



CV

First: Personal Information:

- **Name:** Reham Atef Mohamed Abdel Moneim
- **Current status:** Associate Professor of Pharmacology and Toxicology Faculty of Pharmacy- Cairo University.
- **Date of Birth:** February 12, 1984
- **Contact details:**
- **Email:** Reham.atef@pharma.cu.edu.eg

Second: Academic Credentials:

- *PhD in Pharmaceutical Sciences (Pharmacology & Toxicology) - Cairo University (2016)*

The submitted thesis for the degree was titled:

Characterization of Adenosine Receptor Signaling Pathway Involved in Modulating Cerebral Ischemia-Reperfusion Injury

- *Pharmaceutical Sciences Master's Degree (Pharmacology & Toxicology) - Cairo University (2012)*

The submitted thesis for the degree was titled:

Study of the Possible Role of Adenosine A2A Receptor (A2AR) in Modulating Ischemia-Reperfusion Injury in Rats

- *Bachelor of Pharmaceutical Sciences from Cairo University in 2006: Overall Grade: Excellent with Honors.*

Third: University Career Advancement:

- Associate Professor at Pharmacology and Toxicology Department Faculty of Pharmacy, Cairo University (since 2023).
- Lecturer at Pharmacology and Toxicology Department Faculty of Pharmacy, Cairo University (since 2016).
- Assistant Lecturer at Pharmacology and Toxicology Department Faculty of Pharmacy, Cairo University (2012-2015).
- Teaching Assistant at Pharmacology and Toxicology Department Faculty of Pharmacy, Cairo University (2007-2011).

Fourth: Practical Experiences:

- Teaching undergraduate and postgraduate courses, Faculty of Pharmacy at Cairo University:

Undergraduate Courses

- Pharmacology-1: Intended for undergraduate students in the Pharmaceutical Sciences Program (2016 - 2023).
- Therapeutics-2: Intended for students enrolled in the Pharmaceutical Sciences Program - Clinical Pharmacy (2016-2023).
- Toxicology: Intended for undergraduate students in the Pharmaceutical Sciences Program (2016-2018).
- Pharmacology-2: Intended for students in the Pharm D-Clinical Pharmacy program (2021-2023).
- First Aid: for Bachelor's Degree Students in Pharmaceutical Sciences Program (2017).
- Medical Course: Intended for second-year students pursuing a Bachelor's degree in Pharmaceutical Sciences (2016-2021).

Postgraduate Courses

- Advanced Applied Pharmacology: Intended for Pharmacology Diploma Students (2018-2022)
- Applied Toxicology: Pharmacology Diploma Students (2018-2021)
- Experimental Pharmacology: Intended for Master's Students in Pharmacology (2016-2023)

- Teaching undergraduate Courses at Faculty of Pharmacy, Misr International University.
- Pharmacology-1: Intended for third-year students in the Pharmaceutical Sciences Program (2017, 2018).
- Pharmacology-2: Intended for third-year students enrolled in the Pharmaceutical Sciences Program (2019, 2023).
- Pathophysiology-3: Intended for third-year students enrolled in the Pharmaceutical Sciences Program (2017).

Supervision of master's and doctoral theses:

Master's dissertations:

- *Targeting brain insulin signaling pathway for modulation of cognitive impairment in a rat model of type II diabetes mellitus.*
- *Involvement of adenosine receptor(s) in modulating 3NP-induced Huntington's disease*
- *A study of the potential role of brain-derived neurotrophic factor pathway in ameliorating experimentally induced Huntington's disease in rats*
- *A study of the possible neuroprotective effect of vitamin D3 against global cerebral ischemia-reperfusion injury in rats.*

Doctoral Dissertations:

- *Study of the Possible Role of Adenosine A2A Receptor In Modulating Experimentally Induced Mania in Rats.*
- *Possible role of cilostazol in modulating cerebral ischemia-reperfusion injury in rats.*

Scientific Journal Reviewer

- Biological sciences
- BMC pharmacology&Toxicology

Fifth: Scientific Activities and Events:

1. Activities and events beyond the department and the faculty:

- Courses at the Faculty and Leadership Development Program (FLDC):

While working as a teaching assistant

- Teaching Process Quality Standards (June 2010)
- University Work Professional Behaviours (February 2011)
- Research Ethics (March 2011)
- Proficient Presentation Skills (May 2011)
- Management of Research Teams (May 2012)
- Assessment and Student Evaluation Systems (July 2012)

While Working as an assistant lecturer

- Time Management and Meetings (December 2013)
- Communication Skills across Diverse Learning Styles (February 2014)
- Utilizing Technology for Teaching (August 2014)
- Publication of Scientific Research on an International Scale (February 2015)
- Effective teaching Skills (December 2015)
- Scientific Conferences' Organization (April 2016)

While Working as a lecturer

- Statistical Analysis of Biomedical Experiments (July 2018)
- Strategic Planning (March 2021)
- Blended Learning Essentials (June 2022)
- Digital Transformation (March 2023)
- Critical Thinking (March 2023)
- Prevention and Combating of Administrative Corruption Methods (April 2023)

2. Internal activities within the department and the faculty:

- Participation in academic counselling within the Clinical Pharmacy Program (2015-2023).
- Member of the Department's Equipment Committee (2020-2022).
- Secretary of the Department Council in 2018
- Control Member for second year students (2019).
- Member of Quality Committee at the pharmacology and toxicology Department (2019-2021)

- The Department's Quality Coordinator for Clinical Pharmacy Program (2022-2023)
- Control Member for the Clinical Pharmacy Program (2015-2023).
- Cultural and Media Activities Committee Advisor (2017-2023)
- Safety and Crisis Management Committee Member (2021-2023).
- Assistant Vice Dean of Community Service and Environmental Development Affairs (2023-2024).

3. Conferences:

- Poster presentation in the experimental biology conference, San Diego, USA (2014) (Role of Adenosine A2A Receptor in Ischemia-Reperfusion Injury: Signalling to Extracellular Signal-Regulated Protein Kinase) .
- Poster presentation in the experimental biology conference, Boston, USA (2015) (The Yin and Yang of Adenosine A1 and A2A Receptors in Global Cerebral Ischemia-Reperfusion Injury)
- Poster Presentation in 2nd World Congress on Chemistry, Rome, Italy (2019) (The Ying and Yang of adenosine A1 and A2A receptors on ERK1/2 activation in a rat model of global cerebral ischemia-reperfusion injury).

4. Workshops:

- Proposal writing post Docs (DAAD), Egypt (October 2012)
- Immunohistochemical technique: The Medical Technology Center for Research and Services, Alexandria University, Egypt (December 2013).
- Explorative learning and teaching 2, University Duisburg, Essen, Germany (January 2014).
- How to present scientific data (DAAD), Egypt (May 2014).
- Accreditation and Self-Evaluation Course for Higher Education Institutions; Performance Evaluation and Quality Assurance Unit, Faculty of Pharmacy - Cairo University (October 2020)
- Academic Standards and Course File Elements; Performance Evaluation and Quality Assurance Unit, Faculty of Pharmacy, Cairo University (May 2022)

- Application of competency-based learning, performance appraisal, and quality assurance in the Faculty of Pharmacy at Cairo University, Egypt (July 2022)
- Safe chemical handling in the laboratory: Best Practices and Guidelines; Community Service and Environmental Development Affairs Sector, Faculty of Pharmacy, Cairo University (November 2022)
- Specialized Course in Quality Assurance at the Performance Evaluation and Quality Assurance Unit, Faculty of Pharmacy, Cairo University (May 2023)
- Internal Audit Operations; Performance Assessment and Quality Assurance Division, Faculty of Pharmacy, Cairo University (December 2022)

Sixth: Membership and affiliation with scientific associations:

- Member of the General Syndicate of Pharmacists of Egypt since 2006.

Seventh: Published Scientific Output:

Before acquiring a doctorate:

1. **Mohamed RA**, Agha AM, Nassar NN (2012), SCH58261 The selective adenosine A(2A) receptor blocker modulates ischemia-reperfusion injury following bilateral carotid occlusion: role of inflammatory mediators. *Neurochem Res* 37: 538-547, DOI: 10.1007/s11064-011-0640-x. PMID: 22071908
2. **Mohamed RA**, Agha AM, Abdel Rahman AA, Nassar NN (2016), Role of Adenosine A2A Receptor in Cerebral Ischemia-Reperfusion Injury: Signaling to Phosphorylated Extracellular Signal Regulated Protein Kinase (pERK1/2). *Neuroscience* Feb 9;314:145-59. DOI: 10.1016/j.neuroscience.2015.11.059. PMID: 26642806
3. **Atef, R.M.**, Agha, A.M., Abdel-Rhaman, AR.A., et al. (2017), The Ying and Yang of Adenosine A1 and A2A Receptors on ERK1/2 Activation in a Rat Model of Global Cerebral Ischemia-Reperfusion Injury. *Mol Neurobiol*, doi:10.1007/s12035-017-0401-1. PMID: 28120151

Upon attaining a doctorate:

1. **Reham A. Mohammed** and Suzan M. Mansour (2021) Sodium hydrogen sulfide upregulates cystathionine β -synthase and protects striatum against 3-nitropropionic acid-induced neurotoxicity in rats. *Journal of Pharmacy and Pharmacology* 73, 310–321. DOI: 10.1093/jpp/rgaa072. PMID: 33793881. IF= 4.803.
2. **Reham A. Mohammed**, Mohammed F.El-Yamany, Abdel A.Abdel-Rahman, Noha N.Nassar, Muhammad Y.Al-Shorbagy (2021) Role of pERK1/2-NF κ B signaling in the neuroprotective effect of thalidomide against cerebral ischemia-reperfusion injury in rats. *Eur J Pharmacol* 895(3):173872. DOI: 10.1016/j.ejphar.2021.173872. PMID: 33465355. IF= 5.195.
3. Heba Nasr Shalaby, Hala Fahmy Zaki, Afaf Abd Almonim AinShoka, **Reham Atef Mohammed** (2022) Adenosine A2A Receptor Blockade Ameliorates Mania Like Symptoms in Rats: Signaling to PKC α and Akt/GSK3 β / β Catenin. *Mol Neurobiol.* 59(10): 6397–6410. DOI: 10.1007/s12035-022-02977-2. PMID: 35943710. IF= 5.686.
4. Omnia S. Zaki, Noha N. Nassar, Dalaal M. Abdallah, Marwa M. Safar, **Reham A. Mohammed** (2022) Cilostazol Alleviates NLRP3 Inflammasome–Induced Allodynia/Hyperalgesia in Murine Cerebral Cortex Following Transient Ischemia: Focus on TRPA1/Glutamate and Akt/Dopamine/BDNF/Nrf2Trajectories. *Mol Neurobiol* 59: 7194–7211. DOI: 10.1007/s12035-022-03024-w. PMID: 36127628. IF= 5.686.
5. **Reham A. Mohammed**, Rabab H. Sayed, Ayman E. El-Sahar, Mohamed A. Khattab, Muhammed A. Saad (2022) Insights into the role of pERK1/2 signaling in post-cerebral ischemia-reperfusion sexual dysfunction in rats. *Eur J Pharmacol.* 933:175258. DOI: 10.1016/j.ejphar.2022.175258. PMID: 36096157. IF= 5.195.
6. Heba I. Ibrahim, Mostafa A. Rabie, **Reham M. Atef**, Noha N. Nassar (2023) Adenosine A1 receptor agonist, N6-cyclohexyl adenosine, attenuates Huntington's disease via stimulation of TrKB/PI3K/Akt/CREB/BDNF pathway in 3-nitropropionic acid rat model. *Chem Biol Interact.* 369: 110288. DOI:10.1016/j.cbi.2022.110288. PMID: 36509115. IF= 5.168.

7. Lina Y. Hassab, Samah S. Abbas, **Reham A. Mohammed**, Dalaal M. Abdallah (2023) Dimethyl fumarate abrogates striatal endoplasmic reticulum stress in experimentally induced late-stage Huntington's disease: Focus on the IRE1 α /JNK and PERK/CHOP trajectories. *Front.Pharmacol.Sec. Neuropharmacology*. 14-2023. DOI: [10.3389/fphar.2023.1133863](https://doi.org/10.3389/fphar.2023.1133863). IF=5.988 (In press)
8. Muhammad Muneeb, Suzan M. Mansour, Samira Saleh, **Reham A. Mohammed** (2022) Vitamin D and rosuvastatin alleviate type-II diabetes-induced cognitive dysfunction by modulating neuroinflammation and canonical/noncanonical Wnt/ β -catenin signaling. *Plos One*, 17(11):e0277457. DOI: 10.1371/journal.pone.0277457. PMID: 36374861 IF=3.752.
9. Sherehan M. Ibrahim, Ahmed S. Kamel, Kawkab A. Ahmed, **Reham A. Mohammed**, Reham M. Essam (2024) The preferential effect of Clemastine on F3/Contactin-1/Notch-1 compared to Jagged-1/Notch-1 justifies its remyelinating effect in an experimental model of multiple sclerosis in rats. *Int Immunopharmacol* 15:128:111481. doi: 10.1016/j.intimp.2023.111481. PMID: 38232534. IF=5.6

Eighth: Scholarly Journals:

Contribution to authoring the textbooks for students at the Faculty of Pharmacy, Cairo University:

- Pharmacology I
- Pharmacology II
- Therapeutics II

Ninth: Awards and Certificates of Appreciation:

- Top Master's Thesis of 2012.
- Top PhD Dissertation of 2016.
- Honored by Cairo University for the publication of research in international scientific journals.