Name: Amira Abdel Halim Hamada Boseila

Title (1) Full-time lecturer of "Pharmaceutical sciences",

**Faculty** Faculty of Pharmacy and Drug Technology, Egyptian Chinese University.

Specialty: Novel drug delivery systems, nanomedicine, drug targeting, pharmacokinetics,

comparative dissolution studies, and quality by design

Accounts Amira Boseila (researchgate.net)

Amira Boseila - Google Scholar

Amira Boseila | LinkedIn

### **Education**

### Academic Degrees

### PhD

Doctor of Philosophy in Pharmaceutical Sciences, Faculty of Pharmacy, Cairo University, February 2020.

Thesis Title: "Utility of nanocarriers for targeted delivery of an antiviral drug to the liver"

### Master

Master of Pharmaceutical Sciences, Faculty of Pharmacy, Cairo University, December 2013.

Thesis Title: " Formulation and Evaluation of Modified Nasal Drug Delivery System of an Antiemetic Drug: Ondansetron"

### **Diploma**

• Total Quality Management Diploma (TQM), Quality Control Management Department/American University of Cairo (2009)

### **Bachelor**

Bachelor of Pharmaceutical Sciences, Faculty of Pharmacy, Cairo University, May 2007. Grade: very Good.

### **School**

La Rose De Lisieux/Language School - Dokkie

(September 1990 – June 2002) High school: Science section

### Research interest

Nanomedicine – drug targeting – modified release dosage forms – novel drug delivery system – quality by design.

## **Career History and Professional Experience**

Title (1)	<ul> <li>Full-time Lecturer of "Pharmaceutical science", at the Faculty of Pharmacy, Sinai University (1st September 2022 – 31st August 2025)     Responsible for teaching PharmD courses "Advanced Drug Delivery Systems", "Design of dosage form", "Pharmaceutics 3", "Pharmaceutics 4", "Physical pharmacy", "pharmaceutical technology I", "pharmaceutical technology II", and "Cosmetics".</li> <li>Part-time Lecturer of "Industrial Pharmacy" &amp; "Hospital Pharmacy", at the Faculty of Pharmacy, Sinai University (February 2022 – June 2022)</li> </ul>
Title (2)	<ul> <li>Post-doctoral Researcher at the department of pharmaceutics, Egyptian Drug Authority, Giza, Egypt (July 2020 – present).</li> <li>Associate researcher of pharmaceutics and Lead quality control specialist at the pharmaceutics department, National Organization for Drug Control and Research (NODCAR), Giza, Egypt (January 2018 – March 2020).</li> </ul>
Positions have been acquired:	<ul> <li>Head of Comparative Dissolution Unit at the Reference Lab, Egyptian Drug Authority, Egypt (February 2022 – June 2022)</li> <li>Technical manager / Physicochemical lab 5 at Egyptian Drug Authority, Giza, Egypt (July 2021 – February 2022).</li> <li>Deputy of technical manager / Pharmaceutics Lab at National Organization for Drug Control and Research (March 2020 – present).</li> <li>Senior Quality Control Specialist at pharmaceutics laboratory, National Organization for Drug Control and Research, Giza, Egypt (August 2008 – January 2018)</li> <li>Trainee at the research and drug development department, Hikma pharmaceutical company, Egypt (September 2007 – October 2007)</li> </ul>
Title (3):	Guest Lecturer of "Drug Targeting" course, Applied Biotechnology department, Faculty of Science, Ain Shams University (October 2020 – present)
Projects	1) "Repurposing of Anti-inflammatory Active for the Treatment of Inflammatory Pulmonary Diseases" funded by University of Hail, June 2023, 12-month project.
	2) "Nano Phyto-throat spray: As effective post-exposure prophylaxis and treatment strategies for Covid-19" funded by Misr El Kheir Foundation, October 2021, 12 months project.

### **Publications and Presentations**

- "Harnessing Nature's Microscopic Messengers: Cutting-Edge Viral and Bacterial Vectors Revolutionize Targeted Therapies" https://doi.org/10.1016/j.jddst.2025.106660
- 2. Impact of Lyophilized Milk Kefir-Based Self-Nanoemulsifying System on Cognitive Enhancement via the Microbiota–Gut–Brain Axis. <a href="https://www.mdpi.com/2076-3921/13/10/1205">https://www.mdpi.com/2076-3921/13/10/1205</a>
- Throat spray formulated with virucidal pharmaceutical excipients as an effective early prophylactic or treatment strategy against pharyngitis post-exposure to SARS-CoV-2 <a href="https://www.sciencedirect.com/science/article/pii/S093964112400105X?dgcid=author">https://www.sciencedirect.com/science/article/pii/S093964112400105X?dgcid=author</a>
- 4. Antidepressive And Cardioprotective Effects of Self-Nanoemulsifying Self-Nanosuspension Loaded with Hypericum Perforatum on Post-Myocardial Infarction Depression in Rats. https://link.springer.com/article/10.1208/s12249-022-02387-6
- 5. <u>Materials | Free Full-Text | Recent Advances in Adsorptive Nanocomposite Membranes for Heavy Metals Ion Removal from Contaminated Water: A Comprehensive Review (mdpi.com)</u>
- 6. <u>Iron Oxide Nanoparticles-Plant Insignia Synthesis with Favorable Biomedical Activities and Less Toxicity, in the "Era of the-Green": A Systematic Review PMC (nih.gov)</u>
- 7. In Silico and In Vitro Studies for Benzimidazole Anthelmintics Repurposing as VEGFR-2 Antagonists: Novel Mebendazole-Loaded Mixed Micelles with Enhanced Dissolution and Anticancer Activity PubMed (nih.gov)
- 8. <u>Superiority of DEAE-Dx-Stabilized Cationic Bile-Based Vesicles over Conventional Vesicles for Enhanced Hepatic Delivery of Daclatasvir | Molecular Pharmaceutics (acs.org)</u>
- 9. Design of bile-based vesicles (BBVs) for hepatocytes specific delivery of Daclatasvir: Comparison of ex-vivo transenterocytic transport, in-vitro protein adsorption resistance and HepG2 cellular uptake of charged and β-sitosterol decorated vesicles PubMed (nih.gov)
- 10. Preparation and characterization of thermosensitive mucoadhesive in-situ gels for nasal delivery of Ondansetron Hydrochloride. AA Boseila, AY Abdel-Reheem, G Abdelbary. Al-Azhar journal of pharmaceutical sciences, September 2014.

  article 6953 baa7fb95145a143314ef337c661717c7.pdf (ekb.eg)

### **Patency**

1. Egyptian: Nano Phyto-throat spray: As effective post-exposure prophylaxis and treatment strategies for Covid-19

### **Posters**

- 1. Poster presentation at American Association of Pharmaceutical Scientists (AAPS) Nov 4<sup>th</sup> -7<sup>th</sup> 2018 in Washington DC.
- 2. Poster presentation at 4<sup>th</sup> FUE International Conference of Pharmaceutical Sciences, Jan 31<sup>st</sup> Feb 2<sup>nd</sup>, 2017 "Nanocarriers for the enhancement of the oral delivery of direct-acting antiviral drug DAA".
- 3. Poster presentation at 5<sup>th</sup> International Conference of Pharmaceutical and Drug Industries Research Division under the theme of "Advances in Pharmaceutical Research", March 29-30, 2015.
- 4. Poster presentation at 3<sup>rd</sup> International Scientific Conference of Faculty of Pharmacy, Cairo University on 25<sup>th</sup> April 2012.

### **Conferences**

- 1. International Conference on Pharmaceutical and Bio-medical research, 20-21 March 2022, Faculty of Pharmacy, Sinai University
- 2. Attended the International Conference of the faculty of pharmacy, MSA University 12-13 December 2020.
- 3. Attended 2nd International Conference of the Faculty of Pharmacy Ain Shams University (13th 15th November 2018).
- 4. Attended Arab International Pharmaceutical Conference March 2018.
- 5. Attended British University in Egypt (BUE) International Nanotechnology Summit 2018.
- 6. Attended Nano station event at Zewail City 8/4/2017.
- 7. PUA International Conference on "Advances in Pharmaceutical Sciences", October 27-29, 2015.
- 8. 3rd FUE International Conference of Pharmaceutical Sciences, 9-11 February 2015.
- 9. The 17th scientific congress of the association of pharmacy colleges in the Arab world "New Trends in Drug Discovery, Development and Pharmacy Practice" faculty of pharmacy, Ain Shams University, Cairo (14-16th) October 2014.
- 10. Nanomedicine & Nanotechnology workshop held by Biophysics Department at Faculty of Science, Cairo University, 11-12 January 2014.
- 11. The 10th Annual Congress of Medical Sciences "Medical Research towards Healthy Society" NRC, Cairo-Egypt, 14-16th January 2013.

### **Training abroad**

1. Attended training program on "Quality by Design" at NIPER Mohali, India on 18th -30th November 2019

### **Attended training courses**

- "Effective teaching and learning strategies for colleges and institutes of higher education", 17-18 February 2024, under the supervision of the National Authority for Quality Assurance and Accreditation.
- 3. **"Written Assessment"**, 7<sup>th</sup> March 2023, Sinai University, Kantara Campus, under the supervision of the Quality Assurance Center.
- 4. **"Basic Principles in Assessment"**, 5<sup>th</sup> March 2023, Sinai University, Kantara Campus, under supervision of the Quality Assurance Center.
- 5. **"Academic Advisor"**, 21<sup>st</sup> February 2023, Sinai University, Kantara Campus, under supervision of the Quality Assurance Center.
- 6. **"Research Plan"**, 20<sup>th</sup> February 2023, Sinai University, Kantara Campus, under supervision of the Quality Assurance Center
- 7. **Cell culturing techniques**, February 2022, Creative Egyptian Biotechnologists association.
- 8. Basic & Advanced Lab Practices in Molecular Biology from extraction to sequencing, 7<sup>th</sup>-29<sup>th</sup> January 2022. Creative Egyptian Biotechnologists association.
- 9. Stem cells: Isolation, culture and characterization techniques. NAWAH scientific (2-4/12/2021).
- 10. Conformity Assessment Principles. September 2021.
- 11. Theoretical and Practical Approach on HPLC techniques, Waters, on 7<sup>th</sup> August 2021.
- 12. Theoretical and Practical Approach on Dissolution and Disintegration Techniques, Agilent, on 21st August 2021.
- 13. Workshop entitled: "Concomitant Application of Quality by Design and Artificial Intelligence in Drug Delivery", 12 December 2020.
- 14. Foundations of GMP: Quality Risk Management, USP education, July 4, 2020.
- 15. Foundations of GMP: Final Dosage Form, USP education, June 13, 2020
- 16. Attended workshop organized by British Council "Researcher Connect" on 25th -27th February 2020
- 17. CTD training program at "National Organization for Drug Control and Research" in October 2019
- 18. Theoretical and practical workshop on "Applications of Flow Cytometry in Stem Cells Research" at Zewail City of Science and Technology on 4th-5th September 2019.
- 19. Attended workshop entitled "Development of pharmaceutical dosage forms via QbD: Concept and hands-on computer training, at FOPCU, December 17th, 2016.
- 20. Attended course in "Design of experiments", August 2016.
- 21. The U.S. Pharmacopeial Convention Educational Program (Development and Validation of Dissolution Procedures) June 1-2, 2016.
- 22. Scientific Informatics Research Academy-Egypt (Biostatistics), 3rd May-11th June 2015.