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Associate Professor | Vice President of Institutional Review Board | Head of Department of Pharmacy Practice | Chairman of Faculty Research Committee | [Award-Winning](#) Neuroscientist | Board Certified Pharmacist

PERSONAL STATEMENT

A committed academic, scientist and pharmacist with over 19 years of experience at leading institutions, teaching undergraduate and graduate students from various social and cultural backgrounds. Possessing excellent administrative, verbal communication and written skills along with constructive and effective teaching methods that promote a stimulating learning environment. Able to work in a managerial role or as part of a team and having a proven ability to successfully work to tight schedules and deadlines. In addition to excellent academic qualifications and a significant number of publications, I have more than 17 years of research experience with substantial skills in sophisticated research techniques and technologies.

Work Experience

May 2024–Present: College of Pharmacy, Alfaisal University, Riyadh, Kingdom of Saudi Arabia.

- **Position:** Associate Professor of Pharmacology & Physiology (full-time)

February 2019–May 2024: College of Pharmacy, Alfaisal University, Riyadh, Kingdom of Saudi Arabia.

- **Position:** Assistant Professor of Pharmacology & Physiology (full-time)
- **Responsibilities:** See *page 3* for detailed teaching responsibilities and *page 4* for achievements within current role
 - A committee member of Alfaisal University Animal Resource Center (2024-present)
 - Vice President of Alfaisal Institutional Review Board (2023-present)
 - Chairman of Faculty Research Committee (2023-present)
 - Head of Department of Pharmacy Practice (2022–present)
 - Associate Dean of Academic Affairs (2019–2023)
 - A panel member of the Institutional Review Board (IRB) for Ethical Review of Scientific Research (2019–present)
 - A member of the University’s Core Research Laboratory Advisory Committee (2020–present)
 - CNS, Cardiovascular, Renal, GIT, Hematology, Oncology, and Research Course Coordinator (2019–present)
 - Head of Examination Committee (2019–2020)

February 2019–Present: Department of Pediatrics, School of Medicine, Case Western Reserve University, Cleveland, Ohio, Unites States.

- **Position:** Research Affiliate (seasonal)
- **Responsibilities:** Currently working on collaborative research projects in the field of neuromodulation, writing and submitting new grant applications, and providing training and research consultations whenever required.

May 2018–Feb 2019: Department of Pediatrics, School of Medicine, Case Western Reserve University, Cleveland, Ohio, Unites States.

- **Position:** Research Associate (full-time)
- **Responsibilities:** Continued research in the field of neuromodulation, and trained new research staff, summer students and visiting researchers.

November 2016–April 2018: Department of Pediatrics, School of Medicine, Case Western Reserve University, Cleveland, Ohio, Unites States.

- **Position:** Postdoctoral Research Fellow (full-time)
- **Responsibilities:** Worked on collaborative research project funded by GSK pharmaceuticals to investigate neuromodulation of the baroreceptor afferents and the renal nerves as a potential therapeutic strategy for the treatment of a range of medical conditions including hypertension, cardiovascular disease and sleep apnea.

November 2015–November 2016: Blooms the Chemist, Wollongong, New South Wales, Australia

- **Position:** Community Pharmacist (full-time)
- **Responsibilities:** Worked collaboratively as part of an outstanding community pharmacy team, reviewed prescriptions for error and incompatibilities, accurately dispensed medications, contacted healthcare providers whenever required, provided patient counselling, conducted health and wellness screens, compounded prescriptions when required, and supervised pharmacy technicians and assistants.

December 2010–April 2015: Australian School of Advanced Medicine, Macquarie University, Sydney, Australia

- **Position:** PhD research scholar and teaching fellow in physiology and pharmacology (full-time)
- **Responsibilities:** Undertook research in the field cardiovascular autonomic dysfunction in chronic kidney disease, delivered lectures and seminars to postgraduate master's and PhD students, and assisted with research training, and supervised honor and summer students.

December 2009–December 2010: Department of Pharmacy, Island College of Technology, Penang, Malaysia

- **Position:** Lecturer in Pharmacology and Physiology (full-time)
- **Responsibilities:** Delivered physiology and pharmacology lectures to pharmacy students, delivered seminars and practical classes, and assisted with students' training.

January 2007–March 2010: Department of Physiology and Pharmacology, School of Pharmaceutical Sciences, Universiti Sains Malaysia, Penang, Malaysia

- **Position:** MSc research student and teaching fellow in physiology and pharmacology (full-time)
- **Responsibilities:** Undertook research in the field of sympathetic control of renal function and hemodynamics in health and disease, delivered practical tutorials to undergraduate students, presented regular seminars to fellow postgraduate master's and PhD students, and assisted with their research training when required.

November 2005–December 2006: Department of Pharmacognosy, College of Pharmacy, University of Baghdad, Baghdad, Iraq

- **Position:** Teaching fellow in herbal medicine pharmacotherapy (full-time)
- **Responsibilities:** Delivered practical tutorials to undergraduate students and assisted with students' training.

January 2004–November 2005: Nursing Home Hospital, Baghdad Medical City, Baghdad, Iraq

- **Position:** Clinical Pharmacist (full-time)
- **Responsibilities:** Worked collaboratively with healthcare teams to optimize patient treatment, reviewed medication charts, accurately dispensed medications, provided patient counselling, compounded prescriptions when required, and supervised pharmacy technicians and assistants.

EDUCATION

December 2010–April 2015

Australian School of Advanced Medicine, Macquarie University, Sydney, Australia

- PhD in Advanced Medicine (Major: Physiology & Pharmacology)
- Thesis: Cardiovascular Autonomic Dysfunction in Chronic Kidney Disease

January 2007–March 2010

School of Pharmaceutical Sciences, Universiti Sains Malaysia, Penang, Malaysia

- Master of Pharmacy (Major: Physiology & Pharmacology)
- Thesis: Hemodynamic and functional characterization of renal sympathetic nerve activity in acute renal failure and diabetic Sprague Dawley rats

October 1998–August 2003

College of Pharmacy, University of Baghdad, Baghdad, Iraq

- Bachelor of Pharmacy-Basic Degree (*Degree deemed equivalent to a bachelor's degree level qualification within Australian Qualifications Framework*)

Other educational qualifications:

December 2015–December 2016:

- Graduate Certificate in Applied Pharmacy Practice (GradCertAppPharmPrac), The Pharmaceutical Society of Australia (PSA), Sydney, Australia

ACADEMIC & RESEARCH SKILLS

- **Experienced teaching academic:** More than 19 years of teaching experience within the disciplines of physiology and pharmacology. Involvement in course team activities including lecturing, conducting practical classes, assessments and mentoring, and curriculum development for undergraduate students.
- **Productive scientist (see below):** More than 19 years of experimental research experience. Received 3 patents, published a book, 68 research publications (28 first author papers and 40 coauthored papers) and scored 85 conference participations in the last 19 years.
- **Experienced speaker:** Actively involved in delivering lectures, tutorials, workshops, and faculty seminars since 2005. Presented a total of 35 presentations (10 oral and 25 poster presentations) at many national and international scientific conferences (see below). Previously invited to present my research at the Departments of Physiology and Pharmacology of Oregon Health and Science University (OHSU) and the Integrative Physiology at the University of North Texas Health Science Centre (UNTHSC), USA in 2013.
- **Experienced in applying for grants:**
 - Internal Research Grant 2020 (Grant number: 20307), Alfaisal University, Riyadh, Saudi Arabia – Direct cost: SAR 35,000
 - GlaxoSmithKline grant (CWRU2016-0004): Electrical Stimulation of the Renal Afferents in Conscious Rats (Role: Co-PI) – Direct cost: USD 446,000 (Grant period: 03/01/2016–02/28/2019)
 - GlaxoSmithKline grant (CWRU2016-0001): Electrical Stimulation of the Aortic Depressor Nerve in Conscious Spontaneously Hypertensive Rats (Role: Co-PI) – Direct cost: USD 625,000 (Grant period: 03/01/2016–02/28/2021)
 - The Postgraduate Graduate Research Fund (2013), Macquarie University, Sydney Australia – Fund: AUD 5000

- The Skipper Postgraduate and Early Career Researcher Travel Grant (2012), Macquarie University, Sydney, Australia – Fund: AUD 5000
- USM-RU-PGRS Research Grant from Universiti Sains Malaysia (2009) – Direct cost: RM10,000
- Several external travel grants (see list of **Awards** below)
- **Knowledge of health and safety regulations** including biosafety, chemical safety, lab safety and dealing with hazardous chemicals and procedures. Awareness of all current Equality and Diversity legislation.

Key academic skills

- Delivery of lectures using PowerPoint slides, whiteboard/smartboard illustration and teaching videos.
- Reinforcing conventional teaching with modern teaching approaches to enhance the students' learning experience. This is mainly done through group discussions, problem/case-based learning, blended learning and/or learning games (e.g., Kahoot).
- Assessing and reviewing all exam questions submitted to the examination committee.
- Conducting oral and written exams and grading exam papers.
- Responsible for the departmental administrative tasks and proctoring exams.
- Managing students by providing guidance and feedback to help them strengthen their skills and knowledge base.
- Providing mentoring advice and support to students on a personal level through university mentorship programs.
- Ability to maintain high standards of achievement, behavior, discipline, and punctuality amongst students.

Courses taught

- **Basic pharmacology**, including autonomic and ocular pharmacology, and principles of gene of therapy.
- **Basic toxicology**, including toxokinetics, toxodynamics, and clinical, occupational, environmental, and forensic toxicology.
- **Basic pharmacology and toxicology case-based seminars.**
- **Central nervous system pharmacology**, including pharmacotherapy for anxiety, insomnia, depression, schizophrenia, mania, bipolar disorders, Parkinson's disease, multiple sclerosis, Alzheimer's disease, amyotrophic lateral sclerosis, Huntington disease, addiction, epilepsy, anesthesia, migraine, and pain.
- **Cardiovascular physiology**, including hormonal and neural regulation of cardiovascular function, regulation of blood volume, the renin-angiotensin aldosterone pathway, and acid-base balance.
- **Cardiovascular pharmacology**, including pharmacotherapy for hypertension, ischemic heart disease, heart failure, stroke, shock, arrhythmias, hyperlipidemia, anemia, hemophilia, Von Willebrand disease, sickle cell disease, thalassemia.
- **Immunosuppressant pharmacology** for organ transplantation.
- **Gastrointestinal system pharmacology**, including pharmacotherapy for nausea and vomiting, peptic ulcer disease, constipation, diarrhea, ulcerative colitis, Crohn's disease, irritable bowel syndrome, pancreatitis, and liver cirrhosis.
- **Research methodologies**, including research proposal writing, data analysis and publication of research data.

Research expertise

- Animal care and handling.
- Postsurgical care for animals during recovery procedures, including animal monitoring, assessment of surgical recovery, antibiotic prophylaxis, pain management and nutritional and fluid supplementation.
- Anesthetized *in vivo* recording of blood pressure, ECG, diaphragmatic EMG activity, genioglossus muscle EMG activity, upper airway pressure (Millar), tidal volume (pneumotach flow measurement) and intravenous drug injection in rats.
- Experience in induced rat models of disease including hypertension, ischemia/reperfusion injury, acute and chronic renal failure, heart failure, diabetes, and obesity.
- Experience in genetic rat model of disease including spontaneously hypertensive rats (SHR), Zucker fat rats (ZFR) and the Lewis polycystic kidney (LPK) disease rat model of chronic kidney disease.
- Conscious measurement of blood pressure in rats using tail-cuff plethysmography.
- Conscious telemetric recording of blood pressure (Millar and DSI) and sympathetic nerve activity in rats.
- Conscious chronic implantation of electrodes for electrical stimulation of a range for nerve beds including the aortic depressor nerve (ADN), cervical sympathetic chain (CSC) and renal nerves.
- Nerve recording and stimulation in anesthetized rats (renal sympathetic, splanchnic sympathetic, adrenal sympathetic, cervical sympathetic, vagal, aortic depressor and sciatic nerves).
- Configuration set-up, data acquisition and data analysis using (*Cambridge Electronic Design[®] Mirco1401 and Power1401 and Spike software, UK*) and (*PowerLab[®], ADInstruments and LabChart software*).
- Renal denervation (total or selective renal afferent) in rats (unilateral, bilateral, acute and chronic).
- Blood flow (renal, carotid, mesenteric, aortic, and femoral) and tissue perfusion measurement in anesthetized rats.
- Measurement of renal excretory function including urine output, glomerular filtration rate and urinary and plasma levels of creatinine, urea, electrolytes, and proteins.
- Histology, tissue staining and light microscopy.
- Organ bath studies using isolated tissues.
- Assessing arterial compliance using tensile testing.
- Chromatographic techniques and spectrophotometry.
- Biochemical and phytochemical analyses and enzyme activity assay procedures.

Achievements and responsibilities in my current role:

- 2024-present: A member of Alfaisal University Animal Resource Center (ARC) Committee
- 2023-present: Vice President of Alfaisal Institutional Review Board (IRB)
- 2023-present: Chairman of the College of Pharmacy Research Committee
- 2022-present: A founding member and current department head of the Department of Pharmacy Practice and interviewer for new faculty hire
- 2020-present: Assessor of internal research grant applications submitted annually to the university's Office of Research & Graduate Studies
- 2019-present: A founding and active member of the Animal Research Review panel (established for the first time at Alfaisal University)
- 2019-present: Member and active reviewer of the university Institutional Review Board (IRB)
- 2022: A founding member of the College of Pharmacy Pharmacology and Simulation Laboratories

- 2021: A founding member of the Pharmaceutical Core Research Laboratory
- 2019-present: Active contributor to the College of Pharmacy curriculum development
- 2023: A founding member of new master programs at the university level
- 2019-present: A course coordinator for multiple Year 4 and 5 PharmD courses
- 2021-present: Award organizer and director of the College of Pharmacy Annual Student Recognition Awards
- 2019-present: An active student mentor in the College of Pharmacy Student Mentorship program
- 2020-present: A judging member and group leader of the university Annual Research Day
- 2019-present: A speaker and instructor for preparatory workshop series for “Saudi Pharmacist Licensure Examination (SPLE)” organized annually for all 6th year PharmD students at Alfaisal University

PROFESSIONAL DEVELOPMENT

1. *Getting to the Heart of Cardiovascular Research: From Yesterday to Today and Looking Towards Tomorrow*. InsideScientific Webinars, 329 S Highway 101, Suite 230, Solana Beach, CA 92075, May 30, 2024.
2. *Electrical Stimulation: Safety First*. Biopac Systems, Inc., May 23, 2024.
3. *Finding A Niche in Pharmacology: Lessons Learned and Advice for Your Future*. The American Society of Pharmacology and Experimental Therapeutics (ASPET) Award Lecture Series with Paul Insel, MD, winner of the 2024 Otto Kraymer Award, May 1, 2024.
4. *AI-Powered Creativity Series (Episode I): What's Next in Creativity? AI-Powered Imagination and Brainstorming Reimagined with ChatGPT*, INVENT Startup Studio, Alfaisal University, January 30, 2024.
5. The 6th Annual Meeting of the Saudi Pharmaceutical Society (SPS): Saudi International Pharmaceutical Sciences Meeting and Workshops (SIPHA), Alfaisal Tower, Riyadh, Saudi Arabia, January 22-24, 2024.
6. The 3rd Saudi Society of Clinical Pharmacy Annual International Conference, Crowne Plaza, Riyadh, Saudi Arabia, September 7-9, 2023.
1. *The 4th Pharmacy Research Day*, College of Pharmacy, Princess Noura University, Riyadh, Saudi Arabia, May 25, 2023.
2. A webinar on *Measure Your Blood Pressure Accurately, Control It, Live Longer*, the British & Irish Hypertension Society, Edinburgh, Scotland, UK, May 17, 2023.
3. *Digital health in pharmacy: FIP online course for educators and practitioners*, The international Pharmaceutical Federation (FIP), May 16, 2023.
4. *Course design series: Backward design workshop*, Faculty Development Unit, Alfaisal University, Riyadh, KSA, January 23, 2023.
5. *Riyadh Global Medical Biotechnology Summit*, Hilton Riyadh Hotel, Riyadh, Saudi Arabia, January 25-26, 2023.
6. The Annual Conference of the Saudi Pharmaceutical Society (*Saudi International Pharmaceutical Science Conference and Workshops*, SIPHA), Dammam, Saudi Arabia, January 25-27, 2022
7. *Elsevier HealthCare and Pharmaceutical Industry Product and Services Workshop*, college of pharmacy, Alfaisal University, Riyadh, Saudi Arabia, November 1, 2022.
8. *Bioethics course*, National Committee of Bioethics (NCBE) at King Abdulaziz City for Science and Technology (KACST), Riyadh, Saudi Arabia, June 15, 2022.
9. *Sex Differences in Hypertension Virtual Training Seminar*, the International Society of Hypertension, September 2021.
10. *Forum of international Health Bodies*, National Center of Academic Accreditation and Evaluation (NCAAA), Education and Training Evaluation Commission, Riyadh, Saudi Arabia, December 2019.

11. *The Fifth Meeting of Local Committees for Research Ethics*, King Abdulaziz City for Science and Technology (KACST), Riyadh, Saudi Arabia, September 2019.
12. *The National Committee of Bioethics*, King Abdulaziz City for Science and Technology (KACST) training, Riyadh, Saudi Arabia, July 2019.
13. *Female Rat Estrus Cycle Detection Training*, Animal Resource center (ARC), School of Medicine, Case Western Reserve University, Cleveland, Ohio, United States, May 2017.
14. *Laboratory Standard Training*, Case Western Reserve University, Cleveland, Ohio, United States, January 2017.
15. *Animal Hazard Training*, Animal Resource center (ARC), School of Medicine, Case Western Reserve University, Cleveland, Ohio, United States, January 2016.
16. *Biosafety and Blood Borne Pathogen Training*, Case Western Reserve University, Cleveland, Ohio, United States, December 2016.
17. *Cambridge Electronic Design Training Course*, San Diego, USA, 1 November 2013.
18. *Postmortem Training in Rats*, Central Animal Facility, Macquarie University, Sydney, Australia, September 2013.
19. *Telemetry Surgical Training Course*, Millar Instruments and Telemetry Research, University of Auckland, Auckland, New Zealand, 21-25 May 2012.
20. *Introduction to Animal Ethics Research Course*, University of Sydney, Sydney, Australia, February 2011.
21. *Biosafety Workshop*, Macquarie University, Sydney, Australia, July 2011.
22. *Problem-Based Learning and Computer-Aided Learning Workshop*, University of Malaya, Kuala Lumpur, Malaysia, 7 April 2008.
23. *The 4th Annual Workshop on the Innovative Ways of Teaching Medical/Life Science and Doing Research with PowerLab*, Faculty of Medicine, University of Malaya, Kuala Lumpur, Malaysia, 3 and 4 April 2008.
24. *Scientific Writing and Statistical Techniques Workshop*, the Institute of Graduate Studies (IPS), Universiti Sains Malaysia, Penang, Malaysia, 25 June-6 July 2007.
25. *Chronolog 590-2D Aggregometer Operator's Training by 3S Straits Scientific*, School of Pharmaceutical Sciences, Universiti Sains Malaysia, Penang, Malaysia, 24 July 2007.
26. *Occupational Safety and Health Course for Postgraduate Students*, Occupational Safety and Health Committee, Universiti Sains Malaysia, Penang, Malaysia, 16 June 2007.
27. *Pharmacology and Physiology Practical Refresher Course*, Pharmacology and Physiology Disciplines of the School of Pharmaceutical Sciences, Universiti Sains Malaysia, Penang, Malaysia, 7 June 2007.
28. *Introductory Statistical Course in Pharmaceutical Sciences*, School of Pharmaceutical Sciences, Universiti Sains Malaysia, Penang, Malaysia, 12-13 March 2009.

AWARDS

1. Worldwide [finalist](#) of the annual [Science/PINS Prize for Neuromodulation](#) (2024), Science Magazine, American Association for the Advancement of Science, Washington DC, USA.
2. Translational and Clinical Pharmacology Early Career Scientist Award (2024) from the American Society for Pharmacology and Experimental Therapeutics (ASPET), USA.
3. [Alfaisal University Faculty Awards for Research Excellence \(2022\)](#), Alfaisal University, Riyadh, KSA.
4. [Paul Dudley White International Scholar Award \(2021\)](#) from the American Heart Association, USA.
5. Macquarie University Deputy Vice-Chancellor [Commendation for Excellence in Higher Degree Research Award – Medicine \(2015\)](#), Macquarie University, Sydney, NSW, Australia.
6. The Dean's Best Journal Publication Prize (2014) from the Australian School of Advanced Medicine, Macquarie University, Sydney, NSW, Australia.
7. The Director's Data Club Prize from the Australian School of Advanced Medicine, Macquarie University, Sydney, NSW, Australia for best oral presentation in 2013.

8. The International Society of Hypertension (ISH) New Investigator Poster Award supported by Daiichi-Sankyo and presented during the 24th Scientific Meeting of the International Society of Hypertension, Sydney Convention & Exhibition Centre, Sydney, NSW, Australia, 30 September–4 October (2012).
9. The Foundation for High Blood Pressure Research Young Investigator Travel Award presented during the 24th Scientific Meeting of the International Society of Hypertension, Sydney Convention & Exhibition Centre, Sydney, NSW, Australia, 30 September–4 October (2012).
10. The Postgraduate Oral Presentation Award presented during The Neurophathophysiology of Hypertension - a satellite scientific meeting of the International Society of Hypertension, Novotel Palm Cove Resort, Palm Cove, Queensland, Australia, 25–28 September (2012).
11. The Robert Vandongen Student Travel Award and The Postgraduate Student Travel Award granted by the High Blood Pressure Research Council of Australia and presented during the Annual Scientific Meeting in Perth, Australia, December (2011).
12. A co-author of the paper entitled "*In vitro pharmacodynamic profile of Loranthus ferrugineus: evidence for noncompetitive antagonism of norepinephrine-induced vascular contraction*" published in Journal of Acupuncture and Meridian Studies. This paper was selected for the Young Scientist Award 2011 awarded by the Korean Pharmacopuncture Institute (KPI). The award was officially presented during the International Acupuncture and Meridian Study Symposium, Irvine, California, USA (2011).
13. Biography selected for inclusion in Marquis Who's Who in the World (published in the USA).
14. Macquarie University Research Excellence Scholarship (MQRES) 2010 awarded by Macquarie University, Sydney, NSW, Australia.
15. The Vapaatalo Award for best research publication in physiology/pharmacology (2010) granted by Professor (Emeritus) Heikki Vapaatalo, University of Helsinki, Finland.
16. Universiti Sains Malaysia (USM) Best Thesis Award for Applied Sciences granted by the Institute of Graduate Studies, USM, Penang, Malaysia (2010).
17. The Excellence Award in Research for Postgraduates in Pharmaceutical Sciences granted by Janssen Pharmaceutica, Malaysia (2010).
18. Received MSc degree in pharmacology from Universiti Sains Malaysia (USM), Penang, Malaysia in 2010 and thesis awarded distinction.
19. A co-recipient of Gold Medal (product innovation category) in the 10th Exhibition on Research Design and Innovation: High Impact R&D-Based Innovation. Universiti Putra Malaysia, Kuala Lumpur, Malaysia, 20–22 July (2010): *Orthosiphon stamineus* Leaf Extract Protects Against Ethanol-Induced Gastropathy in Rats. PAMERAN REKACIPTA PENYELIDIKAN & INOVASI 2010 UPM.
20. A co-recipient of Silver Medal (applied research category) in the 10th Exhibition on Research Design and Innovation: High Impact R&D-Based Innovation. Universiti Putra Malaysia, Kuala Lumpur, Malaysia 20–22 July (2010): HPLC and Anti-Inflammatory Studies of the Flavonoid Rich Chloroform Extract Fraction of *Orthosiphon stamineus* Leaves. PAMERAN REKACIPTA PENYELIDIKAN & INOVASI 2010 UPM.
21. A certificate of acknowledgment from the School of Pharmaceutical Sciences, Universiti Sains Malaysia, Penang, Malaysia for delivering a presentation entitled "Hemodynamic and functional characterization of renal sympathetic nerve activity in acute renal failure and diabetic Sprague Dawley rats" at the school level (2009).
22. A co-author of the paper entitled "*In vitro Cholinomimetic effect of Loranthus ferrugineus in isolated guinea pig ileum*" published in Journal of Acupuncture and Meridian Studies. This paper was selected for the International Acupuncture and Meridian Studies (AMS) Travel Award 2009 awarded by the Korean Pharmacopuncture Institute (KPI). The award was officially presented during the International Acupuncture and Meridian Study Symposium 2009 in Seoul, Korea.

23. Appreciation letter from Prof. Tan Sri Dato' Dzulkifli Abd. Razak, Universiti Sains Malaysia vice-chancellor for contribution to *the 4th Life Sciences Postgraduate Conference' of the 2nd Universiti Sains Malaysia Penang International Postgraduate Convention 2008*, Penang, Malaysia.
24. Best poster presenter in Young Natural Product Researchers' Forum, The University of Nottingham, Malaysia Campus, 6 March 2008.
25. Universiti Sains Malaysia Fellowship awarded by the Institute of Graduate Studies, Universiti Sains Malaysia, Penang, Malaysia from September 2007–June 2009.
26. Received BSc degree in pharmaceutical sciences from College of Pharmacy, University of Baghdad in 2003 and ranked 4th among 345 graduates.

PROFESSIONAL MEMBERSHIPS

2017–present

- *The American Heart Association, Dallas, Texas, USA*

2015–present

- *The Pharmaceutical Society of Australia (PSA), Australia*

2013–present

- *The International Society of Hypertension, Hertfordshire, UK*

2012–present

- *The American Society for Pharmacology and Experimental Therapeutics, Maryland, USA*

2012–present

- *Australian Health Practitioner Regulation Agency (Membership ID number: PHA0001761386)*

2007–present

- *The American Physiological Society, Maryland, USA*

LANGUAGES

- Arabic & English – Advanced speaking, reading, and writing competencies.

COMPUTER SKILLS

- Microsoft word, PowerPoint, and Excel – use advanced skills to produce high level work.
- *LabChart (PowerLab[®], ADInstruments and) and Spike (Cambridge Electronic Design Mirco1401 and Power1401)* data acquisition software - competent, use currently.
- GraphPad Prism data analysis - use advanced skills to produce high level work.
- CorelDraw for image production and editing and Image J for analysis of history images - competent, use currently.
- EndNote bibliography software - competent, use currently.
- Others: competent user of Adobe professional and Internet and quick to master new applications.

PEER REVIEWING

1. Pflugers Arch – European Journal of Physiology (published in Germany)
2. Scientific Reports (published in the UK)
3. Frontiers in Pharmacology (published in Switzerland)

4. Frontiers in Physiology (published in Switzerland)
5. Frontiers in Neuroscience (published in Switzerland)
6. Frontiers in Cardiovascular Medicine (published in Switzerland)
7. Autonomic Neuroscience: Basic & Clinical (published in the Netherlands)
8. American Journal of Physiology (published in the US)
9. Clinical and Experimental Hypertension (published in the UK)
10. Acta Physiologica (published in the UK)
11. Circulation Heart Failure (published in the USA)
12. Renal Failure (published in the USA)

PATENTS

1. [Neuromodulation of Baroreceptor Reflex](#)
 - **Inventors:** Sridhar, A., Lewis, S.J., and **Salman, I.M.**
 - **Publication date:** 30/11/2023
 - **Patent office:** United States
 - **Patent publication number:** US 2023/0381519 A1
 - **Application number:** 18/158,563

2. [Neuromodulation Device](#)
 - **Inventors:** Hassan, S.F., Lewis, S.J., McMurray, S., Sridhar, A. and **Salman, I.M.**
 - **Publication date:** 29/9/2022
 - **Patent office:** United States
 - **Patent publication number:** US 2022/0305268 A1
 - **Application number:** 17/619,567

3. [Neuromodulation of Baroreflex](#)
 - **Inventors:** Sridhar, A., Lewis, S.J. and **Salman, I.M.**
 - **Publication date:** 8/6/2020
 - **Patent office:** United States
 - **Patent publication number:** US 2020/0246622 A1
 - **Application number:** 16 / 643,877

1. **Salman, I.M.** (2024). Advancing cardiovascular neuromodulation: Aortic baroreceptor afferents act as targets for blood pressure control in hypertension. *Science*, 385, 508A-508B.
2. **Salman, I.M.** (2024). Key challenges in exploring the rat as a preclinical neurostimulation model for aortic baroreflex modulation in hypertension. *Hypertens. Res.*, 47, 399-415.
3. **Salman, I.M.** (2023). Functional symmetry of the aortic baroreflex in female spontaneously hypertensive rats. *J. Hypertens.*, 41, 1456-1465.
4. **Salman, I.M.** (2023). Differential frequency-dependent reflex summation of the aortic baroreceptor afferent input. *Pflugers Arch. Eur. J. Physiol.*, 475, 933-944.
5. **Salman, I.M.**, Ameer, O.Z., McMurray, S., Hassan, S.F., Sridhar, A., Lewis, S.J. and Hsieh, Y.H. (2023). Differential central integration of left versus right baroreceptor afferent input in spontaneously hypertensive rats. *J. Hypertens.*, 41, 1191-1200.
6. **Salman, I.M.**, Ameer, O.Z., McMurray, S., Hassan, S.F., Sridhar, A., Lewis, S.J. and Hsieh, Y.H. (2022). Low intensity stimulation of aortic baroreceptor afferent fibers as a potential therapeutic alternative for hypertension treatment. *Sci. Rep.*, 12, 1-12.
7. Khanfar, M.A., **Salman, I.M.** and Ameer, O.Z. (2022). Synthesis and biological evaluation of thiazole-based fibroblast growth factor receptor-1 inhibitors. *Anticancer Agents Med. Chem. (in press)*
8. Alwadi, A.Y., Arafah, G.M., Almehlesi, M., Maswadeh, H.M., **Salman, I.M.** and Ameer, O.Z. (2022). Comparative analysis of commercially available acetaminophen tablets in Saudi Arabia. *Dissolution Technologies*, 29, GC1-GC12.
9. Ameer, O.Z., **Salman, I.M.**, McMurray, S., Alwadi, A.Y., Ouban, A., Abu-Owaimer, F.M., AlSharari, S.D. and Ishfaq, A.B. (2021). Regional functional and structural abnormalities within the aorta as a potential driver of vascular disease in metabolic syndrome. *Exp. Physiol.*, 106, 771-788.
10. **Salman, I.M.**, Ameer, O.Z., McMurray, S., Giarola, A.S., Sridhar, A., Lewis, S.J. and Hsieh, Y.H. (2020). Laterality Influences Central Integration of Baroreceptor Afferent Input in Male and Female Sprague Dawley Rats. *Front. Physiol.*, 11, 499.
11. **Salman, I.M.**, Hildreth, C.M. and Phillips, J.K. (2017). Chronic kidney disease impairs renal nerve and haemodynamic reflex responses to vagal afferent input through a central mechanism. *Auton. Neurosci.*, 204, 65-73.
12. **Salman, I.M.** (2016). Major autonomic neuroregulatory pathways underlying short- and long-term control of cardiovascular function. *Curr. Hypertens. Rep.* 18(3), 18.
13. **Salman, I.M.** (2015). Current approaches to quantifying tonic and reflex autonomic outflows controlling cardiovascular function in humans and experimental animals. *Curr. Hypertens. Rep.*, 17(11), 84.
14. **Salman, I.M.** (2015). Cardiovascular autonomic dysfunction in chronic kidney disease: a comprehensive review. *Curr. Hypertens. Rep.*, 17(8), 59.
15. **Salman, I.M.**, Kandukuri, D.S., Harrison, J.L., Hildreth, C.M. and Phillips, J.K. (2015). Direct conscious telemetry recordings demonstrate increased renal sympathetic nerve activity in rats with chronic kidney disease. *Front. Physiol.*, 6, 218.
16. **Salman, I.M.**, Phillips, J.K., Ameer, O.Z. and Hildreth, C.M. (2015). Abnormal central control underlies impaired baroreflex control of heart rate and sympathetic nerve activity in female Lewis polycystic kidney rats. *J. Hypertens.*, 33(7), 1418-1428.
17. Ameer, O.Z., **Salman, I.M.**, Quek K.J., & Asmawi, M.Z. (2015). *Loranthus ferrugineus*: a Mistletoe from Traditional Uses to Laboratory Bench. *J. Pharmacopunct.*, 18(1), 7-18.

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CONFERENCES PRESENTATIONS

Conference abstracts published in peer-reviewed journals

1. **Salman, I.M.**, Ameer, O.Z., Hassan, S.F., Hsieh, Y.H. and Lewis, S.J. (2024). *Neurostimulation of the renal nerves as a novel therapeutic option for obstructive sleep apnea treatment*. The annual American Society for Pharmacology and Experimental Therapeutics (ASPET) meeting, Hyatt Regency Crystal City, Arlington, Virginia, USA, May 16-19. Published in *J. Pharmacol. Exp. Ther.*, 389, S3. (Oral data blitz and poster presentation)
2. Ameer, O.Z. and **Salman, I.M.** (2024). *Impaired nitric oxide-dependent vasorelaxation in metabolic syndrome*. The annual American Society for Pharmacology and Experimental Therapeutics (ASPET) meeting, Hyatt Regency Crystal City, Arlington, Virginia, USA, May 16-19. Published in *J. Pharmacol. Exp. Ther.*, 389, S3. (Poster presentation)
3. **Salman, I.M.**, Ameer, O.Z., Hassan, S.F., McMurray, S., Sridhar, A., Hsieh, Y.H. and Lewis, S.J. (2023). *Cardiovascular responses evoked by low energy continuous versus intermittent stimulation of the aortic baroreceptor afferents in hypertension*. The 29th Scientific Meeting of the International Society of Hypertension (ISH), Kyoto International Conference Center, Kyoto, Japan, October 12-16 (2022). Published in *J. Hypertens.*, 41(Suppl 1), e363. (Poster presentation)
4. Ameer, O.Z. and **Salman, I.M.** (2023). *Association between impaired metabolic function and vascular dysfunction in metabolic syndrome*. The 29th Scientific Meeting of the International Society of Hypertension (ISH), Kyoto International Conference Center, Kyoto, Japan, October 12-16 (2022). Published in *J. Hypertens.*, 41(Suppl 1), e171 (Poster presentation)
5. **Salman, I.M.**, Ameer, O.Z., Hassan, S.F., McMurray, S., Sridhar, A., Hsieh, Y.H. and Lewis, S.J. (2021). *Neuromodulation of the renal nerves in spontaneously hypertensive rats*. American Heart Association Scientific Sessions, Boston, MA, USA, November 13-15. Published in *Circulation* 144 (Suppl_1), A12867. (Poster presentation)

6. Ameer, O.Z. and **Salman, I.M.** (2021). *Assessment of the physiological and pathological structural differences along the aorta in a rat model of metabolic syndrome*. American Heart Association Scientific Sessions, Boston, MA, USA, November 13-15. Published in *Circulation* 144 (Suppl_1), A13462. (Poster presentation)
7. **Salman, I.M.**, Ameer, O.Z., McMurray, S., Sridhar, A., Lewis, S.J. and Hsieh, Y.H. (2021). *Central integration of left versus right baroreceptor afferent input in female spontaneously hypertensive rats*. Joint virtual meeting of the European Society of Hypertension and the International Society of Hypertension, April 11-14. Published in *J. Hypertens.*, 39, e250-e251. (Poster presentation)
8. **Salman, I.M.**, Ameer, O.Z. and Alwadi, A.Y. (2021). *Differential expression of vascular dysfunction of smaller diameter arteries in a rodent model of metabolic syndrome*. Joint virtual meeting of the European Society of Hypertension and the International Society of Hypertension, April 11-14. Published in *J. Hypertens.*, 39, e250. (Poster presentation)
9. Ameer, O.Z., **Salman, I.M.** and Alwadi, A.Y. (2021). *Regional aortic vascular dysfunction in a rodent model of metabolic syndrome*. Joint virtual meeting of the European Society of Hypertension and the International Society of Hypertension, April 11-14. Published in *J. Hypertens.*, 39, e255. (Poster presentation)
10. **Salman, I.M.**, Ameer, O.Z., Hassan, S.F., McMurray, S., Sridhar, A., Lewis, S.J. and Hsieh, Y.H. (2018). *Differential central modulation of right versus left baroreceptor afferent input in hypertension*. The 27th Scientific Meeting of the International Society of Hypertension (ISH), Beijing International Convention Centre (BICC), Beijing, China, September 20-23. Published in *J. Hypertens.*, 36, e93. (Poster presentation)
11. **Salman, I.M.**, Ameer, O.Z., Sridhar, A., Lewis, S.J. and Hsieh, Y.H. (2017). *Low intensity stimulation of aortic baroreceptors as a potential therapeutic alternative for hypertension treatment*. *The American Heart Association (AHA) Council on Hypertension, AHA Council on Kidney in Cardiovascular Disease and American Society of Hypertension Joint Scientific Sessions 2017*. Hyatt Regency San Francisco, San Francisco, California, USA, September 14-17. Published in *Hypertension*, 70, AP110. (Poster presentation)
12. **Salman, I.M.**, Hildreth, C.M., Ameer, O.Z. and Phillips, J.K. (2015). *Differential contribution of afferent and central pathways to the development of baroreflex dysfunction in chronic kidney disease*. *The 9th Meeting of the International Society for Autonomic Neuroscience (ISAN 2015) in conjunction with the Federation of European Autonomic Societies (EFAS), American Autonomic Society (AAS) and Japan Society of Neurovegetative Research (JSNR)*. Palazzo dei Congressi di Stresa, Stresa, Italy, September 26-29. Published in *Auton. Neurosci.*, 192, 40. (Poster presentation)
13. Phillips, J.K., **Salman, I.M.**, Harrison, J.L. and Hildreth, C.M. (2013). *Long-term telemetry recordings demonstrate increased renal sympathetic nerve activity and blood pressure in rats with chronic kidney disease*. *The 23rd Scientific meeting of the European Society of Hypertension*. Mico Milano Congress, Milan, Italy, June 14-17. Published in *J. Hypertens.*, 31, e141. (Oral presentation)
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15. **Salman, I.M.**, Hildreth, C.M. and Phillips, J.K. (2011). *Baroreflex control of the renal sympathetic nerve in autosomal recessive cystic kidney disease*. *The 33rd Annual Scientific Meeting of the High Blood Pressure Research Council of Australia*, Perth Convention Exhibition Center, Perth, Western Australia, Australia, December 7-9. Published in *Hypertension*, 60(2), 492. (Oral presentation)
16. **Salman, I.M.**, Ameer, O.Z., Sattar, M.A., Abdullah, N.A., Yam, M.F., Khan, M.A.H. and Johns, E.J. (2010). *Sympathetic nervous system interacts with renin-angiotensin system to control renal sodium and water handling in SHR rat*. *The Annual Meeting at Experimental Biology*, Anaheim Convention Centre, Anaheim, California, USA, April 24-28. Published in *FASEB J.*, 24, 1050.7. (Poster presentation)

17. Abdulla, M.H., Sattar, M.A., Khan, N.A., Rathore, H.A., Kolla, R.L.A., Ibraheem, Z.O., **Salman, I.M.** and Johns, E.J. (2010). High fructose feeding causes stiffer arteries in Sprague-Dawley rats. *The 2010 Southern Regional Meeting of the American Federation for Medical Research*. Hotel InterContinental, New Orleans, Louisiana, USA, February 25-27. Published in *J. Investig. Med.*, 58, 446. (Poster presentation)
18. **Salman, I.M.**, Sattar, M.A., Abdullah, N.A., Ameer, O.Z., Abdulla, M.H., Rathore, H.A., Anand Swarup, K.R.L., Kazi, R.N., Basri, F., Hussain, N.M., Sriramaneni, R.N., and Johns, E.J. (2009). The role of renal sympathetic nerve activity in the pathogenesis of acute renal failure. *Malaysian Journal of Pharmacy*, 1(7), S68-S69. (Poster presentation)
19. Anand Swarup, K.R.L., Munavvar Zubaid, A.S., Abdullah, N.A., Rathore, H.A., Raisa, N.K., Mohammed, H.A., **Ibrahim, M.S.**, NurJannah, M.H. (2009). Quercetin prevents arterial stiffness in a rat model of streptozotocin-induced diabetes. *Malaysian Journal of Pharmacy*, 1(7), S20. (Poster presentation)
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27. **Ibrahim, M.S.**, Munavvar, A.S., Nor, A.A., Mohammed, H.A., Omar, Z.A., Hassaan, A.R., Kolla, R.L.A.S., Raisa, N.K., Fathihah, B., Nurjannah, M.H. and Edward, J.J. (2008). Study of renal sympathetic nerve activity in diabetic Sprague Dawley rats. *The 13th National Conference on Medical Sciences*. Universiti Sains Malaysia's Health Campus, Kelantan, Malaysia, May 22-23. Published in *Malaysian J. Med. Sci.*, 15(Suppl. 1), 17. (Oral Presentation)
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Conference proceedings

1. **Salman, I.M.**, Ameer O.Z., Abbara, A.R., Mansour, G.K., Hsieh, Y.H., Lewis, S.J. and (2024). Neuromodulation of renal nerves: a proof-of-concept approach for treating hypertension. The 13th College of Pharmacy Research Day (COPRD13), College of Pharmacy, King Saud University, Riyadh, Saudi Arabia, May 23. (Poster presentation). Poster won 3rd place in the annual Young Pharmacist Research Award (YPHRA) competition.
2. Alhamad, H., Alhosainy, M., Mansour, G.K., Ameer O.Z., and **Salman, I.M.** (2024). Exploring prevalence and correlates of nootropics consumption among medical and pharmacy students in Alfaisal University. The 13th College of Pharmacy Research Day, College of Pharmacy, King Saud University, May 23. (Poster presentation)
3. Mansour, G.K., Abbara, A.R., Ameer O.Z., Hsieh, Y.H., Lewis, S.J. and **Salman, I.M.** (2024). Bioelectronic neuromodulation of the renal nerves as a novel therapeutic modality for hypertension treatment. The 15th Annual Research Day, Alfaisal University, Alfaisal University, Riyadh, Saudi Arabia, March 7-10. (Poster presentation)
4. Alwadi A.Y., **Salman I.M.**, and Ameer O.Z. (2024) Changes in metabolic parameters and vascular dysfunction in a metabolic syndrome rat model. The 15th Annual Research Day, Alfaisal University, Alfaisal University, Riyadh, Saudi Arabia, March 7-10. (Poster presentation)
5. Abou Shameh, R.G. and **Salman, I.M.** (2023). Developments in the Treatment of Resistant Hypertension by Use of Electroceuticals to Stimulate Baroreceptors: A Narrative Review and Meta-Synthesis. The 12th College of Pharmacy Research Day, College of Pharmacy, King Saud University, May 17. (Poster presentation)
6. Alwadi A.Y., Ghosoun, M.A., **Salman I.M.**, et. Al (2022). Comparative analysis of commercially available acetaminophen tablets in Saudi Arabia. The 13th Annual Research Day, Alfaisal University, Alfaisal University, Riyadh, Saudi Arabia, March 3. Poster won 2nd place among the graduate students category.
7. Alwadi A.Y., Ameer O.Z., and **Salman I.M.** (2021). Smaller diameter arteries express a differential vascular dysfunction in metabolic syndrome: a preliminary rodent study. The 12th Annual Research Day, Alfaisal University, Riyadh, Saudi Arabia, March 4. Poster won 1st place among the graduate students category.
8. *The contribution of renal nerves to modulation of cardio-respiratory function in Zucker fat rats (ISAN19.133)*. The 11th Congress of The International Society for Autonomic Neuroscience, Los Angeles, California, July 25-27, 2019. (Oral presentation)

9. **Salman, I.M.**, Ameer, O.Z., Hassan, S.F., McMurray, S., Sridhar, A., Lewis, S.J., Hsieh, Y.H. (2019). *The contribution of renal nerves to modulation of cardio-respiratory function in Zucker fat rats* (ISAN19.133). The 11th Congress of The International Society for Autonomic Neuroscience, Los Angeles, California, July 25-27. (Oral presentation)
10. **Salman, I.M.**, Ameer, O.Z., Hassan, S.F., McMurray, S., Sridhar, A., Lewis, S.J., Hsieh, Y.H. (2018). *Sexual dimorphism in central modulation of baroreceptor afferent input in hypertension*. The 6th American Physiological Society (APS) Conference on sex/gender differences in cardiovascular-renal physiology (Cardiovascular, renal and metabolic diseases: sex-specific implications for physiology), The Crowne Plaza Knoxville. Knoxville, Tennessee, September 30-October 3. (Poster presentation)
11. **Salman, I.M.**, Hildreth, C.M., Harrison, J.L. and Phillips, J.K. (2013). Blunted pressor and renal sympathetic nerve stress response in a conscious rodent model of chronic kidney disease. *The 43rd Society for Neuroscience Conference*. San Diego Convention Center, San Diego, USA, November 9-13. (Poster presentation)
12. **Salman, I.M.**, Hildreth, C.M. and Phillips, J.K. (2013). Direct long-term assessment of renal sympathetic nerve activity in the conscious Lewis polycystic kidney rat model of chronic kidney disease. *Central Cardiovascular & Respiratory Control: Future Directions Meeting*. Neuroscience Research Australia, Sydney, NSW, Australia, September 16-17. (Poster presentation)
13. **Salman, I.M.**, Hildreth, C.M. and Phillips, J.K. (2012). Temporal impairment of baroreflex control of renal sympathetic nerve activity in the Lewis polycystic kidney model of chronic kidney disease. *The Neurophathophysiology of Hypertension - a satellite scientific meeting of the International Society of Hypertension*. Novotel Palm Cove Resort, Palm Cove, Queensland, Australia, September 25-28. (Oral presentation)
14. **Salman, I.M.**, Hildreth, C.M. and Phillips, J.K. (2012). Renal sympathetic nerve activity in a rodent model of chronic kidney disease. *The 32nd Annual Meeting of the Australian Neuroscience Society*. Jupiters Hotel, Gold Coast, Queensland, Australia, January 29 -February 1. (Poster presentation)
15. **Salman, I.M.**, Hildreth, C.M., Phillips, J.K. (2011). Impaired baroreflex control of heart rate and sympathetic nerve activity is not associated with altered baroreceptor afferent processing in the Lewis cystic kidney model of chronic kidney disease. *Central Cardiovascular Control: Future Directions Meeting*. Florey Neuroscience Institutes, Melbourne Brain Centre, University of Melbourne, Victoria, Australia, October 20-21. (Poster presentation)
16. Hildreth, C.M., **Salman, I.M.**, Wyse, B.F., Harrison, J.L. and Phillips, J.K. (2011). Evidence for increased renal sympathetic outflow in renal failure. *Central Cardiovascular Control: Future Directions Meeting*. Florey Neuroscience Institutes, Melbourne Brain Centre, University of Melbourne, Victoria, Australia, October 20-21. (Oral presentation)
17. Yam, M.F., Lim, V., **Salman, I.M.**, Ameer, O.Z., Ang, L.F., Rosidah, Abdulkarim, M.F., Abdullah, G.Z., Basir, R., Sadikun, A. and Asmawi, M.Z. (2010). HPLC and anti-inflammatory studies of the flavonoid rich chloroform extract fraction of *Orthosiphon stamineus* leaves. *The 10th Exhibition on Research Design and Innovation: High Impact R&D-Based Innovation*. Universiti Putra Malaysia, Kuala Lumpur, Malaysia, July 20-22, p. 68. (Poster presentation)
18. Yam, M.F., Ang, L.F., **Salman, I.M.**, Ameer, O.Z., Lim, V., Ong, L.M., Ahmad, M. and Asmawi, M.Z. (2010). *Orthosiphon stamineus* leaf extract protects against ethanol-induced gastropathy in rats. *The 10th Exhibition on Research Design and Innovation: High Impact R&D-Based Innovation*. Universiti Putra Malaysia, Kuala Lumpur, Malaysia, July 20-22, p. 68. (Poster presentation)
19. **Salman, I.M.**, Sattar, M.A., Abdullah, N.A., Ameer, O.Z., Abdulla, M.H., Rathore, H.A., Anand Swarup, K.R.L., Kazi, R.N., Basri, F., Hussain, N.M. and Johns, E.J. (2009). Study of renal sympathetic nerve activity in acute unilateral renal ischemia-reperfusion injury. *The 2nd UNAIR-USM Collaborative Conference*. Universitas Airlangga, Surabaya, Indonesia, February 10-11, p. 189. (Oral presentation)
20. **Salman, I.M.**, Sattar, M.A., Abdullah, N.A., Ameer, O.Z., Abdulla, M.H., Rathore, H.A., Anand Swarup, K.R.L., Kazi, R.N., Basri, F., Hussain, N.M. and Johns, E.J. (2009). Effect of acute unilateral renal

- denervation on renal functions in Sprague Dawley rats. *The 2nd UNAIR-USM Collaborative Conference*. Universitas Airlangga, Surabaya, Indonesia, February 10-11, p. 287. (Poster presentation)
21. Ameer, O.Z., **Salman, I.M.**, Abdulla, M.H., Sadikun, A. and Asmawi, M.Z. (2009). *In vivo* hypotensive effect of the methanol extract of *Loranthus ferrugineus* Roxb. *The 2nd UNAIR-USM Collaborative Conference*. Universitas Airlangga, Surabaya, Indonesia, February 10-11, p. 81. (Oral presentation)
 22. Ameer, O.Z., Sattar, M.A., Abdullah, N.A., **Salman, I.M.**, Abdulla, M.H. and Johns, E.J. (2009). Renal sodium and water handling in cisplatin-induced acute renal failure in Sprague Dawley rats. *The 2nd UNAIR-USM Collaborative Conference*. Universitas Airlangga, Surabaya, Indonesia, February 10-11, p. 234. (Poster presentation)
 23. Abdulla, M.H., Sattar, M.A., Abdullah, N.A., Rathore, H.A., Anand Swarup, K.R.L., **Salman, I.M.** and Johns, E.J. (2009). The effect of high fructose consumption on blood pressure and metabolic alterations in Sprague-Dawley rats. *Proceedings of Symposium of USM Fellowship Holders*, ISBN: 978-967-5417-38-1.
 24. Raisa, N.K., Munavvar, A.S., Abdullah, N.A., Rathore, H.A., Fathihah, B., NurJannah, M.H., Anand Swarup, K., Abdulla, M.H., **Salman, I.M.** and Johns, E.J. (2009). Involvement of α_{1B} -adrenoceptors in mediating the neurogenic vasoconstriction of the renal cortical microcirculatory vascular beds in SHR rats with high salt load. *The 23rd Scientific Meeting of the Malaysian Society of Pharmacology and Physiology*. Grand Seasons Hotel, Kuala Lumpur, Malaysia, May 12-13, p. 63. (Poster presentation)
 25. Anand Swarup, K.R.L., Rathore, H.A., Munavvar Zubaid, A.S., Abdullah, N.A., Raisa, N.K., Mohammad, H.A., **Ibrahim, M.S.**, and NurJannah, M.H. (2009). Early changes in the aortic stiffness measured by pulse wave velocity in rats with streptozotocin-induced diabetes. *The 23rd Scientific Meeting of the Malaysian Society of Pharmacology and Physiology*. Grand Seasons Hotel, Kuala Lumpur, Malaysia, May 12-13, pp. 40-41. (Poster presentation)
 26. NurJannah, M.H., Munavvar, A.S., Tengku Sifzizul, T.M., Aidiahmad, D., Rathore, H.A., Anand Swarup, K., **Salman, I.M.**, Abdulla, M.H., Ibrahim, Z.O., Abdullah, N.A. and Johns, E.J. (2009). Involvement of α_1 -adrenoceptors in cardiomyopathy rats model. *The 23rd Scientific Meeting of the Malaysian Society of Pharmacology and Physiology*. Grand Seasons Hotel, Kuala Lumpur, Malaysia, May 12-13, p. 40. (Poster presentation)
 27. **Salman, I.M.**, Sattar, M.A., Abdullah, N.A., Abdulla, M.H., Ameer, O.Z., Rathore, H.A., Anand Swarup, K.R.L., Kazi, R.N., Basri, F., Hussain, N.M. and Johns, E.J. (2008). Study of hemodynamic and renal functional changes following acute unilateral renal sympathectomy in Sprague-Dawley rats. *The 2nd Penang International Postgraduate Convention*. Universiti Sains Malaysia, Penang, Malaysia, June 18-20, p. 555. (Oral presentation)
 28. **Salman, I.M.**, Sattar, M.A., Abdullah, N.A., Abdulla, M.H., Ameer, O.Z., Rathore, H.A., Anand Swarup, K.R.L., Kazi, R.N., Basri, F., Hussain, N.M. and Johns, E.J. (2008). Early metabolic changes in response to streptozotocin-induced diabetes in Sprague Dawley rats. *The 2nd Penang International Postgraduate Convention*. Universiti Sains Malaysia, Penang, Malaysia, June 18-20, p. 609. (Poster presentation)
 29. Ameer, O.Z., **Salman, I.M.**, Abdulla, M.H., Sadikun, A. and Asmawi, M.Z. (2008). Vasorelaxant mechanisms of n-butanol fraction of *Loranthus ferrugineus* methanol extract in pre-contracted rat aorta preparations. *The 2nd Penang International Postgraduate Convention*. Universiti Sains Malaysia, Penang, Malaysia, June 18-20, p. 560. (Oral presentation)
 30. Ameer, O.Z., **Salman, I.M.**, Abdulla, M.H., Sadikun, A. and Asmawi, M.Z. (2008). The effects of *Loranthus ferrugineus* extracts on vascular reactivity of isolated rat aortic ring preparations. *The 2nd Penang International Postgraduate Convention*. Universiti Sains Malaysia, Penang, Malaysia, June 18-20, p. 617. (Poster presentation)
 31. Abdulla, M.H., Sattar, M.A., Abdullah, N.A., **Salman, I.M.**, Ameer, O.Z., Rathore, H.A., Anand Swarup, K.R.L., Kazi, R.N., Basri, F., Hussain, N.M. and Johns, E.J. (2008). Interaction between α_1 -adrenoceptors and AT₁-receptors in the renal vasculature of wistar-kyoto rats. *The 2nd Penang*

- International Postgraduate Convention*. Universiti Sains Malaysia, Penang, Malaysia, June 18-20, p. 613. (Poster presentation)
32. Abdulla, M.H., Sattar, M.A., Abdullah, N.A., **Salman, I.M.**, Ameer, O.Z., Rathore, H.A., Anand Swarup, K.R.L., Kazi, R.N., Basri, F., Hussain, N.M. and Johns, E.J. (2008). Carvedilol induced antagonism of angiotensin II in the renal vasculature of normal and hypertensive rats. *The 2nd Penang International Postgraduate Convention*. Universiti Sains Malaysia, Penang, Malaysia, June 18-20, p. 561. (Oral presentation)
 33. Fathihah, B., Munavvar, A.S., Abdullah, N.A., Aidiahmad, D., Khan, A.H., Rathore, H.A., Raisa, N., NurJannah, M.H., Anand Swarup, K.R.L., Abdullah, M.H., **Salman, I.M.** and Johns, E.J. (2008). Blunting sympathetic nervous system and blockade of angiotensin type I receptor alter renal haemodynamics in hypertension. *The 2nd Penang International Postgraduate Convention*. Universiti Sains Malaysia, Penang, Malaysia, June 18-20, p. 607. (Poster presentation)
 34. NurJannah, M.H., Munavvar, A.S., Tengku Sifzizul, T.M., Khan, A.H., Aidiahmad, D., Rathore, H.A., Raisa, N., Fathihah, B., Anand Swarup K.R.L., **Salman, I.M.**, Abdullah, M.H. and Johns, E.J. (2008). Effects of losartan on modulation of sympathetic nervous system responses in cardiomyopathy rats model. *The 2nd Penang International Postgraduate Convention*. Universiti Sains Malaysia, Penang, Malaysia, June 18-20, p. 616. (Poster presentation)
 35. Naidu, S.R., **Salman, I.M.**, Ameer, O.Z., Sadikun, A. and Asmawi, M.Z. (2008). Acute and subacute toxicological study of standardized chloroform extract of *Andrographis paniculata* on experimental animals. *The 13th Biological Sciences Graduate Congress*. National University of Singapore, Singapore, December 15-17, p. 66. (Poster presentation)
 36. **Salman, I.M.**, Ameer, O.Z. and Asmawi, M.Z. (2008). Vascular responsiveness to different extracts of *Macrosolen cochinchinensis* in isolated aortic rings preparations. *The Young Natural Product Researchers' Forum*. The University of Nottingham Malaysia Campus, Selangor, Malaysia, March 6, p. 12. (Poster Presentation)
 37. Ameer, O.Z., **Salman, I.M.**, Sadikun, A. and Asmawi, M.Z. (2008). *In vivo* cardiovascular effect of methanolic extract of *Loranthus ferrugineus* Roxb. *The Young Natural Product Researchers' Forum*. The University of Nottingham Malaysia Campus, Selangor, Malaysia, March 6, p. 11. (Poster Presentation)
 38. **Salman, I.M.**, Sattar, M.A., Abdullah, N.A., Abdulla, M.H., Ameer, O.Z., Rathore, H.A., Anand Swarup, K.R.L., Kazi, R.N., Basri, F., Hussain, N.M. and Johns, E.J. (2008). Acute unilateral renal sympathectomy in renal failure Sprague Dawley rats: Diuresis and natriuresis. *The 22nd Scientific Meeting of the Malaysian Society of Pharmacology and Physiology*. Universiti Malaya, Kuala Lumpur, Malaysia, April 5-6, p. 42. (Oral Presentation)
 39. **Salman, I.M.**, Sattar, M.A., Abdullah, N.A., Abdulla, M.H., Ameer, O.Z., Rathore, H.A., Anand Swarup, K.R.L., Kazi, R.N., Basri, F., Hussain, N.M. and Johns, E.J. (2008). Hemodynamic and renal functional changes in response to acute unilateral renal sympathectomy in spontaneously hypertensive rats. *The 22nd Scientific Meeting of the Malaysian Society of Pharmacology and Physiology*. University of Malaya, Kuala Lumpur, Malaysia, April 5-6, pp. 68-69. (Poster Presentation)
 40. Abdulla, M.H., Sattar, M.A., Abdullah, N.A., **Salman, I.M.**, Ameer, O.Z., Rathore, H.A., Anand Swarup, K.R.L., Kazi, R.N., Basri, F., Hussain, N.M. and Johns, E.J. (2008). Altered renal hemodynamics in normal wistar-kyoto and spontaneously hypertensive rats in response to acute renal denervation and losartan treatment: Interaction between sympathetic nervous system and renin-angiotensin system. *The 22nd Scientific Meeting of the Malaysian Society of Pharmacology and Physiology*. Universiti Malaya, Kuala Lumpur, Malaysia, April 5-6, p. 40. (Oral Presentation)
 41. Abdulla, M.H., Sattar, M.A., Abdullah, N.A., **Salman, I.M.**, Ameer, O.Z., Rathore, H.A., Anand Swarup, K.R.L., Kazi, R.N., Basri, F., Hussain, N.M. and Johns, E.J. (2008). Effect of angiotensin inhibition and renal denervation on changes in renal blood flow in response to sympathomimetics in normal Wistar-Kyoto and spontaneously hypertensive rats. *The 22nd Scientific Meeting of the Malaysian*

- Society of Pharmacology and Physiology*. Universiti Malaya, Kuala Lumpur, Malaysia, April 5-6, p. 68. (Poster Presentation)
42. Rathore, H.A., Munavvar, A.S., Abdullah, N.A., Basri, F., NurJannah, M.H., Raisa, N.K., Mohammed, H.A., **Ibrahim, M.S.**, Anand Swarup, K.R.L. and Johns, E.J. (2008). Sympathetic control of ventricular function in progression of pressure overload cardiac hypertrophy. *The 22nd Scientific Meeting of the Malaysian Society of Pharmacology and Physiology*. Universiti Malaya, Kuala Lumpur, Malaysia, April 5-6, pp. 23-24. (Oral Presentation)
 43. Rathore, H.A., Munavvar, A.S., Abdullah, N.A., Ishak, M., Basri, F., NurJannah, M.H., Raisa, N.K., Mohammed, H.A., **Ibrahim, M.S.**, Anand Swarup, K.R.L. and Johns, E.J. (2008). Developing heart from bones (step1) bone marrow isolation optimizing cell culture conditions and sub-culturing for adult stem cell studies. *The 22nd Scientific Meeting of the Malaysian Society of Pharmacology and Physiology*. Universiti Malaya, Kuala Lumpur, Malaysia, April 5-6, p. 81. (Poster Presentation)
 44. Raisa, N.K., Munavvar, A.S., Abdullah, N.A., Aidiahmad, D., Khan, A.H., Rathore, H.A., Fathiah, B., NurJannah, M.H., Anand Swarup, K.R.L., Abdulla, M.H., **Salman, I.M.** and Johns, E.J. (2008). Impact of high dietary salt load on the renal Cortical alpha1D adrenoceptor in controlling the renal hemodynamics in normotensive WKY rats. *The 22nd Scientific Meeting of the Malaysian Society of Pharmacology and Physiology*. Universiti Malaya, Kuala Lumpur, Malaysia, April 5-6, p. 84. (Oral Presentation)
 45. Anand Swarup, K.R.L., Rathore, H.A., Munavvar, A.S., Abdullah, N.A., Basri, F., NurJannah, M.H., Raisa, N.K., Mohammed, H.A., **Ibrahim, M.S.** and EJ Johns (2008). Increased sympathetic activity may lead to a failing heart in pressure overload cardiac hypertrophy rats. *The 22nd Scientific Meeting of the Malaysian Society of Pharmacology and Physiology*. Universiti Malaya, Kuala Lumpur, Malaysia, April 5-6, p. 79. (Poster Presentation)
 46. Fathihah, B., Munavvar, A.S., Abdullah, N.A., Aidiahmad, D., Khan, A.H., Rathore, H.A., Raisa, N., NurJannah, M.H., Anand Swarup, K.R.L., Abdullah, M.H., **Salman, I.M.** and Johns, E.J. (2008). Interaction of sympathetic nervous and renin angiotensin system: Effect of sympathectomy and AT₁ blockade on renal haemodynamics in renal failure rats. *The 22nd Scientific Meeting of the Malaysian Society of Pharmacology and Physiology*. Universiti Malaya, Kuala Lumpur, Malaysia, April 5-6, pp. 40-41. (Oral Presentation)
 47. NurJannah, M.H., Munavvar, A.S., Tengku Sifzizul, T.M., Khan, A.H., Aidiahmad, D., Rathore, H.A., Raisa, N., Fathihah, B., Anand Swarup, K.R.L., Abdulla, M.H., **Salman, I.M.**, Abdullah, N.A. and Johns, E.J. (2008). Effects of atenolol on modulation of drenoceptors responses in cardiomyopathy rat model. *The 22nd Scientific Meeting of the Malaysian Society of Pharmacology and Physiology*. Universiti Malaya, Kuala Lumpur, Malaysia, April 5-6, p. 24. (Oral Presentation)
 48. Ameer, O.Z., **Salman, I.M.**, Sadikun, A. and Asmawi, M.Z. (2008). *In vitro* cholinergic activity of the methanolic extract of *Loranthus ferrugineus* Roxb. *The 22nd Scientific Meeting of the Malaysian Society of Pharmacology and Physiology*. Universiti Malaya, Kuala Lumpur, Malaysia, April 5-6, p. 69. (Poster Presentation)
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