

## Curriculum Vitae

### Gehan Hussein Hussein Heeba

**Professor and Head of Department of Pharmacology & Toxicology,  
Faculty of Pharmacy, Minia University, El-Minia, EGYPT**

**أستاذ ورئيس قسم الأدوية والسموم بكلية الصيدلة جامعة المنيا**



#### **Personal Information:**

- **Nationality:** Egyptian
- **Date of birth:** August/16/ 1970
- **Place of birth:** Giza government, Egypt
- **Marital status:** Married
- **Living Place:** Giza government
- **Mailing Address:** Department of Pharmacology and Toxicology, Faculty of Pharmacy, Minia University, El-Minia 61511, Egypt.
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#### **Scientific Metrics**

- **H index:** 28 (Google scholar)
- I was selected among the top 2 percent of the World's most influential scientists in the **Stanford University Rankings**, and is available on **Elsevier** (2020, 2021)  
<https://elsevier.digitalcommonsdata.com/data.../btchxktyzw/4>  
 تم اختيارى من ضمن أعلى 2 في المائة من علماء العالم المؤثرين عالمياً في تصنيف جامعة استانفورد الأمريكية ومتاح على دار النشر الدولية السفير Elsevier ( عامى 2021 , 2022 )
- **Google Scholar:** <http://scholar.google.com.eg/citations?user=ue-kQBMAAAJ&hl=ar>
- **Research Gate:** [https://www.researchgate.net/profile/Dr\\_Gehan\\_Heeba](https://www.researchgate.net/profile/Dr_Gehan_Heeba)
- **Scopus author ID:** 23060107600  
<https://www.scopus.com/authid/detail.uri?authorId=23060107600>
- **ORCID ID :** 0000-0002-6907-4441

#### **Education:** المؤهلات العلمية

- **Ph.D. (Pharmacology):** February/2008- Channel system between Ohio University/USA and Minia University/Egypt  
 - درجة دكتوراة الفلسفة في العلوم الصيدلية "أدوية وسموم" - فبراير/ 2008 - كلية الصيدلة - جامعة المنيا ( قناة علمية مشتركة بين جامعة اوهايو بالولايات المتحدة الامريكية وجامعة المنيا في مصر )
- **M. Sc. (Pharmacology),** Minia University, Egypt, May/2001.  
 - درجة الماجستير في العلوم الصيدلية "أدوية وسموم" مايو / 2001 - كلية الصيدلة - جامعة المنيا
- **B.Sc. (Pharmacy),** Cairo University, Egypt, May/1993.  
 - بكالوريوس العلوم الصيدلية - مايو / 1993 - كلية الصيدلة - جامعة القاهرة

## الوظائف الأكاديمية:

- 9/2019–Present:** Head of Department of Pharmacology and Toxicology,  
Faculty of Pharmacy, Minia University, Egypt.
- 9/2018–Present:** Professor in Department of Pharmacology and Toxicology,  
Faculty of Pharmacy, Minia University, Egypt.
- 2013–8/2018:** Assistant Professor in Department of Pharmacology and Toxicology,  
Faculty of Pharmacy, Minia University, Egypt.
- 2008–2013:** Lecturer in Department of Pharmacology and Toxicology,  
Faculty of Pharmacy, Minia University, Egypt.
- 2005 – 2007:** Visiting Scholar in a channel system at Ohio University, USA
- 2002–2004:** Assistant Lecturer, Pharmacology and Toxicology Department,  
Faculty of Pharmacy, Minia University, Egypt.
- 1998- 2001:** Demonstrator, Faculty of Pharmacy, Minia University, Egypt.
- 1994 – 1998:** living in USA (Texas) with spouse, who was studying Ph.D. in  
Electrical Engineering at Texas A&M University.

## Teaching Experience:

- 1- Teaching for post-graduate students: Teaching lectures for master and diploma's students
- 2- Teaching lectures of the following courses: Pharmacology-1; Pharmacology-2 ; Pharmacology-3; Clinical Pharmacology; Drug Interaction; Therapeutics; Toxicology; First aid; Medical Terminology.
- 3- Participating in the written, practical and oral examination works for the under and post-graduate students.

## النطاقات/ عضوية لجان

- 1.** Academy of Scientific Research and Technology ASRT Fellowship: Member of National Committee of Drugs, 2022

عضوية اللجنة الوطنية للأدوية بقرار رئيس أكاديمية البحث العلمي والتكنولوجيا رقم ١٩٠ منذ عام ٢٠٢٢

- 2.** Member of the Referees' lists for examining scientific production for the promotion to professorship and assistant-professorship, Committee No. 96, Pharmaceutical Studies Sector, specialty in Pharmacology and Clinical Pharmacy

عضوية قوائم المحكمين بلجان الترقى بالجامعة للجامعات (اللجنة العلمية الدائمة لترقية الأستاذة والأساتذة المساعدين)، لجنة رقم ٩٦ قطاع الدراسات الصيدلية تخصص الفارماكولوجي والصيدلة الإكلينيكية – الدورة الثالثة عشر

- 3.** Reviewer in Promotion Committee of National Organization for Drug Control and Research (NODCAR)

عضوية قوائم المحكمين باللجنة العلمية لترقية الأستاذة الباحثين و الأستاذة الباحثين المساعدين بالهيئة القومية للرقابة والبحوث الدوائية (الشعبة العامة للرقابة والبحوث الفارماكولوجية) بوزارة الصحة

- 4.** Member of Committee of Ethics by Scientific Research at Faculty of Pharmacy, Minia University

عضوية لجنة أخلاقيات البحث العلمي بكلية الصيدلة جامعة المنيا

- 5.** Member of Editorial Board of International and Local Scientific Journals like:

- Frontiers in Gastroenterology\_ Gastroenterology and Cancer Journal
- Egyptian Journal of Basic and Clinical Pharmacology

6. Member of the Egyptian Pharmaceutical Society.
  7. Member of Quality Assurance and Accreditation Project at the Faculty of Pharmacy, Minia University (In description of course specifications and in the Evaluation Unit and Examination Systems).
  8. Academic advisor for the students of Clinical Pharmacy Program, including registration of courses, deletions, and periodic meetings of students.
  9. 2008- 2014: Head of the Board of the Egyptian Pharmaceuticals Students' Federation at Faculty of Pharmacy, Minia University.
  10. 10/2008- 2011: Leader of the Students Association "Scientific Committee" of the Faculty of Pharmacy, Minia University.
  11. 10/2011- 2012: Leader of the Students Association "Fine Arts" of the Faculty of Pharmacy, Minia University.
  12. 2011- Present: Member of "Postgraduates and Research Affairs" Committee, Faculty of Pharmacy, Minia University.
  13. Organizer of the EPSF 17<sup>th</sup> annual conference, held at Faculty of Pharmacy, Minia University, 18-21/ October/ 2012.
  14. Co-supervisor of the Summer Program Trainee of third year students in public pharmacies, Faculty of Pharmacy, Minia University.
  15. Reviewer for many Internationally-cited journals
- المشاركة في تحكيم أبحاث علمية لمجلات دولية متخصصة ذات معامل تأثير**  
**(<https://publons.com/author/1184954/gehan-h-heeba#profile>)**
- British Journal of Pharmacology                      • Fundamental & Clinical Pharmacology
  - Clinical and Experimental Pharmacology and Physiology
  - Pharmacological Research                          • Chemico-Biological Interactions
  - Pharmaceutical Biology                            • Nephrology
  - Pharmacy and Pharmacology Annals of Hepatology

### **المؤتمرات العلمية**

1. 14<sup>th</sup> International Pharmaceutical Sciences Conference, Assiut University, November, 6-7, 2024. المشاركة كمحاضر في مؤتمر جامعة أسيوط الدولي الرابع عشر للعلوم الصيدلية ، و المنعقد بجامعة أسيوط ، فى الفترة من 6-7 نوفمبر 2024.
2. 6<sup>th</sup> International Conference of Pharmaceutical & Drug Industries Research Division, NRC, Cairo, October, 23-24, 2017. المشاركة بالحضور والحصول على أحسن بوستر وبحث في المؤتمر الدولي السادس لشعبة الصناعات الصيدلية و الدوائية و المنعقد بالمركز القومى للبحوث فى الفترة من 23-24 أكتوبر 2017.
3. 4<sup>th</sup> FUE International Conference of Pharmaceutical Sciences, Cairo, Egypt, January 31-Feburary 2, 2017. المشاركة بالحضور وبحث في المؤتمر الدولي الرابع للعلوم الصيدلية بجامعة المستقبل - في الفترة من 31 يناير- 2 فبراير 2017.
4. 56<sup>th</sup> Annual Conference of the Egyptian Society of Pharmacology and Experimental Therapeutics. British University in Egypt (BUE), Cairo, Egypt, January, 28, 2017. المشاركة بالحضور وبحث في المؤتمر السادس والخمسون للجمعية المصرية للأدوية والعلاج التجربى و المنعقد بالجامعة البريطانية فى 28-يناير-2017.
5. Author Workshop by Elsevier, presented by Ingrid van de Stadt, Regional Marketing Director at Elsevier Publisher. Held at Minia University, 9 Oct. 2016. حضور ورشة عمل لدار النشر اليسفري و المنعقدة بجامعة المنيا فى 9- اكتوبر 2016

6. 55<sup>th</sup> annual scientific conference held by Egyptian Society of Pharmacology and Experimental Therapeutics, Cairo, Egypt, March 5, 2016.  
المشاركة بالحضور وبحث في المؤتمر الخامس والخمسون للجمعية المصرية للأدوية والعلاج التجاري والمنعقد بالجامعة البريطانية في 5- مارس-2016
7. 33<sup>nd</sup> Conference of Pharmaceutical Sciences, Egyptian Pharmaceutical Society, Cairo, Egypt, Feb., 17-18, 2016.  
المشاركة بالحضور وبحث في مؤتمر العلوم الصيدلية الدولي الثالث والثلاثون للجمعية الصيدلية المصرية المنعقد بمركز المؤتمرات- جامعة القاهرة ، في الفترة من 17-18 فبراير-2016
8. 6<sup>th</sup> International Scientific Conference of Faculty of Pharmacy, Cairo University. April, 25-26, 2015.  
المشاركة بالحضور وبحث في مؤتمر كلية الصيدلة بجامعة القاهرة الدولي السادس للعلوم الصيدلية ، و المنعقد بمركز المؤتمرات بجامعة القاهرة في الفترة من 25-26 أبريل 2015
9. 5<sup>th</sup> International Conference of Pharmaceutical and Drug Industries Research Division held by National Research Center on 29-30 March, 2015.  
المشاركة بالحضور وبحث في المؤتمر الدولي الخامس لشعبة الصناعات الصيدلية و الدوائية و المنعقد بالمركز القومي للبحوث في الفترة من 29-30 مارس-2015.
10. 12<sup>th</sup> National Conference of Biochemistry and Molecular Biology, Cairo, Egypt, March 15-17, 2015.  
المشاركة بالحضور وبحث في المؤتمر القومي الثاني عشر للكيمياء الحيوية والبيولوجيا الجزيئية ، في الفترة من 15-17 مارس-2015
11. 54<sup>th</sup> annual scientific conference held by Egyptian Society of Pharmacology and Experimental Therapeutics, Cairo, Egypt, October, 25, 2014.  
المشاركة بالحضور وبحث في المؤتمر الرابع والخمسون للجمعية المصرية للأدوية والعلاج التجاري والمنعقد بالجامعة البريطانية في 25- اكتوبر- 2014
12. 5<sup>th</sup> International Scientific Conference of Faculty of Pharmacy, Cairo University. April, 23-24, 2014.  
المشاركة بالحضور وبحث في مؤتمر كلية الصيدلة بجامعة القاهرة الدولي الخامس للعلوم الصيدلية ، و المنعقد بمركز المؤتمرات بجامعة القاهرة في الفترة من 23-24 أبريل 2014
13. 9<sup>th</sup> International Pharmaceutical Sciences Conference, Assiut University, March, 12-13, 2014.  
المشاركة بالحضور وبحث في مؤتمر جامعة أسيوط الدولي التاسع للعلوم الصيدلية ، و المنعقد بجامعة أسيوط ، في الفترة من 12-13 مارس-2014
14. AD-Instruments LabTutor Worshop. Held at Cairo University, April, 3, 2013.
15. 8<sup>th</sup> International Pharmaceutical Sciences Conference, Assiut University, March, 14-15, 2012.  
المشاركة بالحضور وبحث في مؤتمر جامعة أسيوط الدولي الثامن للعلوم الصيدلية ، و المنعقد بجامعة أسيوط ، في الفترة من 14-15 مارس-2012
16. 9<sup>th</sup> National Conference of Biochemistry and Molecular Biology, Cairo, Egypt, March 4-6, 2012.  
المشاركة بالحضور وبحث في المؤتمر القومي التاسع للكيمياء الحيوية والبيولوجيا الجزيئية والمنعقد بدار الضيافة- جامعة عين شمس ، في الفترة من 4-6 مارس-2012
17. 32<sup>nd</sup> Conference of Pharmaceutical Sciences, Egyptian Pharmaceutical Society, Cairo, Egypt, December 20-22, 2011.  
المشاركة بالحضور وبحث في مؤتمر العلوم الصيدلية الدولي الثاني والثلاثون للجمعية الصيدلية المصرية و المنعقد بدار الضيافة- جامعة القاهرة ، في الفترة من 20-22 ديسمبر-2011
18. 51<sup>th</sup> annual scientific conference held by Egyptian Society of Pharmacology and Experimental Therapeutics, Cairo, Egypt, March 16-17, 2010.  
المشاركة بالحضور وبحث في المؤتمر الحادى والخمسون للجمعية المصرية للأدوية والعلاج التجاري والمنعقد بدار الضيافة- جامعة عين شمس ، في الفترة من 16-17 مارس-2010

19. First International Scientific Conference held by Faculty of Nursing, Minia University, entitled by "Nursing and current challenges" on 21-23 April, 2010.  
المشاركة بالحضور في المؤتمر العلمي الأول للتمريض تحت عنوان "التمريض وتحديات العصر" والمعقد بكلية التمريض- جامعة المنيا ، في الفترة من 21-23-أبريل-2010.
20. 4<sup>th</sup> International Conference of Pharmaceutical and Drug Industries Research Division held by National Research Center on 3-5 March, 2009.  
المشاركة بالحضور وبحث في المؤتمر الدولي الرابع لشعبة الصناعات الصيدلانية و الدوائية و المنعقد بالمركز القومي للبحوث في الفترة من 3-5 مارس-2009.
21. 31<sup>th</sup> Conference of Pharmaceutical Sciences, Egyptian Pharmaceutical Society, Cairo, Egypt, December 23-25, 2008.  
المشاركة بالحضور وبحث في مؤتمر العلوم الصيدلية الدولي الواحد والثلاثون للجمعية الصيدلية المصرية المنعقد بدار الدفاع الجوى بمدينة نصر- القاهرة ، فى الفترة من 23-25- ديسمبر-2008
22. Attended many workshops held by Quality Assurance and Accreditation Center at Faculty of Pharmacy /Minia University, during 2010-2012.
23. Attended workshop about Digital Library held by Minia University, 3-4 October/ 2012.

### **الخبرة البحثية**

- Good experience in cell culture preparations.
- Animal care and handling for *in-vivo* and *in-vitro* experiments, small animal surgery, blood sample collection and drug administration via different routes.
- Good experience in Electrophoresis, Western blotting, Spectrophotometry, preparation of NO/ONOO<sup>-</sup> nanosensors.....

### **الإشراف على الرسائل العلمية**

#### **الرسائل التي تم منحها : Ph.D. and Master Thesis Supervised since 2008-to-date**

- 1- Evaluation of the Possible Role of Incretin-Based Therapies in Doxorubicin-Induced Organ Toxicity in Rats **(Ph.D. Thesis)**
- 2- Cardiovascular protective role of the central endocannabinoid receptor GPR18 signaling in diabetic rats. **(Ph.D. Thesis)**
- 3- Evaluation of the Possible Neuroprotective Role of a Novel Glucagon-like Peptide-1 Receptor Agonist in Ischemic Stroke in rats. **(Ph.D. Thesis)**
- 4- Evaluation of the Possible Role of Glucagon-like Peptide-1 Receptor Agonist and Dipeptidyl Peptidase-4 Inhibitor in Diabetic Nephropathy in Rats. **(Ph.D. Thesis)**
- 5- Comparative study between effect of atorvastatin and losartan on high fat diet-induced type 2 diabetes mellitus in rats. **(Master Thesis)**
- 6- Role of TNF-alpha in the pathogenesis of doxorubicin-induced cardiomyopathy and its modulation by different pharmacological agent. **(Master Thesis)**

- 7- A Comparative study between the effect of telmisartan and aliskiren in non-alcoholic fatty liver in rats. (Master Thesis)**
- 8- Relevance of Heme Oxygenase-1 in the Pathogenesis of Diabetic Nephropathy and Its Modulation by Different Pharmacological Agents. (Master Thesis)**
- 9- Impact of antiplatelet drugs on cold restraint stress-induced gastric ulceration in adult and aged rats. (Master Thesis)**
- 10- Effect of Phosphodiesterase Inhibition on High Fat Diet-Induced Non-Alcoholic Fatty Liver Disease in Rats. (Master Thesis)**
- 11- Role of Phosphodiesterase Enzyme Inhibitors and Its Interaction with Nitric Oxide on Hepatic Ischemia/Reperfusion Injury in Rats (Master Thesis)**
- 12- Effect of Resveratrol on the Cardiovascular Complications of STZ-induced Diabetes in Rats: Role of Heme Oxygenase Enzyme. (Master Thesis)**
- 13- Comparative Study of the Neuroprotective Effect of the Peroxisome Proliferator Activator Receptor (PPAR) – $\alpha$  agonist, Fenofibrate, versus PPAR- $\gamma$  agonist, Pioglitazone, in Cerebral Ischemia/Reperfusion Rat Model. (Master Thesis)**
- 14- Role of Selective Serotonin Reuptake Inhibitors (SSRIs) in Cerebral Ischemia/Reperfusion-Induced Injury in Rats (Master Thesis)**
- 15- Evaluation of the possible protective role of sodium-glucose cotransporter 2 inhibitors in gentamicin-induced nephrotoxicity in rats (Master Thesis)**
- 16- Evaluation of the Possible Role of Incretin-based Therapies in Type 2 Diabetes Mellitus-induced Testicular Dysfunction in Rats. (Master Thesis)**
- 17- Evaluation of the protective effect of canagliflozine, a SGLT2 inhibitor, on steatosis and brain dysfunction in high fructose-fed rats (Master Thesis)**
- 18- Comparative Study on the Possible Protective Effect of Phosphodiesterase Inhibitors in Cisplatin-Induced Reproductive Toxicity in Adult Male Rats (Master Thesis)**

**Ph.D. and Master Thesis (on-going) : الرسائل الجارى اعدادها**

- 1- Evaluation of the Possible Protective Effect of Some Agents in Methotrexate-Induced Organ Toxicity in Rats (Ph.D. Thesis)**
- 2- Effects of Polyphenolic Compounds on Azithromycin-Induced Organs Injury in Rats (Ph.D. Thesis)**
- 3- Protective Effect of Some Natural Products Against Azithromycin Induced Cardiotoxicity in Rat Model (Master Thesis)**
- 4- Role of Morin hydrate in Cisplatin-Induced Reproductive Toxicity in Male Rats and Cisplatin-Induced Cytotoxicity in Cancer Cell Line (Master Thesis)**
- 5- Evaluation of the Possible Protective Role of Anti-inflammatory drugs in Cyclophosphamide-Induced Reproductive Toxicity in Male Rats (Master Thesis)**
- 6- Gastroprotective effects of Dipeptidyl Peptidase-4 inhibitors and sodium glucose Co-transporter 2 inhibitors against indomethacin-induced gastric ulcers in Type 2 diabetic rats (Master Thesis)**
- 7- The Possible Role of Empagliflozin and Modified Citrus Pectin in Doxorubicin-Induced Nephrotoxicity in Rats (Master Thesis)**
- 8- Evaluation of the possible protective role of dipeptidyl peptidase-4 inhibitors in methotrexate-induced organ toxicity in rats (Master Thesis)**
- 9- Evaluation of the protective effects of a natural agent on chemotherapy- induced hepatorenal toxicity in rats (Master Thesis)**

**List of Publications: النشر العلمي الدولي**

**1. Ali MAM, Matouk AI, Hamza AA, Amin A, Heeba GH.**

Gallic and glycyrrhetic acids prevent azithromycin-induced liver damage in rats by mitigating oxidative stress and inflammation. *Sci Rep.* 2025 Mar 20;15(1):9566. doi: 10.1038/s41598-025-93120-3.

**2. Ismail R, Habib HA, Anter AF, Amin A, Heeba GH.**

Modified citrus pectin ameliorates methotrexate-induced hepatic and pulmonary toxicity: role of Nrf2, galectin-3/TLR-4/NF-κB/TNF-α and TGF-β signaling pathways. *Front Pharmacol.* 2025 Jan 23;16:1528978. doi: 10.3389/fphar.2025.1528978. eCollection 2025.

**3. Botros SR, Matouk AI, Amin A, Heeba GH.**

Comparative effects of incretin-based therapy on doxorubicin-induced nephrotoxicity in rats: the role of SIRT1/Nrf2/NF-κB/TNF-α signaling pathways.

*Front Pharmacol.* 2024 Feb 19;15:1353029. doi: 10.3389/fphar.2024.1353029. eCollection 2024.

**4. Eman M. Othman, Heba A. Habib, Mahmoud E. Zahran, Amr Amin, Gehan H. Heeba**

Mechanistic Protective Effect of Cilostazol in Cisplatin-Induced Testicular Damage via Regulation of Oxidative Stress and TNF-α/NF-κB/Caspase-3 Pathways

*Int. J. Mol. Sci.* 2023, 24(16), 12651; <https://doi.org/10.3390/ijms241612651>

**5. Heeba GH., Morsy MA, Mahmoud ME, Abdel-Latif R.J**

Gastro-protective effect of l-arginine against nitric oxide deficiency-related mucosal injury induced by indomethacin: Does age matter?

*Biochem Mol Toxicol.* 2023 Jul 23:e23479. doi: 10.1002/jbt.23479. Online ahead of print. PMID: 37483153

**6. Hamza AA, Heeba GH., Hassanin SO, Elwy HM, Bekhit AA, Amin A.**

Hibiscus-cisplatin combination treatment decreases liver toxicity in rats while increasing toxicity in lung cancer cells via oxidative stress- apoptosis pathway.

*Biomed Pharmacother.* 2023 Jul 12;165:115148. doi: 10.1016/j.biopha.2023.115148. Online ahead of print. PMID: 37450997

**7. Abdel-Hameed SS, El-Daly M, Ahmed AF, Bekhit AA, Heeba GH.**

Dapoxetine prevents neuronal damage and improves functional outcomes in a model of ischemic stroke through the modulation of inflammation and oxidative stress.

*Naunyn Schmiedebergs Arch Pharmacol.* 2023 Jul 7. doi: 10.1007/s00210-023-02601-7. Online ahead of print. PMID: 37417988

**8. Gehan Heeba, Mohamed Y Abolnaga, Eman M Othman**

Recent approaches for sodium-glucose Co-transporter 2 inhibitors in the management of non-alcoholic fatty liver disease. *Bulletin of Pharmaceutical Sciences. Assiut.* 2023 Jan

**9. Heeba GH., Ali MAM, El-Sheikh AAK.**

Rosuvastatin Induces Renal HO-1 Activity and Expression Levels as a Main Protective Mechanism

against STZ-Induced Diabetic Nephropathy.

**Medicina (Kaunas).** 2022 Mar 15;58(3):425. doi:10.3390/medicina58030425.PMID: 35334601

**10. Botros SR, Matouk AI, Anter A, Khalifa MMA, Heeba GH.**

Protective effect of empagliflozin on gentamicin-induced acute renal injury via regulation of SIRT1/NF- $\kappa$ B signaling pathway. **Environ Toxicol Pharmacol.** 2022 Aug;94:103907.  
doi: 10.1016/j.etap.2022.103907. Epub 2022 Jun 11.PMID: 35697188

**11. Abdel-Latif R, Heeba GH, Hassanin SO, Waz S, Amin A.**

TLRs-JNK/ NF- $\kappa$ B Pathway Underlies the Protective Effect of the Sulfide Salt Against Liver Toxicity.

**Front Pharmacol.** 2022 Apr 20;13:850066.

doi: 10.3389/fphar.2022.850066. eCollection 2022.PMID: 35517830

**12. Randa Ismail, Aliaa Anter, I Matouk, Gehan H Heeba**

An Overview of Incretin-Based Therapies: Pharmacology and Future Perspectives

Bulletin of Pharmaceutical Sciences. Assiut. 2022 Dec

**13. HA Habib, GH Heeba, MMA Khalifa**

Comparative effects of incretin-based therapy on early-onset diabetic nephropathy in rats: Role of TNF- $\alpha$ , TGF- $\beta$  and c-caspase-3

**Life Sciences** 278 (2021) 119624 2021. doi: 10.1016/j.lfs.2021.119624. Epub 2021 May 15.

**14. HA Habib, GH Heeba, MMA Khalifa**

Effect of combined therapy of mesenchymal stem cells with GLP-1 receptor agonist, exenatide, on early-onset nephropathy induced in diabetic rats

**European Journal of Pharmacology** 2021 Feb 5;892:173721. doi: 10.1016/j.ejphar.2020.173721.

**15. AA Hamza, GH Heeba, S Hamza, A Abdalla, A Amin**

Standardized extract of ginger ameliorates liver cancer by reducing proliferation and inducing apoptosis through inhibition oxidative stress/inflammation pathway

**Biomedicine & Pharmacotherapy** 2021 Feb;134:111102. doi: 10.1016/j.biopha.2020.111102.

**16. S Waz, GH Heeba, SO Hassanin, RG Abdel-Latif**

Nephroprotective effect of exogenous hydrogen sulfide donor against cyclophosphamide-induced toxicity is mediated by Nrf2/HO-1/NF- $\kappa$ B signaling pathway

**Life Sciences** 2021 Jan 1;264:118630. doi: 10.1016/j.lfs.2020.118630. Epub 2020 Oct 22.

**17. Gehan Hussein Heeba, Esraa Mohamed Rabie, Mekky Mohamed Abuzeid, Amany Abdelrehim Bekhit, Mohamed Montaser Khalifa**

Morin alleviates fructose-induced metabolic syndrome in rats via ameliorating oxidative stress, inflammatory and fibrotic markers

**Korean J Physiol Pharmacol** 2021;25(3):177-187. doi: 10.4196/kjpp.2021.25.3.177.

**18. RG Abdel-Latif, AF Ahmed, GH Heeba**

Low-dose lixisenatide protects against early-onset nephropathy induced in diabetic rats

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**19. Shehata AHF, Ahmed AF, Abdelrehim AB, Heeba GH.**

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