Samar Ahmed Ahmed Antar, PhD
Postdoctoral Research Fellow
Fralin Biomedical research Institute
Lecturer at Horus University
ORCID: 0000-0002-1223-3579
Email: santar@vt.edu

Phone: +1 5406472092

Academic Qualifications:

Suez Canal University, Faculty of pharmacy, Egypt, PhD
Advisors: Prof. Mona Farag El azab and Dr Mohamed Ahmed Saleh
Thesis title: Pirfenidone and Vitamin D Ameliorate Cardiac Fibrosis Induced by Doxorubicin in Ehrlich Ascites Carcinoma Bearing Mice: Modulation of Monocyte Chemoattractant Protein-1 and Jun N-terminal Kinase-1 Pathways

Zagazig University, Egypt
MSc of Pharmaceutical Sciences (Pharmacology),
Advisors: Prof. Gamal Shams, Prof. Mohamed Khairy
Thesis title: Adverse Effects of Memantine

Sinai University, Faculty of Pharmacy, Egypt
BSc of Pharmaceutical Sciences, excellent with honors (GPA:3.97/4)

Work and Teaching experience:

- **Lecturer** of Pharmacology and Toxicology (December 2020 till now): Faculty of Pharmacy, Horus University, Egypt.

  Teaching:
  - Teaching lectures of Drug Abuse for undergraduate students at Horus University, Egypt.
  - Supervising practical sessions.

- **PhD student** Pharmacology& Toxicology “Doxorubicin toxic effects on heart and kidney” (May 2018 till December 2020): Suez Canal University, Egypt.

  Research: Pirfenidone and Vitamin D Ameliorate Cardiac Fibrosis Induced by Doxorubicin in Ehrlich Ascites Carcinoma Bearing Mice: Modulation of Monocyte Chemoattractant Protein-1 and Jun N-terminal Kinase-1 Pathways

- **Assistant Lecturer** of Pharmacology “Pharmacology and Toxicology” (December 2017 till November 2020): Faculty of Pharmacy, Horus University, Egypt.

- **MSc. Student and instructor** of Pharmacology (2016-2018): Faculty of Pharmacy, Horus University, Egypt.
Teaching:
- Preparing and teaching laboratory sessions of Biophysics, Toxicology, and Pharmacology for undergraduate students at Horus University, Egypt.
- Participating in most student-related activities; correction of quizzes and practical exams.

Instructor of Pharmaceutics (2011-2012): Faculty of Pharmacy and Pharmaceutical Sciences, Sinai University, Egypt.

Teaching: Preparing and teaching laboratory sessions of Pharmaceutics for undergraduate students at Sinai University, Egypt.

Professional skills:

Research skills:
- End note.
- Scientific writing
- ELISA technique
- q-PCR technique
- Western blot technique
- Genotyping technique
- In-vivo assays
- Ehrlich Ascites carcinoma cells
- Animal Handling especially (mice and rats).

Language skills: Arabic (Mother’s tongue), English (good command).

Computer skills: Microsoft Office (Word, Excel, and PowerPoint), and Prism GraphPad

Publications:

1. Amany A. Alzokaky, Ahmed A. Al-Karmalawy, Mohamed A. Saleh, Walied Abdo, Amira E. Farage, Amany Belal, Mohammed A.S. Abourehab, Samar A. Antar. Metformin ameliorates doxorubicin-induced cardiotoxicity targeting HMGB1/TLR4/NLRP3 signaling pathway in mice. *Life Sciences* (01/2023).

2. Ahmed A. Al-Karmalawy, Mohamed S. Nafie, Moataz Ahmed Shaldem, Aymen Abo Elmatty, *Samar A. Antar*, Anwar A. El-Hamaky, Mohamed A. Saleh, Ahmed Elkamahawdy, Haytham O. Tawfik. Ligand-Based Design on the Dog-Bone-Shaped BIBR1532 Pharmacophoric Features and Synthesis of Novel Analogues as Promising Telomerase Inhibitors with In Vitro and In Vivo Evaluations. *Journal of Medicinal Chemistry* (12/2022)

3. Mohamed Kh. ElMahdy, Mennatalallah O. Zaki, Ahmed A. Al-Karmalawy, Walied Abdo, Sulaiman Nasser, *Samar A. Antar*. Glimepiride ameliorates renal toxicity induced by cadmium in mice: Modulation of Jun N terminal kinase (JNK)/nuclear
factor kappa B (NF-κB) and phosphatidylinositol 3-kinases (PI3K)/protein kinase (AKT) pathways *Life Sciences* (11/2022).

4. **Samar A. Antar**, Mohamed A. Saleh, Ahmed A. Al-Karmalawy. Investigating the possible mechanisms of pirfenidone to be targeted as a promising anti-inflammatory, anti-fibrotic, anti-oxidant, anti-apoptotic, anti-tumor, and/or anti-SARS-CoV-2. *Life Sciences* (10/2022).

5. Mohamed A. Saleh, **Samar A. Antar**, Walied Abdo, Ahmed Ashour, Ahmed A. Zaki. Genistin modulates high-mobility group box protein 1 (HMGB1) and nuclear factor kappa-B (NF-κB) in Ehrlich-ascites-carcinoma-bearing mice. " Environmental Science and Pollution Research (7/2022).

6. Ayman Atiba, Walied Abdo, Ehab Ali, Marwa Abd-Elsalam, Mohamed Amer, Ahmed Abdel Monsef, Reda Taha, **Samar Antar** & Ayman Mahmoud. Topical and oral applications of Aloe vera improve healing of deep second-degree burns in rats via modulation of growth factors *Biomarkers* (6/2022).

7. Mona F. El-Azab, Ahmed A. Al-Karmalawy, **Samar A. Antar**, Pierre A. Hanna, Karim M. Tawfik, Reem M. Hazem. A novel role of Nano selenium and sildenafil on streptozotocin-induced diabetic nephropathy in rats by modulation of inflammatory, oxidative, and apoptotic pathways *Life Sciences* (6/2022).

8. **Samar A. Antar**, Ahmed A. Al-Karmalawy, Ahmed A. E. Mourad, Magda Mourad, Mennaallah Elbadry, Sameh Saber, and Ahmed E. Khodir. Protective Effects of Mirazid on Gentamicin-induced Nephrotoxicity in Rats through Antioxidant, Anti-inflammatory, JNK1/iNOS, and Apoptotic Pathways; Novel Mechanistic Insights. Pharm Sci. 2022. doi:10.34172/PS.2022.4

9. **Samar A. Antar**, Walied Abdo, Reda S. Taha, Amira E. Farage, Laila E. El-Moselhy, Mohamed E. Amer, Ahmed S. Abdel Monsef, Amer M. Abdel Hamid, Emadeldin M. Kamel, Ahmad F. Ahmeda, Ayman M. Mahmoud. Telmisartan attenuates diabetic nephropathy by mitigating oxidative stress and inflammation, and upregulating Nrf2/HO-1 signaling in diabetic rats. " *Life Sciences* (2/2022).

10. **Samar A. Antar**, Mohamad A. El-Gamal, Reem M. Hazem, Yasser M. Moustafa. Etanercept Mitigates Cadmium Chloride-induced Testicular Damage in Rats "An Insight into Autophagy, Apoptosis, Oxidative Stress and Inflammation" Environmental Science and Pollution Research (1/2022).

11. Mohamed Kh. ElMahdy, **Samar A. Antar**, Ehab Kotb Elmahallawy, Walied Abdo, Hayfa Hussein Ali Hijazy, Ashraf Albrakati and Ahmed E. Khodir. A Novel Role of Dapagliflozin in Mitigation of Acetic Acid-Induced Ulcerative Colitis by Modulation of Monocyte Chemoattractant Protein 1 (MCP-1)/Nuclear Factor-Kappa B (NF-κB)/Interleukin-18 (IL-18). " *Biomedicines*" (1/2022).

12. Reem M. Hazem, **Samar A. Antar**, Yossef K. Nafea, Mohamed A. Saleh, Mona F. El-Azab, Pirfenidone and vitamin D mitigate renal fibrosis induced by doxorubicin in mice with Ehrlich solid tumor " *Life Sciences* (11/2021).

13. Ahmed A. Al-Karmalawy, Raya Soltane, Ayman Abo Elmaaty, Mohamed A. Tantawy, **Samar A. Antar**, Galal Yahya, Amani Chrouda, Rami Adel Pashameah
Coronavirus Disease (COVID-19) Control between Drug Repurposing and Vaccination: A Comprehensive Overview. Vaccines (11/2021)

14. Samar A. Antar, Mohamed Kh. ElMahdy, Ahmed E. Khodir. A novel role of pirfenidone in attenuation acetic acid induced ulcerative colitis by modulation of TGF-β1 / JNK1 pathway International Immunopharmacology (10/2021).

15. Mohamed A. Saleh, Samar A. Antar, Reem M. Hazem, Mona F. El-Azab, Pirfenidone and vitamin D ameliorate cardiac 1 fibrosis induced by doxorubicin in Ehrlich ascites 2 carcinoma bearing mice: Modulation of monocyte 3 chemoattractant protein-1 and jun N-terminal kinase-4 1 pathways. " Pharmaceuticals 13, no. 11 (2020): 348

16. Samar A. Antar, Mona F. El-Azab, Reem M. Hazem, Mohamed A. Saleh, Investigating Pirfenidone and Vitamin D for Targeting Cardiac and Renal Fibrotic Pathways in Experimentally-Induced Animal Model "Records of Pharmaceutical and Biomedical Sciences 3 (1), 11-16"

17. Gamal El-Din A.M. Shams, Mohamed H. Khairy, Mohamed A. Saleh, Samar A. Antar. Protective effects of Vitamin E on Memantine side effects. Zagazig Veterinary Journal (10/2017).

18. Gamal El-Din A.M. Shams, Mohamed H. Khairy, Mohamed A. Saleh, Samar A. Antar, Adverse Effects of Memantine. Zagazig Veterinary Journal (10/2017).

Conference Presentations:

- July 2009: Attendance of soft skills& H.R package of Summer Training program at Faculty of Pharmacy, Mansoura University.
- July 2009: Attendance of Medical Package of Summer Training Program at Faculty of Pharmacy, Mansoura University.
- July 2009: Attendance of Clinical Pharmacology Course at the Faculty of Pharmacy, Mansoura University.
- July 2010: Summer training at EPICO Egypt Laboratories, Cairo.
- Feb. 2014: Completed at European Resuscitation Council, BLS/AED PROVIDER Course, Faculty of Medicine, Mansoura University.
- October 2017: Attendance of the 5th Damietta Pharmacists Scientific Conference.
- Jan. 2018: Basic Life Support, Faculty of Pharmacy, Horus University.
- October. 2018: The 8th international conference of Oncology center, Mansoura university, 3rd Clinical Pharmacy Workshop.
- Dec. 2018: Attendance of the first Annual Conference for Post Graduate Pharmaceutical Science. Innovation& Development
- Sep. 2020: Training Program in Fundamentals of Digital Transformation Certificate, Suez Canal University.
December 2021: 3rd Annual of postgraduate research in pharmaceutical science, Suez Canal University.
3rd International conference of pharmaceutical sciences- MU-Pharm 2022, Mansoura University.

References:

1. Professor/ Mona Farag
   Professor of Pharmacology and Toxicology, Faculty of Pharmacy, Suez Canal University, Egypt.
   Email: mona_elazab@pharm.suez.edu.eg.
   Tel.: +20 01221407777

2. Dr/ Mohamed Ahmed Saleh
   Associate Professor of Pharmacology, Department of Clinical Sciences, College of Medicine, University of Sharjah
   Email: mohamed.saleh@sharjah.ac.ae
   Tel.: ++971526950401