

CURRICULUM VITAE

السيرة الذاتية



CURRICULUM VITAE

NAME: *Reem Nabil Mohamed Ali Abou El-Naga*

PERSONAL INFORMATION:

Date of Birth: 29, January 1981.

Birth Place: Cairo, Egypt.

Nationality: Egyptian.

E-Mail:

reemelnaga@pharma.asu.edu.eg



CURRENT POSITION:

Associate Professor of Pharmacology and Toxicology, in Pharmacology and Toxicology Department, Faculty of Pharmacy, Ain Shams University (ASU), Cairo, Egypt.

EDUCATION:

• **2018:** Associate Professor of Pharmacology and Toxicology, Faculty of Pharmacy, Ain Shams University, Cairo, Egypt.

• **2012:** Ph.D. in Pharmacology and Toxicology, Faculty of Pharmacy, Ain Shams University, Cairo, Egypt.

Title: Modulation of resistance to TRAIL-mediated apoptosis in human hepatocellular carcinoma cell line using some phytochemicals.

A research article, extracted from the thesis, was published in Life Sciences International Journal (ELSEVIER) in 2013.

• **2009:** M.Sc. in Pharmacology and Toxicology, Faculty of Pharmacy, Ain Shams University, Cairo, Egypt.

Title: Cytotoxic effects of 2-methoxyestradiol in human hepatocellular carcinoma cell line.

A research article, extracted from the thesis, was published in Pharmacology International Journal (Karger) in 2009.

• **2003:** B.Sc. in Pharmaceutical Sciences, Faculty of Pharmacy, Ain Shams University, Cairo, Egypt with general grade "EXCELLENT WITH HONORS".

OCCUPATIONAL BACKGROUND:

• **January 2018 – present:** Associate Professor of Pharmacology and Toxicology, in Pharmacology and Toxicology Department, Faculty of Pharmacy, Ain Shams University (ASU), Cairo, Egypt.

- **November 2012 – December 2017:** *Lecturer in the Department of Pharmacology and Toxicology, Faculty of Pharmacy, Ain Shams University (ASU), Cairo, Egypt.*
- **March 2009 – September 2012:** *Assistant lecturer in the Department of Pharmacology and Toxicology, Faculty of Pharmacy, Ain Shams University (ASU), Cairo, Egypt.*
- **December 2003 – January 2009:** *Demonstrator in the Department of Pharmacology and Toxicology, Faculty of Pharmacy, Ain Shams University (ASU), Cairo, Egypt.*

TEACHING EXPERIENCE:

- ***Preparing and teaching courses for undergraduate students*** including: Basic Pharmacology, Basic Toxicology, Clinical Pharmacology, Clinical Toxicology, Medical Terminology, Drug interactions and Pharmacological screening.
- ***Preparing and teaching courses for postgraduate students*** including: Pharmacology, Clinical Pharmacology and Therapeutics, Clinical Toxicology, Neuropharmacology, Molecular Pharmacology and Advanced Pharmacology.

OTHER PROFESSIONAL EXPERIENCES:

- ***Co-supervision on Master and Ph.D. theses.***
- ***Participation in different committees in the Faculty each year*** concerning students' affairs, postgraduate studies and environmental affairs.
- ***Participation in organizing conferences:*** the 17th Congress of the Association of Pharmacy Colleges in the Arab World at Faculty of Pharmacy, Ain Shams University (ASU) held in Ain Shams University on October 14-16th 2014.
- ***Responsible for the follow up of the educational process effectiveness and the internal auditing for scientific departments in the Quality Control unit*** in Faculty of Pharmacy-ASU.
- ***Responsible for the Quality Control of education process in the Department of Pharmacology and Toxicology,*** Faculty of Pharmacy, Ain Shams University ***for 4 academic years (2012/2013 to 2015/2016).***
- ***Annual participation in the Quality Control affairs in in the Department of Pharmacology and Toxicology,*** Faculty of Pharmacy, Ain Shams University.
- ***Participation in administrative issues in the department*** including ordering chemicals and experimental animals.
- ***Attending scientific conferences*** related to the field of Pharmacology and Toxicology.
- ***Conducting scientific researches*** in the field.
- ***A reviewer for the scientific journal of the Faculty of Pharmacy-ASU.***
- ***Participation in organizing conference:*** the 21st Congress of the Association of Pharmacy Colleges in the Arab World at Faculty of Pharmacy, Ain Shams University (ASU) that will be held in on November 13-15th 2018.
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RESEARCH INTERESTS:

- Cancer chemotherapy
- Modulation of resistance to chemotherapy

- Mechanisms of chemically-induced toxicity
- Protection against chemically-induced toxicity
- Oxidative stress-mediated cell injury and protective antioxidant mechanisms.
- Neuropharmacology
- Anti-fibrotic agents
- Anti-peptic ulcer agents

CONFERENCE PARTICIPATION AND ATTENDANCE:

1. **16th Annual Conference of Diabetes, Gut and Liver: 25-26 September, 2019.**
2. **11th Annual Conference of National Hepatology & Tropical Medicine Research Institute "NHTMRI Pearls 2019": 17-19 September 2019.**
3. **Ain Shams University Conference "Under the title of Creativity, Invention, and Industry": April 1-3rd April, 2019.**
4. **2nd ICPASU international conference of the Faculty of Pharmacy Ain Shams University: November 13-15th, 2018.**
 - ❖ **Poster presentation titled: Indole-3-carbinol protects against cisplatin-induced acute nephrotoxicity: role of calcitonin gene-related peptide and insulin-like growth factor-1.**
- 5.
6. **15th Annual Conference "Diabetes: Gut and Liver": September 26-27th, 2018.**
7. **4th FUE International Conference of Pharmaceutical Sciences: January 31st-February 2nd, 2017.**
8. **Egyptian Society of Pharmacology & Experimental Therapeutics (ESPET) 56th Conference at the British University in Egypt (BUE): January 28th, 2017.**
 - ❖ **Poster presentation titled: Indole-3-carbinol protects against cisplatin-induced acute nephrotoxicity: role of calcitonin gene-related peptide and insulin-like growth factor-1.**
 - ❖ **This poster was awarded the prize of the best poster presented (second place).**
9. **13th Annual Conference of the Egyptian Association of Liver and Gastrointestinal Disease "Diabetes: Gut and Liver": September 28th-29th, 2016.**
10. **22th Annual Conference of Kafrelsheikh Liver Center: 31st August-2nd September, 2016.**
11. **Egyptian Society of Pharmacology & Experimental Therapeutics (ESPET) 55th Conference at the British University in Egypt (BUE): March 5th 2016.**
 - ❖ **Poster presentation titled: Pre-treatment with cardamonin protects against cisplatin-induced nephrotoxicity in rats: impact on NOX-1, inflammation and apoptosis.**
12. **6th International Scientific Conference of Faculty of Pharmacy, Cairo University "2020 Vision for Pharmacy in Egypt": April 25th-26th, 2015.**
 - ❖ **Poster presentation titled: Pre-treatment with cardamonin protects against cisplatin-induced nephrotoxicity in rats: impact on NOX-1, inflammation and apoptosis.**

13. **Egyptian Society of Pharmacology & Experimental Therapeutics (ESPET) 54th Conference at the British University in Egypt (BUE): December 20th 2014.**

14. **The 17th Congress of the Association of Pharmacy Colleges in the Arab World at Faculty of Pharmacy, Ain Shams University (ASU): October 14-16th 2014.**

❖ **Poster presentation titled: Pre-treatment with cardamonin protects against cisplatin-induced nephrotoxicity in rats: impact on NOX-1, inflammation and apoptosis.**

❖ **Poster presentation titled: Effects of indole-3-carbinol on clonidine-induced neurotoxicity in rats: Impact on oxidative stress, inflammation, apoptosis and monoamine levels.**

15. **14th annual conference of the Egyptian society of internal medicine (ESIM): February 27th 2014.**

16. **8th annual conference of Arabic association for the study of diabetes and metabolism (AASD): 17-18th 2013.**

17. **10th Annual Conference of the Egyptian Association of Liver and Gastrointestinal Disease "Diabetes: gut and liver": September 18th-19th 2013.**

18. **Designing and statistical analysis of biological experiments at National research Center (NRC): 2011.**

19. **Bio-industrial techniques: the present and future situations at National research Center (NRC): 2010.**

Participation in organization of conferences:

1. **2nd ICPASU international conference of the Faculty of Pharmacy Ain Shams University: November 13-15th, 2018.**

2. **The 17th Congress of the Association of Pharmacy Colleges in the Arab World at Faculty of Pharmacy, Ain Shams University (ASU): October 14-16th 2014.**

Awards:

In the Egyptian Society of Pharmacology & Experimental Therapeutics (ESPET) 56th Conference at the British University in Egypt (BUE): December 28th 2016.

The prize of the best poster (second place) was awarded for the poster titled:

"Indole-3-carbinol protects against cisplatin-induced acute nephrotoxicity: role of calcitonin gene-related peptide and insulin-like growth factor-1."

MASTERS THESES SUPERVISION:

- 1. Study of potential anti-inflammatory and antifibrotic effects of *Matthiola Arabica* Boiss. In an experimental model of liver fibrosis in rats (completed in 2016).**
- 2. Modulation of resistance to Sorafenib In human hepatocellular carcinoma cell line(s) using phytochemicals (completed in 2015).**
- 3. Study of the potential antifibrotic effects of forskolin in an experimental model of induced-liver fibrosis in rats (completed in 2016).**
- 4. Pharmacological study on the potential protective effect of a NADPH oxidase inhibitor against concanavalin A-induced liver injury in rats (completed in 2016).**
- 5. Possible modulatory effect of resveratrol on methotrexate efficacy and pharmacokinetics in a model of experimentally induced arthritis (Completed in 2017).**
- 6. A pharmacological study of the potential protective effect of angiotensin 2 receptor blocker(s) on experimentally induced benign prostatic hypertrophy in rats (Completed in 2017).**
- 7. A study on the potential protective effects of dibenzazepine against cisplatin-induced nephrotoxicity in rats (Completed in 2018).**
- 8. Pharmacological study on the potential effects of Fligrastim in rotenone induced model of Parkinson's disease in rats (Completed in 2018).**
- 9. Potential modulatory effects of cranberry powder extract in experimental model of fatty liver in rats (Completed in 2019).**
- 10. A study on the potential protective effect of wogonin in cisplatin-induced nephrotoxicity in rats (Completed in 2019).**
- 11. Pharmacological study on the potential effects of paracetamol in rotenone-induced model of Parkinson's disease in rats (Completed in 2021).**
- 12. A study on the potential effects of indole-3-carbinol in rotenone-induced model of Parkinson's disease in rats (Completed in 2021).**
- 13. The Anti-depressant effect of saxagliptin in a model of experimentally-induced depression rats: role of incretin.**
- 14. The anti-depressant effect of morin in a model of experimentally-induced depression in rats (Completed in 2020).**
- 15. The potential hepatoprotective effect of niclosamide in a model of experimentally-induced liver fibrosis in rats (Completed in 2021).**
- 16. Study on the potential neuroprotective effect of nebivolol in experimentally-induced multiple sclerosis in mice**
- 17. The potential protective effects of filgrastim in a model of experimentally-induced seizures in rats**
- 18. Pharmacological studies on the therapeutic outcomes of trimetazidine-immunotherapy combination in breast cancer mouse.**
- 19. Pharmacological studies on the therapeutic outcomes of telmisartan-doxorubicin combination in a breast cancer mouse model.**
- 20. The Potential Protective Effect of Luteolin in Doxorubicin-induced Hepatotoxicity and Neurotoxicity in Rats.**

Ph.D. THESES SUPERVISION:

- 1. Potential protective effects of epigallocatechin-3-gallate against doxorubicin-induced carditoxicity in rats (completed in 2015).**
- 2. Potential anti-fibrotic effect of deferroxamine in concanavalin A induced liver fibrosis (completed in 2015).**
- 3. Studying the effect of deferiprone in immunological model of liver fibrosis (completed in 2017).**
- 4. A comparative study of the potential nephroprotective effects of iron chelators in cisplatin induced nephrotoxicity (completed in 2021).**
- 5. A Pharmacological Study of Therapeutics Outcomes of beta blockers and rosuvastatin combination on isoprenaline-induced myocardial infarction in rats (completed in 2021).**
- 6. Potential protective effects of Co-enzyme Q10 on cyclophosphamide-induced neurotoxicity in rats.**

TRAINING COURSES:

- 1. "Anti-corruption and Egypt's version in 2030" at Training and Development Center (TD center), ASU: July 2021.**
- 2. "Negotiation and Persuasion Skills" at Training and Development Center (TD center), ASU: July 2021.**
- 3. "Effective Communication Skills" at Training and Development Center (TD center), ASU: June 2021.**
- 4. "Presentation Skills" at Training and Development Center (TD center), ASU: June 2021.**
- 5. "Organizing Scientific Conferences" at Training and Development Center (TD center), ASU: April 2021.**
- 6. "Writing and publishing a research article from thesis" at Faculty and Leadership Development Center (FLDC), ASU: March 2017.**
- 7. "Time Management" at Faculty and Leadership Development Center (FLDC), ASU: March 2016.**
- 8. "Quality standards in the Teaching Process" at Faculty and Leadership Development Center (FLDC), ASU: March 2016.**
- 9. "Proper behavior of occupation" at Faculty and Leadership Development Center (FLDC), ASU: February 2015.**
- 10. "The Ethics of Scientific Research" at Faculty and Leadership Development Center (FLDC), ASU: January 2015.**
- 11. "Adobe Photoshop training course" at ICTP, Faculty of Computer Science, ASU: August 2014.**
- 12. "Financial and legal aspects" at Faculty and Leadership Development Center (FLDC), ASU: February 2014.**
- 13. "Credit Hour System" at Faculty and Leadership Development Center (FLDC), ASU: April 2012.**
- 14. "International Publication" at Faculty and Leadership Development Center (FLDC), ASU: March 2012.**

15. ***"The Ethics of Scientific Research"*** at Faculty and Leadership Development Center (FLDC), ASU: April 2010.
16. ***"The Research Team Management"*** at Faculty and Leadership Development Center (FLDC), ASU: April 2010.
17. ***"Quality Standards in the Teaching Process"*** at Faculty and Leadership Development Center (FLDC), ASU: May 2009.
18. ***"Organizing Scientific Conferences"*** at Faculty and Leadership Development Center (FLDC), ASU: April 2009.
19. ***"Local and Global Competitive Research Projects"*** at Faculty and Leadership Development Center (FLDC), ASU: September 2008.
20. ***"Financial and Legal Aspects"*** at Faculty and Leadership Development Center (FLDC), ASU: September 2008.
21. ***"Exams and Students Evaluation Systems"*** at Faculty and Leadership Development Center (FLDC), ASU: September 2008.
22. ***"Using Technology in Teaching"*** at Faculty and Leadership Development Center (FLDC), ASU: October 2007.
23. ***"Effective Teaching"*** at Faculty and Leadership Development Center (FLDC), ASU: September 2007.
24. ***"Communication Skills"*** at Faculty and Leadership Development Center (FLDC), ASU: September 2007.

Indices:

- **H-index: 13 in September 2021 (Google Scholar)**
- **i10-index: 14 in September 2021 (Google Scholar)**

LIST OF PUBLICATIONS:

- **The ameliorative effect of niclosamide on bile duct ligation induced liver fibrosis via suppression of NOTCH and Wnt pathways.** Esmail MM, Saeed NM, Michel HE, El-Naga RN. Toxicology Letters. 2021 May 4;347:23-35. doi: 10.1016/j.toxlet.2021.04.018. Online ahead of print.
- **Mechanistic insights into the protective effect of paracetamol against rotenone-induced Parkinson's disease in rats: Possible role of endocannabinoid system modulation.** Labib AY, Ammar RM, El-Naga RN^{*}, El-Bahy AAZ, Tadros MG, Michel HE. International Immunopharmacology. 2021 May;94:107431. doi: 10.1016/j.intimp.2021.107431.
- **Dibenzazepine Attenuates Against Cisplatin-Induced Nephrotoxicity in Rats: Involvement of NOTCH Pathway.** Abd El-Rhman RH, El-Naga RN^{*}, Gad AM, Tadros

MG, Hassaneen SK. *Frontiers in Pharmacology*. 2020 Dec 14;11:567852. doi: 10.3389/fphar.2020.567852.

- **Protective effects of morin against depressive-like behavior prompted by chronic unpredictable mild stress in rats: Possible role of inflammasome-related pathways.** Hassan MM, Gad AM, Menze ET, Badary OA, El-Naga RN*. *Biochemical Pharmacology*. 2020 Jul 8;180:114140. doi: 10.1016/j.bcp.2020.114140. Online ahead of print. PMID: 32652141.
- **Hepatoprotective Effect of Cranberry Nutraceutical Extract in Non-alcoholic Fatty Liver Model in Rats: Impact on Insulin Resistance and Nrf-2 Expression.** Faheem SA, Saeed NM, El-Naga RN*, Ayoub IM, Azab SS. *Frontiers in Pharmacology*. 2020 Mar 18;11:218. doi: 10.3389/fphar.2020.00218. eCollection 2020.
- **Wogonin pre-treatment attenuates cisplatin-induced nephrotoxicity in rats: Impact on PPAR- γ , inflammation, apoptosis and Wnt/ β -catenin pathway.** Badawy AM, El-Naga RN*, Gad AM, Tadros MG, Fawzy HM. *Chemical Biology Interaction*. 2019 May 16;308:137-146.
- **The potential antifibrotic impact of apocynin and alpha-lipoic acid in concanavalin A-induced liver fibrosis in rats: Role of NADPH oxidases 1 and 4.** Fayed MR, El-Naga RN*, Akool ES, El-Demerdash E. *Drug Discoveries & Therapeutics*. 2018;12(2):58-67.
- **Neuroprotective Effects of Filgrastim in Rotenone-Induced Parkinson's Disease in Rats: Insights into its Anti-Inflammatory, Neurotrophic, and Antiapoptotic Effects.** Azmy MS, Menze ET, El-Naga RN*, Tadros MG. *Molecular Neurobiology*. 2018 Aug;55(8):6572-6588.
- **Granulocyte-Colony Stimulating Factor Prevents Motor Dysfunction and Histological Damages In A Rat Model Of Parkinson's Disease.** Azmy MS, Menze ET, El-Naga RN*, Tadros MG. *Egyptian Journal of Hospital Medicine*. 2017 October ;65(1):6572-6588.
- **Anti-fibrotic potential of Matthiola Arabica isothiocyanates rich fraction: impact on oxidative stress, inflammatory and fibrosis markers.** Mohamed ED, El-Naga RN*, Lotfy AR, Al-Gendy AA, El-Demerdash E. *Die Pharmazei*. 2017 Oct; 72614-72624.
- **Granulocyte-colony stimulating factor prevents motor dysfunction in a rat model of Parkinson's disease.** Azmy MS, Menze ET, El-Naga RN*, Tadros MG. *Egyptian Journal of Hospital Medicine*. 2017 Oct; 69(1):1628-1633.
- **Forskolin, a hedgehog signaling inhibitor, attenuates carbon tetrachloride-induced liver fibrosis in rats.** El-Agroudy NN, El-Naga RN*, El-Razeq RA, El-Demerdash E. *British Journal of Pharmacology*. 2016 Nov; 173(22):3248-3260.
- **A study showing the effectiveness of irbesartan in the treatment of benign prostatic hyperplasia.** Hussein Z, El-Naga RN*, El-Demerdash E. *Azhar Journal of Pharmaceutical Sciences*. 2016 Sep; 54:137-147.

- **A dose response study for the anti arthritic effect of resveratrol in a model of adjuvant arthritis in rats.** Rizk HM, El-Naga RN*, Tolba MF, El-Demerdash E. Azhar Journal of Pharmaceutical Sciences. 2016 Sep; 54:112-123.
- **Indole-3-carbinol enhances sorafenib cytotoxicity in hepatocellular carcinoma cells: A mechanistic study.** Abdelmageed MA, El-Naga RN*, El-Demerdash E, Elmazar MM. Scientific Reports. 2016 Sep 9; 9:6:32733.
- **Indole-3-carbinol protects against cisplatin-induced acute nephrotoxicity: role of calcitonin gene-related peptide and insulin-like growth factor-1.** El-Naga RN*, Mahran YF. Scientific Reports. 2016 Jul 15;6:29857.
- **Apocynin protects against ethanol-induced gastric ulcer in rats by attenuating the upregulation of NADPH oxidases 1 and 4.** El-Naga RN*. Chemico-Biological interactions. 2015 Dec 5; 242:317-326.
- **Growth Hormone Ameliorates the Radiotherapy-Induced Ovarian Follicular Loss in Rats: Impact on Oxidative Stress, Apoptosis and IGF-1/IGF-1R Axis.** Mahran YF, El-Demerdash E, Nada AS, El-Naga RN*, Ali AA, Abdel-Naim AB. PLoS One. 2015 Oct 14;10(10):e0140055.
- **Antifibrotic mechanism of deferoxamine in concanavalin A induced-liver fibrosis: Impact on interferon therapy.** Darwish SF, El-Bakly WM, El-Naga RN*, Awad AS, El-Demerdash E. Biochemical Pharmacology, 2015 Nov 1;98(1):231-42.
- **Epigallocatechin-3-gallate pretreatment attenuates doxorubicin-induced cardiotoxicity in rats: A mechanistic study.** Saeed NM, El-Naga RN*, El-Bakly WM, Abdel-Rahman HM, Salah ElDin RA, El-Demerdash E. Biochemical Pharmacology, 2015 Jun 1;95(3):145-55.
- **Protective role of ellagitannins from *Eucalyptus citriodora* against ethanol-induced gastric ulcer in rats: Impact on oxidative stress, inflammation and calcitonin-gene related peptide.** Al-Sayed E. and El-Naga RN*. Phytomedicine, 2015 Jan 15; 22(1):5-15.
- **Effects of indole-3-carbinol on clonidine-induced neurotoxicity in rats: Impact on oxidative stress, inflammation, apoptosis and monoamine levels.** El-Naga RN*, Ahmed HI, Abd Al Haleem EN. Neurotoxicology, 2014 Sep; 44:48-57.
- **Pre-treatment with cardamonin protects against cisplatin-induced nephrotoxicity in rats: impact on NOX-1, inflammation and apoptosis.** El-Naga RN*. Toxicology and Applied Pharmacology, 2014 Jan 1; 274(1):87-95.

• **Sensitization of TRAIL-induced apoptosis in human hepatocellular carcinoma HepG2 cells by phytochemicals.** Abou El Naga RN*, Azab SS, El-Demerdash E, Shaarawy S, El-Merzabani M, Ammar el-SM. Life Sciences, 2013 Mar 21; 92(10):555-561.

• **Cytotoxic effects of 2-methoxyestradiol in the hepatocellular carcinoma cell line HepG2.** El Naga RN*, El-Demerdash E, Youssef SS, Abdel-Naim AB and El-Merzabani M. Pharmacology, 2009; 48(1): 9-16.

PEER REVIEWING ROLES:

1. BMC Complementary and alternative medicine Journal.
2. The international journal of toxicology and risk assessment.
3. Anti-cancer Drugs journal.
4. Acta Biochimica et Biophysica Sinica Journal.
5. Toxicology and Applied Pharmacology.
6. Journal of Clinical Gastroenterology and Treatment.
7. Pharmaceutical Biology.
8. Clinical and Experimental Pharmacology and Physiology.
9. JSM Hepatitis Journal.
10. PLOS ONE.
11. Cellular Physiology and Biochemistry.
12. Food and Function.
13. Medical Science Monitor.
14. Drug design, development and therapy.
15. Immunopharmacology and immunotoxicology.
16. Environmental Toxicology.
17. Archives of Pharmaceutical Sciences Ain Shams University (APS).
18. Drug and Chemical Toxicology
19. OncoTargets and Therapy
20. Pharmaceutical Biology
21. Pharmacognosy Magazine
22. Journal of Advanced Pharmacy Research-Faculty of Pharmacy-Helwan University
23. Clinical and Experimental Pharmacology and Physiology
24. Evidence-Based Complementary and Alternative Medicine
25. Frontiers in Physiology
26. Immunopharmacology and Immunotoxicology

EDITORIAL ROLES:

1. The Arab Journal of Nuclear Sciences and Applications.
2. Guest Editor in Biochemistry Insights Journal.