

# **Hebaalla Agha**

---

9755 SW 52 ND Rd, Gainesville, FL, 32608 | Cell: 662-703-2779 | h.agha@ufl.edu

## **Summary**

Diverse experience in pharmaceutical sciences, combining academic research, pharmaceutical analysis, and pharmacy practice. Progressive experience in the research and development in synthesis of new compounds, aiming to evaluate their biological activity and having a promising scaffold. Pharmaceutical analysis to carry out quality control of different pharmaceutical dosage forms and raw materials. In addition to the experience as a pharmacist in community pharmacies.

### **Specialties:**

- Medicinal chemistry.
- Pharmaceutical synthesis.
- Pharmaceutical analysis.
- Quality control.
- Pharmacy practice.

## **Experience**

### **Graduate Assistant.**

**Department of Medicinal Chemistry, College of Pharmacy, University of Florida**

**06/2017 to present  
Gainesville, FL,  
USA**

The scope of my work:

- Development of new series of aminoalkyl substituted hydroxybenzothiazoles as potent sigma-1 receptor ( $\sigma 1R$ ) agonists, associated with antineuropathic pain activity.

### **Research Assistant.**

**Division of Medicinal Chemistry, Department of Biomolecular Science,  
University of Mississippi**

**1/2016 to 5/2017  
Oxford, MS, USA**

The scope of my work:

- Design and synthesis of dual acting Opioid-Neuropeptide FF (NPFF) non-peptide ligands, MOP selective agonist and an NPFF antagonist, to block tolerance and opioid-induced hyperalgesia while maintaining analgesic effects.

### **Researcher.**

**Egyptian Atomic Energy Authority (EAEA)  
National Center for Radiation Research & Technology**

**05/2008 to 07/2015  
Cairo, Egypt**

The scope of my work:

- Research and development of using the ionizing radiation in medical applications.
- Synthesis of new compounds to be screened for their in-vitro antitumor activity with/ without the combination of  $\gamma$ -radiation to show the ability of these compounds to sensitize cancer cells to the lethal effects of ionizing radiation, which illustrate the importance of the combination therapy for the cancer patients.

### **Chemical Analyst**

**Drug Control and Research Department, National Organization for  
Drug Control and Research (NODCAR)**

**04/2006 to 04/2008  
Giza, Egypt**

The scope of my work:

- Analyze samples of new products, products under registration, and products that need re-evaluation to assess their compliance with the specifications and standards required for ensuring the good quality, safety, and effectiveness of the marketed (local and imported) products.
- Follow up the new trends for quality control and research in pharmaceutical analysis techniques using UV and HPLC analysis methods to release drugs with safety and efficacy.

**Pharmacist**  
**Retail Pharmacies**

**06/2005 to 04/2006**  
**Cairo, Egypt**

- Practice pharmacy in community pharmacies.

## **Education**

**Doctor of Philosophy (Ph. D.) in Pharmaceutical sciences**  
**University of Florida**

**Expected May 2020**  
**Gainesville, FL, USA**

*Dissertation outlines:*

- Design and synthesis of dual acting Opioid-Neuropeptide FF (NPFF) non-peptide ligands, MOP selective agonist and an NPFF antagonist, to block tolerance and opioid-induced hyperalgesia while maintaining analgesic effects.
- Design and Synthesis of new series of aminoalkyl substituted hydroxylbenzothiazoles as potent sigma-1 receptor ( $\sigma 1R$ ) agonists, associated with antineuropathic pain activity

**Master's Degree in Pharmaceutical Sciences**  
**Cairo University**

**2011**  
**Giza, Egypt**

*Thesis Title:* Synthesis and antitumor evaluation of some new  $N^4$  substituted sulfapyridine derivatives with studying the synergistic effect of  $\gamma$ -irradiation

*Thesis Outline:*

- Synthesize of some novel compounds of  $N^4$  substituted sulfapyridine derivatives with anticipated cytotoxic activity.
- Evaluation and screening of all the synthesized compounds for their *in-vitro* cytotoxic activity against human breast carcinoma cell line MCF7 in comparison with reference drug.
- Study of the cell killing effect of  $\gamma$ -irradiation for its synergistic effect with the most active compounds.
- Study of molecular docking for the most active synthesized compounds in the active site of Cyclin Dependent Kinase 2 receptor to assess their inhibitory effect upon this enzyme as this may have a role in their anticancer activity.

**Bachelor's Degree in Pharmaceutical Sciences**  
**Cairo University**

**2005**  
**Giza, Egypt**

## Certificates

---

- License of pharmacy practice in Egypt.

## Journal Publications

---

1. Mostafa M. Ghorab, Fatma A. Ragab, Helmy I. Heiba, Hebaallah M. Agha, and Yassin M. Nissan, " Novel 4-(4-substituted-thiazol-2-ylamino)-N-(pyridin-2-yl)-benzenesulfonamides as Cytotoxic and Radiosensitizing Agents," Arch Pharm Res Vol 35, No 1, 59-68, 2012.
  2. Mostafa M. Ghorab, Fatma A. Ragab, Helmy I. Heiba, Hebaallah M. Agha, "Synthesis of Some Novel Sulfonamides Containing Biologically Active Alkanoic Acid, Acetamide, Thiazole, and Pyrrole Moieties of Expected Antitumor and Radiosensitizing Activities," J. Basic. Appl .Chem., 1(2)8-14, 2011.
-