CURRICULUM VITAE Iriny Mohsen Mansour Ayoub, Ph.D. Associate Professor

Department of Pharmacognosy and Phytochemistry
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CONTACT INFORMATION

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PERSONAL

Nationality: Egyptian

Date of Birth: June 30, 1982 **Place of Birth:** Cairo, Egypt

EDUCATION

B.Sc. in Pharmaceutical Sciences, May 2004.

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

M.Sc. in Pharmaceutical Sciences (Pharmacognosy), September 2010.

Department of Pharmacognosy, Faculty of Pharmacy, Ain Shams University, Cairo, Egypt. **Thesis Title:** "Phytochemical and biological study on certain plants belonging to family Asteraceae"

Ph.D in Pharmaceutical Sciences (Pharmacognosy), March 2015.

Department of Pharmacognosy, Faculty of Pharmacy, Ain Shams University, Cairo, Egypt. **Thesis Title:** "Phytochemical and biological study on certain plants belonging to family Iridaceae"

PROFESSIONAL EXPERIENCE

(May 2020 to present, *Associate Professor* of Pharamcognosy and Phytochemistry, Department of Pharmacognosy, Faculty of Pharmacy, Ain Shams University, Cairo, Egypt.

(October 2020 to July 2021, *Visiting Associate Professor* of Pharamcognosy and Phytochemistry, Department of Pharmacognosy, Faculty of Pharmacy, Heliopolis University for Sustainable Development, Cairo, Egypt.

(October 2020 to March 2021, *Visiting Associate Professor* of Pharamcognosy and Phytochemistry, Department of Pharmacognosy, Faculty of Pharmacy, British University in Egypt (BUE), El Sherouk City, Suez Desert Road, Cairo, Egypt.

(April 2015 to April 2020), *Lecturer*, Department of Pharmacognosy, Faculty of Pharmacy, Ain Shams University, Cairo, Egypt.

(September 2015 to June 2019), *Visiting Lecturer*, Department of Pharmacognosy, Faculty of Pharmaceutical Sciences & Pharmaceutical Industries, Future University in Egypt, New Cairo, Egypt.

(February 2019 to June 2019), *Visiting Lecturer*, Department of Pharmacognosy, Heliopolis University, Cairo, Egypt.

(August 2017 till December 2017), *PostDoc*, Institute of Pharmacy and Molecular Biotechnology (IPMB), Heidelberg University, Heidelberg, Germany.

(November 2010 till March 2015), *Assistant Lecturer*, Department of Pharmacognosy, Faculty of Pharmacy, Ain Shams University.

(May 2005 till November 2010), *Teaching assistant*, Department of Pharmacognosy, Faculty of Pharmacy, Ain Shams University.

RESEARCH INTEREST

- LC/MS and GC/MS based metabolomics of natural products.
- Isolation and structure elucidation of bioactive metabolites from medicinal plants and associated endophytes applying various methods of chromatography and the new techniques of spectroscopy.
- Screening for the pharmacological activity of different plant extracts and isolated compounds for potential drug discovery.
- Nutraceuticals and functional foods.
- Molecular docking and ligand-based drug design.
- Chemometric analysis of plant extracts for quality control.
- Analysis and bioassay of essential oils.

SKILLS

- Purification and characterization of plant constituents applying various chromatographic and spectroscopic techniques (e.g. GC/MS, HPLC, LC/MS and NMR).
- Operation of GC/MS instrument.
- Optimization and conduction of antioxidant and neuroprotective assays of natural products in *C. elegans in vivo* model system.
- Optimization and conduction of cell culture techniques to assess the antiproliferative activity of natural products *in vitro*.
- Optimization and conduction of hepatoprotective assay of natural products *in vivo*.
- Molecular docking and ligand-based drug design.

TEACHING EXPERIENCE

Participating in teaching the following undergraduate courses at the Department of Pharmacognosy, Faculty of Pharmacy, Ain Shams University, Cairo, Egypt starting

from April 2015 to date (regular, credit-hours system, Pharm D and Pharm D clinical programs): Medicinal plants, Medical botany, Taxonomy, Pharmacognosy, Phytochemistry, Quality Control of Herbal Products, Structure Elucidation of Natural Products (NMR, MS, IR, UV).

Participating in teaching the following postgraduate courses at the Department of Pharmacognosy, Faculty of Pharmacy, Ain Shams University, Cairo, Egypt starting from April 2015 to date: Advanced Chromatographic techniques, Instrumental Analysis of Natural Products and Selected Topics (Metabolomics: Methods and Applications).

Participating in teaching the following courses at the Department of Pharmacognosy, Heliopolis University, Cairo, Egypt starting from February 2019 to June 2019: Phytochemistry and Chromatography.

Participating in teaching the following courses at the Department of Pharmacognosy, Faculty of Pharmaceutical Sciences & Pharmaceutical Industries, Future University, Cairo, Egypt starting from September 2015 to June 2019: Phytochemistry, Chromatography, and Forensic Pharmacognosy.

Establishing, teaching, and preparation of lecture notes for Forensic Pharmacognosy Course at the Department of Pharmacognosy, Faculty of Pharmaceutical Sciences & Pharmaceutical Industries, Future University, Cairo, Egypt, Spring 2018 and Spring 2019.

STUDENTS' ACTIVITIES

Supervising the graduation project of Level 5 students of Drug Design Program (Credit hours system) at *Faculty of Pharmacy, Ain Shams University, Cairo, Egypt* (2021/2022) under the title of **Phytotherapy**— **A new hope for chemobrain patients.**

Supervising the graduation project of Level 5 students of Drug Design Program (Credit hours system) at *Faculty of Pharmacy, Ain Shams University, Cairo, Egypt* (2019/2020) under the title of **Nutraceuticals in psychiatric practice: Evaluation of their antipsychotic potential in rat models.**

Supervising the graduation project of Level 5 students of Drug Design Program (Credit hours system) at *Faculty of Pharmacy, Ain Shams University, Cairo, Egypt* (2018/2019) under the title of **Neuro-Nutraceuticals: Insights on their neuroprotective effects in Alzheimer's disease.**

Supervising the graduation project of Level 5 students of Drug Design Program (Credit hours system) at *Faculty of Pharmacy, Ain Shams University, Cairo, Egypt* (2016/2017) under the title of **Appraisal on the wound healing potential of a topical preparation formulated with various essential oils.**

Supervising the graduation project of Level 5 students of Drug Design Program (Credit hours system) at *Faculty of Pharmacy, Ain Shams University, Cairo, Egypt* (2015/2016) under the title of **GC/MS analysis of the volatile oil of** *Callistemon citrinus*.

Organizer of the **Volatile Oil Gallery (VOG)** for third year pharmacy students (2014/2015), (2015/2016), (2016/2017) and (2019/2020) at *Faculty of Pharmacy, Ain Shams University, Cairo, Egypt.*

Organizer of the Second Year Students Activity (2015/2016): **First Steps on the Road of Scientific Research: A Phytochemical Approach** at Faculty of Pharmacy, Ain Shams University, Cairo, Egypt.

OTHER ACTIVITIES

Head of 4th year Exam Administration Committee (2022/2023).

Member of Faculty of Pharmacy, Ain Shams University Committees:

- Member of the Faculty Environmental Affairs Committee (2019/2020) to present.
- Member of the Faculty Postgraduate Affairs Committee (2018/2019).
- Member of the Faculty Education and Student Affairs Committee (2017/2018).
- Member of the Faculty Education and Student Affairs Committee (2017/2018).
- Member of the Faculty Instruments and Laboratories Committee (2016/2017).
- Member of the Organization Committee of the 2nd International Conference of Faculty of Pharmacy, Ain Shams University, Cairo, Egypt (2018)

Member of 4th year Exam Administration Committee (2017 to 2021).

Member of Postgraduate Exam Administration Committee (2015 to 2017).

Member of 3rd year Exam Administration Committee (2015).

PUBLICATIONS

- 1. Zaghloul, E., H. Handousa, A. N. B. Singab, M. M. Elmazar, <u>I. M. Ayoub</u> and N. Swilam (2023). Phytoecdysteroids and anabolic effect of *Atriplex dimorphostegia*: UPLC-PDA-MS/MS profiling, in silico and in vivo models. *Plants* 12(1): 206.
- 2. Yehia, S. M., <u>I. M. Ayoub</u>, M. Watanabe, H. P. Devkota and A. N. B. Singab (2023). "Metabolic profiling, antioxidant, and enzyme inhibition potential of *Iris pseudacorus* L. from Egypt and Japan: A comparative study. *Scientific Reports* **13**(1): 5233.
- 3. Kabbash, E. M., Z. T. Abdel-Shakour, S. H. El-Ahmady, M. Wink and <u>I. M. Ayoub</u> (2023). Comparative metabolic profiling of olive leaf extracts from twelve different cultivars collected in both fruiting and flowering seasons. *Scientific Reports* **13**(1): 612.
- 4. Farag, M. A., A. O. Ajayi, M. Taleb, K. Wang and <u>I. M. Ayoub</u> (2023). "A Multifaceted review of *Eurycoma longifolia* nutraceutical bioactives: Production, extraction, and analysis in drugs and biofluids. *ACS Omega* **8**(2): 1838-1850.
- 5. Hassan, H. A., <u>I. M. Ayoub</u>, T. I. M. Ragab, S. M. Afifi, A. E.-N. G. El-Gendy, A. R. H. Farrag, A. M. Abd-Elgawad, M. Farag, A. Elshamy and N. M. Ammar (2022). Metabolomics approach of *Symphyotrichum squamatum* ethanol extract and its nano-Ag formulation protective effect on gastric ulcer via bio-chemical and pathological analyses. *Biomarkers*: 1-16.
- 6. <u>Ayoub, I. M.</u>, Abdel-Aziz, M. M., Elhady, S. S., Bagalagel, A. A., Malatani R. T., and Elkady W. M. (2022). Valorization of *Pimenta racemosa* essential oils and extracts: GC-MS and LC-MS phytochemical profiling and evaluation of *Helicobacter pylori* inhibitory activity. *Molecules*, 27(22): 7965.
- 7. Saeed Kotb, S.; <u>Ayoub, I.M.</u>; El-Moghazy, S.A.; Singab, A.N.B. Phytochemical analysis of *Pithecellobium dulce* (Roxb) Benth bark via UPLC-ESI-MS/MS and evaluation of its biological activity (2022). *Natural Product Research*, 1-6, doi:10.1080/14786419.2022.2140153.

- 8. Thabet, A.A.; Moghannem, S.; <u>Ayoub, I.M.</u>; Youssef, F.S.; Al Sayed, E.; Singab, A.N.B. (2022). GC/MS profiling of essential oils from *Bontia daphnoides* L., chemometric discrimination, isolation of dehydroepingaione and evaluation of antiviral activity. *Scientific Reports*, *12*, 17707, doi:10.1038/s41598-022-22174-4.
- 9. <u>Ayoub, I.M.</u>; El-Baset, M.A.; Elghonemy, M.M.; Bashandy, S.A.E.; Ibrahim, F.A.A.; Ahmed-Farid, O.A.H.; El Gendy, A.E.-N.G.; Afifi, S.M.; Esatbeyoglu, T.; Farrag, A.R.H.; et al. (2022). Chemical profile of *Cyperus laevigatus* and its protective effects against thioacetamide-induced hepatorenal toxicity in rats. *Molecules*, 27, 6470.
- 10. Fayez, S.; <u>Ayoub, I.M.</u>; Mostafa, N.M.; Moussa, A.Y.; El-Shazly, M. (2022). Nutraceuticals in Cancer Therapy. *Handbook of Oxidative Stress in Cancer: Therapeutic Aspects*, 1-20.
- 11. Abdelbaset, S.; El-Kersh, D.M.; **Ayoub, I.M.**; Eldahshan, O.A. GC-MS profiling of *Vitex pinnata* bark lipophilic extract and screening of its anti-TB and cytotoxic activities (2022). *Natural Product Research*, 1-7, doi:10.1080/14786419.2022.2124512.
- 12. Younis, M.M.; Ayoub, I.M.; Mostafa, N.M.; El Hassab, M.A.; Eldehna, W.M.; Al-Rashood, S.T.; Eldahshan, O.A. GC/MS profiling, anti-collagenase, anti-elastase, anti-tyrosinase and anti-hyaluronidase activities of a *Stenocarpus sinuatus* leaves extract. (2022). *Plants*, 11, 918.
- 13. Kandil, N.H.; <u>Ayoub, I.M.</u>; El-Ahmady, S.H.; El-Moghazy, S.A. (2022). Advances in the quality control of fenugreek seeds using chromatographic, spectroscopic and DNA-based techniques: A comprehensive review. *Phytochemical Analysis*, *33*, 155-169, doi:https://doi.org/10.1002/pca.3091.
- 14. Thabet, A. A., **Ayoub, I. M.**, Youssef, F. S., Al Sayed, E., & Singab, A. N. B. (2021). Essential oils from the leaves and flowers of *Leucophyllum frutescens* (Scrophulariaceae): phytochemical analysis and inhibitory effects against elastase and collagenase *in vitro*. *Natural Product Research*, 1-5. doi:10.1080/14786419.2021.2000981
- 15. Korany, D.A.; Said, R.S.; <u>Ayoub, I.M.</u>; Labib, R.M.; El-Ahmady, S.H.; Singab, A.N.B. (2022). Protective effects of *Brownea grandiceps* (Jacq.) against Y-radiation-induced enteritis in rats in relation to its secondary metabolome fingerprint. *Biomedicine and Pharmacotherapy*, 146, doi:10.1016/j.biopha.2021.112603.
- 16. Thabet, A.A.; <u>Ayoub, I.M.</u>; Youssef, F.S.; Al-Sayed, E.; Efferth, T.; Singab, A.N.B. (2022). Phytochemistry, structural diversity, biological activities, and pharmacokinetics of iridoids isolated from various genera of the family Scrophulariaceae Juss. *Phytomedicine Plus*, 2, 100287, doi:https://doi.org/10.1016/j.phyplu.2022.100287.
- 17. <u>Ayoub, I.M.</u>; George, M.Y.; Menze, E.T.; Mahmoud, M.; Botros, M.; Essam, M.; Ashmawy, I.; Shendi, P.; Hany, A.; Galal, M.; et al. (2022). Insights into the neuroprotective effects of *Salvia officinalis* L. and *Salvia microphylla* Kunth in the memory impairment rat model. *Food & Function*, doi:10.1039/D1FO02988F.
- 18. Korany D.A., <u>Ayoub I.M.</u>, Labib R.M., El-Ahmady S.H., Singab A.N.B. (2021). The impact of seasonal variation on the volatile profile of leaves and stems of

- Brownea grandiceps (Jacq.) with evaluation of their anti-mycobacterial and anti-inflammatory activities. South African Journal of Botany, 142:88-95.
- 19. Brinza I., <u>Ayoub I.M.</u>, Eldahshan O.A., Hritcu L. (2021). Baicalein 5,6-dimethyl ether prevents memory deficits in the scopolamine zebrafish model by regulating cholinergic and antioxidant systems. *Plants*, 10(6):1245.
- 20. **Ayoub I.M.**, Korinek M., El-Shazly M., Wetterauer B., El-Beshbishy H.A., Hwang T-L., et al. (2021). Anti-allergic, anti-inflammatory, and anti-hyperglycemic activity of *Chasmanthe aethiopica* leaf extract and its profiling using LC/MS and GLC/MS. *Plants*, 10(6):1118.
- 21. Divya G., Albert A., Singab A.N.B., **Ayoub I.M.**, Al-Sayed E, Paul E, et al. (2021). Renoprotective effect of tectorigenin glycosides isolated from *Iris spuria L.* (Zeal) against hyperoxaluria and hyperglycemia in NRK-49Fcells. *Natural Product Research*, 35(6):1029-1034.
- 22. El Khodary Y.A., **Ayoub I.M.**, El-Ahmady S.H., Ibrahim N. (2021). Molecular and phytochemical variability among genus *Albizia*: A phylogenetic prospect for future breeding. *Molecular Biology Reports*, 48(3):2619-28.
- 23. Kabbash E.M., **Ayoub I.M.**, Gad H.A., Abdel-Shakour Z.T., El-Ahmady S.H. (2021). Quality assessment of leaf extracts of 12 olive cultivars and impact of seasonal variation based on UV spectroscopy and phytochemical content using multivariate analyses. *Phytochemical Analysis*, 1–10.
- 24. Gad H., Al-Sayed E., <u>Ayoub I.</u> (2021). Phytochemical discrimination of *Pinus* species based on GC–MS and ATR-IR analyses and their impact on *Helicobacter pylori*. *Phytochemical Analysis*, 1–16.
- 25. Samir N, George R.F., Elrazaz E.Z., <u>Ayoub I.M.</u>, Shalaby E.M., Plaisier J.R., et al. (2020). Synthesis of some tropane-based compounds targeting colon cancer. *Future Medicinal Chemistry*, 12(23), 2123-2140.
- 26. Elshamy, A.I., Farrag, A.R.H., <u>Ayoub, I.M.</u>, Mahdy, K.A., Taher, R.F., Gendy, A.E.-N.G.E., Mohamed, T.A., Al-Rejaie, S.S., El-Amier, Y.A., Abd-ElGawad, A.M., Farag, M.A. (2020). UPLC-qTOF-MS phytochemical profile and antiulcer potential of *Cyperus conglomeratus* Rottb. alcoholic extract. *Molecules*, 25: 4234.
- 27. Saeed Kotb S, <u>Ayoub IM</u>, El-Moghazy SA, Singab ANB (2020). Profiling the Lipophilic Fractions of *Pithecellobium dulce* Bark and Leaves Using GC/MS and Evaluation of Their Antioxidant, Antimicrobial and Cytotoxic Activities. *Chemistry & Biodiversity*, 17:e2000048. doi:10.1002/cbdv.202000048
- 28. Algebali M, Menze ET, <u>Ayoub IM</u>, Tadros M, Esmat A (2020) Macro and Microscopic Gastroprotective Effects of Grape Seed Extract on the Gastric Ulcer Experimentally Induced by Alcohol. *Archives of Pharmaceutical Sciences Ain Shams University*, 113-123

- 29. Faheem, S. A., Saeed, N. M., El-Naga, R. N., <u>Ayoub, I. M.</u>, & Azab S. S. (2020). Hepatoprotective effect of Cranberry nutraceutical extract in non-alcoholic fatty liver model in rats: impact on insulin resistance and Nrf-2 expression. *Frontiers in Pharmacology*, 11: 218.
- 30. Ashmawy, A. M., <u>Ayoub, I. M.</u>, & Eldahshan, O. A. (2020). Chemical composition, cytotoxicity and molecular profiling of *Cordia africana* Lam. on human breast cancer cell line. *Natural Product Research*, 1-6. doi: 10.1080/14786419.2020.1736064
- 31. Elkady, W.M., <u>Ayoub, I. M.</u>, Abdel-Mottaleb, Y., ElShafie, M. F., & Wink, M. (2020). *Euryops pectinatus* L. flower extract inhibits P-glycoprotein and reverses multi-drug resistance in cancer cells: A mechanistic study. *Molecules*, 25(3): 647.
- 32. Labib, R.M., <u>Ayoub, I.M.</u>, Michel, H.E., Mehanny, M., Kamil, V., Hany, M., Magdy, M., Moataz, A., Maged, B., Mohamed, A. (2019). Appraisal on the wound healing potential of *Melaleuca alternifolia* and *Rosmarinus officinalis* L. essential oil-loaded chitosan topical preparations. *PloS one* 14, e0219561.
- 33. Gad, H.A., <u>Ayoub, I.M.</u>, Wink, M. (2019). Phytochemical profiling and seasonal variation of essential oils of three *Callistemon* species cultivated in Egypt. *PloS one* 14, e0219571.
- 34. Kabbash, E.M., <u>Ayoub, I.M.</u>, Abdel-Shakour, Z.T., El-Ahmady, S.H. (2019). A Phytochemical study on *Olea europaea* L. olive leaf extract (cv. Koroneiki) growing in Egypt. *Archives of Pharmaceutical Sciences Ain Shams University*, 3: 99-105.
- 35. George, R.F., Samir, N., <u>Ayoub, I.M.</u>, Shalaby, E.M., Demitri, N., Wink, M. (2018). Synthesis, antiproliferative activity and 2D-QSAR study of some 8-alkyl-2,4-bisbenzylidene-3-nortropinones. *Future Medicinal Chemistry*, 10(24): 2815-2833.
- 36. Elkady, W. M. and <u>Ayoub, I.M.</u> (2018). Chemical profiling and antiproliferative effect of essential oils of two *Araucaria* species cultivated in Egypt. *Industrial Crops and Products*, 118: 188-195.
- 37. Ayoub, I. M., M. Korinek, T. L. Hwang, B. H. Chen, F. R. Chang, M. El-Shazly and A. N. B. Singab (2018). Probing the antiallergic and anti-inflammatory activity of biflavonoids and dihydroflavonols from *Dietes bicolor*. *Journal of Natural Products*, 81(2): 243-253.
- 38. Singab A.N.B., <u>Ayoub, I.M.</u>, El-Shazly, M., Korinek, M., Wu, T.-Y., Cheng, Y.-B., Chang, F.-R. and Wu, Y.-C. (2016). Shedding the light on Iridaceae: Ethnobotany, phytochemistry and biological activity. *Industrial Crops and Products*, 92: 308-335.
- 39. <u>Ayoub, I. M.</u>, Youssef, F. S., El-Shazly, M., Ashour, M. L., Singab, A. N., & Wink, M. (2015). Volatile constituents of *Dietes bicolor* (Iridaceae) and their antimicrobial activity. *Zeitschrift für Naturforschung C*, 70, (7-8): 217-225.
- 40. <u>Ayoub, I. M.</u>, El-Shazly, M., Lu, M.-C., & Singab, A. (2014). Antimicrobial and cytotoxic activities of the crude extracts of *Dietes bicolor* leaves, flowers and rhizomes. *South African Journal of Botany*, 95: 97-101

41. Singab, A.N.B., Ayoub, N.A., Noaman, M., <u>Ayoub, I. M.</u> (2010). Phytochemical constituents, antioxidant and hepatoprotective activities of Egyptian *Cichorium pumilum* Jacq. *Bulletin of Faculty of Pharmacy, Cairo University*, 48: 13-26.

ATTENDANCE AND/OR PARTICIPATION IN CONFERENCES

- 1. 9th Annual Ain Shams University International Congress (2021), Ain Shams University, Cairo, Egypt.
- 2. Nariman Hossam El-din, <u>Iriny M. Ayoub</u>, Sherweit H. El-Ahmady, Safaa Ahmed El-Moghazy (2019). **Discrimination of** *Trigonella foenum-graecum* **L. from various geographical origins via UV and HPLC coupled to multivariate analysis.** Poster presented at the 5th Future University in Egypt International Conference on Pharmaceutical Sciences, Cairo, Egypt.
- 3. Sara S. Kotb, <u>Iriny M. Ayoub</u>, Safaa A. El-Moghazy, Abdel Nasser B. Singab (2019). Comparative chemical and biological study of *n*-hexane extract of *Pithecellobium dulce* bark and leaves cultivated in Egypt. Poster presented at the 5th Future University in Egypt International Conference on Pharmaceutical Science, Cairo, Egypt.
- 4. Yosra A. El Khodary, Nehal M. Sabry, <u>Iriny M. Ayoub</u>, Sherweit H. El-Ahmady (2018). **Ultraviolet spectroscopy coupled with chemometrics as a chemotaxonomic tool to discriminate between various** *Albizia* **Species cultivated in Egypt.** Poster presented at the 2nd International conference of Faculty of Pharmacy, Ain Shams University, Cairo, Egypt.
- 5. Eman M. Kabbash, Sherweit El-Ahmady, <u>Iriny M. Ayoub</u>, Zeinab T. Abdel-Shakour (2018). **Seasonal variation in oleuropein content of olive leaves from different varieties grown in Egypt**. Poster presented at the 7th Annual International Ain Shams University Congress, Cairo, Egypt.
- 6. Doaa A. Korany, <u>Iriny M. Ayoub</u>, Rola M. Labib, Sherweit H. El-Ahmady, Abd-El Naser B. Singab (2018). Chemical composition and biological activity of the volatile fraction obtained by hydrodistillation from *Brownea grandiceps* (Fabaceae). Poster presented at the 7th Annual International Ain Shams University Congress, Cairo, Egypt.
- 7. <u>Iriny M. Ayoub</u> and Haidy Gad (2017). Cytotoxic activity, seasonal variation and GC/MS-based metabolomics of three *Callistemon* species coupled to chemometrics. Poster presented at the 65th International Congress and Annual Meeting of the Society for Medicinal Plant and Natural Product Research (GA), Basel, Switzerland.
- 8. Wafaa M. Elkady and <u>Iriny M. Ayoub</u> (2017). **GC Profile and anti-proliferative effect of essential oils of two** *Araucaria* **species cultivated in Egypt.** Poster presented at 4th Future University in Egypt International Conference on Pharmaceutical Science, Cairo, Egypt.
- 9. Mohamed H. Aly, Mai F. Tolba, <u>Iriny M. Ayoub</u>, Suher Zada, Abdel Nasser B. Singab, Mohey M. Elmazar (2015). **Hepatoprotective activity of** *Dietes bicolor* **leaf extract: Role of Vitexin.** Poster presented at the *Society of Toxicology (SOT)* 54th annual meeting: San Diego, CA, United States.

- 10. Mohamed H. Aly, Mai F. Tolba, <u>Iriny M. Ayoub</u>, Suher Zada, Abdel Nasser B. Singab, Mohey M. Elmazar (2014). *In vitro* studies on the potential hepatoprotective and antioxidant effects of *Dietes bicolor* leaf extract. Poster presented at the *Egyptian Society of Pharmacology and Experimental Therapeutics* (ESPET) 54th annual conference: Faculty of Pharmacy, British University in Egypt (BUE) El Shorooq City, Egypt.
- 11. <u>Iriny M. Ayoub</u>, Al-Siddeg K. Al-Siddeg, Mai F. Tolba, Mohamed El-Shazly, Amani E. Khalifa, Abdel Nasser B. Singab (2014). *In vivo* studies on the potential anti-inflammatory and antioxidant effects of *Dietes bicolor* leaf extract. Poster presented at the 17th Scientific Congress of the Association of Pharmacy Colleges in the Arab World: Faculty of Pharmacy, Ain Shams University Cairo, Egypt.

ACADEMIC AWARDS

A research project entitled "Natural Product-Based Nanomedicine in the Alleviation of Neurocognitive Impairment Induced by Chemotherapy" funded by the **Academy of Scientific Research and Technology (ASRT) REsearch Support Program to winners of StatE and international sCienTific Prizes (RESPECT);** (2022 to present).

Applied research funded by **Community Affairs and Environmental Development Sector at Ain Shams University,** a research project entitled "Antiviral and Anti-inflammatory activities of *Stenocarpus sinuatus* (Proteaceae) cultivated in Egypt (2020-2021).

STDF-Short term fellowship (2017), *PostDoc* at the Institute of Pharmacy and Molecular Biotechnology (IPMB), **Heidelberg University**, **Heidelberg, Germany**.

GA Poster Award (2017) from the 65th International Congress and Annual Meeting of the Society for Medicinal Plant and Natural Product Research (GA), **Basel**, **Switzerland**.

International Publishing Award (2019), Ain Shams University.

International Publishing Award (2020), Ain Shams University.

International Publishing Award (2021), Ain Shams University.

International Publishing Award (2022), Ain Shams University.

Best Topic Award (2022), Drug Design Program at *Faculty of Pharmacy, Ain Shams University*, *Cairo*, *Egypt* for supervising the graduation project entitled **Phytotherapy**— A new hope for chemobrain patients.

Best Poster Award (2020) Drug Design Program at *Faculty of Pharmacy, Ain Shams University, Cairo, Egypt* for supervising the graduation project entitled **Nutraceuticals in psychiatric practice: Evaluation of their antipsychotic potential in rat models.**

Best Poster Award (2019) Drug Design Program at *Faculty of Pharmacy, Ain Shams University, Cairo, Egypt* for supervising the graduation project entitled **Neuro-Nutraceuticals: Insights on their neuroprotective effects in Alzheimer's disease.**

Best Poster Award (2017) Drug Design Program at *Faculty of Pharmacy, Ain Shams University, Cairo, Egypt* for supervising the graduation project entitled **Appraisal on**

the wound healing potential of a topical preparation formulated with various essential oils.

Peer Reviewer and Editorial Board Membership

A member of the editorial board of Frontiers in Natural Products Journal.

A reviewer for Science, Technology & Innovation Funding Authority (STDF) projects.

A peer reviewer for high impact scholarly journals including:

- Industrial Crops and Products
- Molecules
- Cosmetics
- Foods
- Life
- Agronomy
- Plants
- International Journal of Molecular Sciences
- ChemistryOpen
- Chemistry and Biodiversity
- BMC Complementary Medicine and Therapies
- Advanced Therapeutics
- Natural Product Research
- Journal of Herbal Medicine
- ChemistrySelect
- International Microbiology
- Future Journal of Pharmaceutical Sciences
- Archives of Pharmaceutical Sciences Ain Shams University

THESIS SUPERVISION

Doaa A. Korany, Ph.D. earned in May 2023

"Phytochemical and biological studies on *Brownea grandiceps* (Jacq.) belonging to family Fabaceae"

Co-supervision with:

Prof. Dr. Abdel Nasser B. Singab

Prof. Dr. Sherweit H. El-Ahmady

Assoc. Prof. Dr. Rola M. Milad

Mai Mohamed Younis, M.Sc. earned in October 2022

"Phytochemical and Biological Studies on *Stenocarpus sinuatus* Belonging to Family Proteaceae Cultivated in Egypt"

Co-supervision with:

Prof. Dr. Omayma A. Eldahshan

Assoc. Prof. Dr. Nada M. Mostafa

Nariman Hossam El-din, M.Sc. earned in January 2022

"A chemometric approach for the quality control of *Trigonella foenum-graecum* (Family Fabaceae) seeds"

Co-supervision with:

Prof. Dr. Safaa El-Moghazy

Prof. Dr. Sherweit H. El-Ahmady

Yosra El Khodary, M.Sc. earned in December 2021

"A chemometric study on certain *Albizia* species (Fabaceae) using spectroscopic and chromatographic techniques"

Co-supervision with:

Prof. Dr. Sherweit H. El-Ahmady

Dr. Nehal M. Sabry

Sara Saeed Kotb, M.Sc. earned in December 2020

"Pharmacognostical and biological investigation of *Pithecellobium dulce*, Family Fabaceae (Leguminosae) cultivated in Egypt"

Co-supervision with:

Prof. Dr. Abdel Nasser B. Singab

Prof. Dr. Safaa El-Moghazy

Eman Mahmoud Kabbash, M.Sc. earned in July 2019

"Quality control of Olive leaf extract and discrimination between different cultivars cultivated in Egypt using Multivariate Data Analysis"

Co-supervision with:

Prof. Dr. Sherweit H. El-Ahmady

Assoc. Prof. Dr. Zeinab T. Abdel-Shakour

MSc Thesis Supervision

Eman Ashraf Zaghloul

"Phytochemical and biological studies on *Atriplex dimorphostegia*, Family Chenopodiaceae"

Co-supervision with:

Prof. Dr. Abdel Nasser B. Singab

Dr. Noha Swillam

Orchid Ahmed Mahmoud

"Phytochemical and biological studies on *Polyalthia suberosa* (Family Annonaceae) cultivated in Egypt"

Co-supervision with:

Prof. Dr. Abdel Nasser B. Singab

Prof. Dr. Omayma A. Eldahshan

Suzan Mahmoud

"Metabolic profiling of selected *Iris* species belonging to family Iridaceae: A comparative study"

Co-supervision with:

Prof. Dr. Abdel Nasser B. Singab

Assoc. Prof. Dr. Hari Prassed Devekoto

Mohamed Shalaby Abdelgafar

"Quality Control of Certain Jasminum Species Growing in Egypt."

Co-supervision with:

Prof. Dr. Abdel Nasser B. Singab

Prof. Dr. Sherweit H. El-Ahmady

PhD Thesis Supervision

Marwa Mohamed Alaa Eldin

"Comparative study of various *Moringa* species and their commercial products available in the market"

Co-supervision with:

Prof. Dr. Abdel Nasser B. Singab

Prof. Dr. Omayma A. Eldahshan

Amany A. Thabet

"Phytochemical and biological study on *Bontia daphnoides* and *Leucophyllum frutescens* (Family Scrophulariaceae) "

Co-supervision with:

Prof. Dr. Abdel Nasser B. Singab

Assoc. Prof. Dr. Eman M. Kamal

Assoc. Prof. Dr. Fadia S. Youssef-

Aya Nour Eldeen

"Phytochemical and biological studies on *Crateva magna* (Capparaceae) and its associated endophytes"

Co-supervision with:

Prof. Dr. Abdel Nasser B. Singab

Assoc. Prof. Dr. Rola M. Milad

Dr. Nehal M. Sabry

Mohamed Salah Mohamed

"Quality Control of Essential Oils-Enriched Herbal Products for External Applications" Co-supervision with:

Prof. Dr. Abdel Nasser B. Singab

Dr. Shaimaa Fayez

ASSOCIATION MEMBERSHIP

Egyptian Syndicate of Pharmacists.

WORKSHOPS

- Advanced Statistical Analysis in Academic Research, Military Medical Academy, Cairo, Egypt, November 2019.
- **Statistical Analysis in Academic Research,** Military Medical Academy, Cairo, Egypt, September 2019.
- The First Joint Egyptian-Italian Workshop on Innovative Scientific Research, National Research Centre, Giza, Egypt, February 2019.
- **A Three-Hours Tour with Egyptian Clinical Pharmacists,** 2nd International conference of Faculty of Pharmacy Ain Shams University, Cairo, Egypt, November 2018.
- 3rd Workshop in Computer-aided Drug design: "Recent advances in molecular docking and ligand-based drug design techniques", Faculty of Pharmacy, Ain Shams University, Cairo, Egypt, May 2016.
- Sciex Mass spectrometry Workshop, Cairo, Egypt, May 2015.

TRAINING COURSES

• Qorrect Assessment Workshop, Ain Shams University, August 2021.

- Question Banks, Quality Assurance Unit, Ain Shams University, October 2020.
- *Scholarly Publishing in Indexed Journals*, Training and Development Centre (TDC), Ain Shams University, December 2019.
- *Egyptian Knowledge Bank*, Training and Development Centre (TDC), Ain Shams University, December 2019.
- *Scientific Writing*, Training and Development Centre (TDC), Ain Shams University, December 2019.
- *Search and Research*, Training and Development Centre (TDC), Ain Shams University, December 2019.
- Sustainable Development Goals in Higher Education, Training and Development Centre (TDC), Ain Shams University, December 2019.
- GC-MS Operation, Schimadzu, December, 2014.
- *Graphics-Adobe Photoshop*, Information & Communication Technology Project (ICTP), Ain Shams University, September, 2014.
- *Time management*, Faculty and Leadership Project (FLDP), Ain Shams University, August, 2014.
- National and International Research Competitive Projects, Faculty and Leadership Project (FLDP), Ain Shams University, July, 2014.
- *University Legal and Financial Aspects*, Faculty and Leadership Project (FLDP), Ain Shams University, July, 2014.
- *Exam systems and student assessment*, Faculty and Leadership Project (FLDP), Ain Shams University, July, 2014.
- *Credit hours system*, Faculty and Leadership Project (FLDP), Ain Shams University, September, 2012.
- Writing a research project, Faculty and Leadership Project (FLDP), Ain Shams University, May, 2009.
- *Effective Presentation*, Faculty and Leadership Project (FLDP), Ain Shams University, June, 2007.
- *Application of recent technology in teaching*, Faculty and Leadership Project (FLDP), Ain Shams University, June, 2007.
- *Communication skills*, Faculty and Leadership Project (FLDP), Ain Shams University, May, 2007.
- *The ethics of scientific research*, Faculty and Leadership Project (FLDP), Ain Shams University, August, 2006.

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