



SALWA ABURAGEH ABUIESSA

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EDUCATION

- **6/2021:** Ph.D. in Pharmaceutical Sciences, Department of Pharmacology, Faculty of Pharmacy, University of Alexandria, Egypt. The PhD thesis is entitled: "Effect of endotoxemia on maternal and fetal cardiovascular programming in preeclamptic rats: Role of renin-angiotensin system modulators"
- **7/ 2017:** Master in Pharmaceutical Sciences, Department of Pharmacology, Faculty of Pharmacy, University of Alexandria, Egypt. The master thesis was entitled: "Potential protective effect of some serotonin receptor modulators on experimentally-induced gastric ulcers"
- **2011-2017:** Full-time M.Sci. Student, Department of Pharmacology, Faculty of Pharmacy, University of Alexandria, Egypt.
- **2011:** Bachelor of Pharmaceutical Sciences, Distinction of Honor, Faculty of Pharmacy, University of Alexandria, Egypt.
- **2004:** Graduated secondary School.

POSITIONS HELD

- **8/2024-present:** The general academic advisor of new and specialized programs at Faculty of Pharmacy, University of Alexandria, Egypt.
- **6/2023-present:** A member of the advisory board of the Journal of Advanced Pharmaceutical Sciences (JAPS).
- **10/2021- present:** Member of the committee of community service and environmental development affairs at Faculty of Pharmacy, University of Alexandria, Egypt.
- **8/2021-present:** Assistant professor of Pharmacology and Toxicology, Faculty of Pharmacy, University of Alexandria, Egypt.
- **2017-present:** Coordinator of Quality Assurance at the Department of Pharmacology and Toxicology, Faculty of Pharmacy, University of Alexandria, Egypt.
- **8/2017- 6/2021:** Assistant Lecturer of Pharmacology and Toxicology, Faculty of Pharmacy, University of Alexandria.
- **09/2011-7/2017:** Instructor of Pharmacology and Toxicology Faculty of Pharmacy, University of

PROFESSIONAL SOCIETY MEMBERSHIP

- Member in the green cycle steering committee at Faculty of Pharmacy-Alexandria University (2023-present)
- Member in The American Society for Pharmacology and Experimental Therapeutics (ASPET)(2019-present)
- Member in The Community Service and Environmental Development Committee at Faculty of Pharmacy-Alexandria University (2021-present)
- Carbon Footprint Committee at Faculty of Pharmacy-Alexandria University (2021-present)

PUBLICATIONS

- **Abuiessa SA**, Wedn AM, El-Gowilly SM, Helmy MM, El-Mas MM. Pre-eclamptic Fetal Programming Alters Neuroinflammatory and Cardiovascular Consequences of Endotoxemia in Sex-Specific Manners. *J Pharmacol Exp Ther*. 2020 May;373(2):325-336. doi: 10.1124/jpet.119.264192. Epub 2020 Feb 24. PMID: 32094295.
- **Abuiessa SA**, El-Gowilly SM, El-Gowell HM, Helmy MM, El-Mas MM. Short-lived sensitization of cardiovascular outcomes of postpartum endotoxemia in preeclamptic rats: Role of medullary solitary tract neuroinflammation. *Eur J Pharmacol*. 2021 Nov 5;910:174494. doi: 10.1016/j.ejphar.2021.174494. Epub 2021 Sep 8. PMID: 34508754.
- **Abuiessa, S. A.**, Helmy, M. M., El-Gowell, H. M., El-Gowilly, S. M., & El-Mas, M. M. (2022). Dysregulated ACE/Ang II/Ang1-7 signaling provokes cardiovascular and inflammatory sequelae of endotoxemia in weaning preeclamptic rats. *European journal of pharmacology*, 936, 175344. <https://doi.org/10.1016/j.ejphar.2022.175344>
- **Abuiessa SA**, Ayieng'a EO, Elblehi SS, El-Gowilly SM, Afify EA, El-Mas MM. Morphine Aggravates Inflammatory, Behavioral, and Hippocampal Structural Deficits in Septic Rats. *Sci Rep* **13**, 21460 (2023). <https://doi.org/10.1038/s41598-023-46427-y>
- Abdelhady SA, **Abuiessa SA**, Elhamammy RH, El-Deeb NM, El-Mas MM. Hepatoprotective effect of prenatal celecoxib in weaning preeclamptic rats: Role of HMGB1/MAPKs signaling. *Eur J Pharmacol*. 2024 Sep 5;978:176769. doi: 10.1016/j.ejphar.2024.176769. Epub 2024 Jun 24. PMID: 38925287.
- **Abuiessa, S.A.**, Helmy, M.M., El-Gowell, H.M. et al. Gestationally administered RAS modulators reprogram endotoxic cardiovascular and inflammatory profiles in adult male offspring of preeclamptic rats. *Naunyn-Schmiedeberg's Arch Pharmacol* (2024). <https://doi.org/10.1007/s00210-024-03305-2>
- Kostandy, S., **Abuiessa, S.**, Helmy, M., & Helmy, M. (2025). Context-dependent autophagy in cancer: deciphering cytoprotective vs. cytotoxic roles and therapeutic modulation strategies. *Advances In Medical, Pharmaceutical And Dental Research*, 5(1), 38-56. doi:<https://dx.doi.org/10.21622/AMPDR.2025.05.1.1251>
- Badr RM, **Abuiessa SA**, Elblehi SS, Hassan NW, Afify EA. The Antinociceptive Effect of Nicorandil in Neuropathic and Nociceptive Pain is Partially Mediated via TRPV1/Opioidergic Signaling. *Mol Neurobiol*. 2025 Jun 20. doi: 10.1007/s12035-025-05136-5. Epub ahead of print. PMID: 40540176.

ABSTRACTS

- **Abuiessa SA**, El-Gowilly SM, Helmy MM, El-Mas MM. Cardiovascular Programming by Preeclampsia Sensitizes Mother Rats to Hemodynamic and Cardiac Autonomic Depressant Effects of Postpartum Endotoxemia. The FASEB Journal. 2020 Apr;34(S1):1-1.
- **Abuiessa SA**, Wedn AM, El-Gowilly SM, Helmy MM and El-Mas MM (2020) Preeclamptic Fetal Programming Alters Neuroinflammatory and Cardiovascular Consequences of Endotoxemia in Sex Specific Manners. The FASEB Journal 34:1-1.
- **Abuiessa, S.**, Helmy, M., El-Gowilly, S. and El-Mas, M. (2021), Gestationally Administered RASModulators Reprogram Endotoxic Cardiovascular and Inflammatory Profiles in Adult Offspring of Preeclamptic Rats. The FASEB Journal,35:. <https://doi.org/10.1096/fasebj.2021.35.S1.00376>
- **Abuiessa, S.**, Helmy, M., El-Gowilly, S. and El-Mas, M. (2021), Dysregulated ACE/Ang II And ACE2/Ang 1-7 Signalling Provokes Cardiovascular and Neuroinflammatory Outcomes of Endotoxemia in Weaning Preeclamptic Rats. The FASEB Journal, 35:. <https://doi.org/10.1096/fasebj.2021.35.S1.00370>
- Wedn, A., **Abuiessa, S.**, El-Gowilly, S. and El-Mas, M. (2021), Maternal and Fetal Defects of Gestational Angiotensin 1-7 Receptor Antagonism: A Possible Preclinical Model of Preeclampsia. The FASEB Journal, 35:. <https://doi.org/10.1096/fasebj.2021.35.S1.00369>
- **Abuiessa SA**, Helmy MM, El-Gowelli HM, El-Gowilly SM, El-Mas MM. RAS Imbalances Account for Baroreflex Dysfunction and Neuroinflammation Induced by Postpartum Endotoxemia in Weaning Preeclamptic Rats. The FASEB Journal, 36:. <https://doi.org/10.1096/fasebj.2022.36.S1.R2960>
- **Abuiessa SA**, Ayieng'a EO, Elblehi SS, El-Gowilly SM, Afify EA, El-Mas MM. Morphine Aggravates Inflammatory, Behavioral, and Hippocampal Structural Deficits in Septic Rats. TheFASEB Journal, 36:. <https://doi.org/10.1096/fasebj.2022.36.S1.R3331>
- **Abuiessa SA**, Ayieng'a EO, Elblehi SS, El-Gowilly SM, Afify EA, El-Mas MM. Upregulation of Hippocampal MAPK_{ERK}/NFκB Signaling Accounts for the Opioid Receptor-dependent Incitement of Cognitive Impairment in Septic Rats. The FASEB Journal, 36:. <https://doi.org/10.1096/fasebj.2022.36.S1.R3338>
- El-Mas MM, **Abuiessa SA**, Elhamammy RH, El-Deeb NM and Abdelhady SA. The HMGB1/MAPKs/Nrf2 Signaling Arbitrates Hepatoprotection Conferred by Celecoxib in Preeclamptic Weaning Rats. JPET, June 2023, 385 (S3) 21; DOI: <https://doi.org/10.1124/jpet.122.144680>: <https://jpet.aspetjournals.org/content/385/S3/21>
- Arida, R., Abd Elkader, H. T. A., **Abuiessa SA.**, Helmy, M. M., El-Mallah, A. I., Abdallah, S. M., & El-Yazbi, A. F. (2024). Prolonged Exposure to Organophosphates Worsens the Cognitive Outcome of Prediabetes: Possible Modulation by Arachidonic Acid Supplementation. Journal of Pharmacology and Experimental Therapeutics June 1, 2024, 389 (S3) 506; DOI: <https://doi.org/10.1124/jpet.506.966210>
- Makar, M., Nwaiwu, J., Agami, M., Hammady, M., Elhamammy, R. H., **Abuiessa, S. A.**, ... & El-Yazbi, A. (2025). Thermogenic Modulation Reduces Adipose Tissue Inflammation and Complications of Early Metabolic Dysfunction: Impact on Mitochondrial Proteomics and Adipose Lipidomics (Abstract ID: 159767). The Journal of Pharmacology and Experimental Therapeutics, 392(3).
- Arida, R., Abd Elkader, H. T. A., **Abuiessa, S. A.**, Helmy, M. M., El-Mallah, A. I., Abdallah, S. M., & El-Yazbi, A. F. (2025). Prolonged Low-Level Exposure to Organophosphates Induces Neuroinflammation and Impaired Cognition: Impact of Metabolic Dysfunction and Amelioration by Arachidonic Acid (Abstract ID: 157020). The Journal of Pharmacology and Experimental Therapeutics, 392(3).

INITIATED PROGRAMS

- Participated in the Development of the **Professional Certificate in Clinical Toxicology 2024/2025**: setting the certificate bylaws, description and the specifications of the included modules:
 - *Medical and clinical toxicology*
 - *Occupational and environmental toxicology*
 - *Toxicology of natural and chemical products*
 - *Food borne toxicology*
 - *Toxicology related calculations and analytics*
- Participated in the Development of the **Professional Certificate in Clinical Oncology Pharmacy for Undergraduate Clinical Pharmacy Students 2022/2023**: setting the certificate bylaws and the specifications of the included courses:
 - *Palliative Care for Cancer Patients*
 - *Cancerous Patient Care*
 - *Advanced Oncology Pharmacotherapy*
 - *Oncology Pharmacy Practice*
 - *Targeted and Novel Therapy in Oncology*

TEACHING & TRAINING EXPERIENCE

- Developing member of the project " **Online pharmacogenomics and personalized medicine postgraduate program-OPPM**"(November 2021-November 2024) EU funded Erasmus+ project (Project No. 617303-EPP-1-2020-1-EG-EPPKA2-CBHE-JP): developing courses, professional certificates, virtual labs, hospital trainings for OPPM diploma and master.
- **Intensive hands-on training in IMPReS - Individualized Medicine & Pharmacological Research Solutions Center-Faculty of Medicine, University of Thrace, Alexandropoli-Greece 15-20 July 2023**: LC-MS/MS Instrument familiarization, Proteomics sample preparation workflow, Computational analysis of proteomics data, in vitro and ex vivo models for disease and pharmacological studies (cell lines, primary cells, organoids), Wound healing assay, Microscopy session: cell lines, primary cells, organoids, Clinical Pharmacogenomics implementation, Nutrigenomics and Veterinary genomics, Methylation - miRNA techniques and Therapeutic Drug Monitoring.
- Member of project "**IT based International Diploma and professional certificate in clinical toxicology**" (ITCT) (**March 2016 - April 2019**) EU funded Erasmus+ project (561915-EPP-1-2015-1-EG-EPPKA2-CBHE- JP): Member of project team assisting in developing courses, virtual labs and case studies for clinical toxicology diploma
- **Research member of the Science and Technology Development Fund, Egypt (STDF Grants No. 37026).**
- Teaching assistant for online clinical toxicology diploma, Faculty of pharmacy, Cairo University, August 2018.
- Tutor at "Workshop on selected pharmacological techniques", Faculty of pharmacy, Alexandria University, July 2018.
- **Training on selected molecular techniques in university of Malta, April 2018.**
- Domestic teaching:
 - Academic year: 2021-2022**
 - Biophysics, Therapeutics I, Therapeutics II, Pharmacology 3rd year, Toxicology 4th year, Biological screening and standardization of drugs 4th year
 - Development of the structure and teaching of : Pharmacology III, Pharmacology and pharmacotherapeutics I

- Developing the structure and teaching of postgraduate courses: Advanced Pharmacotherapeutics I, Applied experimental pharmacology

Academic year 2022-2023

- Biophysics, Therapeutics I, Therapeutics II, Pharmacology 3rd year, Toxicology 4th year, Biological screening and standardization of drugs 4th year
- Development of the structure and teaching of Pharmacology III, Pharmacotherapy of oncological diseases and radiopharmacy, Pharmacology and pharmacotherapeutics I, Pharmacology and pharmacotherapeutics II, Pharmacology and pharmacotherapeutics III, Toxicology and forensic chemistry
- Teaching of postgraduate courses: Advanced Pharmacotherapeutics I, Advanced Pharmacotherapeutics II, Applied Experimental Pharmacology
- Development, Coordination and teaching of the courses: Palliative Care for Cancer Patients & Advanced Oncology Pharmacotherapy in the **Professional Certificate in Clinical Oncology Pharmacy for Undergraduate Clinical Pharmacy Students**.

Academic Tear 2023/2024

- Medical terminology, Basic and clinical toxicology, Palliative care for cancer patients, Pharmacotherapy of oncological disease and radiopharmaceuticals, Pharmacotherapy of gastrointestinal diseases, Pharmacotherapy of neuropsychiatric disorders diseases.
- Teaching of postgraduate courses: Advanced Pharmacotherapeutics I, Advanced Pharmacotherapeutics II, Applied Experimental Pharmacology
- Development, Coordination and teaching of the courses: Palliative Care for Cancer Patients & Advanced Oncology Pharmacotherapy in the **Professional Certificate in Clinical Oncology Pharmacy for Undergraduate Clinical Pharmacy Students**.

CONFERENCES, COURSES AND PRACTICAL WORKSHOPS

- 3rd International Conference and Exhibition on “Pharmaceutical and Healthcare Sciences, PHS2024”-22-23 November 2024. Hilton Alexandria-Green Plaza-Alexandria-Egypt.
- 2nd International Conference and Exhibition on “Pharmaceutical and Healthcare Sciences, PHS2022”-22-23 November 2022. Hilton Alexandria-Green Plaza-Alexandria-Egypt.
- Assessment in Pharmacy Education A comprehensive series of four EKB-online workshops focusing on assessment skills to foster the application of best practices and implement standards aligned with international accreditation. Delivered from 11th August till 28th August 2022.
- Online workshop on “e-Learning Fundamentals” 27-31 March 2022- ELCC-MCIT
- Workshop on “An effective In-Depth Research Engine for Scientific Information” December 2021-Faculty of Pharmacy-Alexandria University
- Virtual workshop on “What You Need to Know About IACUC” December 2021-ESBA-EAARA-Cairo University.
- Virtual workshop on “Technology Transfer and Commercialization in The Egyptian Universities-Opportunities and Challenges” December 2021-ESBA-EAARA-Cairo University.
- “Artificial Intelligence in Healthcare PHS 2021 Webinar” 27-28 November 2021- Faculty of Pharmacy-Alexandria University

- One workshop at the accredited center of “Faculty & Leadership Development Project, University of Alexandria, entitled “Research ethics and scientific plagiarism”, in 2021.
- Four workshops at the accredited center of “Faculty & Leadership Development Project, University of Alexandria, entitled “Design systems and statistical analysis of scientific experiments”, “Effective communication and presentation skills”, “Use of global databases”, and “Methods of scientific research” all in 2020.
- Representative of project "IT based International Diploma and professional certificate in clinical toxicology" (ITCT) at national Erasmus + day, Cairo, Egypt, October 2018.
- Workshop on IT and e-learning techniques, Ministry of communication, Cairo, July 2018.
- Five workshops at the accredited center of “Faculty & Leadership Development Project, University of Alexandria, entitled “Exams and students in the education systems”, “Quality standards in the education process”, “International publishing of Scientific research”, “Competing for research funds”, and “References research management systems”, all in 2016
- One workshop at the accredited center of “Faculty & Leadership Development Project, University of Alexandria, entitled “Use of technology in teaching”, 2012.

AWARDS & HONORS

- **Ranked First in pharmacy class (2006-2011). Grade: Distinction**
- **PHARMACY FRIENDS ASSOCIATION Award** for the Highest Score of pharmaceutical courses (2006-2011)
- **AMRIA PHARMACEUTICAL INDUSTRIES Award** for the Highest Score of pharmaceutical courses (2006-2011)
- **ALEXANDRIA PHARMACEUTICAL INDUSTRIES Award** for the Highest Score of in organic chemistry (2006-2011)
- **ALEXANDRIA PHARMACEUTICAL INDUSTRIES Award** for the Highest Score of in pharmaceuticals (2006-2011)
- **EUROPEAN EGYPTIAN PHARMACEUTICAL INDUSTRIES COMPANY Award** for the Highest Score in industrial pharmacy course (2011)
- **ARAB GELATINE PHARMACEUTICAL PRODUCTS COMPANY AWARD** for the Highest Score in analytical chemistry course (2006-2011)
- **EI-PHARONIA PHARMACEUTICALS COMPANY Award** for the Highest Score in pharmaceutical courses (2006-2011)
- **PROF.DR. ABDUL-AZIZ BASSIOUNY AWARD** for the highest score in analytical chemistry courses (2006-2011)
- **PROF.DR. MOHAMED ELSAYED RAGAB AWARD** for the Excellence and Top scores in organic chemistry courses (2006-2009)
- **PROF.DR. HASSAN ABDEEN GOLDEN MEDAL AWARD** for the Highest Score in analytical chemistry courses (2006-2009)
- **PROF.DR. SAWSAN EL-MASRY AWARD** for the best Scores in chemistry of crude drugs course (2010)
- **International Travel Award in the Graduate and Post-baccalaureate Student category to attend the ASPET Annual Meeting at Experimental Biology (EB) 2020 in San Diego, CA .**
- **Selected as the HIGHLIGHTED TRAINEE AUTHOR May 2020 by the journal of Pharmacology and Experimental Therapeutics for the article:** *Abuissa SA, Wedn AM, El-Gowilly SM, Helmy MM, El-Mas MM. Pre-eclamptic Fetal Programming Alters Neuroinflammatory and Cardiovascular Consequences of Endotoxemia in Sex-*

Specific Manners. J Pharmacol Exp Ther. 2020 May;373(2):325- 336. doi: 10.1124/jpet.119.264192. Epub 2020 Feb 24. PMID: 32094295.

- **International Travel Award in the Graduate and Post-baccalaureate Student category to attend the virtual ASPET Annual Meeting (*reduced registration fees*) at the Virtual ExperimentalBiology (EB) 2021, April 27-30.**
- **International Travel Award in the Postdoctoral Scientist category to attend the ASPET Annual Meeting at Experimental Biology (EB) 2022 in Philadelphia, PA.**