CURRICULUM VITAE



Biography:

Name: Samar Saad Eldeen Azab **Date of Birth:** November 24, 1977

Citizenship: Egyptian

Work Address: Department of Pharmacology and Toxicology, Faculty of

Pharmacy, Ain-Shams University, Abbasia, Cairo 11566

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Spoken languages: Native: Arabic - Foreign: English-German

Educational History

	Year	
1-	12/04-04/09	Ph.D. of Pharmacology and Toxicology, Faculty of Pharmacy, Ain
		shams university, Cairo, Egypt- University of Texas-Medical
		Branch (Interior Mission system)
2-	09/01-08/04	M.Sc. of Pharmaceutical Sciences (Pharmacology and Toxicolog),
		Faculty of Pharmacy, Ain shams university, Cairo, Egypt
3-	09/95-05/00	B.SC. of pharmaceutical sciences (May 2000), Faculty of
		Pharmacy, Ain shams university, Cairo, Egypt

Degree of graduation: excellent with grade of honor

Professional Experience

	Year	
1-	3/16-10/16	Acting Head of Pharmacology & Toxicology Department, Faculty of Pharmacy, Ain Shams university, Cairo, Egypt
2-	11/14-till now	Associate Professor of Pharmacology and Toxicology, Faculty of Pharmacy, Ain Shams university, Cairo, Egypt
3-	04/13-06/13	Visiting Fellow in Cardiff School of Biosciences, UK as a holder of Alexander von Humboldt Fellowship-Europe research stay
4-	09/11-09/13	Postdoctor in Prodrug development Department, Tumor Biology Center, Freiburg, Germany as a holder of Alexander von Humboldt Fellowship
5-	03/10-08/10	Postdoctor in Prodrug development Department, Tumor Biology Center, Freiburg, Germany as a holder of DAAD Scholarship (GERSS)
6-	10/09-11/14	Lecturer of Pharmacology and Toxicology, Faculty of Pharmacy, Ain Shams university, Cairo, Egypt
7-	09/05-03/07	Ph.D. student at Obstetrics and Gynecology department, University of Texas-Medical branch, Texas, USA as a member of interior mission scholarship program
8-	12/04-10/09	Assistant lecturer and Ph.D. student at Pharmacology and Toxicology department, Faculty of Pharmacy, Ain Shams university, Cairo, Egypt
9-	09/01-09/03	M.Sc. student at the National Cancer Institute, Cairo University, Egypt
10-	09/00-12/04	Teaching Assistant and M.Sc. student at Pharmacology and Toxicology department, Faculty of Pharmacy, Ain Shams university, Cairo, Egypt

Administrative Responsibilities

- 1-Acting Head of Pharmacology & Toxicology Department, Faculty of Pharmacy, Ain Shams university, Cairo, Egypt starting from March 2016 till October 2016.
- 2- Head of the Third year student's assessment committee (examination control) starting from Dec. 2016 till now.
- 3-Head of the First year student's assessment committee (examination control) starting from Dec. 2014 till March 2016.

- 4-Trustee of Pharmacology and Toxicology department Council starting from Sept. 2013 till Sept. 2014.
- 5-Head of Internal Audit Team for administrative departments in Quality Assurance Unit in Faculty of Pharmacy, Ain Shams University (ASU), Cairo, Egypt starting from Sept. 2013 till now.
- 6-Head of Internal Audit for administrative departments & Moderator of documentation department in Quality Assurance Unit in Faculty of Pharmacy, Ain Shams University (ASU), Cairo, Egypt starting from Sept. 2009 till Sept. 2011.

Teaching Experience

- 1-Teaching courses of Pharmacology, Toxicology, Medical terminology, Virtual Pharmacology & Drug Design, quality control of pharmacological products, Clinical Pharmacology & Clinical toxicology to undergraduate Pharmacy students of 1st, 3rd & 4th year students, Faculty of Pharmacy, Ain Shams University, Cairo, Egypt. Besides, supervising the practical sessions of Clinical Pharmacology & Clinical Toxicology-undergraduate courses.
- 2-Teaching courses of clinical pharmacology, clinical toxicology, molecular pharmacology & selected topics of pharmacology to post graduate Master students, at department of pharmacology & Toxicology, Faculty of Pharmacy, Ain Shams University, Cairo, Egypt. Besides, supervising the practical sessions of Clinical Pharmacology & Clinical Toxicology-postgraduate courses.
- 3-Teaching Biostatistics course to pre-Master students at Faculty of pharmacy, Ain shams University and to Fourth level students, Ahram-Canadian University, Cairo, Egypt.
- 4- Teaching Drug Abuse course to undergraduate students at Misr International University (MIU), Egypt.
- 5- Teaching Immunopharmacology & drug information courses to Clinical Pharmacy Diploma students, Faculty of Pharmacy, Ain Shams University, Cairo, Egypt.

Pre-requisite Studied Courses

- 1-Under graduate courses of basic pharmacology, toxicology and biochemistry
- 2-Post graduate courses of cancer chemotherapy, neuro-pharmacology and molecular pharmacology concerned with the following topics: gene therapy, neural stem cells for brain repair and different cell cloning techniques
- 3-Elective courses of Bioinformatics tools, clinical Research: Tools and techniques from the general clinical research center and clinical research education office, University of Texas-Medical branch.

Research Skills

- 1-I had the chance to gain strong knowledge and experience in molecular biology techniques as cell culturing, flowcytometry, PCR and gel electrophoresis by practicing for 3 years and conducting my research at the Cairo international institute of cancer.
- 2-My molecular biology experience was further expanded by accomplishing my Ph.D. project in the University of Texas-Medical branch, Obstetrics and Gynecology department for a year and a half. During this period, I had the chance to master many other techniques as western blotting, real time PCR, basis of gene cloning, basis of gene delivery and gene therapy by non viral and viral methods.
- 3-Recently, I gained more experience in the molecular biology field of Cancer chemotherapy as a post doctor in Tumor Biology Center, Freiburg, Germany through accomplishing extended research about the role of ratiometric dosing in the successful outcomes of cancer chemotherapy.

Objectives

I'm v. interested in gaining more scientific, academic as well as professional experience through working in projects characterized by challenging new ideas, and the need for leadership skills. My goal is to expand my expert horizon in skills of communication and scientific integrity as well as participating in managing projects to budget and timeline frames.

Research Interests

- 1-Chemo-sensitizing multi-drug resistance and potentiating the cytotoxicity of chemotherapeutic agents on human cancer cell lines
- 2-Molecular basis of cancer development and treatment

Memberships

- 1-Member of the DAAD Cairo and AvH Cairo Awardee Alumni
- 2-Member of the Arab-German Young research Academy (AGYA)

Capacity Building Training

- 1- Summer training (1999) at Hoechst Marion Roussel S.A.E.
- 2- Genetic engineering and genomics workshop (December 2003), Mubarak city for scientific research and technology applications

- 3- Introduction to protein expression training course (November 2005), University of Texas-Medical branch, USA
- 4- Clinical Pharmacy training course (July 2008), Faculty of Pharmacy, Cairo univ.
- 5-Training in Ain Shams University Training center (FLDP, Finance leadership development program) for: Time management, presentation skills & communication skills. 6-1st Educational Institute of US-Egypt training on responsible science, Egypt, March 2015
- 7-Africa Scientific Peer Review Publication and Grant Writing Workshop, Morocco, November 2015

Certifications

- 1-International TOEFL certificate (September 2003): scored 273(computer based)
- 2-International computer driving license (ICDL) certificate (May 2005)
- 3- Intensive course in German language learning (Goethe Institute, November 2009).
- 4-B1 Basic Command of German language (Freiburg Goethe Institute, November 2011).

Awards

- 1-Analytical chemistry department award for the highest graduation degrees
- 2-Best poster in the annual conference of the Egyptian cancer society, Danish cancer society and Aarhus university hospital held in Egypt, Feb.9-11, 2005
- 3-Federation International Pharmaceutical (FIP) Congress Travel Grant Award, Turkey 2009
- 4- Award of International Publication, Ain Shams University, 2009 & 2012
- 5- Federation International Pharmaceutical (FIP) Congress Travel Grant Award, Thailand 2014
- 6-Professional development grant and Travel Award from CRDF Global, Morocco 2015
- 7-Best theme presentation in the credit program graduation day, Faculty of Pharmacy, Ain Shams University, Cairo, Egypt May 2016

Professional development Grant

I participated as a Co-PI in a Grant for teaching responsible science awarded from the 1st Egyptian Educational Institute on Responsible Science in partnership with US-National Academy of Science, November 2015. This grant was implemented by organizing a trainning session for teaching "Responsible science principles: Plagiarism, Authorship & Mentorship" in conjunction with Ain Shams University Trainning center, April 2016.

I further presented the outcomes of the workshop in The Reunion Meeting for the Egyptian Educational Institutes on Responsible Science, Ain Shams University Medical Campus,

Cairo, Egypt, May 2016. Moreover, I organized another workshop entitled "Responsible Conduct of Research (RCR): Authorship Rights & Management of Plagiarism" that was conducted in Faculty of Pharmacy, Ain Shams University, Cairo, Egypt, July 2016.

Presentations

- 1-Poster presentation for the annual conference of the Egyptian cancer society, Danish cancer society and Aarhus university hospital held in Egypt, Feb.9-11, 2005: *Modulation of epirubicin cytotoxicity by tamoxifen in human breast cancer cell lines.*
- 2-Poster presentation for Texas Forum for Reproductive Sciences (TFRS), 12 th annual meeting, Houston April 2006: *Can 2-methoxyestradiol modulate cancer multidrug resistance? A novel approach to sensitizing breast cancer cells to doxorubicin.*
- 3-Oral Presentation for the Society for Gynecologic Investigation (SGI) 54th Annual Scientific Meeting, Nevada March 2007: "2-Methoxyestradiol & Multidrug Resistance: Can 2-Methoxyestradiol Sensitize Resistant Breast Cancer Cells?"
- 4-Poster Presentation for Arab Medical Association Against Cancer (AMAAC), Cairo May 2009: "Genetic Profiling Signature of Multi-Drug Resistance in Breast Cancer".
- 5-Poster Presentation for American Association of Cancer Research (AACR) 102 nd annual meeting, Florida USA April 2011: "Biological evaluation of folate prodrugs with a highly toxic derivative of doxorubicin".
- 6-Poster Presentations for American Association of Cancer Research (AACR) 103 rd annual meeting, Chicago USA April 2012: "Combination therapy of doxorubicin and the acid-sensitive albumin-binding prodrug of doxorubicin INNO-206 induces complete regressions in a xenograft pancreatic carcinoma model demonstrating excellent tolerability" and "Combination therapy of an acid-sensitive albumin-binding prodrug of doxorubicin (INNO-206) and an albumin-binding prodrug of methotrexate (AW054) that is cleaved by cathepsin B and plasmin induces complete remissions against pancreatic cancer in vivo".
- 7- Poster Presentations for 32nd Congress of the Societe International d'Urologie (SIU) in Fukuoka, Japan, September 30 October 4, 2012: Caffeic acid phenethyl ester augments docetaxel- cytotoxicity in PC-3 cells by inducing apoptosis through modulation of estrogen receptors".
- **8-** Poster presentations for Federation International Pharmaceutical (FIP) Centennial Congress of Pharmacy and Pharmaceutical Sciences, 2012, Amsterdam, the Netherlands,

- from 3 to 8 October 2012: Ratiometric dosing of indole-3-carbinol (I3C) and 2-methoxyestradiol (2ME) in cancer chemotherapy: a friend or a foe? and Anti-inflammatory effect of Apigenin-7-neohesperidoside (Rhoifolin) in carrageenin-induced rat edema model.
- **9-** Poster presentation for the Humboldt Kolleg "Pharmaceutical and Biotechnological Therapies" 28 September 1 October, 2012 in German University in Cairo: *Effects of Chorisia crispiflora Ethyl Acetate Extract on p21 and NF-κB in Breast Cancer Cells.*
- **10-** Oral presentation for the Network Meeting of the Alexander von Humboldt Foundation, Aachen, Germany on 25-27 April 2012: **Synergy: the Winning Key for both Cancer Chemotherapy and Human Communication"** and attendance of a testimonial session for the Alexander von Humboldt-Stiftung under review by the German Council for Science and Humanities, the prime advisory council of both the Federal and the "Länder" Governments on February 2013, Bonn, Germany.
- **11-** Oral presentation for the Testimonial session for the Alexander von Humboldt-Foundation in the German Science Day, DAAD Cairo office November 2013.
- 12- Poster presentation for the 53rd Annual Meeting of the Society of Toxicology (SOT), March 23-27, 2014 at the Phoenix Convention Center in Phoenix, Arizona: Estrogen Receptor Alpha Modulation and Differential Cytotoxicity of Caffeic Acid Phenethyl Ester in Prostate Cancer Cells.
- 13- Oral presentation for the Alexander von Humboldt network meeting May 2014, DAAD Cairo Office: Introducation about the Arab German Young Researchers Academy (AGYA).
- 14- Poster presentation for Federation International Pharmaceutical (FIP) Centennial Congress of Pharmacy and Pharmaceutical Sciences, 2014, Bangkok, Thailand, from 29 August to 4 September 2014: Protective role of Spirulina platensis against acute Thallium-induced toxicity in rats via modulation of lipid peroxidation & oxidative stress.
- 15- Poster presentation for 3rd International Future University Conference of Pharmaceutical Sciences, Cairo, Egypt, from 9-11February 2015: Antiinflammatory and Immunomodulatory effects of Spirulina Platensis in comparison to Dunaliella Salina in acetic acid-induced rat experimental colitis
- **16-** Oral Presentation followed by panel discussion "Chances vs Challenges for Egyptians to become Humboldtians" in Humboldt Kolleg, Fez, Morroco 2015

Publications

A) Book Chapters:

Samar Azab and Ayman Al-Hendy. Signal Transduction Pathways in Breast cancer: drug targets and challenges in "Breast Cancer Cells - Carcinogenesis, Cell Growth and Signalling Pathways", Gunduz, M. and Gunduz, E.- InTech ed., pp. 109-138, 2011.

B) Review Articles:

- 1- **Azab SS**. Targeting the mTOR Signaling Pathways in Breast Cancer: More than the Rapalogs. JBPR, June 2013, Vol. 1 (2): 75-83.
- 2- Tolba MF, **Azab SS**, Khalifa AE, Abdel-Rahman SZ, Abdel-Naim AB. Caffeic acid phenethyl ester, a promising component of propolis with a plethora of biological activities: a review on its anti-inflammatory, neuroprotective, hepatoprotective, and cardioprotective effects. IUBMB Life. 2013 Aug;65(8):699-709.
- 3- Tolba MF, Omar H, **Azab SS**, Khalifa AE, Abdel-Naim AB, Abdel-Rahman SZ. Caffeic acid phenethyl ester: A review of its antioxidant activity, protective effects against ischemia-reperfusion injury and drug adverse reactions. Accepted July 2013.

C) <u>Articles in peer reviewed scientific journals</u>:

- 1-Azab SS, El-Demerdash E, Abdel-Naim AB, Youssef E, El-Sharkawy N, Osman AM. Modulation of epirubicin cytotoxicity by tamoxifen in human breast cancer cell lines. Biochem Pharmacol. 2005 Sep 1; 70(5):725-32.
- 2-Azab SS, Salama SA, Abdel-Naim AB, Khalifa AE, El-Demerdash E, Al-Hendy A. 2-Methoxyestradiol and multidrug resistance: can 2-methoxyestradiol chemosensitize resistant breast cancer cells? Breast Cancer Res Treat. 2008 Jan,113 (1): 9-19.
- 3-Azab SS, Salama SA, Hassan MH, Khalifa AE, El-Demerdash E, Fouad H, Al-Hendy A, Abdel-Naim AB. 2-Methoxyestradiol reverses doxorubicin resistance in human breast tumor xenograft. Cancer Chemother Pharmacol. 2008 Oct; 62(5):893-902.
- 4 -Abu Ajaj K, El-Abadla N, Welker P, **Azab S**, Zeisig R, Fichtner I and Kratz F. Comparative evaluation of the biological properties of reducible and acid-sensitive

- folate prodrugs of a highly potent doxorubicin derivative. Eur J Cancer. 2012 Sep; 48(13): 2054-65.
- 5-Eldahshan O. and **Azab SS**, Anti-inflammatory Effect of Apigenin-7-neohesperidoside (Rhoifolin) in Carrageenin-Induced Rat Oedema Model. JAPS, 2 (08); 2012: 74-79.
- 6- Ashmawy A, **Azab SS** and Eldahshan O. Effects of Chorisia crispiflora Ethyl Acetate Extract on P21 and NF-κB in Breast Cancer Cells. JAS 2012; 8(8):965-972.
- **7-Azab SS**, Ashmawy A and Eldahshan O. Phytochemical Investigation and Molecular Profiling by p21 and NF-κB of Chorisia crispiflora Hexane Extract in Human Breast Cancer Cells in Vitro. BJPR 2013 Vol. 3, Issue 1 (January-March), 78-89
- 8-Abou El Naga RN, **Azab SS**, El-Demerdash E, Shaarawy S, El-Merzabani M, Ammar ES. Sensitization of TRAIL-induced apoptosis in human hepatocellular carcinoma HepG2 cells by phytochemicals. Life Sci. 2013 Mar 21;92(10):555-61.
- 9-Kratz F, **Azab S**, Zeisig R, Fichtner I, Warnecke A. Evaluation of combination therapy schedules of doxorubicin and an acid-sensitive albumin-binding prodrug of doxorubicin in the MIA PaCa-2 pancreatic xenograft model. Int J Pharm. 2013 Jan 30;441(1-2):499-506.
- 10-Azab S, Abdel-Daim M and Eldahshan O. Phytochemical, cytotoxic, hepatoprotective and antioxidant properties of Delonix regia leaves extract. Med Chem Res. September 2013, 22, (9): 4269-4277.
- 11- Tolba MF, Esmat A, Al-Abd AM, **Azab SS**, Khalifa AE, Mosli HA, Abdel-Rahman SZ, Abdel-Naim AB. Caffeic acid phenethyl ester synergistically enhances docetaxel and paclitaxel cytotoxicity in prostate cancer cells. IUBMB Life 2013 Aug;65(8):699-709.
- 12- Abdel-Aziz AK, **Azab SS**, Youssef SS, El-Sayed AM, El-Demerdash E and Shouman, S. Modulation of Imatinib cytotoxicity by Selenite in HCT116 colorectal cancer cells. Basic and Clinical Pharmacology and Toxicology, 2015; 116: 37-46.
- 13- Abdel-Daim M, Farouk S, Madkour F and **Azab S**. Antiinflammatory and Immunomodulatory effects of Spirulina Platensis in comparison to Dunaliella Salina in acetic acid- induced rat experimental colitis. Immunopharmacology and Immunotoxicology, 2015; 8: 1-14.