

Curriculum Vitae

Huma Shahzad, MBBS, PhD

Assistant Professor of Medical Education
Department of Medical Education
University of Texas Rio Grande Valley
School of Medicine

Education & Training

- Doctor of Philosophy, PhD, Physiology, Faculty of Medicine, University of Malaya, Wilayah Persekutuan Kuala Lumpur, Malaysia (2016).
- Bachelor of Medicine and Bachelor of Surgery MBBS, Liaquat University of Medical and Health Sciences, Jamshoro, Pakistan (2007).

Professional qualification

- Postgraduate Certificate in Health Profession Education, IMU University, Federal Territory of Kuala Lumpur, Malaysia (2020).
- Scholar- Master of Health Profession Education, IMU University, Federal Territory of Kuala Lumpur, Malaysia (2024-2025).

Work Experience

2022 - 2024	Senior Lecturer- Department of Physiology, Division of Human Biology, School of Medicine, International Medical University, Kuala Lumpur, Malaysia.
2017 - 2021	Lecturer- Department of Physiology, Division of Human Biology, School of Medicine, International Medical University, Kuala Lumpur, Malaysia
2014 - 2017	Academic tutor, Department of Anatomy, Faculty of Medicine, University of Malaya, Kuala Lumpur, Malaysia.

2015	Graduate Research Assistant (GRA), Department of Molecular Medicine, Faculty of Medicine, University of Malaya
2007- 2008	House Officer General Medicine & Surgery- Liaquat University Hospital, Hyderabad, Sindh, Pakistan.

Professional Memberships

- Malaysian Society of Pharmacology & Physiology, regular member (Jan 2018 to present).

Honors & Awards

- Winner of 3rd prize for the individual category Lecturer/Senior Lecturer - Highest Cumulative Research Grant as Principal Investigators at 4th SOM Annual Research Awards & Recognition Day, 2023, IMU.
- Winner of 2nd prize for the individual category Lecturer/Senior Lecturer - Highest Cumulative Research Grant as Principal Investigators at 3rd SOM Annual Research Awards & Recognition Day, 2022, IMU.
- Best poster presentation award at 34th Malaysian Society of Pharmacology & Physiology conference scientific meeting, organized by Monash University, Malaysia (2020).
- Recipient of National Research grant FRGS from Ministry of Higher Education, Malaysia (2020).
- Scholarship awarded for postgraduate certificate in health profession education, IMU (2019).
- Offer of conversion to Doctor of Philosophy, University of Malaya 2015. Having fulfilled all requirements of university within 14months to convert Master of medical science Physiology to PhD. (Research) 2015.
- Recipient of scholarship for PhD under High Impact research (HIR) grant, University of Malaya 2015.

Research Focus

Dr Shahazad's research focuses on the advancement and understanding of hormonal influences on disease mechanisms and educational practices, contributing to both the scientific and academic communities. Her laboratory research portfolio encompasses studying the effects of sex steroids on various body systems in normal and diseased conditions of pre- and post-menopausal states in rats and how sex steroids, mainly estrogen, triggers signaling cascades in different cells/tissues of the body system. Her

recent lab studies explored how estrogen deficiency influences inflammation and neurodegeneration in rheumatoid arthritis models, highlighting the hormone's impact on the hippocampus and its potential neuroprotective effects. In our lab we also demonstrated that estrogen regulates signaling mechanisms differentially in the aorta of ovariectomized rheumatoid arthritis models. She is also actively involved in medical education research. Her research in medical education focuses on remedial interventions that aim to improve student outcomes by providing tailored support, ensuring that all students succeed in the demanding environment of medical education.

Publications

1. Govindasamy, N., Barman, M., Salleh, N., Giribabu, N., & **Shahzad, H.** (2024). Effects of 17 β estradiol on blood pressure elevation in ovariectomized rats with collagen induced arthritis via modulation of oxidative stress, inflammation, fibrosis, and apoptosis in the aorta involving TLR4/NOX4/NF-k β and TGF β 1/fibronectin/ α SMA pathways. *Naunyn-Schmiedeberg's Archives of Pharmacology*, 1-22. **(Corresponding author)**.
2. Lee, Z. H., Tung, W. S., Santhiran, K. A., Jana, L., **Shahzad, H.**, Giribabu, N., & Salleh, N. (2024). Estrogen hindrance escalates inflammation and neurodegeneration in the hippocampal regions of collagen-induced arthritis female Sprague–Dawley rats. *Pflügers Archiv-European Journal of Physiology*, 1-16. **(Corresponding author)**
3. Ikram, M. A., **Shahzad, H.**, & Gnanou, J. V. (2023). Iatrogenic ulnar nerve palsy associated with supracondylar humeral fracture in children: A systemic review on its management. *Trauma*, 14604086231197369.
4. Ying, C. C., Yuan, T. T., Leng, C. Z., Le Hui, F., Abdalla, M. M. I., Caszo, B. A., & **Shahzad, H.** (2023). Impact of Coronavirus Disease 2019 Lockdown on Back Pain Intensity, Prevalence and Associated Risk Factor Among Adults in Malaysia. *Malaysian Journal of Medicine & Health Sciences*, 19(6).
5. Khalil, A. S. M., Giribabu, N., Yelumalai, S., **Shahzad, H.**, Kilari, E. K., & Salleh, N. (2021). Myristic acid defends against testicular oxidative stress, inflammation, apoptosis: Restoration of spermatogenesis, steroidogenesis in diabetic rats. *Life sciences*, 278, 119605.
6. **Shahzad, H.**, Giribabu, N., Karim, K., Kassim, N. M., Muniandy, S., & Salleh, N. (2017). Combinatorial effects of quercetin and sex-steroids on fluid and

electrolytes'(Na⁺, Cl⁻, HCO₃⁻) secretory mechanisms in the uterus of ovariectomised female Sprague-Dawley rats. Plos one, 12(3), e0172765.

7. **Shahzad, H.**, Giribabu, N., Karim, K., Muniandy, S., Kassim, N. M., & Salleh, N. (2017). Quercetin alters uterine fluid volume and aquaporin (AQP) subunits (AQP-1, 2, 5 & 7) expression in the uterus in the presence of sex-steroids in rats. Reproductive Toxicology, 69, 276-285.
8. **Shahzad, H.**, Giribabu, N., Karim, K., Kassim, N., Muniandy, S., Kumar, K. E., & Salleh, N. (2017). Quercetin interferes with the fluid volume and receptivity development of the uterus in rats during the peri-implantation period. Reproductive Toxicology, 71, 42-54.
9. **Shahzad, H.**, Giribabu, N., Sekaran, M., & Salleh, N. (2015). Quercetin induces dose-dependent differential morphological and proliferative changes in rat uteri in the presence and in the absence of estrogen. Journal of medicinal food, 18(12), 1307-1316.
10. **Shahzad, H.**, Giribabu, N., Muniandy, S., & Salleh, N. (2014). Quercetin induces morphological and proliferative changes of rat's uteri under estrogen and progesterone influences. International journal of clinical and experimental pathology, 7(9), 5484.