Sarah Khaled AlOuda, PhD.

Assistant professor

Department of Clinical Laboratory Sciences

College of Applied Medical Sciences, King Saud University

P.O. Box 10681

Riyadh 11443

Saudi Arabia

Phone: Office: 966 11 8055629; Cell 966 55 544 8585

Fax. 966 11 8054686

Email: salouda@ksu.edu.sa

PERSONAL STATEMENT

With all the development in the field of antiplatelet pharmaceuticals, limitations in the safety and efficacy of developed agents remain a challenging issue. Due to the working nature of such agents, the risk of developing bleeding ranging from mild to severe bleeds is unavoidable. Such side effects have encouraged continuous search for alternative measures to control platelets. My focus is to employ the basic and modern research technologies to better understand the biology of platelet, its role in haemostasis and thrombosis and lastly, unravel new targets in platelets with possible anti-thrombotic potentials. More importantly, through my passion for research I am hoping to contribute toward building focused academic research groups that invest in attracting undergraduate and postgraduate students in which students are provided with basic research skills and scientific writing to participate in present and future research projects.

EDUCATION & TRAINING

- 2005-2006 Bachelor degree, Clinical Laboratories Sciences. College of Applied Medical Sciences, King Saud University, Riyadh. KSA.

- 2013-2014 Master of Sciences in Clinical Laboratory Sciences, haematology,
- College of Applied Medical Sciences, King Saud University, Riyadh. KSA.

- 2019-2020 Doctor of philosophy in biological sciences, platelet biology. School of biological sciences, University of reading, Reading, UK

- 2005-2006 Internship training. King Fahad National Guard Hospital, Riyadh, KSA.

PROFESSIONAL EXPERIENCE

- 2007-2015 Teaching assistant of the following undergraduate courses:
  - CLS 241, Haematology
  - CLS 441, Immunehaematology
  - CLS 442, Clinical practice haematology

  Teaching assistant of the following undergraduate courses:
  - CLS 542, Advanced haematology

  Members of the following departmental committees:
  - Internship and training, quality and academic counselling

- 2020- present Course instructor of the following undergraduate courses:
  - CLS391, Haematology II
  - CLS392, Haemostasis and thrombosis

  Members of the following departmental committees:
  - Courses and scheduling

RESEARCH SKILLS

- Design research study and methodology.
- Grant and proposal writing.
- Analytical thinking and creative problem solving.
- Cell signaling and molecular biology.
- Protein biochemistry, flowcytometry and immunofluorescence imaging.
- Statistical analysis and data presentation.
- Microsoft office.
- Written and verbal communication.
- Team work and collaboration.

RESEARCH PROJECT

My MSc research concerned with the frequency of human platelet alloantigens in Saudi blood donors and detection of anti-human platelet alloantigens antibodies in multiparous pregnant women and multitransfused patients. Two original articles were generated from the project. Similarly, PhD study was in the scope of platelets where we studied the role of the collagen molecular chaperone HSP47 in platelets-collagen interaction. An original article is submitted for publication. Additionally, ongoing projects are currently conducted in the field of thrombosis and haemostasis.

Publications

- Sahli KA, Flora GD, Sasikumar P, Maghrabi AH, Holbrook LM, **AlOuda SK**, Elgheznawy A, Sage T, Stainer AR, Adiyaman R, AboHassan M, Crescente M, Kriek N, Vaiyapuri S, Bye AP, Unsworth AJ, Jones CI, McGuffin LJ, Gibbins JM. Structural, functional, and mechanistic insights uncover the fundamental role of orphan connexin-62 in platelets. Blood. 2021 Feb 11;137(6):830-843. doi: 10.1182/blood.2019004575. PMID: 32822477; PMCID: PMC7885822.

- Flora GD, Sahli KA, Sasikumar P, Holbrook LM, Stainer AR, **AlOuda SK**, Crescente M, Sage T, Unsworth AJ, Gibbins JM. Non-genomic effects of the Pregnane X Receptor negatively regulate platelet functions, thrombosis and haemostasis. Sci Rep. 2019 Nov 20;9(1):17210. doi: 10.1038/s41598-019-53218-x. PMID: 31748641; PMCID: PMC6868193. 2019 Nov 20 Sci Rep

- Sasikumar P, **AlOuda SK**, Kaiser WJ, et al. The chaperone protein HSP47: a platelet collagen binding protein that contributes to thrombosis and hemostasis. J Thromb Haemost. 2018;16(5):946-959. doi:10.1111/jth.13998 2018 J Thromb Haemost

- **AlOuda SK**, Al-Banyan AA, Abdel Gader AG, Bayoumy NM, Al-Gahtani FH. Gene frequency of human platelet alloantigens-1 to -6 and -15 in Saudi blood donors. Transfus Med. 2016;26(3):220-224. doi:10.1111/tme.12297 2016 Transfus Med

- **AlOuda SK**, Al-Banyan AA, Al-Gahtani FH, Abdel-Gader AG, Al-Dakhil LO. Antibodies against human platelet alloantigens and human leucocyte antigen class 1 in Saudi Arabian multiparous women and multi-transfused patients. Saudi Med J. 2015;36(6):665-670. doi:10.15537/smj.2015.6.11153 2015 Saudi Med J

- Submitted manuscript: **Sarah K. AlOuda**, Parvathy Sasikumar, Khaled A. Sahli, Mohammed S. Abohassan, Stephanie M. Jung, Jonathan M. Gibbins. The role of collagen molecular chaperone HSP47 in platelet.

REFERNCES

- Jon Gibbins, Professor of Cell Biology. Institute for Cardiovascular & Metabolic Research, school ofbiological sciences, university of reading, UK. J.m.gibbins@reading.ac.uk.

- Abdel Galil M. Abdel Gader, PhD, FRCP. Department of Basic Medical Science, College of Medicine, King Saud bin Abdulaziz University for Health Sciences, P. O. Box 22490 Riyadh 11426. Cell 966 509469714, Email: abdulgadera@ksau-hs.edu.sa.

- Abdulmajeed A. Al-Banyan, MSc, PhD, Department of Clinical Laboratory Sciences, College of Applied Medical Sciences, King Saud University, Riyadh, Saudi Arabia, Phone: Office: 009669664948383, Email:Aalbanyan1@ksu.edu.sa.