Zubair A. Karim, Ph.D.
Assistant Professor, College of Allied Health Sciences

Department of Interdisciplinary Health Sciences
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EDUCATION

Ph.D., Biochemistry, Institute of Medical Sciences, Banaras Hindu University, Varanasi, India July 2004

M.S., Biochemistry, Hamdard University, New Delhi, India May 2001

B.S., Biochemistry, S. K. University, Dumka, India May 1994

CURRENT EMPLOYMENT

July 2021 - Present	Assistant Professor, Department of Interdisciplinary Health Sciences, College of Allied Health Sciences, Augusta University, Augusta, GA 30912
August 2021 - Present	Assistant Professor, Graduate School, Augusta University, Augusta, GA 30912

PROFESSIONAL AND ACADEMIC EXPERIENCE

Research Assistant Professor

October 2016 – June 2021	Research Assistant Professor of Pharmaceutical Sciences, School of Pharmacy, The University of Texas at El Paso, El Paso, TX 79902
Feb 2021 – June 2021	Adjunct Assistant Professor, School of Nursing, Western Technical College, El Paso, TX 79924
June 2013 – October 2016	Research Assistant Professor of Pharmaceutical Sciences, College of Pharmacy, Western University of Health Sciences, Pomona, CA 91766
Research Associate (Jan 2009- May 2013)	Department of Molecular and Cellular Biochemistry, Chandler Medical Center, Lexington, KY
Post-doctoral Scholar (Dec 2004-Dec 2008)	Department of Molecular and Cellular Biochemistry, Chandler Medical Center, Lexington, KY
Senior Research Fellow (June 2003 – July 2004)	Department of Biochemistry, Institute of Medical Sciences, Banaras Hindu University (CSIR, INDIA), Varanasi, India.
Junior Research Fellow	Department of Biochemistry, Institute of Medical Sciences, Banaras Hindu University (CSIR, INDIA), Varanasi, India.

(June 2001 – May 2003)

RESEARCH AREAS

- Platelet signaling pathways
- Platelet SNARE machinery
- Role of IKK in platelets
- Role of proteasome in platelets
- Role of TAK1 in platelets

PUBLICATIONS

Journal Publications (Peer-Reviewed)

1. Ali, H.E.A., Alarabi, A.B., Karim, Z.A., Rodriguez, V., Hernandez, K.R., Lozano, P.A., El-Halawany, M.S., Alshbool, F.Z., Khasawneh, F.T. (2022) Haematologica. 107(1):312-315.
2. Alarabi, A.A., Karim, Z.A., Hinojos, V., Lozano, P.A., Hernandez, K.R., Montes, R.J.E., Ali, H.A., Khasawneh, F.T., Alshbool, F.Z. (2020) The G-protein βγ subunits regulate platelet function. Life Sci. 2020 Sep 21:118481.
3. Ramirez, J.E.M., Karim, Z.A., Alarabi, A.B., Hernandez, K.R., Taleb, Z.B., Rivera, J.O., Khasawneh, F.T., Alshbool, F.Z. (2020) The JUUL E-Cigarette Elevates the Risk of Thrombosis and Potentiates Platelet Activation. J Cardiovasc Pharmacol Ther. Jul 21:1074248420941681.
4. Alarabi, A.B., Karim, Z.A., Ramirez, J.E.M., Hernandez, K.R., Lozano, P.A., Rivera, J.O. Alshbool, F.Z., and Khasawneh, F.T. (2020) Short-Term Exposure to Waterpipe/Hookah Smoke Triggers a Hyperactive Platelet Activation State and Increases the Risk of Thrombogenesis. Arterioscler Thromb Vasc Biol. Feb;40(2):335-34.
5. Qasim, H., Alarabi, A.B., Alzoubi, K.H., Karim, Z.A., Alshbool, F.Z., and Khasawneh, F.T. (2019) The Effects of Hookah/Waterpipe Smoking on General Health and the Cardiovascular System. Environmental Health and Preventive Medicine. Sep 14;24(1):58.
6. Paez Espinosa, E.V., Lin, O.A., Karim, Z.A., Alshbool, F.Z., and Khasawneh, F.T. (2019) Mouse transient receptor potential channel type 6 selectively regulates agonist-induced platelet function. Biochem Biophys Rep. Aug 31;20:100685
7. Qasim. H., Karim, Z.A., Hernandez, K.R., Lozano, D., Khasawneh, F.T., and Alshbool FZ. (2019) Arhgef1 Plays a Vital Role in Platelet Function and Thrombogenesis. J Am Heart Assoc. 2019 May 7;8(9): e011712.
8. Hernandez, K.R., Karim, Z.A., Qasim, H., Druey, K.M., Alshbool, F.Z., and Khasawneh, F.T. (2019) Regulator of G-Protein Signaling 16 Is a Negative Modulator of Platelet Function and Thrombosis. J Am Heart Assoc. Mar 5;8(5): e011273
9. Zhu, Y., Romero, E., Ren, X., Karim, Z.A., Alshbool, F.Z., Khasawneh, F.T., Du, C., Liu, B.G.C., Zhong, D., Zhou, J., and Sanca, A., (2018) Clopidogrel as a Donor Probe and Thioenol Derivatives as Flexible Promoieties for Enabling H2S Biomedicine. Nature Communication 2018 Sep 27;9(1):3952.
10. Qasim, H., Karim, Z.A., Silva-Espinoza, J.C., Khasawneh, F.T., Rivera, J.O., Ellis, C.C., Bauer, S.L., Almeida, I.C., and Alshbool, F.Z. (2018) Short-Term E-Cigarette Exposure Increases the Risk of Thrombogenesis and Enhances Platelet Function in Mice. J Am Heart Assoc, 2018 Jul 18;7(15). pii: e009264.
11. Karim, Z.A*., Hensch, N.R., Qasim, H., and Khasawneh, F.T. (2018) Role of I□B kinase □ in regulating the remodeling of CARMA1-Bcl10-MALT1 Complex. Biochem Biophys Res Commun. 500(2): 268-274 (*corresponding author)
12. Alshbool, F.Z., Karim, Z.A., Espinosa, E.V., Lin, O.A., and Khasawneh, F.T., (2018) Investigation of a Thromboxane A2 Receptor-Based Vaccine For Managing Thrombogenesis, J Am Heart Assoc. Jul 18;7(15). pii: e009264.

13. Qasim, H*., Karim, Z.A*., Silva-Espinoza, J.C., Khasawneh, F.T., Rivera, J., Ellis, C., Bauer, S., Almeida, I., and Alshbool, F.Z. Short-term E-cigarette exposure increases the risk of thrombogenesis and enhances platelet function in mice. J Am Heart Assoc. Jul 18;7(15). pii: e009264 (*equal contribution)
14. Hensch, N.R., Karim, Z.A., Pineda, J., Mercado, N., Alshbool, F.Z., and Khasawneh, F.T. (2017) P_2Y_{12} antibody inhibits platelet activity and protects against thrombogenesis. Biochem Biophys Res Commun. 493(2):1069-1074.
15. Qasim, H., Karim, Z.A., Rivera, J.O., Khasawneh, F.T., and Alshbool, F.Z. (2017) Impact of Electronic Cigarettes on the Cardiovascular System. J Am Heart Assoc. 6(9). pii: e006353
16. Hensch*, N.R., Karim. Z.A*., Druey, K.M., Tansey, M.G., and Khasawneh, F.T. (2016) RGS10 negatively regulates platelet activation and thrombogenesis. PLoS One 2016 Nov 9;11(11):e0165984. (*equal contribution)
17. Dhall, S*., Karim, Z.A*., Khasawneh, F.T., and Martins-Green, M., (2016) Platelet Hyperactivity in TNFSF14/LIGHT Knockout Mouse Model of Impaired Healing. Adv Wound Care (New Rochelle). Oct 1;5(10):421-431. (*equal contribution)
18. Karim, Z.A., Alshbool, F.Z., Vemana, H.P., Druey, K.M., and Khasawneh, F.T. (2016) CXCL12 Regulates Platelet Activation via The Regulator of G-protein Signaling 16. BBA – Molecular Cell Research 1863: 314-21.
19. Dhall, S., Wijesinghe, D.S., Karim, Z.A., Castro, A., Vemana, H., Khasawneh, F.T., Chalfant, C.E., and Martins-Green, M. (2015) Arachidonic acid-derived signaling lipids and functions in impaired healing. Wound Repair and Regeneration 23: 644-56.
20. Alshbool, F.Z., Karim, Z.A., Vemana, H.P., Conlon, C., Lin, O.A., Khasawneh, F.T. (2015) The regulator of G-protein signaling 18 regulates platelet aggregation, hemostasis and thrombosis. Biochem Biophys Res Commun. 462: 378-82.
21. Vemana, H*., Karim, Z.A*., Conlon, C., and Khasawneh, F.T., (2015) A Critical role for the Transient Receptor Potential Channel Type 6 in Human Platelet Activation. Plos One 10: e0125764. (*equal contribution)
22. Karim ZA, Alshbool FZ, Vemana HP, Adhami N, Dhall S, Espinosa EV, Martins-Green M, Khasawneh FT. (2015) Third-hand Smoke: Impact on Hemostasis and Thrombogenesis. J Cardiovasc Pharmacol. 66:177-82.
23. Karim, Z.A*., Vemana, H., and Khasawneh, F.T. (2015) MALT1 Ubiquitination Controls SNARE Complex Formation Upon Platelet Activation. Plos One 10: e0119363. (*corresponding author)
24. Karim, Z.A., Vemana, H., Alshbool, F.Z., Lin, O.A., Alshehri, A.M., Javaherizadeh, P., Espinosa, E.V.P., Khasawneh, F.T. (2015) Characterization of a novel function-blocking antibody targeted against the platelet P2Y1 receptor. Arterioscler Thromb Vasc Biol. 35: 637-44.
25. Lin, O.A., Karim, Z.A., Vemana, H., Espinosa, E.V.P., and Khasawneh, F.T., (2014) The Antidepressant 5-HT2A Receptor Antagonists Pizotifen and Cyproheptadine Inhibit Serotonin-Enhanced Platelet Function. PLOS ONE 9: e87026.
26. Karim, Z.A., Zhang J., Banerjee M., Al Hawas R, Chicka M.C., Roche, P.A., and Whiteheart, S.W. (2013) IκB kinase (IKK) phosphorylation of SNAP-23 controls platelet secretion. Blood. 121:4567-74
27. Ye, S., Karim, Z.A., Al Hawas, R., Pessin, J.E., Filipovich, A.H., and Whiteheart, S.W. (2012) Syntaxin-11, but not syntaxin-2 or syntaxin-4, is required for platelet secretion. Blood. 120: 2484-92.
28. Al Hawas, R., Ren, Q., Ye, S., Karim, Z.A., Filipovich, A.H., and Whiteheart, S.W. (2012) Munc18b/STXBP2 is required for platelet secretion. Blood. 120: 2493-500.
29. Choi, W., Karim, Z.A., Whiteheart, S.W. (2010) A comparison of protein expression in platelets from six species that differ in their open canalicular system. Platelets: 1-9
30. Konopatskaya, O., Gilio, K., Harper, M.T., Zhao, Y., Cosemans, J.M.E.M., Karim, Z.A., Whiteheart, S.W., Molkentin, J.D., Verkade, P., Watson, S.P., Heemskerk, J.W.M., and Poole, A.W. (2009) PKC□ regulates platelet granule secretion and thrombus formation. J Clin. Invest. 119: 399-407

31. Karim, Z.A., Choi, W., and Whiteheart, S.W. (2008) Primary platelet signaling cascades and integrin-mediated signaling control ADP-ribosylation factor6-GTP levels during platelet activation and aggregation J. Biol. Chem. 283:11995-12003
32. Ren, Q., Barber, H.K., Crawford, G.L., Karim, Z.A., Zhao, C., Choi, W., Wang, C.C., Hong, W., Whiteheart. S.W. (2007) Endobrevin/VAMP-8 is the primary v-SNARE for the platelet release reaction. Mol Biol Cell. 18: 24-33.
33. Choi, W., Karim, Z.A., and Whiteheart S.W. (2006) Arf6 plays an early role in platelet activation by collagen and convulxin. Blood 107: 3145-3152
34. Wadhawan, V., Karim, Z.A., Mukhopadhyay, S., Gupta, R., Dikshit, M., and Dash, D., (2004) Platelet aging under In Vitro condition is associated with calcium dependent apoptosis-like lesions and novel reorganization in platelet cytoskeleton. Arch. Biochem. Biophys. 422: 183-190.
35. Karim, Z.A., Mukhopadhyay, S., Ramars, A.S.S., and Dash, D., (2004) Sustained stimulation of platelet thrombin receptor is associated with tyrosine dephosphorylation of a novel p67 peptide in a manner regulated by extracellular calcium. Biochim. Biophy. Acta 1693: 147-157.
36. Chakrabarti, P., Karim, Z.A., Gupta, R., Wadhawan, R., Mukhopadhyay, S., and Dash, D. (2004) Biochemical characterization of Glanzmann's thrombasthenia, a rare genetic disorder affecting platelet function. Ind. J. Med. Biochem. 8: 56-60.
37. Srinivasan, A., Mukhopadhyay, S., Karim, Z.A., Gupta, R., Gupta, A., Wadhawan, V., Shukla, J., Singh, V.P., and Dash, D. (2002) Factor VIII gene polymorphisms in North Indian population: A consensus algorithm for carrier analysis of hemophilia A. Clin. Chim. Acta, 325:177-181.

Manuscript (submitted)

1. Karim, Z.A., Garcia, S.E., Alshbool, F.Z., Tiruppathi, C., Roche, P.A., and Khasawneh, F.T. (2020) Role of Transforming Growth Factor-β (TGF-β)-Activated Kinase 1 (TAK1) in CD40-Mediated Effects in Platelet Activation, Hemostasis and Thrombosis (Under review)

Published Abstracts (Peer-Reviewed)

1. Alarabi, A.B., Karim, Z.A., Hernandez, K.R., Hinojos, V., Alshbool, F.Z., Druey, K.M., Khasawneh, F.T. (2019) Regulators of G-protein Signaling 16/18 Double-knockout Mice Exhibit Enhanced Platelet Function. Circulation 11 Nov 2019, 140:A11004
2. Karim, Z.A., Hensch, N.R., Qasim, H., Alshbool, F.Z., and Khasawneh, F.T. (2017) A critical role for the IKK□/Lipid rafts axis in regulating platelet exocytosis, via the spatial regulation of SNARE proteins. Blood 130: 3602.
3. Banerjee, M., Karim, Z.A., Zhang, J., and Whiteheart, S.W. (2012) Regulation of I-kappa-B kinase (IKK) pathway by CARMA 1•Bcl-10•MALT-1 (CBM) complex promotes SNARE complex formation and secretion in platelets. The FASEB Journal. 26: 986.1
4. Srinivasan, A., Mukhopadhayay, S., Gupta, A., Karim, Z.A., Dash, D., Madhukar Rai, and V.P.Singh. (2001) Factor VIII gene polymorphisms and carrier analysis in North Indian Hemophilic Families using Intragenic and Extragenic Markers. BLOOD 98: 84b.

Book Chapter

Karim, Z.A*. and Khasawneh, F.T. (2017) Platelet Functions and Disorders. Emerging Applications, Perspectives, and Discoveries in Cardiovascular Diseases (*Corresponding Author)

Editorials

1. Khasawneh, F.T., and Karim, Z.A*. (2014) Lipid Raft and Platelet SNARE Machinery. J Glycomics Lipidomics 4: e119. (*corresponding author)

Patent

Co-Inventor:
TITLE: THROMBOXANE RECEPTOR-BASED VACCINE FOR MANAGING THROMBOGENESIS
Publication number: US-2019-0358308-A1; Publication Date: 11/28/2019

Abstracts and Posters

1. Bethel, M., Patel, R., Mareddy, C., Karim, Z.A., Freedman, A, Arora, V. (2021) Prognostic Value of Pulmonary Embolism Response Team (PERT) Activation Site and Heart Failure History on Outcomes of Patients with Acute Pulmonary Embolism. PERT Consortium, Nashua, NH.
2. Alarabi, A.B., Karim, Z.A., Hernandez, K.R., Hinojos, V., Alshbool, F.Z., Druey, K.M., Khasawneh, F.T. (2020) The G protein and β/γ Subunits Regulate Platelet Function. Experimental Biology Annual Meeting. San Diego, CA, 4-7 April 2020
3. Alarabi, A.B., Karim, Z.A., Hernandez, K.R., Hinojos, V., Alshbool, F.Z., Druey, K.M., Khasawneh, F.T. (2019) Regulators of G-protein Signaling 16/18 Double-knockout Mice Exhibit Enhanced Platelet Function. American Heart Association, Philadelphia, PA, 16-18 Nov 2019
4. Karim Z.A., Khasawneh, F.T., and Alshbool F.Z., "Investigation of Novel Inhibitor for the Serotonin $5HT_{2A}$ Receptor", Experimental Biology Annual Meeting, Orlando, FL, April 8, 2019.
5. Alshbool F.Z., Karim Z.A., Espinosa E.V.P., Lin O.A., and Khasawneh F.T., "Characterization of a Novel Active-Immunization Therapeutic Approach Against Thrombotic Disorders", 17th Biennial Midwest Platelet Conference, Oklahoma City, OK, October 25-26, 2018.
6. Qasim H., Karim Z.A., Hernandez, K.R., Lozano, D., Esquivel, J.E., Khasawneh F.T., and Alshbool F.Z., "Arhgef1 Plays a Vital Role in Platelet Function and Thrombogenesis", 17th Biennial Midwest Platelet Conference, Oklahoma City, OK, October 25-26, 2018.
7. Qasim, H., Karim, Z.A., Silva-Espinoza, J.C., Khasawneh, F.T., Rivera, J.O., Ellis, C.C., Bauer, S.L., Almeida, and Alshbool, F.Z., (2018) Investigation of the Impact of E-cigarettes on Platelet Activation and Thrombogenesis. Hemostasis Gordon Research Conference, Waterville Valley, NH, July 29-August 3.
8. Alshbool F.Z., Karim Z.A., Espinosa E.V.P., Lin O.A., and Khasawneh F.T., (2018) Investigation of a Thromboxane A_2 Receptor-Based Vaccine For Managing Thrombogenesis. Hemostasis Gordon Research Conference, Waterville Valley, NH, July 29-August 3.
9. Hernandez, K.R., Karim Z.A., Qasim, H., Druey K.M., Alshbool, F.Z., and Khasawneh F.T., (2018) Regulator of G-Protein Signaling 16 is a Negative Regulator of Platelet Function. Hemostasis Gordon Research Conference, Waterville Valley, NH, July 29-August 3.
10. Karim, Z.A., Hensch, N.R., Qasim, H., and Khasawneh, F.T. 2016 IKKβ regulates CBM complex formation in platelets. Mid-West Platelet Conference Oct. 11
11. Karim, Z.A., Hensch, N.R., Qasim, H., and Khasawneh, F.T. 2016 RGS10 Negatively Regulates Platelet Activation and thrombogenesis. Gordon Conference July 24
12. Karim, Z.A., Hensch, N.R., and Khasawneh, F.T. 2016 Essential Role for IκB Kinase β in Remodeling CARMA1/Bcl10/MALT1 Complexes in Activated Platelets. Gordon Conference July 24
13. Karim, Z.A., Venkatesan, N., Hensch, N.R., Ting, H.J., Betageri, G., and Khasawneh, F.T. 2016 Characterization of a Liposome-Based Formulation for Clopidogrel. Gordon Conference July 24
14. Karim, Z.A.,Venkatesan, N., Ting, H.J.,Betageri, G., and Khasawneh, F.T. 2016 A Novel Parenteral Formulation for the Antiplatelet Agent Clopidogrel. Experimental Biology April 6
15. Karim, Z.A., Lin, O, and Khasawneh, F.T. 2016 The First Intracellular Loop Regulates the Platelet Thromboxane A2 Receptor-Gq-Dependent Signaling and Function. Experimental Biology April 4
16. Hensch, N.R., Karim, Z.A., and Khasawneh, F.T. 2016 Antibody Targeted against P2Y12 Receptor Reduces Platelet Activity In Vitro and In Vivo. Experimental Biology April 4
17. Karim, Z.A., Haripriya, V., and Khsawneh, F.T. 2014 MALT1 Ubiquitination Controls SNARE Complex Formation Upon Platelet Activation. Midwest platelet conference,

October 14

18. Karim, Z.A., Haripriya, V., and Khsawneh, F.T. 2014 A Critical role for the Transient Receptor Potential Channel Type 6 in Human Platelet Activation. Midwest platelet conference 14
19. Karim, Z.A., Choi, W., and Whiteheart, S.W. 2007. Delineation of the signaling steps required for the decrease of Arf6-GTP during platelet activation. Gill Heart Institute Cardiovascular Research Day, University of Kentucky, USA, October 13
20. Karim, Z.A., Choi, W., and Whiteheart, S.W. 2007. Delineation of the signaling steps required for the decrease of Arf6-GTP during platelet activation. International Postdoctoral presentation, University of Kentucky, USA, Feb 20
21. Karim, Z.A., Roche, P.A., and Whiteheart, S.W. 2006. Regulation of SNAP-23 Phosphorylation in Activated Platelets. International Postdoctoral presentation, University of Kentucky, USA, Feb 22
22. Karim, Z.A., Roche, P.A., and Whiteheart, S.W. 2006. Regulation of SNAP-23 Phosphorylation in Activated Platelets. Blood club meeting, Lexington, USA. August 15
23. Karim, Z.A., Roche, P.A., and Whiteheart, S.W. 2006. Regulation of SNAP-23 Phosphorylation in Activated Platelets. Midwest platelet conference, Chicago, USA. October 5
24. Karim, Z.A., Roche, P.A., and Whiteheart, S.W. 2006. Regulation of SNAP-23 Phosphorylation in Activated Platelets. Gill Heart Institute Cardiovascular Research Day, University of Kentucky, USA, October 13
25. Karim, Z.A., Roche, P.A., and Whiteheart, S.W. 2005. Regulation of SNAP-23 Phosphorylation in Activated Platelets. Gill Heart Institute Cardiovascular Research Day, University of Kentucky, USA, October 13
26. Karim, Z.A., and Dash D. 2003 Sustained stimulation of platelet thrombin receptor is associated with tyrosine dephosphorylation of a novel p67 peptide in a manner regulated by extracellular calcium. Indian Society of Cell Biology, India, September 7
27. Karim, Z.A., and Dash D. 2002 Platelet aging under In Vitro condition is associated with calcium dependent apoptosis-like lesions and novel reorganization in platelet cytoskeleton. Indian Society of Cell Biology, India, September 10

Oral Presentations

1. Karim ZA 2019 The CBM signalosome complex: Stepping into the limelight of platelet function, ASIOA meeting, Orlando, FL, April 9-11
2. Karim ZA 2017 IκB Kinase β is a Key Modulator of Platelet Function, and the Remodeling of CARMA1-Bcl10-MALT1 Complex Formation, ATVB/PVD, Minneapolis, MN, May 3-6
3. Karim ZA 2016 Characterization of Function Blocking Antibodies Targeting Platelets, ASPET (Experimental Biology), San Diego, April 2-6
4. Karim ZA 2014 The Transient Receptor-Potential Channel 6: Modulation of Platelet Function By Regulation of the Thromboxane A2 Receptor-Operated, Mid-West Platelet Conference, University of Illinois, Chicago, Octorber 8-10
5. Karim ZA 2008. The Role of ADP-Ribosylation Factor 6 (Arf6) in Platelet Activation: Signaling Mechanism. Department of Biochemistry, University of Kentucky, July 22-24
6. Karim ZA 2003. Sustained stimulation of platelet thrombin receptor is associated with tyrosine dephosphorylation of a novel p67 peptide in a manner regulated by extracellular calcium. Indian Society of Cell Biology. Pune, India, October 8-10

TEACHING

- Nutrition
  - FDNS-7800-WEB Nutr Independent Study Section — Summer '22
  - CAHS 7100 Pathophysiology Course Facilitator — Fall '21
  - FDNS 7900 Nutritional Genomics — Fall '21
  - FDNS 7500 Obesity: Prevention, Treatment and Management — Fall '22
  - FDNS-7900 Nutritional Genomics — Fall '22
  - CAHS 7100 Pathophysiology Course Facilitator — Fall '22
  - CAHS-6501- Evidence-Based Practice — Fall '22

- Graduate Courses
  - CAHS 9001 Advanced Topoics: Molecular Diagnostics — Summer '22
  - CAHS-8130 A Grant Writing Section — Spring '22
  - PHSC 6302 Advanced Pharmaceutical Sciences I (Course Co-Facilitator) — Fall '15
  - PHSC 6000 Graduate Seminar (Journal Club) (Course Facilitator) — Fall '14
  - PHSC 6901 Research Techniques: Theory and Practice (Instructor) — Spring '14

- PharmD Courses
  - PHAR 6200 Human Metabolism (Course Facilitator) — Fall '20
  - PHAR 6200 Human Metabolism (Course Facilitator) — Fall '19
  - PHAR 6200 Human Metabolism (Course Facilitator) — Fall '18
  - PHAR 6200 Human Metabolism (Course Facilitator) — Fall '17
  - PHAR 6201 Immunology (Course Co-Facilitator) — Maymester '20
  - PHAR 6201 Immunology (Course Co-Facilitator) — Maymester '19
  - PHAR 6201 Immunology (Course Co-Facilitator) — Maymester '18
  - PHAR 6211 Research technique — Summermester '17

Nursing Courses
- NURS 2230 Pharmacology (Course Facilitator) — Spring '21
- BIOL 1360 Nutrition (Course Facilitator) — Spring '21
- NURS 2125 Medical Legal and Ethical Issue (Course Facilitaor) — Spring '21
- NURS 2645 Nursing Research (Course Facilitator) — Spring '21
- BIOL 1275 Clinical Chemistry (Course Facilitator) — Spring '21
- NURS 2745 Dosage Calculation (Course Facilitator) — Spring '21

External Examiner: Ph.D. Thesis of Mr. Prem Prakash on the Topic "Effect of Anti-Thrombotic Agents on Various Experimental Models of Thrombosis and to Elucidate their Mechanism of Action" at Gautam Buddh Technical University, Lucknow (UP) India -226021

Experience: Diagnosis of Hemophilia by PCR, β-thalassemia by western blot. Genetic counseling of the hemophilic family. Good understanding of ORACLE cloud infrastructure (data base).

AWARDS AND HONORS

- 2016: American Heart Association Scientist Development Award
- 2008: Tom Vanaman Award for the best oral presentation in the Department of Molecular and Cellular Biochemistry, Lexington, KY, USA
- 2003: Awarded Senior Research Fellowship from Council of Scientific Industry and Research, India
- 2001: Awarded Junior Research Fellowship from Council of Scientific Industry and Research, India
- 2000: Awarded Graduate Aptitude Test of Engineering, India.

COLLOQUIUMS, COURSES, CERTIFICATES, WEBINARS AND WORKSHOPS

- Certificate in Radioimmunoassay, Immunoradiometric assay and its applications, a training program based on different radioisotope applications e.g. I^{125}, P^{32}, S^{35}, and Co^{60} in biology, care in usage and disposal of radioisotopes, organized by Radiopharmaceuticals division, Bhabha Atomic Research Center, Mumbai, India.
- Certificate in Electron Microscopy for scientific investigators (TEM, SEM, HVSEM, LVSEM, IMMUNO EM, cryo-TEM and 3D image analysis organized by Department of Anatomy, Electron Microscope Facility, All India Institute of Medical Sciences, New Delhi, India.
- Fluorescence Activated Cell Sorter analysis in the Central Drug Research Institute, Lucknow, India
- Academic Boot Camp, organized by Western University of Health Sciences, Pomona, CA, USA

SCIENTIFIC AND PROFESSIONAL SOCIETY MEMBERSHIPS

- Life member of "Biotechnology Society of India"
- Life member of "Indian Society of Cell Biology"
- Life Member of "Society of Biological chemistry, India".
- Life Member of "Association of Medical Biochemists of India".
- Member of "American Society of Cell Biology".
- Member of "American Heart Association".

SCIENTIFIC REVIEW

- Clinica Chimica Acta
- Archives of Biochemistry and Biophysics
- Biochimica Biophysica Acta
- Food and Chemical Toxicology
- Free Radical Biology and Medicine
- Journal of Thrombosis and Thrombolysis
- ACS Nano
- Plos ONE
- Ecological Indicators
- Mitochondrion

SUPERVISING

2022 – Emily Johnson, P h D student, Applied health Sciences, Department of Interdisciplinary Health Sciences, Augusta University, Augusta, GA
2022 – Madeline Blackadar, Master student, MS Nutrition-Dietetic Internship, Department of Interdisciplinary Health Sciences, Augusta University, Augusta, GA
2022 – Ashley Postma, Master student, MS Nutrition-Dietetic Internship, Department of Interdisciplinary Health Sciences, Augusta University, Augusta, GA
2022 – Brittany Price, Master student, MS Nutrition-Dietetic Internship, Department of Interdisciplinary Health Sciences, Augusta University, Augusta, GA
2022 – Rebecca Reese, Master student, MS Nutrition-Dietetic Internship, Department of Interdisciplinary Health Sciences, Augusta University, Augusta, GA
2022 – Adrianne Smith, Master student, MS Nutrition-Dietetic Internship, Department of Interdisciplinary Health Sciences, Augusta University, Augusta, GA
2018 – Jean E Montes Ramirez, Master student, Pharmaceutical Sciences, School of Pharmacy, The University of Texas at El Paso, El Paso, TX.
2018 – Ahmed Alarabi, PhD student, Pharmaceutical Sciences, School of Pharmacy, The University of Texas at El Paso, El Paso, TX.
2016 – Hanan Qasim, Research Assistant, Pharmaceutical Sciences, School of Pharmacy, The University of Texas at El Paso, El Paso, TX.

2015 – Nicole R. Hensch, Master student, Department of Pharmaceutial Sciences, Western University of Health Sciences, Pomona, CA. Project: RGS10 negatively regulates platelet activation and thrombogenesis.
2014 – Hari Priya Vemana, Master student, Department of Pharmaceutial Sciences, Western University of Health Sciences, Pomona, CA. Project: A Critical role for the Transient Receptor Potential Channel Type 6 in Human Platelet Activation.
2013 – Olivia Lin, Master student, Department of Pharmaceutial Sciences, Western University of Health Sciences, Pomona, CA. Project: The anti-depressant 5-HT2A receptor antagonists pizotifen and cyproheptadine inhibit serotonin-enhanced platelet function.
2007 – Brett Begley, Undergraduate student, Department of Biotechnology, University of Kentucky. Project: Tight correlation between cytoskeleton and Arf6 in human platelets.
2007 – Nikki Trinh, Graduate rotation student, IBS Ph.D. program, University of Kentucky . Project: Regulation of Arf6 in human platelets.
2007 – Deepa Jonnalagada, Graduate rotation student, IBS Ph.D. program, University of Kentucky . Project: Human platelets play a role in exocytosis.
2004 – Partha Chakraborty, MD Biochemistry Program, Biochemistry, Banaras Hindu University, India. Project: Biochemical characterization of Glanzmann's thrombasthenia, a rare genetic disorder affecting platelet function.
2003 – Abhinav Gupta, MD Internal Medicine Program, Banaras Hindu University, India. Project: Factor VIII gene polymorphisms in North Indian population: A consensus algorithm for carrier analysis of hemophilia A.
2002- Ramkrishna Gupta, PhD program, Biochemistry, Banaras Hindu University, India. Project: Late signaling in the activated platelets upregulates tyrosine phosphatase SHP1 and impairs platelet adhesive functions: Regulation by calcium and Src kinase.

Committee:
Master Student Admission Committee, Nutition-Dietetic Internship, Interdisciplinary Health Sciences, Augusta University, Augusta, GA
PhD Student Committee (Graduate Faculty Appointment, Augusta University, Augusta, GA)
PhD Student Committee (Adhoc Graduate Faculty Appointment, University of Texas at El Paso, El Paso, TX)
Master student Committee (Adhoc Graduate Faculty Appointment, University of Texas at El Paso, El Paso, TX
Pharm D Admission Committee, School of Pharmacy, University of Texas at El Paso, El Paso, TX Pharm D Curriculum Committee, School of Pharmacy, University of Texas at El Paso, El Paso, TX
Chair Nursing Research Committee, Nursing, Western Technical College, El Paso, TX
Vice-Chair Nursing Admission Committee, Nursing, Western Technical College, El Paso, TX
Nursing Curriculum Committee, Nursing, Western Technical College, El Paso, TX

Event attended:

2021 - White coat ceremony, Master Student, Nutition-Dietetic Internship, Interdisciplinary Health Sciences, Augusta University, Augusta, GA
2021 – Graduation ceremony, Master Student, Nutition-Dietetic Internship, Interdisciplinary Health Sciences, Augusta University, Augusta, GA
2021 - White coat ceremony, PhD Student, Applied Health Sciences, Interdisciplinary Health Sciences, Augusta University, Augusta, GA
2021 - White coat ceremony, Master Student, Nutition-Dietetic Internship, Interdisciplinary Health Sciences, Augusta University, Augusta, GA

MMI Interviewer

2017-2020 I was involved as MMI interviewer for future PharmD students at School of Pharmacy, UTEP.

SUMMER CAMP

Organized summer camp for elementary, middle and high school at the School of Pharmacy, UTEP.

COMPUTER SKILLS

- Operating Systems : Windows NT/98/2000/XP/2003/Vista
- General Applications : Microsoft Office: MS Word, PowerPoint and Excel
- Statistical Analysis : GraphPad Prism Software
- Graphics : Adobe Photoshop CS5

INSTITUTIONAL AND PROFESSIONAL ACTIVITIES/SERVICES

- Meadowthorpe's Science Fair, Meadowthorpe School, Lexington, KY 2006
- Experience in genetic counseling for Hemophilia and Glanzmann's thrombasthenia. During 2001-2004, I did the genetic counseling in the eastern Utter Pradesh, India.

Research Support

Funded:

AHA 16SDG27520037 (Karim, Z.A., PI) 01/01/2016 – 21/31/2019
AHA
Total Cost: $231,000

Relinquished funding:

RHL127592A-01* (Karim, Z.A., PI) 02/12/2016 – 02/11/2020
NIH/NHLBI

Total cost: $438,009

"Regulation of Platelet SNARE Machinery"

The goal of this project is to understand the basic mechanism of platelet SNARE machinery

*: Note: I have relocated to The University of Texas at El Paso (UTEP) as of October 17 2016 and I had requested and Western University of Health Sciences, my former employer, has agreed and already relinquished my R15 grant (RHL127592A). Unfortunately however, the NIH has not allowed me to transfer to UTEP, and hence I was forced to relinquish this funding, and seek alternative funding mechanisms/sources.

Pending:

Grant-maker: National Institute of Health
1207336 (Karim, Z.A., PI) 04/01/2023 – 03/31/2027
NIH/NHLBI

Total cost: $1,540,000

"COVID-19, Platelets and Venous Thromboembolism: Molecular Mechanisms"

The goal of this project is to understand the mechanisms underlying cardiovascular consequences associated with COVID-19 and long COVID