

ASMA S ALONAZI

Biography

ASMA ALONAZI, graduated from King Saud University (KSU) with bachelor's degree in Pharmaceutical Sciences (BSc Pharm.) in 2007. Next, she joined department of Pharmacology and Toxicology in the College of Pharmacy at KSU as teaching assistant. In 2013, she earned master's degree in Pharmacology (MSc), then she promoted to a lecturer in the same department. In 2015, ASMA joined Department of Cell Physiology and Pharmacology at University of Leicester in United Kingdom to pursue her PhD under Dr Jonathon M. Willets supervision. On November 2019, ASMA award Doctor of Philosophy degree in Cell Physiology and Pharmacology (PhD) from University of Leicester in UK. Currently, Dr ALONAZI came back, she working as Assistant Professor in Department of Pharmacology and Toxicology in College of Pharmacy at KSU. Her primary research field is molecular pharmacology of GPCRs and cardiovascular pharmacology.



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Riyadh, Saudi Arabia



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WORK EXPERIENCE

Vice-chaire of Pharmacology and Toxicology Department

Department of Pharmacology and Toxicology, College of Pharmacy,
King Saud University.

06/2020 - Present

Riyadh, Saudi Arabia

Assistant Professor

Department of Pharmacology and Toxicology, College of Pharmacy,
King Saud University.

02/2020 - Present

Riyadh, Saudi Arabia

Lecturer

Department of Pharmacology and Toxicology, College of Pharmacy,
King Saud University.

10/2017 - 02/2020

Riyadh, Saudi Arabia

Teaching Assistant

Department of Pharmacology and Toxicology, College of Pharmacy,
King Saud University.

09/2007 - 10/2017

Riyadh, Saudi Arabia

PhD Researcher

Department of Cell Physiology and Pharmacology, University of
Leicester

09/2015 - 01/2020

Leicester, United Kingdom



RESERACH INTERESTS

Molecular Pharmacology of GPCRs, G protein-coupled receptors kinases (GRKs) and β -arrestins. Including identifying the G protein dependent (classical) and G protein independent (non-classical) signalling pathways. Understanding the molecular basis of disease pathology, developing new molecular diagnostics and identifying new molecular and cellular therapeutics targets.



CURRENT RESERACH PROJECT

Studying the pathophysiological effect of G Protein Coupled Receptor Kinases 2 and 5 in cardiomyopathy: Investigating their therapeutic targeting for cardio protection from myopathy progression. (07/2021 - Present)

Funding Organization: Deputyship for Research & Innovation, Ministry of Education in Saudi Arabia through the project grant no. (IFKSUDR_H150).



EDUCATION

Doctor of Philosophy in Cell Physiology and Pharmacology (PhD)

University of Leicester, United Kingdom, Leicester.

09/2015 - 01/2020

LEICESTER, United Kingdom

Courses

- Thesis [Investigating The Roles That G Protein-Coupled Receptor Kinase 2 Plays in Arterial Smooth Muscle Proliferation]

Master's Degree in Pharmacology (MSc)

King Saud University, Saudi Arabia, Riyadh.

08/2008 - 07/2013

Riyadh, Saudi Arabia

Courses

- Thesis [Investigation of the Inhibitory Effect of Ruboxistaurin on the Activity of smad and GRAP Proteins in Diabetic Nephropathy Rats Model].

Bachelor's Degree in Pharmaceutical Sciences (BSc Pharm.)

King Saud University, Saudi Arabia, Riyadh.

09/2001 - 02/2007

Riyadh, Saudi Arabia

Courses

- College of Pharmacy/ General Pharmaceutical Science.

Training at King Khaled University Hospital (KKUH)

King Khaled University Hospital, Saudi Arabia, Riyadh.

08/2006 - 01/2007

Riyadh, Saudi Arabia

Courses

- Outpatient/Inpatient pharmacy, DI and poison centre, material management and IV preparations.

Training in the research centre at King Faisal Specialist Hospital and Research Centre (KFSH & RC)

King Faisal Specialist Hospital and Research Centre, Saudi Arabia, Riyadh.

09/2012 - 12/2012

Riyadh, Saudi Arabia

Courses

- Cardiovascular Research Program



PUBLICATIONS

Book Chapter

G protein coupled receptors regulation in cardiovascular disease: Role of GRKs

Author(s)

Asma S. Alonazi, Anfal F. Bin Dayel, Tahani K. Alshammari, Nouf M. Alrasheed

Under Process

Book title: Cardiovascular Diseases



ORGANIZATIONS AND COMMITTEES MEMBERSHIPS

Membership in British Pharmacological Society
(09/2016 - Present)

Membership in Cosmetic Products Safety Advisory Committee/ SFDA
(06/2020 - Present)

Member of Department of Pharmacology and Toxicology Council, Pharmacy College/KSU.
(01/2020 - Present)

Member of College of Pharmacy Council, College of Pharmacy/KSU
(06/2020 - Present)

Committee of faculty members, teaching assistants, and lecturers, and their secondment, assignment, and promotions/ Department of Pharmacology and Toxicology.
(09/2020 - Present)

Postgraduate Programs Supervising Committee/ Department of Pharmacology and Toxicology
(09/2020 - Present)

Head of the committee of annual request of the Pharmacology and Toxicology for equipment and chemicals for girl section, Department of Pharmacology and Toxicology. (09/2020 - Present)

Postgraduate Admission committee department admission controls/ Department of Pharmacology and Toxicology. (09/2020 - 09/2021)

Member in the Committee for Scientific Research and Scientific Thesis and to review research proposals/ Department of Pharmacology and Toxicology
(01/2020 - 09/2020)



PUBLICATIONS

Research Article

Examining Anxiety, Sleep Quality, and Physical Activity as Predictors of Depression among University Students from Saudi Arabia during the Second Wave of the COVID-19 Pandemic

Author(s)

Tahani K Alshammari, Aljawharah M Alkhodair, Hanan A Alhebshi, Aleksandra M Rogowska, Awatif B Albaker, Nouf T Al-Damri, Anfal F Bin Dayel, Asma S Alonazi, Nouf M Alrasheed, Musaad A Alshammari

May, 2022

Int J Environ Res Public Health, doi: 10.3390/ijerph19106262.

Book Chapter

Pharmacological Modulation of Toll-Like Receptors in Brain Disorders

Author(s)

Tahani K. Alshammari, Nouf M. Alrasheed, Lina Alhushan, Reema Alhoutah, Anfal F. Bin Dayel, Asma S. Alonazi and Musaad A. Alshammari

July, 2021

Book title: Therapy Approaches in Neurological Disorders

Research Article

G protein-coupled receptor kinase 2 is essential to enable vasoconstrictor-mediated arterial smooth muscle proliferation

Author(s)

Asma Alonazi, Jonathon Willets.

December, 2021

Cellular Signalling, doi.org/10.1016/j.cellsig.2021.110152

Review Article

GPCRs: The most promiscuous druggable receptor of the mankind

Author(s)

Khaled Alhosaini; Asim Azhar; Asma Alonazi; F Al-Zoghaibi

June, 2021

Saudi Pharmaceutical Journal, doi.org/10.1016/J.JSPS.2021.04.015.

Research Paper

A novel form of glycolytic metabolism-dependent cardioprotection revealed by PKC α and β inhibition.

Author(s)

Sean Brennan, Shen Chen, Samir Makwana, Christopher A. Martin, Mark W. Sims, Asma S.A. Alonazi, Jonathan M Willets, Iain B. Squire, Richard D. Rainbow.

June 2019

Journal of Physiology, DOI: 10.1113/JP278332.

Research Paper

Ruboxistaurin attenuates diabetic nephropathy via modulation of TGF- β ₁/Smad and GRAP pathways. Research paper published in

Author(s)

Al-Onazi AS, Al-Rasheed NM, Attia HA, Al-Rasheed NM, Ahmed RM, Al-Amin MA, Poizat C.

February 2016

The Journal of Pharmacy and Pharmacology, DOI: 10.1111/jphp.12504. •



ARBITRATION FOR THESIS AND RESEARCH PROPOSALS

Member in Thesis

Examination Committee for the Master's Thesis for the student Turki F. Alharbi entitled "Role of Dapagliflozin in the Attenuation of LPS-induced Hemodynamic Disturbances and Cardiotoxicity during Euglycemic and Hyperglycemic Conditions"
Department of Pharmacology and Toxicology/ Pharmacy College, KSU.

01/2022

Member in Thesis

Examination Committee for the Master's Thesis for the student Adel M. Alghamdi entitled "Venetoclax Induces Cardiotoxicity Through Modulation of Oxidative Stress Mediated Cardiac Inflammation and Apoptosis"
Department of Pharmacology and Toxicology/ Pharmacy College, KSU.

05/2022



PUBLICATIONS

Research Paper

Aqueous Date Flesh or Pits Extract Attenuates Liver Fibrosis via Suppression of Hepatic Stellate Cell Activation and Reduction of Inflammatory Cytokines, Transforming Growth Factor- β 1 and Angiogenic Markers in Carbon Tetrachloride-Intoxicated Rats.

Author(s)

Al-Rasheed NM, Attia HA, Mohamad RA, Al-Rasheed NM, Al-Amin MA, Al-Onazi AS.

Aprile 2015

Evid Based Complement Alternat Med, DOI: 10.1155/2015/247357.

Abstract

Potential role for G protein coupled receptor kinase 2 in vasoconstrictors-stimulated vascular smooth muscle cell proliferation via MAPK/ERK signalling pathway.

Author(s)

Asma Alonazi, Jonathon Willets.

Date of Publication

Journal of Vascular Research, DOI: 10.1159/000499516.

Poster presentation in ESM-EVBO 2019 [Maastricht, Netherland 15-18 April 2019].

Abstract

Modulation in G protein coupled receptor kinase 2 expression/catalytic activity differentially change vasoconstrictor-induced ASMC proliferation.

Author(s)

Asma Alonazi, Jonathon Willets.

Date of Publication

pA2 Online: E-Journal of British Pharmacological Society.

Poster presentation in BPS meeting Pharmacology 2017 [London, UK 11-13 December 2017].

Abstract

G Protein coupled receptor kinase 2 is essential for vasoconstrictor-stimulated arterial smooth muscle cell proliferation.

Author(s)

Asma Alonazi, Jonathon Willets.

Date of Publication

Journal of Vascular Research, DOI: 10.1159/000480116.

Poster presentation in International Symposium on Resistance Arteries [Manchester, UK 3-6 September 2017].

Abstract

Investigation of the Inhibitory Effect of Ruboxistaurin on the Activity of Smad and GRAP Proteins in Diabetic Induced Nephropathy Rat Model

Author(s)

Al-Onazi AS, Al-Rasheed NM, Attia HA, Al-Rasheed NM, Ahmed RM, Al-Amin MA, Poizat C.

Date of Publication

DIABETIC Medicine, DOI: 10.1111/dme.12091

Poster presentation in the Diabetes UK Professional Conference 2013, Manchester Central Convention Complex, Manchester, UK, 13-15 March 2013



ACADEMIC SUPERVISION OF UNDERGRADUATE / POSTGRADUATE STUDENTS

Main Supervisor, Master Degree Student Noura H. Al-Musallam, Department of Pharmacology and Toxicology, King Saud University. The thesis title "Possible Involvement of P2X7 Receptor in Myocardial Infarction Induced Fibrotic Remodelling"

Main Supervisor for Graduation Research Project, Pharm D. Students Danha A. Albuaiajan and Alhanouf S. Bin Osfor, Pharmacy College, King Saud University. The project title "Cardioprotective Effect GRK2 Inhibitor Mediated By NF- κ B/Pro-Hypertrophic Genes in Animal Model of Cardiac Hypertrophy."

Main Supervisor for Graduation Research Project, Pharm D. Students Reema Alfehaid and Sara Alqahtani, Pharmacy College, King Saud University. The project title "The possible effect of Sitagliptin on TGF- β /Smad/ILK pathways in animal model of diabetic nephropathy"

Main Supervisor for Graduation Research Project, Pharm D. Student Sara Alhaidar, Pharmacy College, King Saud University. The project title "Role of G Protein Coupled Receptor Kinases in Animal Model of Cardiac Hypertrophy"



PRESENTATION

Impact Of G Protein Coupled Receptor Kinase 2 on Cell Proliferation (2017), University of Leicester, UK.

Potential Role of G Protein coupled receptor kinase 2 in arterial smooth muscle cell proliferation (2016). University of Leicester, UK.



CONFERENCES & COURSES

11th College of Pharmacy Research Day (COPRD) (05/2022)

College of Pharmacy at King Saud University

The Annual Meeting of SPS: SIPHA2022 (01/2022)

Saudi International Pharmaceutical Sciences Meeting and Workshops

Translating Ideas into Therapies (06/2021 - 07/2021)

ELRIG UK Co-hosted with the British Pharmacological Society

10th College of Pharmacy Virtual Research Day (COPRD) (03/2021 - 03/2021)

College of Pharmacy at King Saud University

The 9th GDR3545-GPCR international meeting. (11/2020 - 11/2020)

Institut Cochin, Paris

ESM-EVBO 2019 (Maastricht, Netherland)

Meeting of the European Society for Microcirculation (ESM) and the European Vascular Biology Organization (EVBO)

- 15-18 April /2019

7th Focused Meeting on Cell Signalling (Nottingham, UK)

Conference/Issuer of the certificate

- 16-17 April /2018

Pharmacology 2017 (Queen Elizabeth II Conference Centre, London, UK)

Meeting of British Pharmacological Society

- 11 - 13 December 2017

International Symposium on Resistance Arteries (Manchester, UK)

ISRA, Manchester, UK.

- 3-6 September /2017

Pharmacology 2016 (Queen Elizabeth II Conference Centre, London, UK)

Meeting of British Pharmacological Society

- 13 - 15 December /2016

Pharmacological aspects of microvascular cell-cell signalling and CVS disease (Oxford, UK)

Meeting of British Pharmacological Society

- 21-22 September /2016

Workshop (Radiation Safety Training)

Leicester Learning Institute, Leicester, UK.

- Workshop on the main points of the University of Leicester Radiation Protection Rules [20 January 2016].

Workshop (Chemical Hazards and COSHH)

Leicester Learning Institute, Leicester, UK.

- (30 October /2015)

The Diabetes UK Professional Conference 2013 (Manchester, UK)

Conference/Issuer of the certificate

- 13-15 March /2013

The Second Scientific Meeting of Shaikh Abdullah BaHamdan Research Chair for Evidence-Based Health Care and Knowledge Translation in Collaboration with The 5th GCC Evidence Based Health Care (EBHC) Workshop

King Khaled University Hospital, Riyadh, Saudi Arabia.

- (14-18 November/2009).



PRESENTATION

Investigation of the Inhibitory Effect of Ruboxistaurin on the Activity of Smad and GRAP Proteins in Diabetic Induced Nephropathy Rat Model (2013), The Diabetes UK Professional Conference 2013 (Manchester, UK).

The Stories of Withdrawn Drugs (2009), King Saud University/ Pharmacy College.

History of Influenza Pandemic; H1N1 (Swine Flu) (2009), King Saud University/ Pharmacy College.

Safe Handling of Cytotoxic and Hazardous Drugs (2007), King Saud University/ Pharmacy College.

Malignant Primary Hypertension In Pregnancy Treated With Lisinopril (2006), King Saud University/ Pharmacy College.



POSTERS

Potential role for G protein coupled receptor kinase 2 in vasoconstrictor-stimulated vascular smooth muscle cell proliferation via MAPK/ERK signalling pathway.

Poster presentation in ESM-EVBO 2019 [Maastricht, Netherland 15-18 April 2019].

Modulation in G protein coupled receptor kinase 2 expression/catalytic activity differentially change vasoconstrictor-induced ASMC proliferation.

Poster presentation in BPS meeting Pharmacology 2017 [London, UK 11-13 December 2017].

G Protein coupled receptor kinase 2 is essential for vasoconstrictor-stimulated arterial smooth muscle cell proliferation.

Poster presentation in International Symposium on Resistance Arteries [Manchester, UK 3-6 September 2017].



CONFERENCES & COURSES

The 3rd Annual King Fahad Cardiac Centre International Conference (Beating Heart Bypass Surgery Updates & Live Teleconference)

Conference/Issuer of the certificate

- (2-3 May/ 2009).

The 9th International Pharmaceutical Sciences Conference

Riyadh, Saudi Arabia.

- (17-21 December /2005)

Workshop (Security and Safety In Our Lives)

Collage of Pharmacy, King Saud University, Riyadh, Saudi Arabia.

- (6-7 April /2005)



TECHNICAL SKILLS

**Extensive
experience in:**

Preparation and handling of primary cell culture, Live cell calcium imaging, Cell proliferation assay, siRNA knockdown and Immunoblotting using Odyssey Licore imaging system.

**Experience in
computer/statistic
programs
including;**

Microsoft Office: Word, Power point, Excel, Publisher, Graph pad prism; Analysis software: Image J.



POSTERS

Investigation of the Inhibitory Effect of Ruboxistaurin on the Activity of Smad and GRAP Proteins in Diabetic Induced Nephropathy Rat Model

Poster presentation in the Diabetes UK Professional Conference [Manchester, UK, March/2013] and Poster presentation in Graduates Students Annual Scientific Meeting at King Saud University [Riyadh, Saudi Arabia, 2013].

Safe Handling of Spillage of Cytotoxic Drugs

Poster presentation in Collage of Pharmacy at King Saud University [Riyadh, Saudi Arabia, 2007].