

## Curriculum Vitae

REEM ALSHAMAN, Ph.D.

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### PERSONAL INFORMATION

- Nationality: Saudi
- Place of birth: Tabuk –Saudi Arabia

### ACADEMIC QUALIFICATIONS

<b>University</b>	<b>Degree</b>	<b>GPA</b>	<b>Subject Area</b>
Texas Southern University Houston, TX, USA	PhD (2016)	3.8/4	Pharmaceutical Sciences
Texas Southern University Houston, TX, USA	M.S. (2013)	4/4	Pharmaceutical Sciences
King Saud University Riyadh, Saudi Arabia	BSc (2005)	4.5/5	Pharmacy (Clinical Pharmacy track)

### PROFESSIONAL EXPERIENCE

- August 2023- to present: Associate Professor at the Department of Pharmacology and Toxicology, College of Pharmacy, University of Tabuk.
- August 2020-to present: Vice Dean of Faculty of Pharmacy- University of Tabuk
- March 2020-to present: Vice Dean for Graduate Studies and Development , Faculty of Pharmacy, University of Tabuk
- October 2019- to present: Coordinator of Pharmacology and Toxicology Department, College of Pharmacy, University of Tabuk.
- October 2019- to August 2020: Quality coordinator at Pharmacology and Toxicology Department, College of Pharmacy, University of Tabuk
- August 2019-to August 2023t: Assistant Professor at the Department of Pharmacology and Toxicology, College of Pharmacy, University of Tabuk.
- January 2018- June 2019: Vice-dean of Al Ghad International Colleges for Applied Medical Sciences, Tabuk
- August 2013- September 2016: Teaching assistant, Pharmaceutical Sciences Department, Texas Southern University
- July 2006- November2009: Pharmacist in-charge for pediatric wards and NICU at North West Armed Forces Hospital, Tabuk.
- September 2005- January2006: Training at Northwest Armed Forces Hospital, Tabuk

## SCHOLARSHIPS and AWARDS

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- King Abdullah Scholarship- 2010
- Second Class Honor for Excellence in Bachelor Degree of Pharmaceutical Sciences, College of Pharmacy, King Saud University- 2005
- The Annual Meeting of Saudi pharmaceutical society: 2<sup>nd</sup> place student poster (Pharmaceutical Sciences): The anti-rheumatic drug, Leflunomide, produces nephrotoxic effect through upregulation of TGFβ-stimulated p53/Smad2/3 pathway.

## PRESENTATIONS and POSTER:

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- Process for obtaining ethical approval, University of Tabuk.
- How to present a poster at a conference, Faculty of Pharmacy, University of Tabuk
- Formulation and characterization of doxycycline-loaded polymeric nanoparticles for testing antitumor/antiangiogenetic action in experimental colon cancer in mice, Deanship of Scientific Research, University of Tabuk.
- Research collaboration, Faculty of Pharmacy, University of Tabuk
- Experimental Biology, Poster (2017), Role of mammalian target of rapamycin in ischemia-reperfusion induced kidney injury. San Diego, USA
- Rosuvastatin (presentation), Northwest Armed Forces Hospital (NWAFFH).
- Pioglitazone (presentation), NWAFFH.
- Wilson disease (case discussion), NWAFFH.
- Linezolid induced leucopenia (case report), NWAFFH
- Nursing orientation lecture for pharmacy services, NWAFFH
- SLE (case discussion), KCUH.
- Hypertensive crisis (case discussion), KCUH.
- Infective endocarditis (case discussion), KCUH
- Domperidone (presentation), KSU.
- Anemia (presentation), KSU.
- Hypertension (case discussion), KSU.
- Pneumonia (case discussion), KSU.

## SYMPOSIA and WORKSHOPS

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- December 2025: Analytical Techniques: From General Approaches to Target-Specific Applications
- December 2025: Homocysteine and the Aging Retina: Molecular Insights and Clinical Implications
- November 2025: National biotechnology forum in Tabuk
- 7-9 January 2025: Dubai International Pharmaceuticals and Technologies Conference and Exhibition.
- 9-11 January 2024: Dubai International Pharmaceuticals and Technologies Conference and Exhibition.
- 22-24 January 2024: The Annual Meeting of Saudi pharmaceutical society
- 10-12 January 2023: Dubai International Pharmaceuticals and Technologies Conference and Exhibition.
- 3-5 January 2023: The Annual Meeting of Saudi pharmaceutical society
- 22-24 February 2022: Dubai International Pharmaceuticals and Technologies Conference and Exhibition.
- 25-27 January 2022: The Annual Meeting of Saudi pharmaceutical society
- September 2021: The 6 Critical Practices for Leading a Team™" program.
- March 2021- Academic Leadership: Opportunities and Challenges
- March 2021-Motivation mechanisms for outstanding students, methods and solutions to reduce students' faltering
- March 2021-The internal audit for quality work at the level of programs and colleges
- March 2021-How to peer review: guides from the publishers
- March 2021-Appling the Power of Transformational Outcome-Based Education to learning outcomes
- January 2021 - Measuring learning outcomes for the academic program and courses
- November 2020 - Program and course specification
- November 2020 - Active leadership elements
- November 2020 - Predatory journals: Its effect on pharmacy research and how to avoid
- November 2020 - The first conference of heads and supervisors of academic departments
- October 2020 - Analyzing Data and Using Its Outcome for Quality Improvement Assurance.
- October 2020 - Skills of Writing Exams and Student Assessments
- October 2020 - Active Communication Skills
- October 2020 - Scientific research skills
- October 2020 - The responsibilities of faculty for their community
- October 2020 - Designing students' learning through learning outcomes -Part one
- October 2020 - Designing students' learning through learning outcomes -Part two

- October 2020 - The available learning resources at the university
- October 2020 - The regular report for programs, curriculum, and field experiences
- October 2020 - Achieving Quality and Accreditation Standards at The Program Level
- October 2020 - Evaluating the teaching performance of faculty members and its impact on the quality of education
- 5 October 2020. Analyzing Data and Using Its Outcome for Quality Improvement Assurance. University of Tabuk
- 4 October 2020. Skills of Writing Exams and Student Assessments. University of Tabuk
- 6 October 2020. Active Communication Skills. University of Tabuk
- 13 October 2020. The responsibilities of faculty for their community University of Tabuk
- 27 October 2020. Teaching strategies and their consistency with learning outcome. University of Tabuk
- September 2020 Students Rights and Responsibilities
- September 2020 - The Role of Academic Leaders in Achieving National Accreditation
- September 2020 - The Second Strategic Plan for the University of Tabuk
- September 2020 - Faculty Members Rights and Responsibilities
- September 2020 - National Transformation Strategies and Saudi Vision 2030
- 25-27 February 2020: Dubai International Pharmaceuticals and Technologies Conference and Exhibition.
- 12-13 February 2020: 4<sup>th</sup> International Cardiovascular Pharmacotherapy Conference, Riyadh
- 4 December 2019: Construction of multiple choice questions in university courses. University of Tabuk
- 1 September 2019: New faculty preparation program , University of Tabuk
- 19 April 2018: Overall Faculty Assessment Criteria, Al Ghad International Colleges for Applied Medical Sciences, Riyadh
- 24 April 2015: Autophagy symposium, Houston, USA
- April 2014: Experimental Biology Meeting, San Diego, USA
- 9 October 2005: Parenteral and Enteral Nutrition Study Day, NWAFFH.
- 13-14 December 2005: Pediatric Review & Medical Genetics Course.
- 17-21 December 2005: The 9<sup>th</sup> International Pharmaceutical sciences Conference & exhibition [Future of Medications in the 21<sup>st</sup> Century]

## COMMITTEE MEMBERSHIPS

- Head of Research Ethical Committee, University of Tabuk (UT)

- Member of Saudi Scientific Society of Pharmaceutical Industries.
- Member of Programs and Plans Unit, Faculty of Pharmacy
- Member of Al-Ghad College Advisory Committee.
- Member of Scientific Integrity Committee, UT
- Member of the Permanent Committee for Scholarships and Training, UT
- Head of Scientific Research Unit, Faculty of Pharmacy, UT
- Head of Graduate Studies Unit, Faculty of Pharmacy, UT
- Member of self-study Report Committee, Faculty of Pharmacy, UT
- Member of Pharmacy Training Unit, Faculty of Pharmacy, UT

\*At Al Ghad International Colleges for Applied Medical Sciences

- Head of the Academic advising committee.
- Vice-head of the Faculty members development committee
- Vice-head of the Self-study committee.
- Vice-head of the Student advisory council
- Vice-head of the Clinical training committee
- Vice-head of the Academic quality committee

## LABORATORY SKILLS

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- General animal handling, anesthesia and surgical procedures.
- Preparation and administration of intravenous and inhalational anesthesia for rodent.
- Carotid artery cannulation in rats for direct BP measurement.
- Urinary bladder cannulation for urine collection.
- Probe insertion in life animals for renal blood flow measurement.
- Gel electrophoresis.
- ELISA assays.

## PUBLICATIONS

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Retinoprotective effect of donepezil in diabetic mice involves mitigation of excitotoxicity and activation of PI3K/mTOR/BCI 2 pathway. Zaitone SA, **Alshaman R**, Alattar A, Elsherbiny NM, Abogresha NM, El-Kherbetawy MK, Elaskary AA, Hashish AA, Rashed LA, Ahmed. *Life Sci.* Dec 2020

Rahman ZU, Al Kury LT, Alattar A, Tan Z, Alshaman R, Malik I, Badshah H, Uddin Z, Khan Khalil AA, Muhammad N, Khan S, Ali A, Shah FA, Li JB, Li S.

Carveol a Naturally Derived Potent and Emerging Nrf2 Activator Protects Against Acetaminophen-Induced Hepatotoxicity. *Front Pharmacol.* Jan 2021

Ghanem HA, Nasr AM, Hassan TH, Elkhoudary MM, **Alshaman R**, Alattar A, Gad S. Comprehensive Study of Atorvastatin Nanostructured Lipid Carriers through Multivariate Conceptualization and Optimization. *Pharmaceutics.* Jan 2021

Hassan HM, El-Kannishy SMH, Alattar A, **Alshaman R**, Hamdan AM, Al-Gayyar MMH. Therapeutic effects of blocking  $\beta$ -catenin against hepatocellular carcinoma-induced activation of inflammation, fibrosis and tumor invasion. *Biomed Pharmacother.* Feb 2021

Naeem K, Tariq Al Kury L, Nasar F, Alattar A, **Alshaman R**, Shah FA, Khan AU, Li S. Natural Dietary Supplement, Carvacrol, Alleviates LPS-Induced Oxidative Stress, Neurodegeneration, and Depressive-Like Behaviors via the Nrf2/HO-1 Pathway. *J Inflamm Res.* Apr 2021

El-Baz AM, Yahya G, Mansour B, El-Sokkary MMA, **Alshaman R**, Alattar A, El-Ganiny AM. The Link between Occurrence of Class I Integron and Acquired Aminoglycoside Resistance in Clinical MRSA Isolates. *Antibiotics (Basel).* Apr 2021

Saber S, Yahya G, Gobba NA, Sharaf H, **Alshaman R**, Alattar A, Amin NA, El-Shedody R, Aboutouk FH, Abd El-Galeel Y, El-Hefnawy A, Shabaka D, Khalifa A, Saleh R, Osama D, El-Zoghby G, Youssef ME. The Supportive Role of NSC328382, a P2X7R Antagonist, in Enhancing the Inhibitory Effect of CRID3 on NLRP3 Inflammasome Activation in Rats with Dextran Sodium Sulfate-Induced Colitis. *J Inflamm Res.* 2021 Jul 21;14:3443-3463.

**Alshaman R**, Alattar A, El-Sayed RM, Gardouh AR, Elshaer RE, Elkazaz AY, Eladl MA, El-Sherbiny M, Farag NE, Hamdan AM, Zaitone SA. Formulation and Characterization of Doxycycline-Loaded Polymeric Nanoparticles for Testing Antitumor/Antiangiogenic Action in Experimental Colon Cancer in Mice. *Nanomaterials (Basel).* 2022 Mar 3;12(5):857.

Hao L, Alkry LT, Alattar A, Faheem M, **Alshaman R**, Shah FA, Li S. Ibrutinib attenuated DSS-induced ulcerative colitis, oxidative stress, and the inflammatory

cascade by modulating the PI3K/Akt and JNK/NF- $\kappa$ B pathways. *Arch Med Sci.* 2022 Apr 20;18(3):805-815

Riaz M, Al Kury LT, Atzaz N, Alattar A, **Alshaman R**, Shah FA, Li S. Carvacrol Alleviates Hyperuricemia-Induced Oxidative Stress and Inflammation by Modulating the NLRP3/NF- $\kappa$ B Pathway. *Drug Des Devel Ther.* 2022 Apr 22;16:1159-1170.

Aljohani AA, Alqarni YS, Alrashidi MN, Aljuhani MH, Shehata SA, El-Kherbetawy MK, Prabahar K, **Alshaman R**, Alattar A, Helaly AMN, Ateyya H, Ismail EA, Zaitone SA. The Anti-Rheumatic Drug, Leflunomide, Induces Nephrotoxicity in Mice via Upregulation of TGF $\beta$ -Mediated p53/Smad2/3 Signaling. *Toxics.* 2022 May

Zaky MF, Hammady TM, Gad S, Alattar A, **Alshaman R**, Hegazy A, Zaitone SA, Ghorab MM, Megahed MA. Influence of Surface-Modification via PEGylation or Chitosanization of Lipidic Nanocarriers on In Vivo Pharmacokinetic/Pharmacodynamic Profiles of Apixaban. *Pharmaceutics.* 2023; 15(6):1668. <https://doi.org/10.3390/pharmaceutics15061668>

Heikal EJ, Kaoud RM, Gad S, Mokhtar HI, Alattar A, **Alshaman R**, Zaitone SA, Moustafa YM, Hammady TM. Development of Novel pH-Sensitive Eudragit Coated Beads Containing Curcumin-Mesalamine Combination for Colon-Specific Drug Delivery. *Gels.* 2023 Mar 23;9(4):264. doi: 10.3390/gels9040264. PMID: 37102876; PMCID: PMC10137603.

**Alshaman, R.**, Kolieb, E., El-Sayed, R. M., Gouda, S. G., Alattar, A., Zaitone, S. A., ... & Ali, D. A. (2024). Computational and Experimental Approaches Exploring the Role of Hesperetin in Improving Autophagy in Rat Diabetic Retinopathy. *Biomedicines*, 12(3), 552.

Shah, F. A., Albaqami, F., Alattar, A., **Alshaman, R.**, Zaitone, S. A., Gabr, A. M., ... & Koh, P. O. (2024). Quercetin attenuated ischemic stroke induced neurodegeneration by modulating glutamatergic and synaptic signaling pathways. *Heliyon*, 10(7).

Ali, R., Alattar, A., **Alshaman, R.**, Ghabban, A., Alanazi, S., Al-Brahimi, H., Alatwi, M., Jlawi, A., Albalawi, A., Moutair Awad Alatawi, A., Al balawi, B., Al-Marwani, A., & El-Wekil, M. M. (2024). Sensing the invisible: Ultrasensitive and selective colorimetric detection of E. Coli O157:H7 based on masking the

peroxidase-mimetic activity of aptamer-modified Au/Fe<sub>3</sub>O<sub>4</sub>. *Food Chemistry*, 443, 138564.

Rahman, A. A., Hegazy, A., Elabbasy, L. M., Shoaer, M. Z., Abdel-Aziz, T. M., Abbas, A. S., **Alshaman, R** ... & Zaitone, S. A. (2024). Leflunomide-induced cardiac injury in adult male mice and bioinformatic approach identifying Nrf2/NF- $\kappa$ b signaling interplay. *Toxicology Mechanisms and Methods*, 1-15.

Muhammad, A. J., Al-Baqami, F. F., Alanazi, F. E., Alattar, A., **Alshaman, R.**, Rehman, N. U., ... & Shah, F. A. (2024). The Interplay of Carveol and All-Trans Retinoic Acid (ATRA) in Experimental Parkinson's Disease: Role of Inflammasome-Mediated Pyroptosis and Nrf2. *Neurochemical Research*, 1-13.

Ali R, Elfadil H, Sirag N, **Alshaman R**, Albalawi AS, Albalawi N, Albalawi A, Alharbi S, Al-Anzi A, Alatawi S, Alhuaiti Y, Aldwsari N, El-Wakil MM. Ultrasensitive detection of zineb using a CoMn-MOF/rGO molecularly imprinted electrochemical sensor. *Mikrochim Acta*. 2025 Jul 2;192(8):469. doi: 10.1007/s00604-025-07326-3. PMID: 40601119.

Alatawi Y, Alanazi FE, Alattar A, **Alshaman R**, Ramadan YN, Sayad R, Hetta HF. Therapeutic Impact of Zanubrutinib in Chronic Lymphocytic Leukemia: Evidence from a Systematic Review and Single-Arm Meta-Analysis. *Pharmaceuticals (Basel)*. 2025 Nov 5;18(11):1674. doi: 10.3390/ph18111674. PMID: 41304918; PMCID: PMC12655045.

Hetta HF, Alatawi Y, Alanazi FE, Alattar A, **Alshaman R**, Alshareef H, Alatawi Z, Alatawi MS, Albalawi JH, Alosaimi GA, Sayad R, Nageeb WM. Evaluating the Safety and Efficacy of PD-1 Inhibitors in HIV Patients Diagnosed with Lung Cancer: A Systematic Review. *Pharmaceuticals (Basel)*. 2025 Nov 1;18(11):1654. doi: 10.3390/ph18111654. PMID: 41304899; PMCID: PMC12655231.

Hakem F, Abdelwaly A, **Alshaman R**, Alattar A, Alanazi FE, Zaitone SA, Helal MA. Recent Advances in the Development of Pro-PROTAC for Selective Protein Degradation. *Pharmaceutics*. 2025 Sep 4;17(9):1160. doi: 10.3390/pharmaceutics17091160. PMID: 41012497; PMCID: PMC12473374.

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