine Medical School, New Castle University, Newcastle Upon Tyne NE2 4HH, UK**. As continuing to this collaboration, Dr Ahmed is conducting a joint research with Prof Dr Matthew and Dr Tarek as a follow up to their researches on ionic liquids where **Dr Ahmed is a head of neurobehavioral team responsible for studying neurobehavioral effects of ionic liquids** (liquids that induce common autoimmune hepatitis in UK and caused several AIH cases) **on animals in relevance to gender**. This project is a cornerstone in Newcastle University to feedback the medical society with the new advances regarding Autoimmune Hepatitis (AIH) in UK. This project is on-going and under-publication process.

Public Engagement

-After publication of our project findings about **neurotoxicity of commonly used anti-diarrheal drug in Egypt; Diiodohydroxyquinoline**, our research team delved to present these results to the public in the **workshop entitled “Fake Medications: Challenges, Global Responses and Current Research”** that had been held on the 24th/25th September 2019 at Steigenberger El Tahrir Hotel in Cairo, Egypt **in collaboration with Freie Universität Berlin in Cairo**. Our publication entitled “Experimental Evidence for Diiodohydroxyquinoline-Induced Neurotoxicity: Characterization of Age and Gender as Predisposing Factors. **Kamel, A.S.**; Mohamed, A.F.; Rabie, M.A.; Elsherbiny, M.E.; Ahmed, K.A.; Khattab, M.M.; Abdelkader, N.F. *Pharmaceuticals* 2022, 15, 251. <https://doi.org/10.3390/ph15020251>”.

- **Dr Ahmed is one of the founders of the first Pharmacovigilance diploma in Egypt**. Dr Ahmed recently in collaboration with the diploma team succeeded to obtain the acceptance from **the minister of high education and supreme council of universities** to transform the academic diploma to **professional diploma** to increase the awareness of pharmacovigilance in the pharmaceutical and non-pharmaceutical sectors to monitor any adverse events evolves from the medications in the Egyptian market. **Dr Ahmed’s implementation of collaboration with**

Egyptian drug authority (EDA) and Pharmacovigilance departments in pharmaceutical companies has the real impact of success of diploma to gain a lot of interests especially the diploma enabled the graduates to log to **vigibase** and different databases for first time in Egypt.

- As the role of **Dr Ahmed as a vice-chairman of Animal Facility of Faculty of Pharmacy, Cairo University**, enabled him to organize several **workshops for undergraduate students** of school of pharmacy to engage them with **the application of ARRIVE guidelines (Animal Research: Reporting of In Vivo Experiments) to comply with ethics of experimental animal studies**. These workshop in collaboration with Vice-dean for community affairs in the school of Pharmacy.

- Dr Ahmed is **the first in Egypt** to apply **practical modules of basic pharmacology using Strathclyde Pharmacology Simulations programs** (under permission from Strathclyde University, Glasgow) **for teaching in vitro and in vivo techniques in undergraduates Pharmacology courses to save animals consumption and comply with code of ethics**. These modules based on problem-based learning (PBL) to allow the students to acquire their knowledge based on concept mapping rather than rote learning.

Career History and Professional Experience

Titles

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Academic Activities

- **Researcher** in Aya Alaa lab in Helmy Institute of Biomedical Sciences, Zewail City of Science and Technology – May 2015 - till now.
- **Teacher and Lecturer of Pharmacology-1, Biostatistics and Biological Standardization** in Bachelor program for undergraduates starting from June 2018.
- **Teaching/ Research Assistant** at Department of Pharmacology & Toxicology, Faculty of pharmacy Cairo University - May 2009 till 2018.
- **Officer of Department of Pharmacology and Toxicology department in the committee that organize the official site of Faculty of Pharmacy, Cairo University –September 2015-2016.**
- **Member of Device Committee at Department of Pharmacology and Toxicology, Faculty of Pharmacy, Cairo University- September 2014-till Now.**

- **Organizer of Drug profile project for third year students, 2009-2015, Faculty of Pharmacy, Cairo University.**
- **Officer of Department of Pharmacology and Toxicology department for undergraduate courses in Performance Appraisal and Quality Assurance Unit, Faculty of Pharmacy, Cairo University – May 2016 till 2018.**
- **Installation of behavioral equipment of Ugo-Basile, Italy in Clinical Toxicology Lab** (Multi 8-arm maze, Elevated plus maze, Morris water maze, Activity cage, Plethysmometer, Rotarod open-field and Object recognition task).
- **Member of the First Board of Faculty of Pharmacy, Egyptian Chinese University (ECU) –started on 28/9/2020-till present.**
- **Reviewer in several Outstanding Medical journals**
- **First in Egypt to run and apply Any-maze Behavioral tracking software to analyze animal behavior in behavioral labs.**

Projects

- 1-Participant in the Erasmus project entitled “IT-based international diploma and professional certificate in clinical toxicology”-ITCT (2015). "Collaboration between different Universities from Egypt, The UK, Malta and Sweden" (January 2018 - present)
- 2- Project to study **Neurobehavioral effects of ionic liquids in both animal genders** in collaboration with **institute of Cellular Medicine Medical School, New Castle University, Newcastle Upon Tyne NE2 4HH, UK..**
- 3- Participant in National Research Centre (NRC) research grant entitled “Development of new multi-target drugs for the treatment of osteoporosis’ (2019).

Research interest

Diabetes, Neurodegenerative diseases, Molecular Neuropharmacology, Inflammation.

Research Activities

1-Publications

- 1- **Kamel AS**, Farrag SM, Mansour HM, Nassar NN, Saad MA. Dapagliflozin modulates neuronal injury via instigation of LKB1/p-AMPK/GABAB R2 signaling pathway and suppression of the inflammatory cascade in an essential tremor rat model. *Expert Opin Ther Targets*. 2023 May 2;1-20. doi: 10.1080/14728222.2023.2206955. Epub ahead of print. PMID: 37089040.
- 2- Modulation of p38 MAPK and Nrf2/HO-1/NLRP3 inflammasome signaling and pyroptosis outline the anti-neuroinflammatory and remyelinating characters of Clemastine in EAE rat model. Tarek K. Motawi, Shohda A. El-Maraghy, **Ahmed S. Kamel**, Salma E. Said, Mona A. Kortam. *Biochemical Pharmacology*, Volume 209, 2023., 115435, ISSN 0006-2952, <https://doi.org/10.1016/j.bcp.2023.115435>.
- 3- Boosting amygdaloid GABAergic and neurotrophic machinery via dapagliflozin-enhanced LKB1/AMPK signaling in anxious demented rats. **Ahmed S. Kamel**, Ahmed Wahid, Noha F. Abdelkader, Weam W. Ibrahim, *Life Sciences*, Sep 2022. <https://doi.org/10.1016/j.lfs.2022.121002>.
- 4- Dapagliflozin as an autophagic enhancer via LKB1/AMPK/SIRT1 pathway in ovariectomized/d-galactose Alzheimer's rat model. WW Ibrahim, **AS Kamel**, A Wahid, NF Abdelkader - *Inflammopharmacology*, April 2022. <https://doi.org/10.1007/s10787-022-00973-5>
- 5- Role of PI3K/Akt axis in mitigating hippocampal ischemia-reperfusion injury via CB1 receptor stimulation by paracetamol and FAAH inhibitor in rat. Sherif S. Abdel Mageed, Ramy M. Ammar, Noha N. Nassar, Helmy Moawad, **Ahmed S. Kamel**. *Neuropharmacology* 2022, 207, 2022, 108935. <https://doi.org/10.1016/j.neuropharm.2021.108935>
- 6- Experimental Evidence for Diiodohydroxyquinoline-Induced Neurotoxicity: Characterization of Age and Gender as Predisposing Factors. **Kamel, A.S.**; Mohamed, A.F.; Rabie, M.A.; Elsherbiny, M.E.; Ahmed, K.A.; Khattab, M.M.; Abdelkader, N.F. *Pharmaceuticals* 2022, 15, 251. <https://doi.org/10.3390/ph15020251>

7- Sesquiterpene lactones; Damsin and Neoambrosin suppress cytokine-mediated inflammation in complete Freund's adjuvant rat model via shutting Akt/ERK1/2/STAT3 signaling. Shymaa I.A.Mahmoud, Mohamed N.A.Khalil, Enas H.Abdelrahman, Hamida M.El-Gohary, **Ahmed S.Kamel**. J Ethnopharmacol (2020). <https://doi.org/10.1016/J.JEP.2020.113407>

8- Immunomodulatory effect of diallyl sulfide on experimentally induced benign prostate hyperplasia via the suppression of CD4+T/IL-17 and TGF- β 1/ERK pathways. Elbaz, E.M., Amin, H.A.A., **Kamel, A.S.** et al. Immunomodulatory effect of diallyl sulfide on experimentally-induced benign prostate hyperplasia via the suppression of CD4+T/IL-17 and TGF- β 1/ERK pathways. Inflammopharmacol (2020). <https://doi.org/10.1007/s10787-020-00743-1>

9- Vildagliptin Attenuates Huntington's Disease through Activation of GLP-1 Receptor/PI3K/Akt/BDNF Pathway in 3-Nitropropionic Acid Rat Model. Noha H. Sayed, Nevine Fathy, Mona A. Kortam, Mostafa A. Rabie, Ahmed F. Mohamed, **Ahmed S. Kamel** Neurotherapeutics **volume** 17, pages252–268(2020).

10-Stimulation of ACE2/ANG(1–7)/Mas Axis by Diminazene Ameliorates Alzheimer's Disease in the D-Galactose-Ovariectomized Rat Model: Role of PI3K/Akt Pathway. **Kamel, A.S.**, Abdelkader, N.F., Abd El-Rahman, S.S. et al. Mol Neurobiol. 2018 Oct;55(10):8188-8202. doi: 10.1007/s12035-018-0966-3. Epub 2018 Mar 7.

11-Beneficial effects of certain phosphodiesterase inhibitors on diabetes mellitus in rats. **Kamel, A.S.**, Eid, N., El-Sayed, M.E. Volume 52, Issue 2, December 2014, Pages 179-189. Bulletin of Faculty of Pharmacy, Cairo University.

2- Peer Reviewer in Journals

All reviewed papers were verified on web of science site:
<https://www.webofscience.com/wos/op/peer-reviews/summary>

1 paper for Chemico-Biological Interactions, impact factor (2020/21): 5.192.

Paper entitled "Suppression of BACE1 and amyloidogenic/RAGE axis by sitagliptin ameliorates PTZ kindling-induced cognitive deficits in rats" **2020-05-23** Verified on publons

1 paper for Aging, impact factor (2020/21): 5.682.

Paper entitled "miR-132/PTEN signaling pathway regulates cognitive impairment and neural plasticity in mice with depression through targeting the PI3K/AKT axis" by Rongguo Yu, Qin Dan, Jingjing Wang, and Xiao Han [Paper #014321]. **01-05-2022** Verified on publons

4 papers for BMC Complementary Medicine and Therapies, impact factor (2020/21): 6.5.

Papers entitled

A-“Resveratrol induces proliferation and differentiation of mouse pre-osteoblast MC3T3-E1 by promoting autophagy”, 01-02-2023 verified on publons.

B-“Protective Effects of Salvianolic Acid B on Intestinal Ischemia/reperfusion Injury in Rats By Regulating the AhR/IL- 22/STAT6 Axis”, 2023-01-30 verified on publons

C-“Xiaoyaosan Ameliorates Depressive-like Behavior and Susceptibility to Glucose Intolerance in Rat: Involvement of LepR-STAT3/PI3K Pathway in Hypothalamic Arcuate Nucleus” 2022-07-27, 2022-10-24 verified on publons

3 papers for International Journal of Molecular Sciences; Impact factor (2020/21): 6.208

A-“Knockdown of amyloid precursor protein increases ion channel expression and alters calcium Ca²⁺ signaling pathways” 2023-01-05 verified on publons

B-“Functional correlates of striatal dopamine transporter cerebrospinal fluid levels in Alzheimer’s disease: a preliminary 18F-FDG PET/CT study” 2022-12-19 verified on publons

C-“Neuropharmacological modulation of N-Methyl-D-aspartate, Noradrenaline and Endocannabinoids receptors in Fear Extinction Learning: synaptic transmission and plasticity” 2023-01-09 verified on publons

1 paper for Cell Communication and Signaling, Impact factor (2020/21): 7.54

Paper entitled “Estrogen Downregulates Cd73/adenosine Axis Hyperactivity Via Adaptive Modulation Pi3k/akt Signaling to Prevent Myocarditis and Arrhythmias During Chronic Catecholamines Stress” 2022-12-05, 2023-01-09 verified on publons

1 paper for Applied Sciences, Impact factor (2020/21): 2.838

Paper entitled “Modeling of Brain Cortical Activity During Relaxation and Mental Workload Tasks Based on EEG Signal Collection”, 2023-01-30 verified on publons

1 paper for Molecules, Impact factor (2020/21): 4.927

Paper entitled “Analytical Characterization and Pharmacological Evaluation of Boswellia Serrata against 3-NP Induced Experimental Huntington’s disease (HD)” 2023-01-09 verified on publons.

3- Editor in Journals

Guest editor in Jove Visualized Journal of Experiments for Methods Collection Proposal entitled “Recent advancements and Modifications in Rodent Behavioral Testing”.

4- Conferences

- Poster Presentation at the 4th scientific conference of Faculty of Pharmacy Cairo University, 24-25th April 2013.
- The “6th Global Diabetes Summit and Medicare Expo” held on November 02-04, 2015 in Dubai, UAE.
- **Head and Coordinator of Pharmacology and Toxicology Department Conference, Cairo University, 4th march 2020.**

5- Research and Statistical Analysis Programs

1. **Graph Pad Prism analysis program** for biostatistics analysis, scientific graphing, and curve fitting.
2. **SPSS program** for Statistical Data analysis
3. **Reference manager software** to handle references and full-text documents, and citations while writing thesis and articles.
4. **Mendeley program** to handle and share references as well full-text documents, and citations while writing thesis and articles.
5. **Principle component analysis technique**, a statistical procedure that uses an orthogonal transformation to convert a set of observations of possibly correlated variables into a set of values of linearly uncorrelated variables.
6. **R, C++, python coding** and ongoing applying of them in advanced models of **computational biology and bioinformatics**.
7. Licensed Proficiency in **Microsoft programs**.
8. **Image analysis** of immunohistochemical and western blot images **using image J analyzer program**.
9. Sophisticated video-tracking system **“ANY-maze Behavior Tracking Software for recording animal activity and movement during behavioral tests”**.

10. Network pharmacology and ability to construct Disease-target and Drug-target networks by **Cytoscape network** then compounding both with elucidation of protein-protein interaction (PPI) by **String Network** database besides using TCMP database.
11. **Application of Gene Ontology by Kyoto Encyclopedia of Genes and Genomes (KEGG) and Functional enrichment analysis genes** using **DAVID database, g:Profiler and ShinyGO.**

6- Research Experience and Techniques

1. Wide experience in **conducting neurobehavioral tasks (11 apparatuses)** to evaluate sensory, cognitive and psychiatric domains in rodents. Dr Ahmed has experience to apply different analytical techniques to interpret animal behavior using animal tracking software like any-maze together with factorial statistical analysis to figure out the possible animal behavior under different stimuli and environmental conditions.
2. ***In vitro* isolation of beta-islets from pancreas of rats by collagenase enzyme** using stereomicroscope under supervision of Prof. Dr. Mostafa El-Sayed, Professor of Pharmacology and Toxicology, Faculty of Pharmacy, Cairo University.
3. **Western blotting technique for measurement of protein expressions** in Zewail city of Science and Technology under supervision of Prof. Dr. Marwan Emara, Professor of Cancer Biology, Zewail city of Science and Technology.
4. **Real time Polymerase Chain Reaction technique (RT-PCR) for assessment of gene expressions using Taqman assay** in Zewail city of Science and Technology under supervision of Prof. Dr. Marwan Emara, Professor of Cancer Biology, Zewail city of Science and Technology.
5. **Intracranial injections in rats using stereotaxic apparatus** in Faculty of Pharmacy, Alexandria University, under supervision of Prof. Dr. Mahmoud El-Mas, Professor of Pharmacology and Toxicology, Alexandria University.
6. **Primer design for assessing gene expression of proteins in conventional PCR** in Faculty of Pharmacy, Alexandria University, under supervision of Assistant Prof. Dr. Ahmed Waheed, Assistant Professor of Pharmacology and Toxicology, Alexandria University.
7. **Immunohistochemical analysis of protein expressions as tissue-based technique** in Faculty of Pharmacy, Alexandria University, under supervision of Prof. Dr. Mahmoud El-Mas, Professor of Pharmacology and Toxicology, Alexandria University.

8. **Cardiovascular techniques such as femoral cannulation, baroreflex sensitivity and heart rate variability** in Faculty of Pharmacy, Alexandria University, under supervision of Prof. Dr. Mahmoud El-Mas, Professor of Pharmacology and Toxicology, Alexandria University.
9. **Induction of Alzheimer's animal model through performing ovariectomy surgery followed by D-galactose injection** in Faculty of Pharmacy, Cairo University under supervision of Prof. Dr. Mahmoud Khattab, Professor of Pharmacology and Toxicology, Faculty of Pharmacy, Cairo University.
10. **Induction of Diabetes mellitus in rats using Streptozotocin** under supervision of Prof. Dr. Mostafa El-Sayed, Professor of Pharmacology and Toxicology, Faculty of Pharmacy, Cairo University.
11. **High-performance liquid chromatography and Mass spectroscopy analysis** in Faculty of Pharmacy, Cairo University under supervision of Dr. Mohamed Khaled, Lecturer of Analytical chemistry, Faculty of Pharmacy, Cairo University.
12. **Deep resolution and diagnosis of cardiovascular compartments using Hs-2200 High resolution Black/White ultrasound imaging system from Honda electronics Co., Ltd.**
13. Assessing **Nerve conduction of sciatic nerve using ADI instrument nerve conduction chamber** with analysis of biphasic action potential, nerve conduction velocity, absolute and relative refractory periods using Lab chart 7.
14. **Local Field potential recordings using ADI instrument and stereotaxic technique in CA1 and lateral hypothalamus.**
15. Application of **ARRIVE guidelines** (Animal Research: Reporting of In Vivo Experiments) as a checklist of recommendations to improve the reporting of research involving animals – maximizing the quality and reliability of published research, and enabling others to better scrutinize, evaluate and reproduce it.
16. **Writing and discussing systemic reviews** including manipulation of search strategy and other methodological analysis.

Teaching Courses

	Course Title
Undergraduate Courses in Faculty of Pharmacy-Cairo University (Bachelor of Pharmacy Program)	Pharmacology I - FOPCU
	Pharmacology II- - FOPCU
	Pharmacology III - FOPCU
	Biostatistics and Biological Standardization of Drugs- FOPCU
	Toxicology - FOPCU
	First aid- FOPCU
Undergraduate Courses (Clinical Program)	Pharmacology1 - FOPCU
	Pharmacology-2 - FOPCU
	Toxicology and Forensic Chemistry - FOPCU
	Therapeutics-1 - FOPCU
	Clinical Pharmacology - FOPCU
	Clinical Therapeutics-1 & 2 - FOPCU
	Clinical Respiratory system diseases - FOPCU
	Clinical Gastrointestinal system diseases - FOPCU
	Oncology - FOPCU
	First aid - FOPCU
Undergraduate Courses (Future University in Egypt - Egyptian Chinese University)	Terminology (MD101)- Faculty of Pharmacy, ECU (2020-2022)
	Pharmacology-1 Faculty of Physiotherapy, ECU (2020-till now)
	Drug Abuse Faculty of Pharmacy, FUE (2020-2021)
	Toxicology Faculty of Pharmacy, FUE (2020-2021)
	Pharmacology-1 Faculty of Pharmacy, FUE (2020-2021)
	Pharmacology-2 Faculty of Pharmacy, FUE (2020-2021)
Postgraduate Courses in Faculty of Pharmacy-Cairo University	Lecturer assistant in Experimental Pharmacology course, Master Program-FOPCU (2010-2012)
	Lecturer of Pharmacovigilance 1 and 2 beside Pharmacotherapy and Drug-induced adverse effect courses in Pharmacovigilance Diploma, Faculty of Pharmacy, Cairo University (2018-till present).
	Lecturer of Biostatistics course in Clinical Toxicology Diploma, Faculty of Pharmacy, Cairo University.

Teaching Experience and Skills

- Delivered **clear and logical online lectures** that help the students to understand the point of each lecture, as well as make the content easy to follow and recall.
- Expert in **face-to-face and online environments**, that is crucial to engage students with the course. This makes the course interesting and not only motivates student work, but it also promotes student success. This allows intertwining interesting videos, and examples into lectures using several applications as google classrooms, meet and zoom.
- **Teaching & research experience**, particularly in a laboratory environment
- **Knowledge of education and market trends as well challenges** in assigned content areas i.e., Biology, Chemistry, Medicine, or Psychology
- Knowledge of **STEM publishing**
- Demonstrated ability to deliver **excellent presentations for large and small groups**
- Experience in **networking with scientists and decision makers**
- Experience in **public speaking and creating engaging presentations for teachers, researchers, libraries, and decision makers.**
- **Head of Pharmacology-1 team (303, PO701, PO501, POC401)**: created interactive modules that apply perception of students to theoretical lectures with cardiovascular charts using Strathclyde pharmacology simulation program.
- **Head of Pharmacology-2 team (302)**: created flexible structure for drug profile project that enable 3rd year students to cooperate and search for new drugs as well reveal the new trends and updates in the pharmaceutical sciences.
- **Head of Biostatistics team (306)**: created statistical modules through reviewing published research to motivate the students to link their learned statistical basics with the applied one.
- Creating practical modules of basic pharmacology based on **Strathclyde Pharmacology Simulations programs** for teaching in vitro and in vivo techniques in undergraduates Pharmacology courses.

Awards and Achievements

- **Best PhD thesis for year 2018 in Pharmacology and Toxicology Department**, Faculty of Pharmacy, Cairo University.
- **Best Post-doctoral research for year 2020 in Pharmacology and Toxicology department**, Faculty of Pharmacy, Cairo University.

Courses, Certificates, Workshops & Webinars

- Certified **Project Management course** (32 hours) from **ESLSCA, Egypt** after presenting a project using work breakdown structure, Gantt chart and passing through all steps of project management from initiation to planning and execution till closure and how to engage with stakeholders before the release of new Anti-MS drug (12/2-7/3/2023).
- Certified **Basics of Tissue culture and cell lines course and training** from **Vacsera, Egypt** on using different types of cell lines and sub culturing beside precautions during handling and preservation of cells “31/1-6/2/2023”.
- Certified Course from **Nasser Higher Military Academy**. Course entitled “Methods of Thinking and Future Studies Number 19” hold in Center of Strategic Thinking for Military Forces, 18/9-5/10/2022.
- **Three Online Workshops** certified from **Nature Research Academies** and **STDF, Egypt**. Workshops were about how to design a and write a research manuscript and how to write a protocol to obtain different grants. Workshops entitled “Research Methodology, Grant writing, Writing Research paper”, 17-27/7/2022.
- Certified Workshop entitled “**How to apply Competency Based Learning (CBL)**” by performance appraisal and quality assurance unit at Faculty of Pharmacy, Cairo University, 18/7/2022.
- Online webinar about “**Supercharge your image analysis with advanced AI methods**” promoted by Bitesize Bio webinars and Zeiss, 14/7/2022.
- Online Course about “**Mobile applications**” by faculty and leadership center at Cairo University (FLDC), 30-31/3/2022
- Online Certified Course about “**Academic advisor for Bachelor of Pharmacy- Pharm D**” by performance appraisal and quality assurance unit at Faculty of Pharmacy, Cairo University, 16/2/2022.

- Online Certified Course about “**Critical thinking**” by faculty and leadership center at Cairo University (FLDC), 1/2022
- Online Certified Course about “**Specialized workshop in Quality Practice**” by performance appraisal and quality assurance unit at Faculty of Pharmacy, Cairo University, 12/10/2021.
- Online Certified Course about “**Interactive E-learning**” by faculty and leadership center at Cairo University (FLDC), 10/2021
- Online Course workshop about “**Fundamentals of Integrated Learning**” by faculty and leadership center at Cairo University (FLDC), 8/2021
- Online workshop about “**HTA Education**” organized by Vintura at 12-14th January 2020 in collaboration with **Unified Procurement Authority**.
- Online Certified workshop about “**H-index, Impact factor and Citation**” by performance appraisal and quality assurance unit at Faculty of Pharmacy, Cairo University, 27/8/2020.
- Certified Workshop about “**Fundamentals of Photoshop: Towards designing a Graphical Abstract**” by performance appraisal and quality assurance unit at Faculty of Pharmacy, Cairo University, 20/1/2020.
- Certified Course about “**Stress management**” by faculty and leadership center at Cairo University (FLDC), 2019
- Certified Training Course entitled “**E-Learning Management system**” in E-learning Competence Centre for E-Learning at Ministry of Communications and Information technology (MCIT), 2nd-4th July 2018.
- Certified workshop entitled “**Essentials of Pharmacovigilance Practice: An Overview**” by Drug Manufacturing Unit, Faculty of Pharmacy, Cairo University, 14th May 2018.
- Certified Course about “**Fundamentals of Clinical Trials**” by faculty and leadership center at Cairo University (FLDC), 2018.
- Certified Course about “**University Management**” by faculty and leadership center at Cairo University (FLDC), 2017.
- Certified Course about “**Citation managers software; Endnote vs mendely**” by Faculty of Pharmacy, Cairo University, 2017.
- Certified Course about “**Creative Thinking**” by faculty and leadership center at Cairo University (FLDC), 2016.

- Certified Course about “**Effective Teaching Skills**” by faculty and leadership center at Cairo University (FLDC), 2016.
- Certified Course about “**Strategic Planning**” by faculty and leadership center at Cairo University (FLDC), 2016.
- Certified Course about “**University Code of Ethics**” by faculty and leadership center at Cairo University (FLDC), 2016.
- Certified Course about “**Exams and Students Evaluation System**” by faculty and leadership center at Cairo University (FLDC), 2015
- Certified Course about “**International Publishing of Scientific Research**” by faculty and leadership center at Cairo University (FLDC), 2015
- Certified Course about “**Legal and Financial Aspects in University Environment**” by faculty and leadership center at Cairo University (FLDC), 2014
- Certified Training Course entitled “**Statistical Data Analysis using SPSS- Level 1**” by The Institute of Statistical Studies and Research, 7th Dec 2012-11th Jan 2013.
- Certified Course about “**Conference Organization**” by faculty and leadership center at Cairo University (FLDC), 2013.
- Certified Course about “**Use Technology in Teaching**” by faculty and leadership center at Cairo University (FLDC), 2013
- Certified Course about “**Competing for Research Funds**” by faculty and leadership center at Cairo University (FLDC), 2012
- Certified Course about “**The Credit Hour Systems**” by faculty and leadership center at Cairo University (FLDC), 2012.
- Certified Course about “**Essentials of Pharmacovigilance Practice: An Overview**”
- ICDL Holder (Windows, Word, Excel, IT, Access, Power point and Networks), 2010.

Training internship

- Two weeks training in quality control department at “6th October Company”, 2006.
- Manager and Pharmacist of Al-Atbaa pharmacy, 2009-till present.
- Statistical Data analysis using SPSS, Institute of statistical studies and research, 7th December 2012-11th January 2013.
- Training at Alexandria University as part of the capacity building of the team members working in the ITCT project on stereotaxic technique, immunostaining, blood pressure and baroreflex responses measurements, 15-17th July 2018.
- ITCT pilot training for E-labs in E-learning competence Centre at Ministry of communications and information technology (MCIT), 2nd-4th July 2018.
- Training in Newcastle University on protein and gene analysis techniques; western blot and polymerase chain reaction under supervision of Professor Matthew Wright, Institute of Cellular Medicine, Medical School, Newcastle University, Newcastle upon Tyne funded by Erasmus plus project entitled “IT-based international diploma and professional certificate in clinical toxicology”-ITC, 28 August-5 September 2018.
- Training on installation and running Ugo-Basile instruments in Egypt, January, 2019.