# CURRICULUM VITAE

#### Meganathan Kannan, PhD

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# **Broad area of Specializations**

- (b) **Research:** Medical Sciences: Blood and Vascular Biology
- **Teaching:** Biochemistry and Molecular Biology
  - Students' feedback on teaching- IQAC: 4.5 out of 5.0 (Overall till now)

### **Educational Profile**

Degree	Institution	Year	Specialization	Remark
Ph.D.	All India Institute of Medical Sciences (AIIMS), New Delhi	Jan 2008	Hematology	Thesis adjudged excellent
M.Sc.	University of Madras, Chennai	Apr 2000	Biochemistry	First Class
B.Sc.	University of Madras, Chennai	Apr 1998	Biochemistry	First Class

### **Teaching and Research Experience:**

**Assistant Professor:** Blood & Vascular Biology Research Lab, Department of Life Sciences, School of Life Sciences, Central University of Tamil Nadu, Thiruvarur **Apr 2013 to present** 

Research Associate:Division of Hematology/Oncology, Cincinnati Children's HospitalMedical Center, Cincinnati, Ohio 45229. USA.March 2010 to January 2013

Postdoctoral Fellow: Division of Hematology, FDA, National Institutes of Health (NIH), Bethesda, MD 20892. USA. April 2008 to March 2010

# **Research Grants:**

S. No	Title of Research Project	Funding Agency	Duration	Role	Amount (Rs.)	Status
1	Mitigation of clinical phenotype by activated platelets in severe Hemophilia	DBT	2019-2023	PI	Rs. 5,190,400 (Rs. 51.90 Lakhs)	Ongoing
2	The potential use of platelet small non-coding RNAs as biomarkers of programmed cell death and programmed cell necrosis in platelet disorders	DST-SERB	2017-2021	PI	Rs. 5,253,000 (Rs. 52.53 Lakhs)	Completed
3	The use of platelet microRNAs as biomarkers of apoptosis in Paroxysmal Nocturnal Hemoglobinuria	UGC	2014-2016	PI	Rs. 600,000 (Rs. 6.0 Lakhs)	Completed
4	Elucidation of the molecular mechanistic role of platelet NLRP3 on platelet activation, platelet-mediated neutrophil extracellular trap formation and endothelial dysfunction in mediating systemic inflammation	ICMR	2021-2024	Co-PI	Rs. 6,500,000 (Rs. 65.00 Lakhs)	Ongoing

# **Research Guidance:**

#### COMPLETED

# ONGOING (RESEARCH TEAM)

PhD Guidance:	One	PhD students:	Two
PG Research Guidance:	Twelve	Project staff:	One
		PG Research students:	Two
		Postdoctoral scientist:	One

### Academic & Administrative responsibilities

- <sup>(2)</sup> Member Secretary, Institutional Human Ethics Review Board, CUTN
- Member Secretary, Internal Human Ethics Subcommittee, CUTN
- \* External Member, Research Advisory Committee, Govt. Medical College, Thiruvarur
- (\*) Member, Board of Studies of Life Sciences and Material Sciences
- **Examination Coordinator,** Department of Life Sciences
- (\*) Member, Doctoral Committee- Life Sciences, Chemistry, Physics, Mathematics & Tamil
- <sup>®</sup> Member, Department Research Committee, Life Sciences, CUTN
- <sup>(\*)</sup> Member, Purchase Committee, Department of Life Sciences, CUTN
- **Member,** Admission Committee
- **University Observer,** Central Universities Common Entrance Test (CUCET)
- <sup>()</sup> University Representative, Education Expo
- ⑦ Member, Convocation Committee
- Member, Counselling and Guidance Cell from 2014 to 2017
- ONSS Programme Officer from 2013 to 2017
- O NSS Programme Coordinator from 2013 to 2017

### **Awards and Merits**

- Visiting Professor at the Department of Pharmacology and Pathology, Loyola University Medical Center, Stritch School of Medicine, Chicago, USA from 26<sup>th</sup> Oct to 2<sup>nd</sup> Nov 2016.
- 2. **Visiting Assistant Professor:** Recipient of ISTH fellowship by the International Society of Thrombosis and Hemostasis to visit the Rockefeller University, New York, USA from 9th May to 8th July 2016.
- 3. **Visiting Professor** at the Department of Paediatric Haematology and Oncology, University Medical Center Hamburg-Eppendorf, Germany under the **Professor Gunter Landbeck Stipendium** for the period of one month (from 25<sup>th</sup> June to 24<sup>th</sup> July 2015).
- 4. **Pier M. Mannucci Young Investigator Award** for the best article of the year 2009 published in the **Journal of thrombosis and haemostasis** for the excellence and originality of the work on "Molecular defects in ITGA2B and ITGB3 genes in Glanzmann thrombasthenia".
- Elected as an Associate Member in the American Society of Hematology for the significant contribution to the field of hematology and the care of patients with hematologic disorders on 19<sup>th</sup> Sep 2008 by ASH society, Washington, DC 20036. USA
- 6. Recipient of **Oak Ridge Institute for Science and Engineering Fellowship**. Apr 2008-Mar 2010.
- The prestigious Dr JC Patel award for active research work in hematology in India at the 48<sup>th</sup> Annual conference of Indian Society of Hematology and Transfusion Medicine, held on 15<sup>th</sup> to 17<sup>th</sup> November 2007 at Lucknow.
- 8. National-level faculty Selection by merit: UGC-Assistant Professor under the UGC-Faculty Recharge Programme on November 2013 (Selected but not availed as already accepted position at the Central University of Tamil Nadu).
- 9. Featured research studies on the journals' front cover pages
  - □ Thrombosis and Hemostasis. Journal issue: 2013; Vol.109, issue 1.
  - □ Journal of Thrombosis and Haemostasis. Journal issue: 2009; Vol. 7, issue 11.

- 10. **Qualified NET (National Eligibility Test)** for Lectureship/Assistant Professorship on October 2001, conducted by ICAR, recognized by the UGC/CSIR.
- 11. **Awarded Senior Research Fellowship** by the Council of Scientific and Industrial Research (CSIR), Human Resource Development Group, New Delhi. December 2006.
- 12. **Awarded Senior Research Fellowship** by the Indian Council of Medical Research (ICMR), New Delhi. January 2007.
- 13. Recipient of **INSA fellowship** to attend the 49th American Society of Hematology conference in Atlanta, Georgia, USA, held on 8<sup>th</sup> to 11<sup>th</sup> December 2007.
- 14. **Best poster Award** for the presentation entitled "Mutation spectrum and molecular studies of type 2 von willebrand disease" at XXII Congress of the International Society of Thrombosis and Haemostasis, 11-16 July 2009. Boston, MA, USA.
- 15. **Best paper Award** for the presentation entitled "Characterization of two novel deletions causing von Willebrand disease type 3" at 53<sup>rd</sup> Annual meeting of Thrombosis and Haemostasis on 4-7 February 2009 at Vienna, Austria.
- 16. **Best paper Award** for the presentation on "Occurrence of Heparin-Induced Thrombocytopenia in Indian patients on Unfractionated Heparin" at Delhi Society of Hematology, XIV annual conference held on July 12, 2003 at Kasturba Hospital, Delhi
- 17. **Best paper Award** for the presentation entitled "Multimeric analysis for sub characterization of Von Willebrand Disease in Indians" at annual meet of Indian Society of Hematology and Transfusion Nov. 2003 New Delhi

#### Specialized trainings

- 18. **Special coagulation training** at the McLendon Clinical Laboratories, UNC School of Medicine, University of North Carolina, Chapel Hill, NC 27514. USA. July 7 to 8, 2010.
- 19. **Visiting student** at the Haemostasis and Thrombosis Research Laboratories, Department of Pharmacology and Pathology, Loyola University of Medical Center, Maywood, Chicago, IL. USA. November 30 to December 14, 2007.
- 20. **Pre-Doctoral Training** at Dr Jaweed Fareed Iab, Hemostasis & Thrombosis Research Laboratories, Department of Pathology and Pharmacology, Loyola University of Chicago, Stritch School of Medicine, Chicago, USA. Feb 2004 to Mar 2004.
- 21. **Visiting Scientist** at the Dr Barry S Coller lab, Laboratory of Blood and Vascular Biology, The Rockefeller University, New York. USA. December 2003 to February 2004

# Membership in Scientific Organization

- 1. International Society on Thrombosis & Haemostasis (ISTH member) 2008 onwards
- 2. North American Society on Thrombosis Hemostasis (NASTH Member) 2008 onwards
- 3. Indian Society of Hematology and Transfusion Medicine (L-896 Life member).
- 4. Indian Society of Human Genetics (Life Member: L/1745/2014) 2014 onwards
- 5. Indian Society of Transfusion Medicine (Life Member) 2015 onwards
- 6. American Society of Hematology (ASH member) 2008 2013
- 7. American Heart Association (AHA Member) 2009 -2013
- 8. The American Society of Human Genetics (ASHG Member) 2008 -2010
- 9. Association of Scientists of Indian Origin in America, Inc 2009-2010

# **Editorial team/Reviewer**

# (i) Peer-reviewed journals

- ⑦ PLOS ONE
- ⑦ Blood
- ⑦ Medicine
- ⑦ Haemophilia
- ⑦ Medicinal Chemistry
- ⑦ Molecular carcinogenesis
- ⑦ Current Medicinal Chemistry
- ⑦ Molecular & Cellular Biochemistry BMC Immunology
- ⑦ Molecules
- ③ Bioengineered
- ⑦ Journal of Clinical Medicine
- ⑦ Journal of Biomaterial Science
- (ii) Thesis review
  - ⑦ PhD thesis
  - ⑦ M.Phil thesis
  - ⑦ M.Tech thesis

# (iii) Project proposal review

- ⑦ DST Extra Mural Grant (DST-SERB)
- ③ UK Heart Research Foundation

# **Publications**

Total	: 116
Abstracts in Journals	: 27
Chapters in Books	: 16
Peer-reviewed Journals	: 73 (National: 10 & International: 63)

Citation index: h-index: 21 & i10 index: 41

#### https://scholar.google.co.in/citations?user=SxJWWU0AAAAJ&hl=en

- Thrombosis and Haemostasis
- BMC Gastroenterology
- Frontiers in Immunology
- Clinical Applied Thrombosis/Hemostasis
- Frontiers in Medicine
- Critical Review on Oncology and Hematology
- Thrombosis Research
- Hematology Reports
- Indian J Hematology and Blood Transfusion
- Pharmaceutics

### Publications

#### (A) Journals (Peer-reviewed):

SN	Publication details
1	Josefsson EC, Ramström S, Thaler J, Lordkipanidzé M; COAGAPO study group
	(Kannan M). Consensus report on markers to distinguish procoagulant platelets from
	apoptotic platelets: communication from the Scientific and Standardization
	Committee of the ISTH. J Thromb Haemost. 2023;S1538-7836(23)00394-X.
	(Impact factor: 10.4)

- Maharana S, Roy CR, Kishor K, Ranjan R, Ahmad F, Mahapatra M, Saxena R, Kannan M. Depolarized mitochondrial membrane potential and elevated calcium in platelets of Sickle Cell Disease. Indian Journal of Hematology and Blood Transfusion.
   2023 [Accepted; IJHB-D-22-00732R1]. (Impact factor: 0.9)
- 3 Puthiya Veettil R, Rabia, Mathew DK, Gondi R, Sankarapandian K, **Kannan M**, Kumar G, Al-Qaradawi SY, Jeyakumar RB. Synergistic Effect of Surfactant on Disperser Energy and Liquefaction Potential of Macroalgae (Ulva intestinalis) for Biofuel Production. **Fermentation. 2023**; 9(1):55. (Impact factor: 3.7)
- 4 Subi TM, Krishnakumar V, Kataru CR, Panigrahi I, **Kannan M.** Association of VEGF and p53 Polymorphisms and Spiral Artery Remodeling in Recurrent Pregnancy Loss: A Systematic Review and Meta-Analysis. **Thrombosis and Haemostasis. 2022**;122: 363-376. (Impact factor: 6.7)
- 5 Ahmad F, **Kannan M**, Ansari AW. Role of SARS-CoV-2 -induced cytokines and growth factors in coagulopathy and thromboembolism. **Cytokine and Growth Factor Reviews. 2022**; 63:58-68. (*Impact factor: 13.0*)
- 6 Selvavinayagam ST, Yong YK, Joseph N, Hemashree K, Tan HY, Zhang Y, Rajeshkumar M, Kumaresan A, Kalpana R, Kalaivani V, Monika AVD, Suvaithenamudhan S, Kannan M, Murugesan A, Narayanasamy K, Palani S, Larsson M, Shankar EM and Raju S. Low SARS-CoV-2 viral load among vaccinated individuals infected with Delta B.1.617.2 and Omicron BA.1.1.529 but not with Omicron BA.1.1 and BA.2 variants. Frontiers in Public Health. 2022; 10:1018399.

(Impact factor: 5.2)

- 7 Gupta A, Jayakumar MN, Saleh MA, **Kannan M**, Halwani R, Qaisar R, Ahmad F. SARS-CoV-2-infection induced growth factors play differential roles in COVID-19 pathogenesis. **Life Sciences. 2022**;304: 120703 (*Impact factor: 6.1*)
- 8 Gupta A, Al-Tamimi AO, Halwani R, Alsaidi H, Kannan M, Ahmad F. Lipocalin-2, S100A8/A9 and Cystatin C: potential predictive biomarkers of cardiovascular complications in COVID-19. Experimental Biology and Medicine. 2022;Jul;247(14):1205-1213 (Impact factor: 3.2)

9 Al-Tamimi AO, Yusuf AM, Jayakumar MN, Ansari AW, Elhassan M, AbdulKarim F, Kannan M, Halwani R, Ahmad F. SARS-CoV-2 infection induces soluble platelet activation markers and PAI-1 in the early moderate stage of COVID-19. International J of Laboratory Hematology. 2022;44(4):712-721

(Impact factor: 3.0)

10 Gupta A, Qaisar R, Halwani R, **Kannan M**, Ahmad F. TFPI and FXIII negatively and S100A8/A9 and Cystatin C positively correlate with D-dimer in COVID-19. **Experimental Biology and Medicine. 2022**;247(17):1570-1576.

(Impact factor: 3.2)

- 11 Mary AS, Raghavan VS, Kagula S, Krishnakumar V, Kannan M, Gorthi SS and Rajaram K. Enhanced In Vitro Wound Healing Using PVA/B-PEI Nanofiber Mats: A Promising Wound Therapeutic Agent against ESKAPE and Opportunistic Pathogens. ACS Applied Bio Materials. 2021 4(12):8466-8476. (Impact factor: 3.25)
- 12 Gerotziafas GT, Catalano M, Theodorou Y, Dreden PV, Marechal V, Spyropoulos AC, Carter C, Jabeen N, Harenberg J, Elalamy I, Falanga A, Fareed J, Agathaggelou P, Antic D, Antignani PL, Bosch MM, Brenner B, Chekhonin V, Colgan MP, Dimopoulos MA, Douketis J, Elnazar EA, Farkas K, Fazeli B, Fowkes G, Gu Y, Gligorov J, Ligocki MA, Indran T, **Kannan M**, Kantarcioglu B, et al. The COVID-19 Pandemic and the Need for an Integrated and Equitable Approach: An International Expert Consensus Paper. **Thrombosis and Haemostasis. 2021** Aug;121(8):992-1007

(Impact factor: 6.7)

- 13 Gresele P, Falcinelli E, Bury L, Pecci A, Alessi MC, Borhany M, Heller PG, Santoro C, Cid AR, Orsini S, Fontana P, Candia ED, Podda G, Kannan M, Jurk K, Castaman G, Falaise C, Guglielmini G, Noris P, BAT-VAL study investigators. The ISTH bleeding assessment tool as predictor of bleeding events in inherited platelet disorders. Journal of Thrombosis and Haemostasis. 2021;19(5):1364-1371 (Impact factor: 10.4)
- 14 Kataru CR, Krishnakumar V, Panigrahi I, Kannan M. Study of prothrombotic gene variations associated with the risk of development of thrombosis in patients with Down syndrome. Indian Journal of Hematology and Blood Transfusion. 2021;37(3):507-508 (Impact factor: 0.9)
- 15 Meena A, Murugesan A, Surliappan S, Yong Y, Ganesh S, Vimali I, Ramachandran V, Manickan E, Kannan M, Dash A, Shankar EM. Increase of plasma TNF-a is associated with decreased levels of blood platelets in clinical dengue infection. Viral Immunology. 2020;33(1):54-60 (Impact factor: 2.2)
- 16 Gresele P, Orsini S....**Kannan M...**Mumford AD. [BAT-VAL study investigators] et al. Validation of the ISTH/SSC bleeding assessment tool for inherited platelet disorders. **Journal of Thrombosis and Haemostasis. 2020**;18(3):732-739

(Impact factor: 10.4)

- 17 Kannan M, Ahmad F, Saxena R. Platelet activation markers in evaluation of thrombotic risk factors in various clinical settings. Blood Reviews. 2019;37:100583. (Impact factor: 7.4)
- 18 Ahmad F\*, Kannan M\*, Obser T, Budde U, Schneppenheim S, Saxena R, Schneppenheim R. Characterization of VWF gene conversions causing von Willebrand disease. British J of Haematology. 2019;184(5):817-25. [\*Equal first author] (Impact factor: 6.5)

19 Barathan M, Mohamed R, Yong YK, Kannan M, Vadivelu J, Saeidi A, Larsson M, Shankar EM. Viral Persistence and Chronicity in Hepatitis C Virus Infection: Role of T-Cell Apoptosis, Senescence and Exhaustion. Cells. 2018;7(10): 165.

(Impact factor: 6.0)

- Kannan M, Saxena R. No genetic abnormalities identified in a2IIb and β3: Phenotype overcomes genotype in Glanzmann thrombasthenia. International J of Laboratory Hematology. 2017;39(2):41-4. (Impact factor: 3.0)
- 21 Ahmad F, Jan R, **Kannan M**, Obser T, Hassan MI, et al. Characterisation of mutations and molecular studies of type 2 von Willebrand disease. **Thrombosis and Haemostasis. 2013**;109(1):39-46. (*Impact factor: 6.7*)
- 22 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. Thrombosis and Haemostasis. 2013;109(4):652-60. (Impact factor: 6.7)
- 23 **Kannan M,** Atreya C. Differential profiling of human red blood cells during storage for 52 selected microRNAs. **Transfusion. 2010**;50(7):1581-8. (*Imp. factor: 2.9*)
- 24 **Kannan M,** Yadav BK, Ahmad F, Saxena R. Role of RFLP using TspRI for carrier detection in Glanzmann's thrombasthenia: a report on two families. **International J** of Lab Hematology. 2010; 32:158-62. (*Impact factor: 3.0*)
- 25 Kulkarni S, Kannan M, Atreya C. Omics approaches to quality biomarkers for stored platelets: Are we there yet? Transfusion Medicine Reviews. 2010; 24(3):211-7. (Impact factor: 4.5)
- Ahmad F, Kannan M, Yadav V, Biswas A, Saxena R. Impact of thrombogenic mutations on clinical phenotypes of von Willebrand disease. Clinical and Applied Thrombosis/Hemostasis. 2010; 16(3):281-7. (Impact factor: 2.9)
- 27 Ahmad F, **Kannan M**, Kishor K, Saxena R. Co-inheritance of severe von Willebrand Disease with Glanzmann's Thrombasthenia. **Clinical and Applied Thrombosis/Hemostasis. 2010**;16(5):529-32. (*Impact factor: 2.9*)
- Kannan M, Ahmad F, Yadav B, Kumar R, Choudhry V, Saxena R. Molecular defects in ITGA2B and ITGB3 genes in patients with Glanzmann's thrombasthenia. Journal of Thrombosis and Haemostasis. 2009; 7 (11): 1878-85. (Impact factor: 10.4)
  - In Focus article: Article of Significant interest by Editor
  - **Cover image:** Study was featured on the journal's front cover page
  - Best article: Selected as the journal's best article of the year 2009 & received Pier M. Mannucci Young Investigator Cash Award towards the Best publication.

- Kannan M, Mohan KVK, Kulkarni S, Atreya C. Membrane array-based profiling of platelets during storage for 52 miRNAs associated with apoptosis. Transfusion. 2009;49(7):1443-50. (Impact factor: 2.9)
- 30 **Kannan M,** Yadav BK, Ahmad F, Biswas A, Saxena R. Modulation of clinical phenotype of Glanzmann's Thrombasthenia by Thrombogenic mutations. **Clinica Chimica Acta. 2009**;403(1-2):156-8. (*Impact factor: 5.0*)
- 31 **Kannan M,** Chatterjee T, Ahmad F, Kumar R, Choudhry VP, Saxena R. Acquired Glanzmann's thrombasthenia associated with Hairy cell leukemia. **European Journal** of Clinical Investigation. 2009;39(12):1110-11. (Impact factor: 5.5)
- 32 **Kannan M,** Saxena R, Adiguzel C, Fareed J. An Update on the prevalence and characterization of H-PF4 antibodies in Asian-Indian patients. **Seminars in Thrombosis & Hemostasis. 2009**;35:337–44. (Impact factor: 5.7)
- 33 **Kannan M,** Saxena R. Glanzmann's Thrombasthenia: An Overview. **Clinical and Applied Thrombosis/Hemostasis. 2009**;15(2):152-65. (Impact factor: 2.9) (Editors' Choice article: Article of Significant interest by Editorial Board)
- 34 **Kannan M,** Ahmad F, Yadav BK, Anand M, Jain P, Kumar R, Saxena R. Glanzmann's thrombasthenia in North Indians: Sub classification and carrier detection by flow cytometry. **Platelets. 2009**;20(1):12-5. (*Impact factor: 3.3*)
- Ahmad F, Kannan M, Biswas A, Saxena R. Impact of 789Ala/Ala genotype on quantitative type of von Willebrand disease. Annals of Hematology. 2009;88(5):479-83. (Impact factor: 3.5)
- 36 Adiguzel C, Bansal V, Litinas E, Cunanan J, Iqbal O, Nelson K, Kannan M, Hoppensteadt D, Fareed J. Increased prevalence of antiheparin platelet factor 4 antibodies in patients may be due to contaminated heparin. Clinical and Applied Thrombosis/Hemostasis. 2009;15(2):145-51. (Impact factor: 2.9)
- 37 Kannan M, Ahmad F, Yadav BK, Kumar P, Jain P, Kumar R, Saxena R. Carrier detection in Glanzmann's Thrombasthenia: Comparison of flow cytometry and western blot with respect to DNA mutation. American Journal of Clinical Pathology. 2008;130(1):93-8. (Impact factor: 3.5)
- Ahmad F, Kannan M, Ranjan R, Bajaj J, Choudhary VP, Saxena R. Inherited platelet function disorders versus other inherited bleeding disorders: An Indian overview.
   Thrombosis Research. 2008;121(6):835-41. (Impact factor: 7.5)

Bhattacharyya M, Kannan M, Chaudhry VP, Mahapatra M, Pati H, Saxena R.
Hypercoagulable state in five thalassemia intermedia patients. Clinical and Applied Thrombosis/Hemostasis. 2007;13(4):422-7. (Impact factor: 2.9)

40 Dixit A, Chatterjee T, Mishra P, **Kannan M,** Choudhry DR, Mahapatra M, Choudhry VP, Saxena R. Disseminated intravascular coagulation in acute leukemia at

presentation and during induction therapy. **Clinical and Applied Thrombosis/Hemostasis. 2007**;13(3):292-8. (Impact factor: 2.9)

- 41 Ranjan R, Biswas A, **Kannan M,** Meena A, Deka D, Saxena R. Prenatal diagnosis of haemophilia A by chorionic villus sampling and cordocentesis: All India Institute of Medical Science experience. **Vox Sangunis. 2007**;92(1):79-84. (*Imp. factor: 2.7*)
- 42 Saxena R, **Kannan M**, Choudhry VP. Laboratory studies in coagulation disorders. **Indian Journal of Pediatrics. 2007**;74(7):649-55. (*Impact factor: 4.3*)
- 43 Ahmad F, **Kannan M**, Biswas A, Choudhary VP, Saxena R. Gene tracking in a family of novel identical twins affected by severe type-III von Willebrand Disease (vWD). **Thrombosis Research. 2007**;120(3):459-62. (*Impact factor: 7.5*)
- 44 Gupta PK, **Kannan M**, Chatterjee T, Dixit A, Mahapatra M, Choudhry VP, Saxena R. Acquired von Willebrand's disease associated with gastrointestinal angiodysplasia: a case report. **Haemophilia. 2006**;12(4):452-5. (*Impact factor: 3.9*)
- 45 Ahmed RPH, **Kannan M**, Biswas A, Ranjan R, Choudhry VP, Saxena R. Use of Intron 1, 22 inversions and linkage analysis in Carrier detection of Hemophilic A in Indians. **Clinica Chimica Acta. 2006**;365(1-2):109-12. (*Impact factor: 5.0*)
- 46 **Kannan M,** Ahmad S, Ahmad F, Kale S, Hoppensteadt DA, Fareed J, Saxena R. Functional characterization of antibodies against heparin-PF4 complex in heparininduced thrombocytopenia patients in Asian-Indians: Relevance to inflammatory markers. **Blood Coagulation & Fibrinolysis. 2005**;16(7):487-90.

(Impact factor: 1.1)

- Dixit A, Kannan M, Mahapatra M, Choudhry VP, Saxena R. Roles of protein C, protein S, and antithrombin III in acute leukemia. American Journal of Hematology. 2006;81(3):171-4. (Impact factor: 12.8)
- Bhattacharyya M, Chatterjee T, Panigrahi I, Kannan M, Choudhry VP, Mahapatra M, Saxena R. Therapy-related acute promyelocytic leukemia after treatment of carcinoma breast--a case report. Indian Journal of Pathology & Microbiology. 2006;49(2):251-4. (Impact factor: 1.0)
- Bhattacharyya J, Dutta P, Mishra P, Dixit A, Srinivas U, Kannan M, Kumar R, Choudhry VP, Saxena R. Congenital vitamin K-dependent coagulation factor deficiency (VKCFD): A Case report. Blood Coagulation & Fibrinolysis. 2005;16(7):525-7. (Impact factor: 1.1)
- Gupta PK, Adamtziki E, Budde U, Jaiprakash M, Kumar H, Harbeck-Seu A, Kannan M, Oyen F, Obser T, Wedekind I, Saxena R, Schneppenheim R. Gene conversions are a commonest cause of von Willebrand Disease. British Journal of Haematology. 2005;130(5):752-8. (Impact factor: 6.5)

- 51 Bhattacharya M, Biswas A, Ahmed R, **Kannan M,** Gupta M, Mahapatra M, Choudhry VP, Saxena R. Clinico-hematological profile of Factor XIII deficient patients. **Clinical and Applied Thrombosis/Hemostasis. 2005**;11(4)475-480. (*Imp. factor: 2.9*)
- Ahmed RP, Biswas A, Kannan M, Bhattacharya M, Geisen C, Seifried E, Oldenburg J, Saxena R. First report of a FVII-deficient Indian patient carrying double heterozygous mutations in the FVII gene. Thrombosis Research. 2005;115(6):535. (Impact factor: 7.5)
- 53 Ahmed RP, Ivaskevicius V, **Kannan M,** Seifried E, Oldenburg J, Saxena R. Identification of 32 novel mutations in the factor VIII gene in Indian patients with hemophilia A. **Haematologica. 2005**;90(2):283-4. (*Impact factor: 10.1*)
- 54 Gupta PK, Ahmed RP, Bhattacharyya M, Kannan M, Biswas A, Kalra V, Saxena R.
   Protein C system defects in Indian children with thrombosis. Annals of Hematology.
   2005;84(2):85-8. (Impact factor: 3.5)
- Bhattacharyya M, Kannan M, Biswas A, Kumar A, Saxena R. beta(2) Glycoprotein 1 in Indian Patients with SLE. Clinical and Applied Thrombosis/Hemostasis. 2005;11(2):223-6. (Impact factor: 2.9)
- 56 Bhattacharya M, Biswas A, **Kannan M,** Mishra P, Kumar A, Choudhry VP, Saxena R. Clinicohematologic spectrum in patients with lupus anticoagulant. **Clinical and Applied Thrombosis/Hemostasis. 2005**;11(2):191-5. (*Impact factor: 2.9*)
- 57 Saxena R, Gupta M, Gupta S, Kannan M, Ahmed RP, Choudhry VP. Inherited heterogenous defect in platelet aggregation selectively with ADP and epinephrine--a series of 25 cases. Indian Journal of Pathology & Microbiology. 2005;48(3):345-8. (Impact factor: 0.773)
- Dutta P, Chatterjee T, Tyagi S, Pati HP, Choudhry VP, Kannan M, Saxena R. Gel card in the diagnosis of autoimmune haemolytic anemia. Indian Journal of Pathology & Microbiology. 2005;48(3):322-4. (Impact factor: 1.0)
- 59 Panigrahi I, Ahmed RPH, **Kannan M,** Kabra M, Deka D, Saxena R, Cord blood analysis for prenatal diagnosis of thalassemia major Hemophilia A. **Indian Pediatrics. 2005**;7;42(6):577-81. (Impact factor: 2.3)
- 60 Bhattacharyya M, Makharia G, **Kannan M,** Ahmed RPH, Gupta PK, Saxena R. Inherited prothrombotic defects in Budd Chiari syndrome and portal vein Thrombosis. **American Journal of Clinical Pathology. 2004**;121(6):844-7. (*Imp factor: 3.5*)
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- Inherited Coagulation Disorders. In: Medical Genetics and Genetic Counseling (2020) Das R and Kannan M. Chapter 15. Pp. 128-146
- Microbial Pathogenesis: Virus Pathogen–Host Interactions. In: Model Organisms for Microbial Pathogenesis, Biofilm Formation and Antimicrobial Drug Discovery (2020) Krishnakumar V and Kannan M. Chapter 2. pp.19-35
- 4. Inherited Platelet Function Disorders Glanzmann's Thrombasthenia. In: Monograph on platelet disorders (2016) **Kannan M** and Arora N. Chapter 20 pp. 226-235
- 5. Investigations of Thrombophilia. In: Laboratory Techniques in Haematology (2008) Saxena R, **Kannan M** and Biswas A. Chapter 8 197-230.
- Lab Monitoring of Anticoagulants. In: Laboratory Techniques in Haematology (2008) Saxena R, Kannan M, Biswas A and Sharma V. Chapter 9 231-238.
- 7. Investigations of Bleeding Disorders. In: Laboratory Techniques in Haematology (2008) Saxena R, Pati HP, **Kannan M** and Ahmad F. Chapter 7 135-196.
- Molecular Techniques in Hematology. In: Laboratory Techniques in Haematology (2008) Saxena R, Sazawal S, Kannan M, Biswas A, Chaubey R, Ranjan R, Meena A, Bijender B and Mir R. Chapter 14 302-361.
- 9. Spectrum of Glanzmann Thrombasthenia in India. In: Haematology Today (2008) Saxena R and **Kannan M**. Chapter 33 247-253
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- 12. Flow cytometry in Hematology. In: Recent Advances in Hematology II (2006) Sengar M, Kannan M, Anand M, Saxena R, Kumar R. Chapter 17 297-312.
- Approach to thrombophilia: Clinical and Loaboratory. In: Recent Advances in Hematology II (2006) Saxena R, Bhattacharyya J, Kannan M, Choudhry VP. Chapter 11 187-220.
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### (C) Books Edited:

- Associate Editor: Recent Trends and Future Advances in Life Sciences. 2015. Excel India Publishers (ISBN: 978-93-84869-33-5)
- <sup>()</sup> **Associate Editor:** Fauna: A biodiversity of CUTN. Vol. 1. 2019.

#### **Papers/Posters presented at Conferences**

- Roy CL, Maharana S, Kishor K, Ranjan R, Mahapatra M, Saxena R, Kannan M. Role of activated platelets in compensation of bleeding severity in Hemophilia A. XXX Congress of the International Society on Thrombosis and Haemostasis, 09-13 July 2022. London, England. UK.
- Kataru R, Maharana S, Rroy CL, Krishnakumar V, Panigrahi I, Kannan M. Analysis of genetic variants associated with thrombophilia in patients with Down syndrome. 45<sup>th</sup> Annual Meeting of the Indian Society of Human Genetics, 13-15 February 2020. Chennai.
- Kataru R, Maharana S, Krishnamukar V, Panigrahi I, Kannan M. Identification of leukemic genes in patients with Down syndrome using Next Generation Sequencing. International Symposium and 60<sup>th</sup> Annual Conference of Association of Microbiologists of India, 15-18 November 2019. Haryana
- 4. Ahmad F, Schneppenheim R, Oyen F, Obser T, **Kannan M**, Saxena R. Mutation spectrum and characterization of two novel large deletions causing severe type 3 von willebrand disease. XXIII Congress of the International Society on Thrombosis and Haemostasis, 23-28 July 2011. Kyoto, Japan.
- 5. **Kannan M**, Kulkarni S, Atreya C. Apoptotic miRNA profiling of packed red blood cells during storage. 51<sup>st</sup> American Soc. of Hematology, 5-8 Dec 2009, New Orleans, USA.
- 6. **Kannan M**, Yadav BK, Ahmad F, Fareed F, Saxena R. Thrombogenic mutations in glanzmann's thrombasthenia patients. XXII Congress of the International Society of Thrombosis and Haemostasis, 11-16 July 2009. Boston, MA, USA.
- Ahmad F, Schneppenheim R, Budde U, Oyen F, Obser T, Hasan I, Kannan M, Saxena R. Mutation spectrum and molecular studies of type 2 von willebrand disease. XXII Congress of the International Society of Thrombosis and Haemostasis, 11-16 July 2009. Boston, MA, USA.
- Ahmad F, Schneppenheim R, Oyen F, Obser T, Budde U, Kannan M, Saxena R. Mutation spectrum of severe von Willebrand disease type 3 in India. 14<sup>th</sup> Congress of the European Hematology Association, Berlin, Germany on June 4-7, 2009.
- Ahmad F, Kannan M, Yadav BK, Saxena R. Characterization of two novel deletions causing von Willebrand disease type 3 held at the 53<sup>rd</sup> Annual meeting of Thrombosis and Haemostasis on 4-7 February 2009 at Vienna, Austria.
- Kannan M, Mohan KVK, Kulkarni S, Atreya C. Potential use of miRNAs as platelet biomarkers of storage held at the 50<sup>th</sup> American Society of Hematology, 6-9 December 2008, Moscone Center, San Francisco, California, USA.
- 11. **Kannan M**, Ahmad F, Yadav BK, Kumar R, Saxena R. Glanzmann's Thrombasthenia patients with no mutations in both the ITGA2B and ITGB3 genes as identified by Conformation Sensitive Gel Electrophoresis (CSGE) held at the 50<sup>th</sup> American Society of Hematology, 6-9 December 2008, Moscone Center, San Francisco, California, USA.
- 12. Ahmad F, Kannan M, Yadav BK, Saxena R. Variable Number of Tandem Repeats and Other Polymorphic Linkage Are Not Accurate Markers for Carrier Detection of von Willebrand Disease. AJCP Resident Research Symposium and Poster Sessions, Annual Meeting of the American Society for Clinical Pathology (ASCP), October 16-19, 2008, Baltimore, MD, USA.

- 13. **Kannan M**, Ahmad F, Yadav BK, Kumar R, Saxena R. Mutation screening of GPIIb and GPIIIa exons by Conformation Sensitive Gel Electrophoresis held at the 49<sup>th</sup> American Society of Hematology, 8-11 December 2007, Atlanta, Georgia, USA.
- 14. **Kannan M**, Ahmad F, Yadav BK, Kumar R, Saxena R. Evaluation of Molecular genetics of Glanzmann's Thrombasthenia in India and its role in Carrier detection. held at at the 48<sup>th</sup> Annual conference of Indian Society of Hematology and Transfusion Medicine, held from 15<sup>th</sup> to 17<sup>th</sup> November 2007 at Lucknow.
- 15. **Kannan M**, Ahmad F, Ahmad S, Kale S, Fareed J, Saxena R. Testing of Heparin-PF4 Antibodies in Indian HIT Patients: Relevance to FcγRIIa Polymorphism and Inflammation. 19<sup>th</sup> International Congress on Thrombosis, 14-18 May 2006, Tel Aviv, Israel.
- 16. Kannan M, Ahmad F, Ahmad S, Kale S, Fareed J, Saxena R. FcgRIIa platelet polymorphism in Asian Indians: Its association with development of Heparin Induced Thrombocytopenia. The International Society on Thrombosis and Haemostasis XXth Congress and the 51st Annual SSC Meeting, 6-12 August 2005, Sydney Convention & Exhibition Centre, Sydney, Australia.
- 17. Gupta PK, Adamtziki E, Budde U, Harbeck-Seu A, Kannan M, Jaiprakash M, Oyen F, Obser T, Wedekind I, Saxena R, Schneppenheim R. Gene Conversions Are a Common Cause of von Willebrand Disease. The International Society on Thrombosis and Haemostasis XXth Congress and the 51st Annual SSC Meeting, 6-12 August 2005, Sydney Convention & Exhibition Centre, Sydney, Australia.
- Kannan, M, Ahmad, F, Kale, S, Saxena, R. Heparin Induced Thrombocytopenia in Indians: Prevalence and its association with Platelet receptor polymorphism (His131Arg). Indian Society of Atherosclerosis Research & International Symposia on Atherosclerosis (ISARCON). Nov 25-27, 2005, Lady Harding Medical College, Delhi.
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- 20. **Kannan M**, Ahmed RPH, Kale S, Saxena R "Occurrence of Heparin-Induced Thrombocytopenia in Indian patients on Unfractionated Heparin" at Delhi Society of Hematology, XIV annual conference, July 12, 2003 at Kasturba Hospital, New Delhi
- 21. **Kannan M**, Ahmed RPH, Paresh Jain, Rajive Kumar, Choudhry VP, Saxena R. Sub characterization of North Indian patients with Glanzmann Thrombasthenia by Flow cytometry. Indian Society of Haematology and Transfusion Medicine (ISHTM). 17<sup>th</sup>-21<sup>st</sup> November 2003 at New Delhi.
- 22. Kannan M, Sarfraz Ahmad, Rafeeq Ahmed, Shailaja Kale, Jawed Fareed<sup>3</sup>, and Renu Saxena<sup>1</sup> Functional Characterization of HIT-Associated Heparin-PF4 Antibodies in Indians Patients. Indian Society of Haematology and Transfusion Medicine (ISHTM). 17<sup>th</sup>-21<sup>st</sup> November 2003 at New Delhi.
- 23. Maitreyee Bhattacharyya. **M. Kannan**, V.P. Choudhury, Renu Saxena\* Neonatal Thrombosis in India: A Report of 14 Cases" Indian Society of Haematology and Transfusion Medicine (ISHTM). 17<sup>th</sup>-21<sup>st</sup> November 2003 at New Delhi

- 25. Panigrahi I., Rupali Kashyap, **Kannan M**, Tyagi S, Choudhry VP, Saxena R\* Correlation of Alpha-thalassemia Genotype with clinical and Hematological Parameters of Thalassemia Intermedia. Indian Society of Haematology and Transfusion Medicine (ISHTM). 17<sup>th</sup>-21<sup>st</sup> November 2003 at New Delhi
- 26. Rafeeq Ahmed, Kannan M, Choudhry VP, Saxena R. Intron 1 and 22 inversions in Indian Haemophilics Indian Society of Haematology and Transfusion Medicine (ISHTM). 17<sup>th</sup>-21<sup>st</sup> November 2003 at New Delhi.
- 27. Ahmed R, Gupta PK, **Kannan M**, Kalra V, Choudhry VP, Saxena R. Molecular factors underlying Paediatric Indian thrombophilics. 2<sup>ND</sup> SIOP- ASIA conference and 6<sup>TH</sup> National conference of pediatric hematology oncology. November 22-24, 2002. Delhi.
- 28. Gupta PK, Ahmed R, Kannan M, Choudhry VP, Saxena R. Characterization of Von Willebrand Disease variants in Indian population. 2<sup>ND</sup> SIOP- ASIA conference and 6<sup>TH</sup> National conference of pediatric hematology oncology. November 22-24, 2002 held at New Delhi, India.

# **Invited talks**

- Blood cells and their associated defects. National Colloquium on Biovision- 2022. Sir Isac Newton College for Arts and Science, Nagapattinam. 27<sup>th</sup> February 2022
- Approach to Scientific Research. Special lecture to DST-STAR College scheme, Sri Sarada College for Women, Salem. 22<sup>nd</sup> February 2022
- Inherited Bleeding Disorders. A guest lecture. Vellore Institute of Technology (VIT), Vellore. 12<sup>th</sup> January 2022
- Platelet activation markers in clinical diseases. Haematocon. An international conference on Hematology. New Delhi. November 2019
- ② Approach to single gene disorders. International conference on "Current Research and Developments in Microbiology" organized by Saveetha Dental College and Hospitals, Chennai. 3<sup>rd</sup> August 2019
- Blood platelets and molecular genetics of inherited blood disorders. Refresher Course in Life Sciences, organized by the UGC-HRD Center, University of Calicut. 05<sup>th</sup> November 2018
- Biomolecules. Inauguration of NEET coaching at the Oxford Matric Hr. Sec. School, Thiruvarur. 26<sup>th</sup> December 2018
- ⑦ Differential diagnosis of bleeding disorders. National Hematology Update XI organized by the All India Institute of Medical Sciences, New Delhi. 14<sup>th</sup> April 2018.
- ③ Science Camp 2018 organized by Rashtriya Avishkar Abhiyan, Central University of Tamil Nadu, Thiruvarur. 04<sup>th</sup> April & 09<sup>th</sup> April 2018
- O Advancement in the development of biomarkers for stored blood cells. National Conference on Recent Progress in Basic Sciences at the MASS college of Arts & Science, Kumbakonam. 25<sup>th</sup> Sep, 2015
- ⑦ Molecular genetics of Hemophilia and vWD in India. 4th Annual Conference of Molecular Pathology Association of India (MPAI) in association with AMP-USA at the TATA Medical Center, Kolkata. 14th-15th Feb, 2015.
- Molecular approaches in X-linked disorders. "DNA Diagnostics" at the Post Graduate Institute of Medical Education and Research (PGIMER), Chandigarh. Feb 5-8, 2015
- ⑦ Role of microRNAs in platelets. Cincinnati Children's Hospital Medical Center, Cincinnati, OH, USA. Nov 18, 2010.
- Molecular defects and microRNAs based regulation in human platelets. Cincinnati Children's Hospital Medical Center, Cincinnati, OH, USA. Jan 22, 2010.
- Post-transcriptional regulation in platelets and red blood cells. Dana-Farber Cancer Institute, Harvard Medical School, 44 Binney street, Boston, USA. Aug 19, 2009.
- Molecular genetics of a platelet function disorder due to a defect in GPIIb/IIIa receptor. CBER, US.FDA at NIH Campus, Bethesda, USA. May 19, 2008.
- Molecular genetics of Glanzmann's thrombasthenia in India and determination of its role for carrier detection. Dec 12, 2007 Loyola Univ. of Medical Center, Chicago, USA

# Extracurricular profile

• **Computer**: Diploma in Application Software