

## CURRICULUM VITAE

### **Firdos Ahmad, MSc, PhD**

Assistant Professor  
College of Medicine  
University of Sharjah  
Sharjah, UAE 27272

**E-mails:** [fahmad@sharjah.ac.ae](mailto:fahmad@sharjah.ac.ae)

### **Research and professional Experience**

---

<b>Assistant Professor</b> College of Medicine, University of Sharjah, Sharjah, UAE	2017-present
<b>Assistant Professor</b> Division of Cardiovascular Medicine, Vanderbilt University, Nashville, TN, USA	2014- 2016
<b>Post-Doctoral Fellows</b> Center for Translational Medicine, Temple University, Philadelphia, PA, USA	2012- 2014
<b>Post-Doctoral Fellow</b> Department of Medicine, Thomas Jefferson University, Philadelphia, PA, USA	2009- 2012
<b>Prof. Gunther Landbeck Fellow</b> University Medical Center Eppendorf, Hamburg, Germany	2007- 2008

### **Education**

---

<b>Ph.D</b> (Clinical Genetics, Hematology)	2009	All India Institute of Medical Sciences, New Delhi, India/ University Medical Center Hamburg Germany
<b>M.Sc</b> (Toxicology)	2004	Hamdard University, New Delhi, India
<b>B.Sc</b> (Biology, Chemistry)	2000	University of Lucknow, Lucknow, India

### **Scientific Memberships**

---

1. American Heart Association (AHA)	2012- 2017
2. International Society for Heart Research (ISHR)	2011- 2017
3. American Society of Hematology (ASH)	2010- 2011
4. Association of Scientists of Indian Origin in America (ASIOA)	2011- 2018
5. International Society on Thrombosis and Haemostasis (ISTH) (Academic member)	2015- Present

### **Honors/Awards**

---

- Pier M. Mannucci Young Investigator award** for the best first author article (*J Thromb Haemost.* 2011;9(10):2077-86) published in 2011 by *JTH Editorial Board*
- U.S. New Investigator Travel Award** from Boston ISTH Committee for high rated abstract at XXIII Congress of ISTH 2011 at Kyoto(July 23-28<sup>th</sup> 2011) Japan (conference not attended)
- Travel Award** from American Society of Hematology (ASH) committee 2010 for high rated abstract at annual meeting (Dec 4-7, 2010) held at Orlando Florida
- Developing World Scientist award** by 22<sup>nd</sup> International Society of Thrombosis and Hemostasis (ISTH) committee, meeting held in Boston (July 11<sup>th</sup>-16<sup>th</sup> 2009)
- Senior Research Fellowship Award** from Indian Council of Medical Research (March 2008-Nov 2009)
- Reach the world Young Scientist award** by 54<sup>th</sup> Annual Meeting of the Scientific and Standardization Committee (SSC) of International Society of Thrombosis and Hemostasis (ISTH July 2<sup>nd</sup>-5<sup>th</sup> 2008) in Vienna, Austria
- Prof. Guenther Landbeck Fellowship** by University Medical Center Eppendorf, Hamburg, Germany (Sept 2007-March 2008)

8. **Travel award** by Department of Science and Technology (DST), HRD Ministry (Oct 2007), New Delhi, India

**Ad-hoc Reviewer in Journals:**

*Circulation, Circulation Research, PLOS One, J. Am Heart Association, Hematology, Molecular and Cellular Biochemistry, DNA and Cell Biology, British Journal of Nutrition, ClinicoEconom & Outcomes Research Journal, Journal of Pharmacy and Pharmacology, Chemical Research in Toxicology, Tumor Biology Journal*

**Publications:**

---

1. **Ahmad F**, Singh AP, Tomar D, Rahmani M, Zhang Q, Woodgett JR, Tilley DG, Lal H, Force T. Cardiomyocyte-GSK-3 $\alpha$  promotes mPTP opening and heart failure in mice with chronic pressure overload. *J Mol Cell Cardiol*. 2019 Mar 27;130:65-75.
2. **Ahmad F**, Kannan M, Obser T, Budde U, Schneppenheim S, Saxena R, Schneppenheim R. Characterization of VWF gene conversions causing von Willebrand disease. *Br J Haematol*. 2019 Mar;184(5):817-825.
3. **Ahmad F**. Vaccination: a novel potential therapeutic approach to limit thrombosis. *J Am Heart Assoc*. 2018 Jun 23;7(13). pii: e009861
4. Gupte M, Tumuluru S, Sui J, Singh AP, Umbarkar P, Parikh S, **Ahmad F**, Zhang Q, Force T, Hind Lal. Cardiomyocyte-Specific Deletion of GSK-3 $\beta$  Leads to Cardiac Dysfunction in a Diet Induced Obesity Model. *Int J Cardiol*. 2018; 259;145–152
5. Gupte M, Lal H **Ahmad F**, Sawyer DB, Hill MF. Chronic Neuregulin-1B Treatment Mitigates the Progression of Post-Myocardial Infarction Heart Failure in the Setting of Type 1 Diabetes Mellitus by Suppressing Myocardial Apoptosis, Fibrosis and Key Oxidant-Producing Enzymes. *J Card Fail*. 2017; S1071-9164(17)31159-4.
6. Zhou J\*, **Ahmad F\***, Lal H, Force T. Response by Zhou et al to Letter Regarding Article, "Loss of Adult Cardiac Myocyte GSK-3 Leads to Mitotic Catastrophe Resulting in Fatal Dilated Cardiomyopathy". Invited commentary *Circ Res*. 2016;119:e29-e30 \*Equal first author
7. Zhou J\*, **Ahmad F\***, Parikh S, Hoffman NE, Rajan S, Verma VK, Song J, Yuan A, Shanmughapriya S, Guo Y, Gao E, Koch W, Woodgett JR, Madesh M, Kishore R, Lal H, Force T. Loss of Adult Cardiac Myocyte GSK-3 Leads to Mitotic Catastrophe Resulting in Fatal Dilated Cardiomyopathy. *Circ Res* 2016; 118;1208-1222. \*Equal first author
8. Lal H, **Ahmad F**, Woodgett JR, Force T. The GSK-3 family as a therapeutic target for myocardial diseases. *Circ Res*. 2015 Jan 2;116(1):138-149. *Invited Review*
9. **Ahmad F**, Lal H, Zhou J, Vagnozzi RJ, Yu JE, Shang X, Woodgett JR, Gao E, Force T. Cardiomyocyte specific deletion of *Gsk3 $\alpha$*  mitigates post-myocardial infarction remodeling, contractile dysfunction, and heart failure. *J Am Col Cardiol* 2014;64(7):696-706
10. Lal H\*, **Ahmad F\***, Zhou J, Yu JE, Vagnozzi RJ, Guo Y, Yu D, Tsai JE, Woodgett JR, Gao E, Force T. Cardiac fibroblast GSK-3 $\beta$  regulates ventricular remodeling and dysfunction in ischemic heart. *Circulation* 2014;130(5)419-30. \*Equal first author (**Faculty of 1000 rating:\*\***)
11. Lal H, **Ahmad F**, Parikh S, Force T. TNNI3K, a novel cardiac-specific kinase, emerging as a molecular target for the treatment of cardiac disease. *Circulation J* 2014 Jun 25;78(7):1514-9. *Invited Review*
12. **Ahmad F\***, Oyen F, Jan R, Budde U, Schneppenheim R, Saxena R. Germline *de novo* mutations and linkage markers versus DNA sequencing for carrier detection in von Willebrand disease. *Haemophilia* 2014 Jul;20(4):e311-7 \*Corresponding author

13. Zhou J, Freeman TA, **Ahmad F**, Shang X, Mangano E, Gao E, Farber J, Wang Y, Ma X, Woodgett J, Vagnozzi RJ, Lal H, Force T. GSK-3 $\alpha$  is a central regulator of age-related pathologies in mice. *J Clin. Invest* 2013;123(4):1821-1832.
14. **Ahmad F\***, Budde U, Jan R, Oyen F, Kannan M, Saxena R, Schneppenheim R. Phenotypic and molecular characterisation of type 3 von Willebrand disease in a cohort of Indian patients. *Thromb Haemost* 2013;109(4):652-660. \*Corresponding author
15. **Ahmad F\***, Jan R, Kannan M, Obser T, Hassan MI, Oyen F, Budde U, Saxena R, Schneppenheim R. Characterisation of mutations and molecular studies of type 2 von Willebrand disease. *Thromb Haemost* 2013;109(1):39-46 (**Cover Page**) \*Corresponding author
16. Edelstein L, Luna E, Gibson I, Bray M, Jin Y, Kondkar I, Nagalla S, Smith T, Hadjout-Rabi N, Covarrubias D, Jones SN, **Ahmad F**, Stolla M, Kong X, Dong J, Bergmeier W, Shaw C, Leal S and Bray PF. Human Genome-Wide Association and Mouse Knockout Approaches Identify Platelet Supravillin as an Inhibitor of Thrombus Formation under Shear Stress. *Circulation* 2012;25(72):2762-71.
17. Lal H, Zhou J, **Ahmad F**, Zaka R, Vagnozzi RJ, DeCaul M, Woodgett J, Gao E, Force T. GSK-3 $\alpha$  Limits Ischemic Injury, Cardiac Rupture, Post- Myocardial Infarction Remodeling and Death. *Circulation* 2012;125(1):65-75
18. Pandey S, Ranjan R, **Ahmad F**, Shah V, Pandey SW, Mishra RM, Seth T, Saxena R. Relation Between the Uridine Diphosphate Glucuronosyltransferase 1A1 Polymorphism and the Bilirubin Levels in Sickle Cell Disease. *Journal of Clinical and Diagnostic Research* 2012;6(5): 821-824
19. **Ahmad F**, Ouellette TD, Greene T, Poncz M, Feske S, Bergmeier W. Relative contribution of STIM1 and CalDAG-GEFI to calcium-dependent platelet activation and thrombosis. *J Thromb Haemost.* 2011;9(10):2077-86 (**Pier M. Mannucci Award winner**).
20. **Ahmad F**, Kannan M, Kishor K and Saxena R. Coinheritance of severe von Willebrand disease with Glanzmann Thrombasthenia. *Clin Appl Thromb Hemost* 2010;16(5):529-32.
21. **Ahmad F**, Kannan M, Yadav V, Biswas A and Saxena R. Impact of thrombogenic mutations on clinical phenotype of von Willebrand Disease. *Clin Appl Thromb Hemost* 2010;16(3):281-7.
22. **Ahmad F**, Kannan M, Biswas A and Saxena R. Impact of Ala789Ala genotype on quantitative type von Willebrand Disease. *Ann Hematol* 2009;88(5):479-83.
23. **Ahmad F**, Kannan M, Ranjan R, Bajaj J, Choudhary VP, Saxena R. Inherited Platelet function disorders versus others inherited bleeding disorders: An Indian overview. *Thromb Res* 2008;121(6):835-41.
24. **Ahmad F**, Kannan M, Biswas A, Choudhary VP and Saxena R. Gene tracking in a family of novel identical Twins affected by severe type 3 von Willebrand Disease. *Thromb Res* 2007;120 (3):459-462.
25. Kannan M, Yadav BK, **Ahmad F** and Saxena R. Role of RFLP using TspRI for carrier detection in Glanzmann's Thrombasthenia: A report on two families. *Int J Lab Hematol* 2010;32(1 Pt 1):e158-62. (
26. Kannan M, **Ahmad F**, Yadav BK, Kumar R, Choudhry VP, Saxena R. Molecular defects in ITGA2B and ITGB3 genes in patients with Glanzmann's thrombasthenia. *J Thromb Haemost* 2009;7(11):1878-85 (**Cover page**).
27. Kannan M, Chatterjee T, **Ahmad F**, Rajive Kumar, Choudhary VP and Saxena R. Acquired Glanzmann's thrombasthenia associated with Hairy cell leukemia. *Eur J Clin Invest* 2009;39(12):1110-1.
28. Kannan M, Yadav BK, **Ahmad F**, Biswas A and Saxena R. Modulation of clinical phenotype in Glanzmann's Thrombasthenia. *Clin Chim Acta* 2009;403(1-2):156-8.
29. Kannan M, **Ahmad F**, Yadav BK, Mona A, Jain P, Kumar R and Saxena R. Glanzmann's Thrombasthenia in North Indians: Sub classification and carrier detection by flow cytometry. *Platelets* 2009;20(1):12-5.

30. Kannan M, **Ahmad F**, Yadav BK, Kumar P, Jain P, Kumar R and Saxena R. Carrier detection in Glanzmann's Thrombasthenia: Comparison of flow cytometry and western blot with respect to DNA mutation. *Am J Clin Pathol* 2008;130(1):93-98.
31. Kannan M, **Ahmad F**, Yadav BK, Ethayathulla A, Kumar R, Chowdhary VP, Saxena R. Identification of 22 novel mutations in patients with Glanzmann's Thrombasthenia. *Nature Precedings* (online) <http://hdl.handle.net/10101/npre.2008.2398.1>
32. Panigrahi I, **Ahmad F**, Kapoor R, Sharma PK, Makharia G, Saxena R. Evidence for non-HFE linked hemochromatosis in Asian Indians. *Indian J Med Sci* 2006;60(12):491-495.
33. Kannan M, **Ahmad F**, Ahmad S, Kale S, Debra A. Hoppensteadt, Fareed J and Saxena R. HIT Antibodies in Heparin Induced Thrombocytopenia: Its Relationship with FcγRIIa Polymorphism. *Am J Immunol* 2005;1(1):55-59
34. Kannan M, Ahmad S, **Ahmad F**, Kale S, Debra A. Hoppensteadt, Fareed J and Saxena R. Functional characterization of antibodies against heparin–platelet factor 4 complex in heparin-induced thrombocytopenia patients in Asian- Indians: relevance to inflammatory markers. *Blood Coagul Fibrinolysis* 2005;16(7):487-90.

### **Abstracts published in Journals:**

1. Gupta M, Tumuluru S, Singh AP, Umbarkar P, Zhang Q, **Ahmad F**, Parikh P, Force T, Lal H, Cardiomyocyte-specific Conditional Deletion of GSK-3β Leads to Cardiac Dysfunction in a High Fat Diet Induced Obesity Model. *Circ Res* 2017; 121 (Suppl 1), A41
2. Gupta M, Lal H **Ahmad F**, Sawyer DB, Hill MF. Chronic Neuregulin-1β Treatment Mitigates the Progression of Post-myocardial Infarction Heart Failure in the Setting of Type 1 Diabetes Mellitus. *Circ Res* 2017; 121 (Suppl 1), A33
3. **Ahmad F**, Lal H, Verma VK, Woodgett JR, Force T. Cardiomyocyte GSK-3α Signaling Exacerbate Pressure Overload-induced Dilated Cardiomyopathy and Heart Failure. *Circ Res* 2016;119:A69
4. Lal H, **Ahmad F**, Verma VK, Tumuluru S, Parikh S, Zhang Q, Force T. Cardiomyocyte-specific Conditional Deletion of GSK-3β Leads to Global Metabolic Defects and Cardiac Dysfunction in a HFD Induced Obesity Model. *Circ Res* 2016;119:A75
5. Verma VK, **Ahmad F**, Zhang Q, Force T, Lal H. Cardiac fibroblast-specific deletion of GSK-3α alleviate from cardiac dysfunction and fibrotic remodeling in ischemic heart. *Circ Res* 2016;2016;119:A280
6. Zhou J, **Ahmad F**, Lal H, Parikh S, Hoffman NE, Rajan S, Shanmughapriya S, Zhang X, Guo Y, Yuan A, Song J, Chan X, Madesh M, Woodgett JR, Kishore R, Force T. Cardiac-specific deletion of GSK-3α and β leads to fatal dilated cardiomyopathy with mitotic catastrophe. *Circulation*. 2014;130:A13350
7. **Ahmad F**, Lal H, Vagnozzi RJ, Zhou J, Woodgett J, Gao E, Force T. Cardiac specific deletion of Glycogen Synthase Kinase-3α attenuates post myocardial infarction-induced ventricular remodeling and preserves heart function. *Circ Res* 2012;111(e1-e9):22990
8. Lal H, **Ahmad F**, Vagnozzi RJ, Zhou J, Woodgett J, Gao E, Force T. Cardiac specific deletion of Glycogen Synthase Kinase-3α attenuates post myocardial infarction-induced ventricular remodeling and preserves heart function. *Circ Res*2012;111(e1-e9):22983
9. **Ahmad F**, Stefanini L, Ouellette TD, Greene TK, Feske S, and Bergmeier W. STIM1 Deficiency Results In Impaired Platelet Procoagulant Activity and Protection From Arterial Thrombosis. *J Thromb Haemost* 2011;9(S2):736
10. **Ahmad F**, Schneppenheim R, Oyen F, Obser T, Kannan M and Saxena R. Mutation spectrum and characterization of two novel large deletions causing severe type 3 von Willebrand disease. *J Thromb Haemost* 2011;9(S2):19

11. **Ahmad F**, Stefanini L, Ouellette TD, Greene TK, Feske S, and Bergmeier W. STIM1 Deficiency Results In Impaired Platelet Procoagulant Activity and Protection From Arterial Thrombosis. *Blood* 2010;116: 485
12. Stolla M, Stefanini L, Ouellette TD, **Ahmad F**, Reilly MP, McKenzie S, and Bergmeier W. Critical Role of CalDAG-GEFI in FC $\gamma$ RIIa-dependent platelet Activation and thrombosis. *Blood* 2010;116: 3196
13. **Ahmad F**, Schneppenheim R, Oyen F, Obser T, Budde U, Hasan I, Kannan M and Saxena R. Mutation spectrum and molecular studies of type 2 von Willebrand disease: *J Thromb Haemost* 2009;7:638
14. Kannan M, Yadav BK, **Ahmad F**, Fareed J and Saxena R. Thrombogenic mutations in glanzmann's thrombasthenia patients. *J Thromb Haemost* 2009;7:037
15. **Ahmad F**, Schneppenheim R, Oyen F, Obser T, Budde U, Kannan M and Saxena R. Mutation spectrum of severe von Willebrand disease type 3 in India. *Haematologica* 2009;94(2):43
16. **Ahmad F**, Schneppenheim R, Oyen F, Obser T, Kannan Mand Saxena R. Characterization of two novel large deletions causing von Willebrand disease type 3. *Hämostaseologie* 2009;29:3.2-1
17. **Ahmad F**, Kannan M, Yadav BK and Saxena R. Variable number of tandem repeats and other polymorphic linkage are not accurate markers for carrier detection of von Willebrand disease. *Am J Clin Pathol* 2008;130:652
18. Kannan M, **Ahmad F**, Yadav BK, Kumar R, Fareed J and Renu Saxena. Patients with No Mutations in Both the ITGA2B and ITGB3 Genes as Identified by Conformation Sensitive Gel Electrophoresis (CSGE). *Blood* 2008;112: 1236
19. Kannan M, **Ahmad F**, Yadav BK, Kumar R, Fareed J and Saxena R. Mutation Screening of GPIIb and GPIIIa Exons by Conformation Sensitive Gel Electrophoresis. *Blood* 2007; 110: 3218
20. Kannan M, **Ahmad F**, Yadav BK, Kumar R and Saxena R. Evaluation of molecular genetics of Indian Glanzmann's Thrombasthenia and determination of its role for carrier detection. Selected for Dr. JC Patel best paper award, 48th Annual conference of Indian Society of Hematology and Transfusion Medicine at Lucknow, 15th to 17th Nov 2007
21. Kannan M, **Ahmad F**, Kumar R, Choudhry VP and Saxena R. Use of CSGE, TspRI- RFLP and Western blot in Carrier Detection in an Indian family with Type I Glanzmann Thrombasthenia. *Blood* 2006; 108: 3975
22. Kannan M, **Ahmad F**, Ahmad S, Kale S, Fareed J and Saxena R. Fc $\gamma$ RIIa Platelet Polymorphism in Asian Indians: Its Association with Development of Heparin Induced Thrombocytopenia. *J Thromb Haemost* 2005; 3(1):913
23. M. Kannan, S. Ahmad, **Ahmad F**, S. Kale, J. Fareed, R. Saxena, Testing of heparin-PF4 antibodies in Indian HIT patients: Relevance to Fc $\gamma$ RIIa polymorphism and inflammation. *Pathophysiol Haemos Thromb* 2006;35:199-248
24. Kannan M, **Ahmad F**, Kale S, Saxena R. Fc gamma RIIa polymorphism and its association with Heparin Induced Thrombocytopenia in Asian Indians. *ISARCON* 2005, New Delhi, India