

## C.V.

### **Personal Data:**

**Name:** May Ahmed Amin Hamza  
**Date of Birth:** January 10<sup>th</sup>, 1970  
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### **Education:**

- MB. BCh. Faculty of Medicine, Ain Shams University, Cairo, Egypt (December 1993) with grade “Excellent with honor“.
- M.Sc. Pharmacology, Faculty of Medicine, Ain Shams University, Cairo, Egypt, 1999.
- M.D. Pharmacology, Faculty of Medicine, Ain Shams University, Cairo, Egypt, 2004.
- Currently enrolled in FAIMER-Keele Distance Learning Master’s program in Health Professions Education, September 2018 to August 2023.

### **Positions:**

- House officer in Ain Shams University hospitals from March 1994 - February 1995.
- Resident in the department of Physical medicine in the same hospital from April 1995 - November 1995.
- **Demonstrator** of Pharmacology, Department of Pharmacology, Faculty of Medicine, **Ain Shams University**, Abbassia, Cairo, Egypt from December 1995 till Jan 2000.
- **Assistant lecturer** in the same department from Jan 2000 till March 2004.
- **Lecturer** in the same department from April 2004 till June 2009.
- **Associate Professor** in the same department from July 2009 till July 2016.
- **Professor** in the same department from August 2016 till now.
- **Head of the Department** of Clinical Pharmacology, Faculty of Medicine, Ain Shams University, Abbassia, Cairo, Egypt from August 2021 till now.
- **Vice Director of the Quality Assurance Unit**, Faculty of Medicine, Ain Shams University, from August 2021 till now.

- **Special volunteer** at the pain research unit, division of intramural research, National Institute of Nursing Research, **NIH, Bethesda, MD, USA**, from April 2006 till May 2009.

### **Awards:**

#### **National Incentive Prize in medical Sciences 2009**

### **Grants:**

Joint supervision grant to perform the experimental work of MD thesis, funded by the Egyptian ministry of higher education (Feb 2001-Aug 2002).

### **Scientific visits:**

- A visit to the Institute of Experimental and Clinical Pharmacology and Toxicology, Friedrich-Alexander-University, **Erlangen-Nürnberg, Germany** for 19 months (Feb 2001-Aug 2002) as part of the joint supervision scheme for Egyptian postgraduate students funded by the Egyptian ministry of higher education. During this visit, I joined the behavioral pharmacology group to conduct the experimental work of my thesis.
- A visit to the Institute of Experimental and Clinical Pharmacology and Toxicology, Friedrich-Alexander-University, **Erlangen-Nürnberg, Germany** for 2 months (July 2004-Aug 2004).
- A visit to the pain research unit, division of intramural research, National Institute of Nursing Research, **NIH, Bethesda, MD, USA**, from April 2006 till May 2009.
- A fellowship at the **Association of American Medical Colleges ("AAMC")**, Visiting Student Learning Opportunities (VSLO), Washington, DC, USA, from September 2019 to March 2020.

### **Educational activities:**

- Participate in teaching of undergraduate pharmacology course at Faculty of Medicine, Ain Shams University, including Ain Shams Special Teaching Program (ASTP; Malaysian Program) and Extended modular program (EMP), as well as Undergraduate pharmacology courses at Faculties of Nursing and Dentistry, Ain Shams University.

- Participate in teaching of postgraduate pharmacology courses at Faculty of Medicine, Ain Shams University
- Participate yearly in updating the pharmacology course.
- Participate and supervise the training of assistant lecturers and demonstrators to teach basic and clinical pharmacology for medical students.
- Undergraduate Pharmacology Course coordinator, including ASTP and EMP (2011-2016, 2021-2022).
- Undergraduate program coordinator for the third year, including ASTP (2013-2016).
- Participated in developing the pharmacology MCQ Question Bank (2013-2015).

### **Quality of Education activities:**

- Member of the **strategic planning committee for the health sector of higher education in Egypt** (2010-2013).
- **Member of the strategic planning team**, the Faculty of Medicine, Ain Shams University (2016).
- Member of the Medical Education Development Unit, Faculty of Medicine, Ain Shams University (2013-2014).
- Member of the Self Study Team, Quality Assurance Unit, Faculty of Medicine, Ain Shams University (2011-2013).
- **Internal auditor**, Quality Assurance Unit, Faculty of Medicine, Ain Shams University (2012-2016).
- Member of the committee for **preparing undergraduate program new bylaws** (2017).
- **Vice Director of the Quality Assurance Unit**, Faculty of Medicine, Ain Shams University, from August 2021 till now.

### **Scientific Activities:**

**Scopus**

**H index 14**

**Citations 725**

**Google Scholar**

**H index 15**

**Citations 1006**

- Member of the Faculty of Medicine, Ain Shams Research Institute (MASRI), with the main responsibility of establishing an animal house, 2015-now.
- Reviewer for the USAID funded Higher Education Initiative, Graduates Scholarships for Professional program, Central Department of Missions - Ministry of Higher Education, December 2021 and March 2022.
- Reviewer of the Research Ethics Committee (REC), Faculty of Medicine, Ain Shams University, FWA 000017858, 2012-Now.
- Board Member, Clinical Pharmacology Unit, Faculty of Medicine, Ain Shams University
- Member of the editorial board of Case Reports in Anesthesiology Journal (December 2011-May 2017).
- Member of the editorial board of ISRN Inflammation Journal (December 2011- December 2020).
- Member of the editorial board of Journal of Medical Education and Curricular Development (October 2016 - present).
- Editor of the Clinical Pharmacology topics published in Ain Shams Journal of Anesthesia (June 2010 - June 2012).
- Reviewer for International Journals: International Journal of Diabetes in Developing Countries, Indian Journal of Biochemistry & Biophysics, Case Reports in Anesthesiology and International Scholarly Research Notices.
- A member of the organizing committee for the ESPET 51<sup>st</sup> annual meeting, March 16-17, 2010, Cairo.
- Participated in organizing and training of the participants in the interactive workshop on "Searching and Appraising the Literature on Antibiotic Medication (SALAM)" September 28 – October 4, 2010.
- Trainer in the interactive workshop on "Assessing adverse drug reactions of psychotropic pharmacotherapies" March, 2012.
- Trainer in the interactive workshop on "Assessing adverse drug reactions of psychotropic pharmacotherapies" May, 2013.

### **Theses Supervised:**

## **I. MSc Theses:**

1. Amina Ahmed Sedky, The Metabolic Syndrome: Concept, Controversy and Implications for Novel Pharmacotherapeutic Targets. 2010
2. Asmaa Monir Hamed Soliman Al shaer, Diabetic Neuropathy: A Deeper Look into an Unresolved Problem. 2011
3. Heba Hassan El Morsy, Study of analgesic effect of solvent (e.g. DMSO) in Swiss albino mice. 2012
4. Yasmin Mahmoud Sayed Ahmed, Dimethyl Sulphoxide (DMSO), to Which Extent Can We Use it as a Vehicle: a Study on the Antinociceptive Effect of DMSO in an Experimental Pain Model in Mice. 2012
5. Raghda Abd el Aziz Mohammed Salama, Equivalent intraperitoneal to orally administered doses of ibuprofen on dose response curve for analgesia and prostaglandin inhibitory effect in mice. 2015.

## **II. MD Theses:**

1. Amany Helmy Mohamed Hassanein, Impact of a Selective Phosphodiesterase Inhibitor and A Leukotriene Receptor Antagonist on Smoking-induced Steroid Resistance In an Animal Model of Chronic Asthma. 2008.
2. Sherin Shafik Tawfik, A Study into a Possible Mechanism of the Analgesic Effect of Ibuprofen in a Model of Post-surgical Pain beyond the Conventional COX Inhibition Theory. 2013
3. Lobna Ahmed Saleh Ahmed, The Effect of an NSAID on a Murine Model of Chronic Immune Activation and Depressive like Behavior: Role of Prostaglandins and Nitric Oxide. 2014
4. Ghada Mohamed Ahmed El-Lithy, The Effect of Ibuprofen Arginate on a Murine Model of Diabetic Neuropathy & study of the possible mechanisms. 2015.
5. Heba Hassan El Morsy, Effect of ibuprofen and fluoxetine on BCG-induced changes in pain perception and pain related biochemical mediators in mice. 2020.

## **Training Courses and Workshops:**

**Besides regular trainings at the Faculty Development Center (FLDC) and other University centers:**

- 1- **University Administration and Leadership for professors applying for Deanship positions** (الإدارة الجامعية والقيادة" للسادة المرشحين لشغل وظيفة عميد كلية), Training and development Center, Ain Shams University, Sept. 2021.
- 2- **Department Heads Competencies Development Course** (دورة تطوير كفايات رؤساء الأقسام), **University Education Development Center, Ain Shams University - March 2021.**
- 3- **Advanced Teaching skills, Harvard Medical School, Boston, USA, June 2019.**
- 4- **Being a Resilient Leader** workshop, **Association of American Medical Colleges ("AAMC")**, Washington, DC, USA, July, 2019.
- 5- **Professional Human Resources Management Program, American University in Cairo, 2012.**
- 6- Internal Audit of Educational Institutes, National Authority for Quality Assurance and Accreditation of Education (NAQAAE), Cairo, (April, 2011).
- 7- Internal Auditor Training, Quality Assurance Unit, Faculty of Medicine, Ain Shams University, January 2022.
- 8- TRAC7: Animal and Human Cell Cultures: Methods and Applications, organized by the foundation for advanced education in the science, Inc. (FAEC) and held at the National Institutes of Health, Bethesda, MD, USA (April 2006).
- 9- Introduction to Lab Safety, Computer Based Training Course organized by the Division of Safety, NIH, Bethesda, MD, USA (April 2006).
- 10- Laboratory Safety at the NIH organized by the Division of Safety, NIH, Bethesda, MD, USA (May 2006).
- 11- The Training Course in **Health Research Ethics**, Faculty of Medicine, Ain Shams University, June 2012.
- 12- TOT in systemic Assessment, Ain Shams University, November 2011.
- 13- E-Learning Concept, Methodologies and Tools. Faculty of Medicine, Ain Shams University, April 2012.
- 14- Introduction In Quality and Hospital management, Ain Shams University, June 2012.
- 15- Training of the Trainer Program, **American University in Cairo, 2014.**

16-A catalyst for change: Promoting Health Equity in Global Medical Education in the Post COVID-19 Era Workshop, **Weill Cornell, Medicine-Qatar**, Online, December 2020.

## **Scientific Societies Memberships:**

- Member of the Egyptian Society of Pharmacology and Experimental Therapeutics ESPET.
- Member of the International Association for the Study of Pain IASP.

## **List of publications:**

### **I. Chapters:**

Dionne RA, Gordon SM, **Hamza M**. Clinical Pharmacology of Nonsteroidal Anti-inflammatory Drugs. In: **Pain 2010 An updated review, Refresher Course Syllabus**. Mogil J, Ed. IASP Scientific Program Committee.

### **II. Theses:**

1. Master thesis: “Comparative study between valsartan (angiotensin II receptor antagonist) and captopril & benazepril (ACE inhibitors) on experimental animals”
2. M.D. thesis: “Effects of indomethacin and the synthetic cannabinoid HU-210 on the production of prostaglandin E<sub>2</sub> in the spinal cord: Relation to antinociception”

### **III. Journal articles:**

1. Gühring H, Schuster J, **Hamza M**, Ates M, Kotalla CE, Brune K. HU-210 shows higher efficacy and potency than morphine after intrathecal administration in the mouse formalin test. **Eur J Pharmacol**. 2001; 429(1-3):127-34.
2. Gühring H, **Hamza M**, Sergejeva M, Ates M, Kotalla CE, Ledent C, Brune K. A role for endocannabinoids in indomethacin-induced spinal antinociception. **Eur J Pharmacol**. 2002; 454(2-3):153-63.
3. Ates M, **Hamza M**, Seidel K, Kotalla CE, Ledent C, Gühring H. Intrathecally applied flurbiprofen produces an endocannabinoid-dependent antinociception in the rat formalin test. **Eur J Neurosci**. 2003; 17(3):597-604.
4. Seidel K, **Hamza M**, Ates M, Gühring H. Flurbiprofen inhibits capsaicin induced calcitonin gene related peptide release from rat spinal cord via an endocannabinoid dependent mechanism. **Neurosci Lett**. 2003; 338(2):99-102.
5. **Hamza M**, Badawy A, El serafi O, Darwish S. Comparative study on valsartan (angiotensin II receptor antagonist) and benazepril and captopril (two angiotensin converting enzyme inhibitors) in experimental animals. **J. Egypt. Soc. Pharmacol. Exp. Ther**. Jan. 2003, 23(1).

6. Reinold H, Ahmadi S, Depner UB, Layh B, Heindl C, **Hamza M**, Pahl A, Brune K, Narumiya S, Müller U, Zeilhofer HU. Spinal inflammatory hyperalgesia is mediated by prostaglandin E receptors of the EP<sub>2</sub> subtype. **J Clin Invest**. 2005; 115(3):673-9.
7. **May Hamza**. Role of Transient Receptor Potential Vanilloid 1 (TRPV1) and Cannabinoid CB1 Receptors in Paracetamol Induced Antinociception and Hypothermia in Mice. **J. Egypt. Soc. Pharmacol. Exp. Therap**. 2007; 28(1):183-215.
8. Wang XM, Wu TX, **Hamza M**, Ramsay ES, Wahl SM, Dionne RA. Rofecoxib modulates multiple gene expression pathways in a clinical model of acute inflammatory pain. **Pain**. 2007; 128(1-2):136-47.
9. Gordon SM, Chuang BP, Wang XM, **Hamza M**, Rowan JS, Brahim JS, Dionne RA. Differential Effects of Bupivacaine and Lidocaine on PGE<sub>2</sub> Release, Cyclooxygenase Gene Expression and Pain in a Clinical Pain Model. **Anesthesia & Analgesia**. 2008; 106(1):321-7.
10. Wang XM, **Hamza M**, Gordon SM, Wahl SM, Dionne RA. COX Inhibitors Downregulate PDE4D Expression in a Clinical Model of Inflammatory Pain. **Clin. Pharmacol. Therap**. 2008; 84:39-42.
11. **Hamza M**, Hassan, AN. The Interaction between Anti-inflammatory Dose of Nimesulide (Selective COX-2 Inhibitor) and Low Dose Rolipram (Selective PDE-4 inhibitor) on Airway Hyper-responsiveness in Ovalbumin Sensitized Guinea Pigs. **J Egypt. Soc. Pharmacol. Exp. Ther**. 2008, 29(2): 445-462.
12. **Hamza M**. Role of Neutrophils in the Anti-inflammatory and Antinociceptive Activity of the Cyclooxygenase Inhibitors Indomethacin and Nimesulide. **J. Egypt. Soc Pharmacol. Exp. Ther**. 29(2): 507-527.
13. **Hamza M**, Dionne RA. Mechanisms of non-opioid analgesics beyond cyclooxygenase enzyme inhibition. **Curr. Mol. Pharmacol**. 2009; 2(1):1-14.
14. Wang XM, **Hamza M**, Wu TX, Dionne RA. Up-regulation of IL-6, IL-8 and CCL2 gene expression after acute inflammation: correlation to clinical pain. **Pain**. 2009; 142(3):275-83.
15. **Hamza M**, Wang X-M, Adam A, Rowan JS, Brahim JS, Carmona Sr. GN, Dionne RA. Kinin B<sub>1</sub> Receptors Contributes to Acute Pain Following Minor Surgery in Humans. **Mol Pain**. 2010 Feb 13;6:12.
16. **Hamza M**, Wu T, Wang X-M, Brahim JS, Rowan JS, Jaber L, Dionne RA. Nitric oxide is negatively correlated to pain and modulates the analgesic effect of ketorolac in the oral surgery model of pain. **Mol Pain**. 2010 Sep 15;6:55.
17. **Hamza M**, Dionne RA. 2020 Foresight: Envisioning Therapeutic Innovations for Pain. **Drug Discovery Today: Therapeutic Strategies**. 2009; 6(3):113-119.
18. Murad HAS, **Hamza M**, Hamza SA. Repaglinide as a safe alternative against hypoglycemia in fasting elderly diabetic patients: A single blinded, placebo-controlled, six period, cross-over study. **Afr. J. Pharm. Pharmacol**. 2013; 7(14):763-769.
19. Murad HAS, **Hamza M**, Hamza SA. Effect of Nateglinide on C-Peptide level in Fasting Elderly Diabetic Patients: A Placebo-Controlled Cross Over Study. **Life Sci J** 2013; 10(3): 1476-1481.



20. El-Morsy HH, Aboul-Ela YMS, Hasanin AH, Abd El Aziz LF, Masoud SI, **Hamza M**. Low Concentrations of Dimethyl Sulphoxide Mask the Antinociceptive Activity of Paracetamol in the Mouse Formalin Test. **Life Sci J** 2013;10(4):1856-1861.
21. Abdel Kawy HS, Aboul-Fotouh S, **Hamza M**, Hassan AN. Antibiotics prophylaxis in surgery. Part 1 (gastroenterological surgeries). **Ain-Shams Journal of Anaesthesiology** 2013; 6 (2): 99.
22. Hassan AN, Mabrouk A, Abdel Kawy HS, **Hamza M**, El-Shaer A. Management of multi drug-resistant gram-negative bacteria in the intensive care unit. **Ain-Shams Journal of Anaesthesiology** 2013; 6 (1): 97.
23. Saad SS, Bahr MH, **Hamza M**, Masoud SI. The Effect of Preemptive Ibuprofen on Postoperative Mechanical Allodynia in a Model of Plantar Incision in Mice. **Ain Shams Medical Journal** 2013; 64 (7-9): 529-535.
24. Saleh LA, **Hamza M**, El Gayar NH, El-Samad AAA, Nasr EA, Masoud SI. Ibuprofen suppresses depressive like behavior induced by BCG inoculation in mice: role of nitric oxide and prostaglandin. **Pharmacology Biochemistry and Behavior** 2014; 125: 29-39.
25. Saleh LA, **Hamza M**, El Gayar NH, El-Samad AAA, Nasr EA, Masoud SI. Effect of Rofecoxib on Depressive-Like Behaviour in BCG Inoculated Mice. **Ain Shams Medical Journal** 2014.
26. Saad SST, **Hamza M**, Bahr MH, Masoud SI. Nitric oxide is involved in ibuprofen preemptive analgesic effect in the plantar incisional model of postsurgical pain in mice. **Neuroscience letters** 2016; 614: 33-38.
27. Salama RAM, El Gayar NH., Georgy SS, **Hamza M**. Equivalent Intraperitoneal Doses of Ibuprofen Supplemented in Drinking Water or in Diet: A Behavioral and Biochemical Assay Using Antinociceptive and Thromboxane Inhibitory Dose-Response Curves in Mice. **PeerJ** 2016, Jul 19; 4:e2239.
28. El-Lithy GM., El-Bakly WM., Matboli M, Abd-Alkhalek HA., Masoud SI., **Hamza M**. Prophylactic L-arginine and ibuprofen delays the development of tactile allodynia and suppresses spinal miR-155 in a rat model of diabetic neuropathy. **Translational research** 2016; 177: 85-97.

#### **IV. Conferences Abstracts:**

1. Abdel Kawy HS, Aboul-Fotouh S, **Hamza M**, Elmelegy AAM. COX-2 inhibitors: a non biased opinion. 28<sup>th</sup> International Annual Ain Shams Medical Congress, March, 2005, Cairo.
2. Wang XM, Wu TX, **Hamza M**, Ramsay ES, Wahl SM, Dionne RA. Selective COX2 inhibitor modulates multiple gene expression pathways in a clinical model of acute inflammation. The NIH research festival, October, 2006, Bethesda, MD, USA.
3. Gordon S, **Hamza M**, Wang X, Chuang B, Dionne R. Bupivacaine paradoxically increases cyclooxygenase gene expression, PGE2 production and pain in an oral surgery pain model. The American Pain Society's 26th Annual Scientific Meeting, May 5-7, 2007, Washington, DC.

4. Wang X, Wu T, **Hamza M**, Dionne R. Changes in gene expression with pain onset in a clinical model of tissue injury. The American Pain Society's 26th Annual Scientific Meeting, May 5-7, 2007, Washington, DC.
5. Wang X, **Hamza M**, Gordon SM, Wahl SM, Dionne RA. COX inhibitors downregulate PDE4D expression in a clinical model of inflammatory pain. 2008 Annual Meeting of the American Society for Clinical Pharmacology and Therapeutics (ASCPT), April 2-5, Orlando, FL.
6. **Hamza M**. Role of transient receptor potential vanilloid-1 (TRPV1) and cannabinoid CB1 receptors in paracetamol induced antinociception and hypothermia in mice Experimental Biology, 2008, April 5-9, San Diego, CA.
7. **Hamza M**, Wang X-M, Adam A, Carmona Sr. GN, Dionne RA. Ketorolac does not modulate nitric oxide, kinin B1 receptor or its endogenous ligands at the early phase of acute inflammatory pain in the oral surgery model. 2009 Annual Meeting of the American Society for Clinical Pharmacology and Therapeutics (ASCPT), March 18-21, Washington, DC.
8. **Hamza M**, Wang X-M, Wu T, Dionne RA. IL-6, IL-8 and CCL2 are correlated to pain intensity but not modulated by ketorolac in a clinical model of acute inflammatory pain. 2009 Annual Meeting of the American Society for Clinical Pharmacology and Therapeutics (ASCPT), March 18-21, Washington, DC.
9. **Hamza M**. Pain Mechanisms in the Oral Surgery Model of Acute Inflammatory Pain and Role of NSAIDs. The First Local Workshop of the NeuroMed consortium: Neuroplasticity and Neurorepair, April 28-29, 2010, Assiut, Egypt.
10. Wang X, **Hamza M**, Adam A, Brahim JS, Rowan JS, Carmona GN, Dionne RA. Kinin B1 Receptors Contributes to Acute Pain Following Minor Surgery in Humans. 13<sup>th</sup> World Congress on Pain, 2010, August 29 – September 2, Montréal, Québec, Canada.
11. **Hamza M**, Wang X, Wu T, Brahim JS, Rowan JS, Dionne RA. Nitric Oxide is Negatively Correlated to Pain During the Early Phase of Acute Inflammatory Pain. 13<sup>th</sup> World Congress on Pain, 2010, August 29 – September 2, Montréal, Québec, Canada.
12. El-Morsy HH, Ahmed YMS, Helmy A, Abd El Aziz LF. Masoud SI, **Hamza M**. Low concentrations of DMSO masks the antinociceptive activity of paracetamol in the mouse formalin test. 2012 ESPET annual meeting, March 10<sup>th</sup>, Cairo.
13. **Hamza M**, Hassan AN, Aboul-Fotouh S, Elmazar MM, Abdel Tawab AM. Teaching Clinical Pharmacology Using Information Technology to Promote Rational Prescribing Based on Evidence. 2012 ESPET annual meeting, March 10<sup>th</sup>, Cairo.
14. Nadim HS, Abdel Mohsen D, Sayed HYM, **Hamza M**. Non-traditional teaching/learning to large number of medical students. 1<sup>st</sup> scientific conference of Medical Education Development Center, Faculty of Medicine-Cairo university, 2012, December 22<sup>nd</sup>-23<sup>rd</sup>, Cairo.
15. Saleh LA, El Gayar NH, Nasr EA, **Hamza M**, Massoud SI. The Effect of Ibuprofen on Depressive like Behavior Induced by BCG Inoculation in mice: Role of Prostaglandins and Nitric Oxide. 2013 ESPET annual meeting, April 13<sup>th</sup>, Cairo.

16. Saad SS., Bahr MH, **Hamza M**, Masoud SI. Nitric oxide and alpha-2 adrenoceptors are involved in ibuprofen preemptive analgesic effect in postsurgical pain in mice. 2013 ESPET annual meeting, April 13<sup>th</sup>, Cairo.
17. El-Lithy GM, El-Bakly WM, Matboli M, Abd-Alkhalek HA, Masoud SI, **Hamza M**. Prophylactic L-arginine delays the development of tactile allodynia and suppresses spinal miR-155 in a rat model of diabetic neuropathy. 2016 ESPET annual meeting, March 5<sup>th</sup>, Cairo.

### **Conferences Attended:**

1. **28<sup>th</sup> International Annual Ain Shams Medical Congress**, held in Cairo (March, 2005) and participated in the preparation of the department's lecture "COX-2 inhibitors: an unbiased opinion".
2. The **NIH research festival** (October 2006), and **participated in a poster** presented: "Selective COX2 inhibitor modulates multiple gene expression pathways in a clinical model of acute inflammation".
3. The **26<sup>th</sup> annual Scientific meeting of the American Pain Society** held in Washington DC (April 2007) and **presented a poster**: "Bupivacaine paradoxically increases cyclooxygenase gene expression, PGE2 Production and pain in an oral surgery pain model".
4. **Experimental Biology, 2008**, the official meeting of The American Society for Pharmacology and Experimental Therapeutics held in San Diego, CA (April 5-9), **to present a poster**: "Role of transient receptor potential vanilloid-1 (TRPV1) and cannabinoid CB1 receptors in paracetamol induced antinociception and hypothermia in mice".
5. **Neuroscience 2008**, the 38th annual meeting of the Society for Neuroscience, held in Washington, DC (November 15 – 19).
6. **ASCPT 2009**, the annual meeting for the American Society for Clinical Pharmacology and Therapeutics held in Washington, DC (March 18 – 21) and **presented a poster**: "Ketorolac does not modulate nitric oxide kinin B1 receptor or its endogenous ligands at the early phase of acute inflammatory pain in the oral surgery model".
7. **51<sup>st</sup> Annual Conference, Egyptian Society of Pharmacology and Experimental Therapeutics (ESPET)**, held in Cairo (March, 2010) and **presented a poster**: "Nitric Oxide

is Negatively Correlated to Pain and is Modulated by Ketorolac in the Oral Surgery Model of Pain”.

8. **26<sup>th</sup> Annual Scientific Conference, Egyptian Anesthesia 2010**, held in Cairo Egypt (March, 2011).
9. **The First Local Workshop of the FP7 NeuroMed consortium: Neuroplasticity and Neurorepair**, April 28-29, 2010, Assiut, Egypt. **Presented an oral presentation**: “Pain Mechanisms in the Oral Surgery Model of Acute Inflammatory Pain and Role of NSAIDs”.
10. **27<sup>th</sup> Annual Scientific Conference of Egyptian Society of Anesthesia (EgSA)** held in Cairo Egypt (April, 2011).
11. **8<sup>th</sup> International Congress on Psychiatry 3rd International Congress on Neuroscience** held in Cairo (March, 2012).
12. **Medical Education between Reality and Expectations, 1<sup>st</sup> scientific conference of Medical Education Development Center**, Faculty of Medicine-Cairo University, 2012, December 22<sup>nd</sup>-23<sup>rd</sup>, Cairo.
13. **9<sup>th</sup> International Congress on Psychiatry 4th International Congress on Neuroscience** held in Cairo (May, 2013).
14. **52<sup>nd</sup> Annual Conference, Egyptian Society of Pharmacology and Experimental Therapeutics (ESPET)**, held in Cairo (March, 2012) and **presented 2 posters**: “Teaching Clinical Pharmacology Using Information Technology to Promote Rational Prescribing Based on Evidence” and “Low concentrations of DMSO masks the antinociceptive activity of paracetamol in the mouse formalin test”.
15. **53<sup>rd</sup> Annual Conference, Egyptian Society of Pharmacology and Experimental Therapeutics (ESPET)**, held in Cairo (April, 2013) and **presented 2 posters**: “Nitric oxide and alpha-2 adrenoceptors are involved in ibuprofen preemptive analgesic effect in postsurgical pain in mice” and “The Effect of Ibuprofen on Depressive like Behavior Induced by BCG Inoculation in mice: Role of Prostaglandins and Nitric Oxide”.
16. **55<sup>th</sup> Annual Conference, Egyptian Society of Pharmacology and Experimental Therapeutics (ESPET)**, held in Cairo (March, 2016) and **presented an oral presentation**:

“Prophylactic L-arginine delays the development of tactile allodynia and suppresses spinal miR-155 in a rat model of diabetic neuropathy”.

17. **37<sup>th</sup> Ain Shams Medical Congress**, held in Cairo (March, 2016) and participated with **an oral presentation**: “e-Learning pharmacology curriculum”.
18. **The Council for Higher Education Accreditation (CHEA) 23<sup>rd</sup> Annual Conference** and CHEA International Quality Group (CIQG) Annual Meeting, held in Washington, DC, USA, (January 27-30, 2020).
19. **The Council for Higher Education Accreditation (CHEA) 24<sup>th</sup> Annual Conference**, held online, (January 26-28, 2021).