

# **Samar Ahmed Ahmed Antar, PhD**

**Postdoctoral Research Fellow**

**Fralin Biomedical research Institute**

**Lecturer at Horus University**

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## **Academic Qualifications:**

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**Suez Canal University, Faculty of pharmacy , Egypt, November2020**  
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 December 2017**

MSc of Pharmaceutical Sciences (Pharmacology),

Advisors: Prof. Gamal Shams, Prof. Mohamed Khairy

Thesis title: Adverse Effects of Memantine

**Sinai University, Faculty of Pharmacy, Egypt July 2011**

BSc of Pharmaceutical Sciences, excellent with honors (**GPA:3.97/4**)

## **Work and Teaching experience:**

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• **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, Horu 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:**

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**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:**

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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 Elkamahawy, 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, Mennatallah 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- $\kappa$ B) 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- $\kappa$ B) 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 d , 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-Gammal, Reem M. Hazem, Yasser M. Moustafa. Etanercept Mitigates Cadmium Chloride-induced Testicular Damage in Rats "An Insight into Autophagy, Apoptosis, Oxidative Stress and Infammation" *Environmental Science and Pollution Research* (1/2022).
  11. Mohamed Kh. ElMahdy, **Samar A. Antar** , Ehab Kotb Elmahallawy , Walied Abdo, Hayfa Hussin 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- $\kappa$ B)/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

, *Muhamad Mustafa* , *Mobarak Abu Mraheil* and *Ahmed Mostafa*. 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- $\beta$ 1 / 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 fibrosis induced by doxorubicin in Ehrlich ascites carcinoma bearing mice: Modulation of monocyte chemoattractant protein-1 and jun N-terminal kinase-4 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:

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- 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: 3<sup>rd</sup> Annual of postgraduate research in pharmaceutical science, Suez Canal University.
- 3<sup>rd</sup> International conference of pharmaceutical sciences- MU-Pharm 2022, Mansoura University.

## References:

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### 1. Professor/ Mona Farag

- Professor of Pharmacology and Toxicology, Faculty of Pharmacy, Suez Canal University, Egypt.
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### 2. Dr/ Mohamed Ahmed Saleh

- Associate Professor of Pharmacology, Department of Clinical Sciences, College of Medicine, University of Sharjah
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