

Curriculum Vitae (CV) for Faculty Staff

Personal statement:

am an Assistant Professor of Clinical Pharmacology with extensive academic and research experience in Egypt and Jordan. Holding an M.B.B.Ch., M.Sc., and Ph.D. in Clinical Pharmacology from Mansoura University, my expertise bridges experimental, molecular, and clinical pharmacology with a focus on metabolic disorders, diabetes, hepatoprotection, and drug-induced toxicity. I have a strong record in teaching pharmacology and therapeutics across medicine, dentistry, and pharmacy programs, currently serving at Ibn Sina University for Medical Sciences.



My teaching philosophy emphasizes interactive, competency-based learning and the integration of digital technologies and AI tools to enhance medical education. My research involves experimental and translational pharmacology, exploring antifibrotic, anti-inflammatory, and antioxidant mechanisms. I have authored several publications in international journals and actively contribute to curriculum development, academic quality assurance, and e-learning innovation. My mission is to advance pharmacology education through scientific research, digital transformation, and mentorship, fostering future healthcare professionals with strong scientific and ethical foundations.

| 1. Personal Information | |
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| Name: | Sameh Ahmad Muhammad Abdel-Ghany Aly. |
| Date and place of birth | 1974-2-16 - Shebeen Elkom, Munofya, Egypt. |
| Faculty: | Faculty of Medicine, Ibn Sina University for medical sciences, Amman, Jordan. |
| Department: | Basic medical science |
| Contact info. | Phone +201003798288 +962 790601974 Email sameh.abdulghany@isums.edu.jo , samghany@mans.edu.eg |

| 2. Education | | | |
|--------------|---------------------|--|-------------|
| Date | Issuing institute | Field | Degree |
| 1998 | Mansoura University | Medicine and general surgery | M.B. B. Ch, |
| 2008 | Mansoura University | Basic medical sciences (clinical pharmacology) | M.Sc |
| 2017 | Mansoura University | Basic medical sciences (clinical pharmacology) | Ph.D |

| 3. Specialization and area of interest | |
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| General | Clinical Pharmacology, with a strong emphasis on experimental and translational research focusing on hepatotoxicity, metabolic disorders, and mechanistic evaluation of novel pharmacological and nutraceutical agents. Research interests extend to the molecular basis of drug action, organ protection, and the integration of digital technologies in pharmacological education and research. |
| Focus area | <ul style="list-style-type: none"> • Experimental pharmacology of hepatotoxicity, liver fibrosis, and organ protection • Metabolic disorders and diabetes mellitus: mechanisms of insulin resistance and β-cell preservation • Molecular pathways in drug action, oxidative stress, and inflammatory signaling (NF-κB, AMPK, and FOXO3a axes) • Antifibrotic and anti-inflammatory therapeutics in liver and lung injury models • Experimental drug toxicity studies and protective pharmacotherapy strategies • Application of artificial intelligence, e-learning, and digital innovation in pharmacology education and research |

| 4. Professional experience | |
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| Position | Date |
| Lecturer (Assistant Professor) of Clinical Pharmacology Faculty of Medicine, Ibn Sina University for Medical Sciences – Amman, Jordan | 2023 – Present |
| Lecturer (Assistant Professor) of Clinical Pharmacology Faculty of Medicine, Mansoura University – Egypt | 2018 – Present |

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| Lecturer of Pharmacology Mansoura National University – Egypt | 2022 – 2023 |
| Lecturer of Pharmacology Neo Mansoura University – Egypt | 2021 – 2022 |
| Lecturer of Pharmacology and Therapeutics Delta University for Science and Technology – Egypt | 2018 – 2023 |
| Vice Director, E-Learning Unit Faculty of Medicine, Mansoura University – Egypt | 2011 – 2013 |
| Assistant Lecturer of Clinical Pharmacology Faculty of Medicine, Mansoura University – Egypt | 2008 – 2017 |
| Demonstrator of Clinical Pharmacology Faculty of Medicine, Mansoura University – Egypt | 2000 – 2008 |
| Rotating House Officer Mansoura University Hospitals – Egypt | 1999 – 2000 |

| 5. Research Experience | |
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| I have extensive experience in experimental and clinical pharmacology, particularly in the areas of metabolic disorders, diabetes mellitus, liver injury, and organ-protective pharmacology. My research focuses on elucidating molecular and cellular mechanisms of drug action in metabolic syndrome, NAFLD/NASH, and fibrotic diseases. I have also developed and evaluated pharmacological and nutraceutical interventions that modulate oxidative stress, inflammation, and apoptotic pathways in hepatic and pulmonary fibrosis models. | |
| Additional experience includes the design and conduct of clinical research—with emphasis on patient selection, randomization methods, ethical approval and compliance, and statistical analysis of pharmacological and therapeutic data using advanced biostatistical tools such as SPSS and GraphPad Prism. | |
| I possess rich experience in the methodology of scientific research, starting from hypothesis formulation, literature review, experimental design, data collection and analysis, to result interpretation, scientific writing, and publication in international peer-reviewed journals. | |
| Master's Thesis (2008): Vascular and hepatic effects of Thiazolidinediones (pioglitazone-rosiglitazone) in Rats with insulin resistance | |
| Ph.D. Thesis (2017): Potential effect of captopril , valsartan and nimodipine on nuclear factor kappa B (NF-κB) and lipid peroxidation in hepatic ischemiareperfusion injury in rats | |
| Publications: Authored and co-authored peer-reviewed articles addressing hepatotoxicity, liver fibrosis, diabetes, metabolic syndrome, pulmonary fibrosis, and pharmacological organ protection. My work highlights the molecular pathways of NF-κB, AMPK, FOXO3a, and TGF-β modulation and evaluates novel antifibrotic and anti-inflammatory compounds published in high-impact journals such as The FASEB Journal and Pharmaceuticals. | |

Collaborative & Interdisciplinary Research: Contributed to multidisciplinary projects exploring computational and AI-based approaches in biomedical and pharmacological research, digital education, and experimental modeling.

Research Interests:

- Experimental and clinical pharmacology of metabolic and liver diseases
- Pharmacotherapeutic interventions for hepatic and pulmonary fibrosis
- Molecular pharmacology and gene expression modulation
- Nutraceutical and antioxidant pharmacology
- Drug toxicity studies and protective pharmacotherapy
- Translational pharmacology integrating experimental and clinical therapeutics
- Application of artificial intelligence in pharmacology research and education

| 6. Publications | |
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| Name of Author(s) | Title |
| ORCID: https://orcid.org/0000-0003-1864-0279 | |
| Ghazi F Sharkas, Ragaa El-Masry, Sameh Abdel-Ghany, Ayman El Baz, Tamer Abou-Elsaad, Amira Adly Kassab, Darwish H Badran, Abdalla Y Bashir | Satisfaction of academic medical staff with integrated medical curriculum: an exploratory multinational survey. BMC Medical Education. 2024 Dec 18;24(1):1483. https://link.springer.com/article/10.1186/s12909-024-06468-x December 2024 |
| Alexandru Madalin Hasan, Simona Cavalu, Sameh Saber, Ahmed S Doghish, Rabab S Hamad, Mustafa Ahmed Abdel-Reheim, Mushabab Alghamdi, Mohannad Mohammad S Alamri, Jaber Alfaifi, Masoud IE Adam, Abdullah Ali Alqarni, Assad Ali Rezigalla, Sally Negm, Attalla F El-Kott, Ali S Alshehri, Shahad Fuad BinAfeef, Sameh Abdel-Ghany, Mohammed A Attia, Osama A Mohammed | Hedgehog signaling mastery: R51211's promise in augmenting the therapeutic efficacy of sorafenib. Life Sciences. 2024 Aug 15;351:122791. https://www.sciencedirect.com/science/article/pii/S0024320524003813 August 2024 |
| Osama A Mohammed, Mahmoud E Youssef, Ahmed S Doghish, Rabab S Hamad, Mustafa Ahmed Abdel-Reheim, Mushabab Alghamdi, Mohannad Mohammad S Alamri, Jaber Alfaifi, Masoud IE Adam, Muffarah Hamid Alharthi, Abdullah Hassan Alhalafi, Emad Bahashwan, Assad Ali Rezigalla, Daad Fuad BinAfif, Sameh Abdel-Ghany, Mohammed A Attia, Elsayed A Elmorsy, Tohada M Al-Noshokaty, Heba Fikry, Lobna A Saleh, Sameh Saber | A novel combination therapy targets sonic hedgehog signaling by the dual inhibition of HMG-CoA reductase and HSP90 in rats with non-alcoholic steatohepatitis. European Journal of Pharmaceutical Sciences. 2024 Jul 1;198:106792. https://www.sciencedirect.com/science/article/pii/S0928098724001040 July 2024 |

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| Osama A Mohammed, Sameh Saber, Mustafa Ahmed Abdel-Reheim, Mohannad Mohammad S Alamri, Jaber Alfaifi, Masoud IE Adam, Muffarah Hamid Alharthi, Ali MS Eleragi, Hanan B Eltahir, Mohamed Osama Abdalla, Emad Bahashwan, Elwathiq Khalid Ibrahim, Assad Ali Rezigalla, Sameh Abdel-Ghany, Amany A Alzokaky, Ahmed S Doghish, Hussein M El-Husseiny, Mushabab Alghamdi, Mahmoud E Youssef | Tracking the therapeutic efficacy of a ketone mono ester and β -hydroxybutyrate for ulcerative colitis in rats: New perspectives. Toxicology and Applied Pharmacology. 2024 May 1;486:116943. https://www.sciencedirect.com/science/article/abs/pii/S0041008X24001418 |
| Abdelhady, R.; Mohammed, O.A.; Doghish, A.S.; Hamad, R.S.; Mustafa A. Abdel-Reheim; Alamri, M.S.; Muffarah H. Alharthi; Jaber Alfaifi; Adam; A.H. Alhalafi; M.N.A. Adamu Imam Isa; Sameh Abdel-Ghany; Attia, M.A.; Elmorsy, E.A.; Al-Noshokaty, T.M.; Nomier, Y.; El-Dakrouy, W.A.; Saber, S. | Linagliptin, a DPP-4 inhibitor, activates AMPK/FOXO3a and suppresses NF- κ B to mitigate the debilitating effects of diethylnitrosamine exposure in rat liver: Novel mechanistic insights. The FASEB Journal (2024). DOI: https://doi.org/10.1096/fj.202302461rr Feb 2024 |
| Mohammed, O.A.; Abdel-Reheim, M.A.; Saleh, L.A.; Alamri, M.M.S.; Alfaifi, J.; Adam, M.I.; Farrag, A.A.; AlQahtani, A.A.J.; BinAfif, W.F.; Hashish, A.A.; Sameh Abdel-Ghany. | Alvespimycin exhibits potential anti-TGF- β signaling in the setting of a proteasome activator in rats with bleomycin-induced pulmonary fibrosis: A promising novel approach. Pharmaceuticals (2023), 16(8):1123. DOI: https://doi.org/10.3390/ph16081123 August 2023 |
| Mohammed, O.A.; Abdel-Reheim, M.A.; Alamri, M.M.S.; Alfaifi, J.; Adam, M.I.; Saleh, L.A.; Farrag, A.A.; Yahia, A.I.O.; Sameh Abdel-Ghany et al. | STA9090 as a potential therapeutic agent for liver fibrosis by modulating the HSP90/T β R11/proteasome interplay: Novel insights from in vitro and in vivo investigations. Pharmaceuticals (2023), 16(8):1080. DOI: https://doi.org/10.3390/ph16081080 July 2023 |
| Saber, S.; Alamri, M.M.S.; Alfaifi, J.; Saleh, L.A.; Sameh Abdel-Ghany et al. | (R,R)-BD-AcAc ₂ Mitigates Chronic Colitis in Rats: A Promising Multi-Pronged Approach Modulating Inflammasome Activity, Autophagy, and Pyroptosis. Pharmaceuticals (2023), 16(7):953. DOI: https://doi.org/10.3390/ph16070953 June 2023 |
| Ghany, S.A.; Malek, H.A.; Sahar El-Dakroory; Amira Kamal El-Hawary; Sanad S. El-Kholy. | Potential effect of ferulic acid on NF- κ B in a rat model of doxorubicin toxicity. Medical Science (2020), 24(106): 4321–4331. |

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| | <u>Potential effect of ferulic acid on NF-κB in a rat model of doxorubicin toxicity</u> December 2020 |
| Abdel-Ghany, S.A.; Elashry, H.A.; Ameen, M.M.; Abdel-Rahman, K.M.; Yassin, A.R.A. | Hepatic Ischemia-Reperfusion Injury: Pathogenesis and Pharmacological Treatment. <i>Advances in Medicine and Medical Research</i> (2018), 1(1): 2–18. |
| Sameh Ahmad M. Abdel-Ghany; Hala A. Elashry; Maha M. Ameen; Karawan M. Abd-El Rhman; Abdel-Rahman A.F. Yassin. | Potential effect of captopril and valsartan on nuclear factor kappa B and lipid peroxidation in hepatic ischemia-reperfusion injury in rats. <i>Mansoura Medical Journal</i> (2015), 44(1–2). https://mmj.mans.edu.eg/home/vol44/iss1/9/ |

| 7. Conferences and Presentations | | |
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| Name- organizer | Place and date | Type of participation |
| The 9th International Conference of Jordan Public Health Association – “Advancing Public Health for a Resilient Future.” | Amman, Jordan – July 3–4, 2025 | Attendance |
| International Conference on Simulation in Medical Education – Faculty of Medicine, Yarmouk University | Irbid, Jordan – April 23–24, 2025 | Attendance |
| Scientific Conference on Diabetes (7th Scientific Day & 2nd Regional Conference) – Jordanian Society for Care of Diabetes / Jordan Medical Council | Amman, Jordan – November 28–29, 2024 | Attendance |
| KHCC Conference “Powering the Future of Cancer Care: Intersection of AI, Surgery and Robotics.” | Amman, Jordan – November 15–16, 2024 | Attendance |
| 5th Scientific Day of the Jordan Public Health Association | Dead Sea, Jordan – October 24, 2024 | Attendance |
| Amman Retina Meeting | Amman, Jordan – May 29–31, 2024 | Attendance |
| Workshop: “Unlocking Gen-AI in Higher Education Practical” – University of Strathclyde & British Council | Amman, Jordan – May 28, 2024 | Attendance |
| Workshop: “Capacity-Building on Developing | Amman, Jordan – November 20, 2024 | Attendance |

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| Learning Objectives” – British Council | | |
| Workshop: “Training in Medical Education” – UTHSA-GWU Faculty Development Program for Ibn Sina University | Amman, Jordan – June 3–4, 2024 | Attendance |
| Webinar: “Professionalism in Medicine” – George Washington University (ISUMS/GW Series) | Online – October 31, 2024 | Attendance |
| Webinar: “How to Prepare for USMLE Step I” – George Washington University | Online – December 10, 2024 | Attendance |
| Workshop: “Managing Your Time” – SMHS Center for Faculty Excellence, George Washington University | Online – April 21, 2025 | Attendance |
| Workshop: “Engagement Techniques to Maximize Learning” – SMHS Center for Faculty Excellence, George Washington University | Online – May 27, 2025 | Attendance |
| First Annual International Conference of Clinical Pharmacology Department (AICCP 2020) – Mansoura University, Faculty of Medicine | Mansoura, Egypt – 2020 | Attendance |
| Annual Scientific Conference – Faculty of Medicine, Mansoura University | Mansoura, Egypt – 2018 | Speaker |
| First E-Learning Conference – Faculty of Medicine, Mansoura University | Mansoura, Egypt – January 2012 | Speaker |

| 8. Training courses | |
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| Course name-organizer | Date |
| SUMS Faculty Professional Development Series – “Managing Your Time”, SMHS Center for Faculty Excellence, George Washington University / Ibn Sina University for Medical Sciences | April 2025 |
| SMHS Center for Faculty Excellence – “Engagement Techniques to Maximize | May 2025 |

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| Learning”, George Washington University / Ibn Sina University for Medical Sciences | |
| ISUMS/GW Webinar Series – “Professionalism in Medicine”, George Washington University / Ibn Sina University for Medical Sciences | October 2024 |
| “How to Prepare for USMLE Step I” Webinar, George Washington University / Ibn Sina University for Medical Sciences | December 2024 |
| Workshop – “Training in Medical Education”, UTHSA–GWU Faculty Development Program for Ibn Sina University | June 2024 |
| Workshop – “Unlocking Gen-AI in Higher Education Practical”, University of Strathclyde & British Council | May 2024 |
| Workshop – “Capacity-Building on Developing Learning Objectives”, British Council | November 2024 |
| Course in E-Research Tools, Faculty of Medicine, Tanta University, Egypt | March 2019 |
| Workshop – Computer-Aided Drug Design, Faculty of Medicine, Tanta University, Egypt | March 2017 |
| Training Course – Integration in Medical Education, Faculty of Medicine, Mansoura University | January 2011 |
| Teaching Skills Workshop, Quality Assurance Unit, Faculty of Medicine, Mansoura University | August 2010 |
| Course – Medical Statistics and Use of SPSS, Faculty of Medicine, Mansoura University | October 2010 |
| ICTP Course – Web Design (FrontPage, Dreamweaver, Photoshop, Flash), Mansoura University | Dec 2009 – Apr 2010 |
| Smart Board Training Course, E-Learning Unit, Mansoura University | 2009 |
| ICTP Course – Advanced PowerPoint, Mansoura University | December 2009 |
| Training of Teachers (TOT) Workshop, Quality Assurance & Accreditation Unit, Mansoura University | May 2008 |
| ISO Coordinator Training, Quality Assurance Unit, Faculty of Medicine, Mansoura University | 2009 |
| FLDP Workshops – Effective Communication, Active Learning, | 2005–2010 |

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| Presentation, Time Management, Quality Parameters, Research Ethics | |
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| 9. Teaching Experience for last 5 years | | |
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| Course Name | Year | Institute |
| General Pharmacology (2 nd year -first semester) | 2023–2025 | Faculty of Medicine, Ibn Sina University for Medical Sciences, Amman, Jordan |
| Cardiovascular Pharmacology (CVS Module), Blood Pharmacology(Blood & lymphatics module), Respiratory pharmacology(Respiratory module) (2 nd year -Second semester) | 2023–2025 | Faculty of Medicine, Ibn Sina University for Medical Sciences, Amman, Jordan |
| Pharmacology for Dentistry (Dental Therapeutics) | 2025-2026 | Faculty of Dentistry, Ibn Sina University for Medical Sciences, Amman, Jordan |
| Central Nervous System Pharmacology(CNS module)(Second semester-3 rd year) | 2024–2025 | Faculty of Medicine, Ibn Sina University for Medical Sciences, Amman, Jordan |
| Basic & Clinical Pharmacology | 2022-2023 | Faculty of Medicine, National Mansoura University, Egypt |
| Basic & Clinical Pharmacology | 2018–2023 | Faculty of Medicine, Mansoura University, Egypt |
| Basic & Clinical Pharmacology (Manchester Program) | 2018–2023 | Faculty of Medicine, Mansoura University, Egypt |
| Clinical Pharmacology | 2022–2023 | Faculty of Nursing, Mansoura University, Egypt |
| Basic & Clinical Pharmacology | 2022–2023 | Faculty of Medicine, New Mansoura University, Egypt |
| Pharmacology for Dentistry, Medicine, and Pharmacy Students | 2019–2023 | Faculty of Medicine, Delta University for Science and Technology, Egypt |

| 10. committees' membership and community service | |
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| Date | Name or type of membership/service |
| 2024-2025 | Director of Examination Office 2024-2025 |
| 2024-2025 | Member, Course Equivalency Committee, Faculty of Medicine, Ibn Sina University for Medical Sciences |
| 2024 | Member of the Committee for Support and Coordination of Scientific Research and Promotion of Academic Publication, Faculty of Medicine, Ibn Sina University for Medical Sciences, Amman, Jordan |
| 2022 | Member of the Pharmacology Curriculum Integration Committee, Faculty of Medicine, Mansoura University, Egypt |
| 2019–2020 | Member of the Examination and Assessment Committee, Faculty of Medicine, Mansoura University, Egypt |
| 2008-2014 | Member in Good deeds charity |
| 2011-2013 | Member of the Digital Learning and E-Learning Development Committee, Faculty of Medicine, Mansoura University, Egypt |
| 2009-2011 | ISO Coordinator of the clinical pharmacology department at the quality assurance and accreditation unit of the faculty of medicine, Mansoura university |
| 2008-2009 | Managing Director of Good Deeds charity |
| 2000- till now | Member of Egyptian syndicate of medicine |

| 11. Awards And Honors | | |
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| Name | Date | Issuing authority |
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| 12. Other skills |
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| Research and Data Analysis: Skilled in statistical analysis (SPSS, GraphPad, Excel), scientific writing, data visualization, and literature review for evidence-based practice. |
| Digital and AI Competence: Proficient in AI tools for education (ChatGPT, DALL·E, InVideo AI, Sora, Veo 3), learning-management systems (Moodle, Blackboard), and digital content creation (interactive slides, e-learning modules, and 3D visual storytelling). |
| Communication and Presentation Skills: Excellent verbal and written communication; experienced speaker in workshops, conferences, and academic meetings. |
| Language Proficiency: Arabic (native), English (very good). |
| Computer Skills: Advanced user of Microsoft Office, data analysis software, image editing tools, and internet research. |

| 13. References |
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| Prof. Dr. Mohamed–Hesham yousri Daba (professor of clinical pharmacology, Damietta university, Egypt) |
| Prof. Dr. Karawan Mohammed Abd-el Rahman (professor of clinical pharmacology, Mansoura university, Egypt) |
| Prof. Dr. Hala abdelmalek (professor of clinical pharmacology, Mansoura university, Egypt) |
| Prof. Dr. Abd-el Motaal fouda (professor of clinical pharmacology, Mansoura university, Egypt) |