

CURRICULUM VITAE

September 7th 2019

PERSONAL INFORMATION

Nigel Mackman, B.Sc., Ph.D., FAHA
300 Laurel Hill Road
Chapel Hill
North Carolina 27514
Married

EDUCATION

University of Leicester 1982-1985
Leicester, England
Ph.D. (Genetics)

University of Leicester 1978-1982
Leicester, England
B.Sc. (Biological Sciences)

POSTDOCTORAL TRAINING

Postdoctoral Fellow 1987-1989
Scripps Clinic and Research Foundation
La Jolla, California

Postdoctoral Fellow 1985-1987
University of Leicester
Leicester, England

ACADEMIC APPOINTMENTS

2011-2017 Director of the UNC McAllister Heart Institute

2009-2011 Associate Director of the UNC McAllister Heart Institute

2007-present Co-Director of the Thrombosis and Hemostasis Program at UNC

2007-present John Parker Distinguished Professor of Medicine
Professor of Pharmacology
Professor of Pathology and Laboratory Medicine.
Member of the Immunology program in the
Lineberger Comprehensive Cancer Cancer
Division of Hematology/Oncology
Department of Medicine
University of North Carolina at Chapel Hill

2002-2007 Associate Professor (with tenure)
Department of Immunology
The Scripps Research Institute
La Jolla, California

1995-2002 Associate Professor
Department of Immunology
The Scripps Research Institute
La Jolla, California

1989-1995 Assistant Professor
Department of Immunology
The Scripps Research Institute
La Jolla, California

HONORS & AWARDS

2017 ATVB Distinguished Achievement Award

2017 McFarlane-Biggs Lecture on Thrombosis presented at the British Society of Hematology Annual meeting.

2015 Distinguished Career Award from the International Society of Thrombosis and Hemostasis.

2014 The 13th Annual Mosesson Lecture on Thrombosis, Blood Research Institute, Blood Center of Wisconsin.

2014 Humprey's Lecture, College of Medical and Dental Sciences, University of Birmingham, UK.

2011 Jeffrey M. Hoeg Arteriosclerosis, Thrombosis, and Vascular Biology Award for Basic Science and Clinical Research, presented at the ATVB Spring Meeting.

2010 Dr. Phillip Rayford Memorial Lecture, University of Arkansas Medical School, Little Rock, Arkansas.

2009 Sol Sherry Distinguished Lecture on Thrombosis presented at the American Heart Association National meeting.

2007 Investigator Recognition Award from the International Society of Thrombosis and Haemostasis.

2004 Treadwell Distinguished Lectureship, University of California at Davis.

2004 Special Recognition Award in Thrombosis from the American Heart Association Council on Arteriosclerosis, Thrombosis and Vascular Biology.

1999 Elected Fellow of the American Heart Association.

1995 Established Investigator of the American Heart Association.

- 1991 Winner of the Louis N. Katz Basic Science Research Prize for Young Investigators.
- 1988 American Heart Association, California Affiliate Fellowship.

Thesis Committees

- 2019-present Jean-Marie Mwiza, University of North Carolina at Chapel Hill, Chapel Hill, North Carolina, USA.
- 2015-2018 Jamie Byrnes, University of North Carolina at Chapel Hill, Chapel Hill, North Carolina, USA.
- 2011 Manjunath Goolyam Basavaraj, University of Tromso, Norway.
- 2009-2017 Tasha Nalywajko, University of North Carolina at Chapel Hill, Chapel Hill, North Carolina, USA.
- 2009-2011 Kellie Machlus, University of North Carolina at Chapel Hill, Chapel Hill, North Carolina, USA.
- 2005 External reviewer for Margot Tesselaar's thesis from the Department of Clinical Oncology, Leiden University Medical Center, The Netherlands.
- 2004 External reviewer for Charles Song's thesis from the University of Sydney, Sydney, Australia.
- 2003 Minor Proposition Committee for Alejandro Diaz from the University of California at San Diego.
- 1996 External reviewer for Veronique Ollivier's thesis from the University of Paris, France.

Hosting Visiting Scholars

- 2019 October-November. Bernhard Moser, Medical University of Vienna, Vienna, Austria.
- 2019 August-October. Axel Rosell, Danderyd University Hospital and Karolinska Institute, Stockholm, Sweden.
- 2018 March-June. Jens Posma, Cardiovascular Research Institute Maastricht, Maastricht University Medical Center, Maastricht, Netherlands.
- 2018 April-July. Ana Sachetto, Instituto Butantan, Laboratorio de Fisiopatoqia, Faculdade de Medicine, Universidade de Sao Paulo.
- 2017 March- Ma. Hannes Datler, Department of Thrombosis Research and Vascular Biology, Medical University of Vienna, Vienna, Austria

GRANT SUPPORT

Active

- 2019-2023 R01 HL147149 National Institutes of Health, The grant is entitled “Mechanisms of venous thrombosis in pancreatic cancer”. PI. N. Mackman
- 2013-2022 R01 HL119523 National Institutes of Health. The grant is entitled “Role of the thrombin PAR-1 pathway in viral infections”. PI. N. Mackman
- 2013-2019 U01 HL117659 National Institutes of Health. The project is entitled “Targeted anticoagulant therapy for sickle cell disease.” MPI. Ataga, Key, Mackman, Pawlinski
- 2015-2020 R01 National Institutes of Health. The project is entitled “Alternatively spliced tissue factor in pathobiology of pancreatic cancer.” PI. V. Bogdanov Subcontract PI. N. Mackman
- 2019-2020 Grant from Bayer entitled “Determine the mechanism by which rivaroxaban reduces atherosclerosis in LDLR^{-/-} mice”.

Completed

- 2016-2017 Duke/UNC CTSA Consortium Collaborative Award. The grant is entitled “Targeting the intrinsic pathway of coagulation to prevent venous thrombosis in pancreatic cancer. Co-PI. N. Mackman
- 2014-2016 Janssen Research and Development. LLC. Title of the project is entitled “Effect of rivaroxaban on cardiac remodeling and function in mice. PI. N. Mackman
- 2014-2015 UNC Center for Tobacco Regulatory Sciences and Lung Health/Innate Immune Defense. The title is entitled “The effect of new and emerging tobacco products on prothrombotic biomarkers. Co-PIs N. Mackman and A. Wolberg
- 2014-2016 UNC Nutrition Obesity Research Center. The grant is entitled “Role of macrophage tissue factor in diet induced obesity. PI. N. Mackman
- 2009-2014 P01 HL 006350 National Institutes of Health. The project was entitled “Structure, function, and genetics of coagulation factors. PI, D. Stafford. Project Leader, N. Mackman.
- 2008-2013 P01 National Institutes of Health. The project was entitled “Thrombosis Formation In Vivo” (Furie, PI, Harvard Beth Israel Deaconess Medical Center). Mackman consortium.
- 2008-2013 R01 National Institutes of Health. The project was entitled “Mechanisms of thrombosis in cancer-associated thrombosis” N. Mackman and N. Key Multiple PI.

PROFESSIONAL SERVICE

Memberships & Offices in Professional Societies

- American Heart Association
- American Society of Hematology
- International Society of Thrombosis and Hemostasis (ISTH)
- American Society of Biochemistry and Molecular Biology
- North American Vascular Biology Organization

Senior Associate Editor Positions

2012- present Senior Associate Editor: ATVB

Associate Editor Positions

2012-2017 Associate Editor: Journal of Clinical Investigation
2007-2012 Associate Editor: ATVB
2006-2012 Associate Editor: Journal of Thrombosis and Hemostasis
2002-2007 Thrombosis and Hemostasis

Editorial Boards

2014-present Journal of Thrombosis and Haemostasis
2007-present Thrombosis Research
2005-2007 Arteriosclerosis, Thrombosis and Vascular Biology (ATVB)

Leadership courses

2009 Faculty Leadership Initiative Course at UNC-CH

Committees

2014-2016 Chair of the ATVB Nomination Committee
2012-2014 Chair of the ATVB Council of the AHA
2012-2014 Member of the AHA Triangle Metro Board
2012-2014 Chair of the Missions Committee of the AHA Triangle Metro Board
2010-2012 Vice Chair of the ATVB Council of the AHA

Review Panels

2011-present UNC NC TraCS Institute Study Section
2009-2013 NHLBI Program Project Review Committee
2005-2007 Member, Western Review Consortium, AHA
2004 Ad Hoc Hemostasis and Thrombosis (HT) Study Section, NIH
2003 Ad Hoc Pathology A Study Section, NIH
2002 Member, Vascular Wall Biology II Study Group, AHA
1997-2001 Member, Pathology A Study Section, NIH
1995-1997 Member, Thrombosis Study Committee, AHA
1993-1997 Member, Peer Review Committee, California Affiliate, AH

Planning Committees

- 2014 NHLBI and NCI Strategic Working Group: Cancer and Thrombosis
2006 NHLBI Strategic Planning Group on Critical Role of Inflammation in Ischemic Disorders

Scientific Committees

- 2013- 2017 Co-chair of the ISTH Scientific Standardization Subcommittee on Hemostasis and Malignancy
2015 Chair of the ASH Scientific Committee on Thrombosis and Vascular Biology
2012- 2014 Vice-chair of the ASH Scientific Committee on Thrombosis and Vascular Biology
2010-2012 Member of the ASH Scientific Committee on Thrombosis and Vascular Biology
2004-2008 Chair of the Kenneth M. Brinkhous Young Investigator Prize in Thrombosis sponsored by the American Heart Association.
2005-2013 Co-chair of the ISTH Scientific Standardization Subcommittee on Animal Models
2004-2008 Member of the Leadership Committee, Council on ATVB/AHA
2001-2003 Member of the Scripps Vascular Biology Group Seminar Series Organization Committee
1990-1993 Member of the Scripps Immunology Affinity Group Seminar Series Organization Committee

Conference Organization Committees

- 2015 Member of the Advisory Board for the International Society of Atherosclerosis in Amsterdam
2015 Member of the Organizing Committee for the ISTH meeting in Toronto.
2014 Member of the Organizing Committee for the 7th Symposium on Hemostasis in Chapel Hill
2014 Member of the Organizing Committee for the Thrombosis and Hemostasis Society of North American Meeting in Chicago.
2012-2015 Member of the Organizing Committee for the ATVB Spring Meeting.
2010 Co-Chair of the 13th Midwest Platelet Conference.
2010 Chair of the Hemostasis Gordon Conference.
2010 Co-Chair of the 5th Symposium on Hemostasis with Special Focus on Factor VIIa and Tissue Factor – from cell biology to animal models.
2010 Organized a 1 day workshop on Microparticles, Chapel Hill, NC.
2010 Member of the organizing committee for the ATVB Spring meeting.
2010 Member, Thrombosis Committee for the ATVB/AHA National Meeting.
2009 Member, Intl. Scientific Advisory Board for the ISTH meeting in Boston, USA.
2008 Member of the organizing committee for the 1st Symposium on Deep Vein Thrombosis at Chapel Hill.
2008 Co-Chair of the 4th Symposium on Hemostasis with Special Focus on Factor VIIa and Tissue Factor - Understanding the Molecular Mechanism.
2007 Member, Intl. Scientific Advisory Board for the ISTH meeting in Geneva, Switzerland.
2005 Member, Thrombosis Committee for the ATVB/AHA National Meeting.
2005 Member, Intl. Scientific Advisory Board for the ISTH meeting in Sydney, Australia.
2004 Chair, Thrombosis Committee for the ATVB/AHA National Meeting.
2003 Member, International Advisory Board for the International Society on Thrombosis and Hemostasis.

Patents:

- 2007 Mackman, N., Pawlinski, R. and Blaxall, B. Methods and Composition for Treating and Preventing Cardiac Dysfunction
1999 Mackman, N. Determination of Tissue Factor Levels in Unstimulated Whole Blood.

- 1994 Mackman, N. Novel Protein Complex Containing the p65 Subunit of NF- κ B.
1987 Mackman, N., Nicaud, J-M, and Holland, I.B. International Patent Application No. PCT/GB 87/00331 Process for the Production of a Polypeptide.

Scientific Advisory Boards

- 2014-present Member of the International Scientific Advisory Board for the Austrian Science Fund project entitled “Cellular mediators linking inflammation and thrombosis,” Vienna.
- 2014-2017 Member of the International Scientific Advisory Board of the K.G. Jebsen Thrombosis Research and Expertise Center at the University of Tromso, Norway.
- 2012-2016 Member of the International Scientific Advisory Board for the German Center for Cardiovascular Research, Berlin.
- 2002-2012 Thrombotargets Group
- 2002 Advisory Board on the use of a humanized anti-tissue factor antibody. Design an observational study of tissue factor in acute coronary syndrome patients. Genentech
- 2000 Tissue Factor Advisory Board. Reviewed therapeutic areas in which Tissue Factor-VIIa interactions are likely to contribute to pathology. Searle.
- 1997-2002 Coagulation Diagnostics, Inc.

Consulting Positions

- 2018-present Zafgen
- 2015-2019 Consultant to Johnson & Johnson
- 2010-2015 Consultant to Merck
- 2009-2018 Consultant to Bayer
- 2008-2012 Consultant to Daiichi-Sankyo
- 2006 Consultant to King Pharmaceuticals
- 2006-2007 Consultant to Cytori Therapeutics
- 2005-2007 Consultant to Tanox
- 2004 Consultant to Dynavax Technologies
- 2002-2005 Consultant to Sunol Molecular Corporation
- 1995-2007 Consultant to Tanabe Research Laboratories
- 1997-2002 Consultant to Coagulation Diagnostics

TEACHING & MENTORING ACTIVITIES

Teaching

- 2007- present Lecture graduate students in Pathology and Pharmacology.
- 2007-2013 Lectured second year medical students.
- 1985-1987 Taught undergraduates at the University of Leicester.

Training Grant Membership

2014-2017	NIH T32 (Stouffer) Cardiology training grant, Co-director.
2007-present	NIH T32 (Key) Hematology training grant, Co-director.
2001-2007	NIH T32 (Curtiss) Blood Systems in Coagulation and Vessel Disease.
1998-2007	NIH T32 (Mosier) Immunology training grant.

Mentoring

Current Trainees

1. Yohei Hisada, PhD. Dr. Hisada received his Ph.D. degree from the University of Tokyo on fibrin deposition in cancer. He is currently working on cancer-associated thrombosis.
2. Steve Grover, PhD. Dr. Grover received his Ph.D. degree in Cardiovascular Medicine from King's College London, UK. He was a postdoctoral fellow with Dr. Furie at Harvard Medical School studying the role on thrombospondin 1 in arterial thrombosis.

Past Trainees

1. Bertrand Gondouin, MD, PhD. 2016-2017. Dr. Gondouin studied the roles of PAR-1 and PAR-2 in kidney ischemia-reperfusion injury. He has is currently in private practice in Marseille.
2. Michael Bode, MD. 2013-2016, Dr. Bode studied the role of cardiomyocyte PAR-1 in Cocksackievirus-induced myocarditis. He is currently training to be an interventional cardiologist at UNC.
3. Kohei Tatsumi, M.D., Ph.D. Dr. Tatsumi received his M.D. and Ph.D. degrees from Nara Medical University, Japan. He worked on the role of coagulation in influenza A infection. Dr. Tatsumi is currently an Assistant Professor at Kinki University in Osaka.
4. Julia Geddings, Ph.D. 2009-2015. Dr. Geddings worked on the role of TF+ tumor-derived microparticles in cancer-associated thrombosis. She has returned to Medical School at the University of North Carolina at Chapel Hill.
5. A. Phillip Owens, Ph.D., 2009-2014. Dr. Owens received a Ph.D. from the University of Kentucky in 2009. He studied angiotensin II and aortic aneurysms. He received a AHA fellowship to study the role of TF in the hypercoagulable state associated with hyperlipidemia. He also obtained a K99/R00 to study the role of platelets and the clotting cascade in aortic aneurysms. He is currently an Assistant Professor in the Department of Medicine at the University of Cincinnati.
6. Silvio Antoniak, Ph.D., 2008-2014. Dr. Antoniak received a Ph.D. from the University of Berlin in Germany in 2008. He studied the role of PARs in cardiac ischemia-reperfusion injury and viral myocarditis. Current position: Research Assistant Professor in the Department of Pathology and Laboratory Medicine at the University of North Carolina at Chapel Hill.
7. Pierre-Emmanuel Rautou, M.D., Ph.D., 2012-2013. Dr. Rautou received an M.D. degree from the University of Brodeaux and a Ph.D. from the University of Paris. He studied the how human atherosclerotic plaque microparticles stimulate endothelial cells. Current Position: Assistant Professor Hospital Beaujon, Clichy, France.

8. Jian-Guo Wang, Ph.D., 2007- 2012. Dr. Wang received a Ph.D. from Shanghai Institutes for Biological Sciences, China in 2003. He studied the regulation of tissue factor in monocytic cells. Sponsor's NIH grants. Current Position: Postdoctoral Fellow at Harvard Medical School.
9. Troy McEachron, Ph.D., 2008- 2011. Dr. McEachron studied the role of PAR-2 signaling in the growth of breast tumors. NIH Predoctoral fellowship. Current Position: Postdoctoral Fellow at St. Jude Children's Research Hospital, Memphis, Tennessee.
10. Jeremiah Boles, M.D., 2009-2011. Dr. Boles received an M.D. degree from the University of North Carolina at Chapel Hill in 2005. He was funded in a T32 fellowship. Current Position: private practice.
11. Julie Clarke Williams, Ph.D., 2010-2011. Dr. Williams received a Ph.D. from the University of North Carolina at Chapel Hill in 2009. Current Position: postdoctoral fellow at the University of Florida, Granville.
12. James Luyendyk, Ph.D., 2005-2007. Dr. Luyendyk received a Ph.D. from the Department of Pharmacology and Toxicology at Michigan State University in 2005. Assistant Professor, Department of Pharmacology, Toxicology and Experimental Therapeutics, The University of Kansas Medical Center, Kansas City, KS.
13. Linda Kidd, DVM, Ph.D. 2006-2007. Dr. Kidd earned her DVM degree from the University of Wisconsin in 1991 and a Ph.D. from North Carolina State University in January of 2006. Current position. Assistant Professor, Western University College of Veterinary Medicine, Pomona, CA.
14. Rachel Tilley, Ph.D., 2004-2007. Dr. Tilley earned her Ph.D. in Biochemistry in 2001 at the University of St. Andrews, Scotland, and completed three years of postdoctoral training (2001-2004) in molecular biology at Rowett Research Institute in Aberdeen. Current position. Science writer.
15. Elisa Romeo, Ph.D., 2006-2007. Ms. Romeo earned a Ph.D. from the University of Zurich, Institute of Physiology, in January 2006. Current position. Research Scientist at Genotix, Carlsbad, CA, USA.
16. Rafal Pawlinski, Ph.D., 1999-2005. Dr. Pawlinski received a Ph.D. in 1999 from the Institute of Zoology, Jagiellonian University, Poland. Staff Scientist, The Scripps Research Institute, La Jolla, CA, USA.
17. Ting-Kun "Mark" Lin, M.D., Ph.D., 2004-2005. Current position. Doctor of Pulmonary Medicine, Kaiser Permanente Hospital, San Francisco, CA, USA.
18. Gernot Schabbauer, Ph.D., 2003-2005. Current position. Assistant Professor at the University of Vienna, Austria.
19. Yuichiro Sato, M.D., Ph.D., 2003-2005. Current position. Senior Scientist at UCSD Medical Center, Department of Pathology, San Diego, CA, USA.
20. Veera Reddy Konda, Ph.D., 2001-2004. Current position. Senior Scientist with Metagenics, Gig Harbor, Washington, USA.
21. Patricia Lopez, Ph.D., 2002-2004. Current position. Quality Assurance Engineer with Smith & Nephew, La Jolla, CA, USA.

22. Dario Frank, M.D., 2002-2003. Current Position. Clinical Physician, Technical University Aachen, Germany.
23. Bettina Kehrle, B.S., 2001-2002. Current position: Medical School, University of Ulm, Ulm, Germany.
24. Mausumee Guha, Ph.D., 1999-2002. Current position: Principal Investigator, Kalypsys, Inc., San Diego, CA, USA.
25. Gourab Bhattacharjee, Ph.D., 2000-2002. Current position: Staff Scientist, The Scripps Research Institute, La Jolla, CA.
26. Lingzhi Zhang, Ph.D., 2000-2001. Current position: Postdoctoral fellow, UCSD, San Diego, CA, USA.
27. Sarah Ahrens, B.S., 2000-2001. Stanley J. Sarnoff Fellowship. Current position: Medical School, UCSF, San Francisco, CA, USA.
28. Xuehong Song, Ph.D., 2000-2001. Current position: Associate Scientist, Metabasis Therapeutics, Inc., San Diego, CA, USA.
29. Kevin Kempf, M.D., 1999-2000. Naval training fellowship. Current position: Staff Rheumatologist, Naval Hospital at Balboa, San Diego, CA, USA.
30. Joanne Labriola, B.S., 1999-2000. Stanley J. Sarnoff fellowship. Current position: Medical School, University of Pittsburgh, Pittsburgh, PA, USA.
31. Craig Kovacich, B.S., 1998-1999. Stanley J. Sarnoff fellowship. Current position: Medical School, University of Washington, Seattle, WA, USA.
32. Richard Santucci, M.D., 1997-1999. NIH fellowship. Current position: Associate Professor, Wayne State School of Medicine, Detroit, MI, USA.
33. Maria O'Connell, Ph.D., 1997-1999. AHA fellowship 1998-1999. Current position: Senior Postdoctoral Scientist, MRC Resource Centre for Human Nutrition Research, Cambridge, U.K.
34. Jonathan Erlich, M.D., Ph.D., 1996-2000. AHA fellowship 1998-2000. Current position: Senior Lecturer in Medicine, Dept. of Nephrology, University of New South Wales, Sydney, Australia.
35. Graham Parry, Ph.D., 1992-1997. AHA fellowship 1993-1995. Current position: Research Investigator, Attenuon LLC, San Diego, CA, USA.
36. Veronique Ollivier, Ph.D., 1994-1995. Sanofi fellowship. Current position: Research Associate, INSERN, Paris, France.
37. Mei-Zhen Cui, Ph.D., 1991-1994. Current position: Research Associate, Cleveland Clinic, Cleveland, OH, USA.
38. Brian Foster, Ph.D., 1991-1993. Current position: Investigator, Calif. Least Tern Mgmt. Fndn., San Diego, CA, USA.

32. Korbinian Brand, M.D., 1989-1991. Current position: Assoc. Prof., Inst. For Clinical Chem. & Pathobiochem., Munich, Germany.

Chair of Webinars

- 2015 January. Chaired an ISTH webinar on Microvesicles.

Chair of Scientific Sessions:

- 2019 July, Melbourne, Australia. Chaired a session on the “Tissue Factor Pathway” at the International Society of Thrombosis and Haemostasis meeting.
- 2019 July, Melbourne, Australia. Chaired a session at the Platelet and Thrombosis Symposium.
- 2018 October, Oklahoma City, Oklahoma. Chaired a session on Emerging Trends at the 17th Midwest Platelet Conference.
- 2018 November, Chicago, Illinois. Chaired the ATVB Journal Session: from Cells to the Clinic: Progress in the Development of Novel Therapeutic for ATVB Diseases.
- 2018 October, Oklahoma City, Oklahoma. Chaired a session on Emerging Trends at the 17th Midwest Platelet meeting.
- 2017 May, San Francisco, California. Chaired a session on Highlights of the ATVB Journal at the Vascular Discovery: From Genes to Medicine meeting.
- 2017 July, Berlin, Germany. Chaired a session on Animal Models of Thrombosis at the International Society of Thrombosis and Hemostasis meeting.
- 2017 February, Maastricht, Netherlands. Chaired a session on Target identification and new avenues in atherothrombosis management at the 2nd Maastricht Consensus Conference on Thrombosis.
- 2016 December, Santa Fe, New Mexico. Chaired a session on endothelial dysfunction and coagulopathy at the Keystone meeting on Hemorrhagic Fever Viruses.
- 2016 November, New Orleans, Louisiana. Chaired a session on microparticles in vascular disease at the AHA Scientific Sessions.
- 2016 October, Boston, Massachusetts. Chaired a session on thrombosis at the 19th International Vascular Biology Meeting.
- 2016 May, Nashville. Chaired a plenary session on highlights of the ATVB journal at the ATVB Spring meeting.
- 2016 May, Chapel Hill. Chaired a session on the initiation of coagulation at the 8th Symposium on Hemostasis.
- 2015 December, Orlando, Florida. Chaired a session on aging and thrombosis at the American Society of Hematology’s annual meeting.

- 2015 June, Toronto (Canada). International Society on Thrombosis and Haemostasis meeting. Chaired a session entitled Microparticles in Health and Disease.
- 2015 June Toronto (Canada). Scientific Standardization Committee meeting of the International Society of Thrombosis and Haemostasis. Chaired a session entitled Hemostasis and Malignancy.
- 2015 February, Maastricht (Netherlands). Maastricht Consensus Conference on Thrombosis. Chaired a sesión on Epidimiology, biomarkers, imaging of VTE and PTS.
- 2014 November. Chicago (USA). AHA National meeting. Chaired a sesión entitled New Targets for Antiplatelet Drugs
- 2014 May, Toronto (Canada). Arteriosclerosis, Thrombosis and Vascular Biology Annual Meeting of the American Heart Association. Chaired plenary session V for Invited Lecture Series
- 2013 May, Lake Buena Vista (USA). Arteriosclerosis, Thrombosis and Vascular Biology Annual Meeting of the American Heart Association. Chaired a plenary session entitled Genetics and Molecular Determinants of Angiogenesis and Lymphangiogenesis, and a plenary session on Invited Lectures
- 2012 May, Chapel Hill (USA). 6th Symposium on Hemostasis. Chaired a session entitled Tissue Factor and Microparticles.
- 2012 April, Chicago (USA). Arteriosclerosis, Thrombosis and Vascular Biology Annual Meeting of the American Heart Association. Chaired a session entitled Blood Coagulation and Fibrinolysis.
- 2010 November, Chicago (USA). AHA National meeting. Chaired a session on The Not-So-Micro Effects of Microparticles.
- 2010 June, Los Angeles (USA). International Vascular Biology Society Chaired a session on Vascular Integrity.
- 2010 April, Galveston (USA). International Congress on Antiphospholipid Antibodies. Chaired a session on the Pathophysiology of APC.
- 2010 April, San Francisco (USA). Arteriosclerosis, Thrombosis and Vascular Biology Annual Meeting of the American Heart Association. Chaired a session entitled Inflammation and Coagulation.
- 2010 April, San Francisco (USA). Research Initiatives in Vascular Disease Conference hosted by the Society of Vascular Surgery. Chaired a session entitled Vascular Endothelium and Thrombosis.
- 2009 April, Washington DC (USA). Arteriosclerosis, Thrombosis and Vascular Biology Annual Meeting of the American Heart Association. Chaired a session entitled Inflammation and Coagulation.

- 2008 November, Atlanta (USA). American Heart Association Scientific Sessions. Chaired a session entitled Coagulation in Thrombosis and Therapeutic Targeting Coagulation.
- 2008 September, Chapel Hill (USA). 1th Symposium on Venous Thromboembolism: from Bench to Bedside. Chaired a session entitled Basic Science Aspects of VTE.
- 2008 April, Chapel Hill (USA). 4th Symposium on Hemostasis with Special Focus on Factor VIIa and Tissue Factor. Chaired a session entitled Animal Models of Hemostasis and Thrombosis.
- 2007 July, Geneva (Switzerland). XXI International Society on Thrombosis and Haemostasis meeting. Chaired a session entitled Microparticles.
- 2007 April, Chicago (USA). 7th Annual Conference on Arteriosclerosis, Thrombosis and Vascular Biology. Chaired session entitled Blood Coagulation and Fibrinolysis.
- 2007 April, Chicago (USA). 7th Annual Conference on Arteriosclerosis, Thrombosis and Vascular Biology. Chaired Plenary Session III.
- 2006 April, Denver (USA). 6th Annual Conference on Arteriosclerosis, Thrombosis and Vascular Biology. Chaired Plenary Session IV.
- 2005 November, Dallas (USA). American Heart Association Scientific Sessions. Chaired a session entitled New Insights from Animal Models of Thrombosis.
- 2005 September, Frauenisel (Germany). Chaired a session at a conference entitled Mechanism of Thrombus Formation.
- 2005 August, Sydney (Australia). XXth Congress of the International Society on Thrombosis and Haemostasis. Chaired a session entitled Signaling and Transcriptional Control in Cells of the Vascular System.
- 2005 April, San Diego (USA). Experimental Biology 2005. Chaired a session entitled Inflammation and Immunology.
- 2004 May, San Francisco (USA). 5th Annual Conference on Arteriosclerosis, Thrombosis and Vascular Biology. Chaired a session entitled Control of Coagulation and a plenary session.
- 2003 November, Orlando (USA). American Heart Association Scientific Sessions. Chaired session entitled Thrombosis: New Concepts in Coagulation and Fibrinolysis.
- 2003 July, Birmingham (UK). International Society on Thrombosis and Haemostasis. Chaired a session entitled Protease Receptors and Growth Factors.
- 2003 July, Birmingham (UK). International Society on Thrombosis and Haemostasis. Chaired a session entitled, “Lessons from Gene Knock-outs”
- 2002 November, Chicago (USA). American Heart Association Scientific Sessions. Chaired a session entitled Regulation of Blood Coagulation and Fibrinolysis.
- 2001 November, Anaheim (USA). American Heart Association Scientific Sessions. Chaired a session entitled Regulation of Blood Coagulation and Fibrinolysis.

- 2001 July, Paris (France). International Society on Thrombosis and Haemostasis.
Chaired session entitled Determinants of Cell Inflammatory Response.
- 2000 November, New Orleans (USA). American Heart Association Scientific Sessions.
Chaired session entitled Cardiovascular Transcription Factors and Gene Regulation.
- 1998 August, Cairns (Australia). VIIth International Vascular Biology Conference.
Chaired session entitled Transcription Factors and Kinases.

Masterclass

- 2019 July, Melbourne (Australia). International Society on Thrombosis and Haemostasis.
Masterclass on tissue factor.

BIBLIOGRAPHY

REFEREED PAPERS/ARTICLES

Original Research

1. Vallier L, Bouriche T, Bonifay A, Judicone C, Bez J, Franco C, Guervilly C, Hisada Y, **Mackman N**, Houston R, Poncelet P, Dignat-George F, Lacroix R. Increasing the sensitivity of the human microvesicle tissue factor activity assay. *Thromb Res* 2019. PMID 31450010. In press.
2. Maqsood A, Hisada Y, Garratt KB, Homeister J, Mackman N. Rivaroxaban does not affect the growth of human pancreatic tumors in mice. *J Thromb Haemost* 2019. PMID 31393055. In press.
3. Tatsumi K, Schmedes CM, Houston ER, Butler E, **Mackman N**, Antoniak S. Protease-activated receptor 4 protects mice from Coxssackievirus B3 and H1N1 influenza A viral infection. *Cell Immunol* 2019. PMID 31337508. In press
4. Nieuwland R, Gardiner C, Dignat-George F, Mullier F, **Mackman N**, Woodhams B, Thaler J. Towards standardization of assays measuring extracellular vesicle-associated tissue factor activity. *J Thromb Haemost*. 2019. PMID 31231949.
5. Puhm F, Afonyushkin T, Resch U, Obermayer G, Rohde M, Penz T, Schuster M, Wagner G, Rendeiro AF, Melki I, Kaun C, Wojta J, Bock C, Jilma B, **Mackman N**, Boilard E, Binder CJ. Mitochondria are a subset of extracellular vesicles released by activated monocytes and induced type I IFN and TNF responses in endothelial cells. *Circ Res* 125(1):43-52, 2019. PMID 31219742.
6. Wu C, Lu W, Zhang G, Shi X, Hisada Y, Grover SP, Zhang X, Li L, Xiang B, Shi J, Li XA, Daugherty A, Smyth SS, Kirchhofer D, Shiroishi T, Shao F, **Mackman N**, Wei Y, Li Z. Inflammasome activation triggers blood clotting and host death through pyroptosis. *Immunity* 50(6):1401-1411, 2019. PMID 31076358.
7. Tatsumi K, Hisada Y, Connelly AF, Buranda T, **Mackman N**. Patients with severe orthohantavirus cardiopulmonary syndrome due to Sin Nombre Virus infection have increased circulating extracellular vesicle tissue factor and an activated coagulation system. *Thromb Res* 179:31-33, 2019. PMID 310755699.
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4. Edgington, T.S., Taylor, F., Chang, A., Ruf, W., Block, K., **Mackman, N.**, and Morrissey, J.H. Tissue factor: Molecular biology and significance in the pathophysiology of gram-negative septic shock. In: Microbiological, chemotherapeutical and immunological problems in high risk patients. E. Garaci, G. Renzini, F. Filadoro, A.L. Goldstein, and J. Verhoef, eds., Raven Press, New York, pp. 29-37, 1989.
5. **Mackman, N.**, and Williams, P. Detection of α -haemolysin production by clinical isolates of *Escherichia coli*. In: The Virulence of *Escherichia coli*. M. Sussman, ed., Academic Press, New York, 1984, Ch. 23, pp. 425-427.

Webinars

- 2016 November. Presented a webinar on “Tissue factor in the innate immune response”.
- 2015 December. Presented a webinar on “Tissue factor and cancer.”

Invited Presentations

- 2019 July, Houston. Presented a talk on “Mechanisms of cancer-associated thrombosis” at the VA-ORD BLR&D Field-based Meeting on Links between thrombosis and inflammation.
- 2019 July, Melbourne, Australia. Presented a talk on “Measurement of the procoagulant activity of extracellular vesicles isolated from plasma” at the International Society of Thrombosis and Haemostasis meeting.
- 2019 July, Melbourne, Australia. Presented a talk on “Effect of combining low levels of tissue factor with complete deficiencies in factor IX or factor XI on survival and placental development in mice” at the International Society of Thrombosis and Haemostasis meeting.
- 2019 June, Charleston. Presented a talk on “A new mouse model to study mechanisms of thrombosis in cancer” at the New Insights into the Understanding of Thrombosis and Hemorrhage in

Myeloproliferative Neoplasms: Improving Patient Outcomes.

- 2019 June, Pittsburgh. Presented a talk on “Hemostasis and thrombosis in men and mice” at the University of Pittsburgh.
- 2019 May, Boston. Presented a talk on “Mechanisms of cancer associated thrombosis” at Beth Israel Deaconess Medical Center.
- 2019 May, Boston. Presented a talk on “Mechanisms of cancer associated thrombosis” at the American Heart Association meeting Vascular Discovery from Genes to Medicines.
- 2019 April, Boston. Presented a talk on “Mechanisms of venous thrombosis in cancer” at the Boston University Symposium on Cancer-associated thrombosis and vascular dysfunction: from molecular to large data bases.
- 2019 April, Philadelphia. Presented a talk on “Mechanisms of cancer-associated thrombosis” to Janssen Pharmaceuticals.
- 2019 March, Seoul, Korea. Presented a talk on “Cancer-associated pathways and biomarkers of venous thrombosis” at the Korean Society of Hematology International Conference.
- 2019 February, Maastricht, Netherlands. Presented a talk on “Tissue factor and microvesicles in thrombo-inflammatory diseases” at the 3rd Maastricht Consensus Conference on Thrombosis.
- 2018 November, Chicago, Illinois. Presented a talk on “Mouse models of cancer-associated thrombosis” at the American Heart Association meeting.
- 2018 October, Oklahoma City, Oklahoma. Presented a talk entitled “Genetic analysis of hemostasis in mice” at the 17th Midwest Platelet meeting.
- 2018 July. Dublin, Ireland. Presented a talk entitled “Overview on procoagulant extracellular vesicle assays” at the 64th Annual ISTH SSC meeting.
- 2018 July. Dublin, Ireland. Presented a talk entitled “A genetic approach to analyze blood coagulation pathways in mice” at the 64th Annual ISTH SSC meeting.
- 2018 June, Stockholm, Sweden. Presented a talk entitled “Hemostasis in mice and men” at the Danderyd Hospital of the Karolinska Institute.
- 2018 June, Stockholm, Sweden. Presented a talk entitled “Pathogenesis of cancer-associated thrombosis” at the European Hematology meeting.
- 2018 June, Helsinki. Finland. Presented a talk entitled “Roles of tissue factor in hemostasis and thrombosis” at the Kalastajatorppa Hotel.
- 2018 June, Toronto, Canada. Presented a talk entitled “Update on hemostatic and thrombotic pathways” at the International Symposium on Atherosclerosis.
- 2018 May, Vienna, Austria. Presented a talk entitled “A genetic approach to analyze blood coagulation pathways” at the Joint Meeting on Vascular Biology, Inflammation and Thrombosis.
- 2018 May, Pittsburgh, USA. Presented a talk entitled “Role of PS+ and TF+ extracellular vesicles in hemostasis and thrombosis” at The American Society of Pediatric Hematology/Oncology.
- 2018 April, Bergamo, Italy. Presented a talk entitled “Mouse models of cancer-associated thrombosis” at the 9th International Conference on Thrombosis and Hemostasis Issues in Cancer.

- 2018 April, Milan, Italy. Presented a talk entitled “Roles of tissue factor in hemostasis and thrombosis” at the Centro Cardiologico Monzino.
- 2018 February, New York, USA. Presented a talk entitled “Roles of tissue factor in hemostasis and thrombosis” at the New York Blood Center.
- 2017 December, Atlanta, USA. Presented a talk entitled “Bridging the translational divide” at a trainee didactic session at the American Society of Hematology meeting.
- 2017 November, Vienna, Austria. Presented a talk entitled “Tissue factor” at the European Atherosclerosis Society course of atherosclerosis.
- 2017 November, Curitiba, Brazil. Presented a talk entitled “Risk factor of venous thrombosis” at Hemo2017.
- 2017 November, Curitiba, Brazil. Presented two talks entitled “Principles of blood coagulation, its regulation and fibrinolysis” and “The clotting cascade and host defense” at the educational course run in collaboration with the ISTH associated with Hemo2017.
- 2017 September, Cambridge, UK. Presented a talk entitled “Roles of tissue factor in hemostasis and thrombosis” at the University of Cambridge.
- 2017 September, Cambridge, UK. Presented a talk entitled “Procoagulant extracellular vesicles in hemostasis and thrombosis” at the SELECTBIO Extracellular Vesicle meeting.
- 2017 September, Debrecen, Hungary. Presented a talk entitled “Roles of tissue factor in hemostasis and thrombosis” at the Department of Medicine at the University of Debrecen.
- 2017 September, Budapest, Hungary. Presented a talk entitled “Roles of tissue factor in hemostasis and thrombosis” at the Department of Medicinal Biochemistry at Semmelweis University.
- 2017 September, Riga, Latvia. Presented a talk entitled “Protective and pathologic roles of coagulation proteases and PARs in influenza infection” at the sixth European Scientific Working group meeting on influenza.
- 2017 July, Berlin, Germany. Presented a talk entitled “PAR signaling in viral infections” at the International Society of Thrombosis and Hemostasis meeting.
- 2017 June, Nagoya, Japan. Presented a talk entitled “Role of tissue factor in hemostasis and thrombosis at the 39th Japanese Society on Thrombosis and Hemostasis meeting.
- 2017 May, Toronto, Canada. Presented a talk entitled “EVs as biomarkers of hemostasis and thrombosis” at Educational Day of the International Society of Extracellular Vesicle meeting.
- 2017 April, Vienna, Austria. Presented a talk entitled “The clotting cascade and host defense” at the Joint Meeting on Vascular Biology, Inflammation and Thrombosis.
- 2017 January, Chapel Hill, North Carolina. Presented a talk entitled “Tissue factor, coagulation proteases and PARs in health and disease” to the Department of Pathology and Laboratory Medicine.
- 2017 January, Cincinnati, Ohio. Presented a talk entitled “Tissue factor, coagulation proteases and PARs in health and disease” to the Division of Hematology/Oncology at the University of Cincinnati.

- 2016 December, Santa Fe, New Mexico. Presented a talk entitled “Coagulation cascade activation during viral infections” at the Keystone meeting on Hemorrhagic Fever Viruses.
- 2016 November, Chapel Hill, North Carolina. Presented a talk entitled “Tissue factor, coagulation proteases and PARs in health and disease” to the UNC Lung Institute.
- 2016 November, Washington, DC. Presented a talk entitled “Tissue factor and thrombosis in antiphospholipid syndrome” at the American College of Rheumatology meeting.
- 2016 November, New Orleans, Louisiana. Presented a talk entitled “Microparticle-associated tissue factor in disease” at the AHA Scientific Sessions.
- 2016 October, Portland, Oregon. Presented a talk entitled “Roles of tissue factor in hemostasis, thrombosis and the innate immune response” at the Department of Biomedical Engineering at the Oregon Health Sciences University.
- 2016 October, Memphis, Tennessee. Presented a talk entitled “Viral infection and the hemostatic system” at the 16th Midwest Platelet Conference.
- 2016 September, Sommaroy, Norway. Presented a talk entitled “Role of the thrombin-PAR-1 pathway in viral infection” at the TREC fall meeting.
- 2016 September, Ithaca, New York. Presented a talk entitled “Roles of tissue factor in hemostasis, thrombosis and innate immune response” at the Veterinary College of Cornell University.
- 2016 September, Rochester, New York. Presented a talk entitled “Roles of tissue factor in hemostasis, thrombosis and innate immune response” at the Aab Cardiovascular Center in the University of Rochester.
- 2016 August, Newry, Maine. Presented a talk entitled “Circulating procoagulant microvesicles and thrombosis” at the Extracellular Vesicle Gordon Research Conference.
- 2016 April, Chapel Hill, North Carolina. Presented a talk entitled “Tissue factor, coagulation proteases and PARs in health and disease” to the Center for Gastrointestinal Biology and Disease.
- 2016 April, Chicago, Illinois. Presented a talk entitled “Cancer and Thrombosis” at the Thrombosis and Hemostasis Societies of North American meeting.
- 2016 April, Burlington, Vermont. Presented a talk entitled “Advances in Coagulation Research and their Translation to Cancer” at the Clinical and Translational Research Symposium on Thrombosis, Hemostasis and Cancer.
- 2016 March, Vienna, Austria. Presented a talk entitled “Tissue factor-positive microparticles and cancer-associated thrombosis” at the Joint Meeting on Vascular Biology, Inflammation and Thrombosis.
- 2016 February, University of Virginia, Charlottesville, Virginia. Presented a talk entitled “Roles of tissue factor in hemostasis, thrombosis, cardiac ischemia-reperfusion injury and viral infection.”
- 2016 January, University of Michigan, Ann Arbor, Michigan. Presented a talk titled “Role of tissue factor in hemostasis, thrombosis, inflammation, and immunity.”
- 2015 September, Harvard School of Public Health, Cambridge, Massachusetts. Presented a talk titled “Role of tissue factor in hemostasis, thrombosis, inflammation and immunity.”

- 2015 August, Sommaroy (Norway). Presented a talk entitled “Protective and pathologic roles of tissue factor in the lung” at the TREC K.G. Jebsen Thrombosis Research and Expertise Center Summer meeting.
- 2015 August, Oslo (Norway). Presented a talk entitled “Role of tissue factor in hemostasis, thrombosis, inflammation and immunity” at the University of Oslo.
- 2015 June, Toronto (Canada). Presented a talk entitled “Role of tissue factor in different animal models of thrombosis” at the Scientific Standardization Committee meeting of the International Society of Thrombosis and Haemostasis.
- 2015 June, Toronto (Canada). Presented a talk entitled “Activation of platelets by tumor microparticles” at the Scientific Standardization Committee meeting of the International Society of Thrombosis and Haemostasis.
- 2015 June, Toronto (Canada). Presented a talk entitled “Measurement of tissue factor in clinical samples” at the Scientific Standardization Committee meeting of the International Society of Thrombosis and Haemostasis.
- 2015 April, Vienna (Austria). Presented a talk entitled “Hemostasis, thrombosis and immunity” at the Symposium on Inflammation and Thrombosis.
- 2015 March, Baltimore (USA). Presented a talk entitled “Hemostasis, Thrombosis and Immunity” to the Center for Vascular and Inflammatory Diseases at the University of Maryland at Baltimore.
- 2015 February, Freiburg (Germany). Presented a talk entitled “Anticoagulation in cancer- new targets on the horizon?” at the GTH Highlight Symposium.
- 2015 February, Dusseldorf (Germany). Presented a talk entitled “Tissue factor – friend or foe” at the Germany Thrombosis and Hemostasis meeting.
- 2015 February, Maastricht (Netherlands). Presented a talk entitled “Role of tissue factor microvesicles in cancer-associated thrombosis” at the Maastricht Consensus Conference on Thrombosis.
- 2015 February, Sommaroy (Norway). Presented a talk entitled “Mechanisms of cancer-associated thrombosis” at the TREC K.G. Jebsen Thrombosis Research and Expertise Center Winter meeting.
- 2014 December, San Francisco (USA). Presented a talk entitled “Tissue factor dependent mechanisms in cancer and cancer-associated thrombosis” at the ASH National meeting.
- 2014 November, Chicago (USA). Presented a talk entitled “Role of leukocyte-derived microvesicles in activation of coagulation in patients with hyperlipidemia” at the AHA National meeting.
- 2104 November, Nashville (USA). Presented a talk entitled “Animal models of thrombosis” at the Ariad Pharmaceuticals advisory board meeting.
- 2014 November, Cleveland (USA). Presented a talk entitled “Hemostasis, thrombosis and immunity” at the Lerner Research Institute of the Cleveland Clinic.
- 2014 October, Basel (Switzerland). Presented a talk entitled “Hemostasis, thrombosis and immunity” at Novartis.
- 2014 October, Augusta (USA). Presented a talk entitled “Hemostasis, thrombosis and immunity” at the Georgia Regents University.

- 2014 October, Lexington (USA). Invited speaker at the 17th Annual Cardiovascular Research Day. Presented a talk entitled “Hemostasis, thrombosis and immunity”.
- 2014 September, Hamn I Senja (Norway) Presented a talk entitled “Mechanisms of venous thrombosis” at the K. G. Jebsen Thrombosis Research and Expertise Center.
- 2014 August, Washington DC (USA). Presented a talk entitled “Advances in coagulation research and their translation to cancer” at the NHLBI and NCI Strategic Working Group: Cancer and Thrombosis.
- 2014 July, Barcelona (Spain). Presented a talk entitled “Tissue factor in the myocardium” in a session on Tissue factor and biology at the Frontiers in Cardiovascular Biology meeting organized by the Basic Cardiovascular Science Council of the European Society of Cardiology.
- 2014 June, Milwaukee (USA). Presented a talk entitled “Circulating tumor-derived microparticles and thrombosis” at the Scientific Standardization Committee meeting of the International Society of Thrombosis and Hemostasis.
- 2014 June, Milwaukee (USA). Presented a talk entitled “Tissue factor standardization” at the Scientific Standardization Committee meeting of the International Society of Thrombosis and Hemostasis.
- 2014 June, Boston (USA). Presented a talk entitled “Roles of tissue factor, coagulation proteases and PARs in Hemostasis, Thrombosis and Cardiac Injury” at the Whitaker Cardiovascular Research Institute at Boston University.
- 2014 May, Chapel Hill (USA). Presented a talk entitled Role of PARs in Viral Infection at the 7th Symposium on Hemostasis.
- 2014 May, East Lansing (USA). Presented a talk entitled “Roles of tissue factor, coagulation proteases and PARs in Hemostasis, Thrombosis and Cardiac Injury” at the Department of Pharmacology and Toxicology at Michigan State University.
- 2014 April, Maastricht (Netherlands). Presented a talk entitled “Roles of tissue factor, coagulation proteases and PARs in Hemostasis, Thrombosis and Cardiac Injury” at the Einthoven Laboratory for Experimental Vascular Medicine at the University of Leiden.
- 2014 April, Amsterdam (Netherlands). Presented a talk entitled “Roles of tissue factor, coagulation proteases and PARs in Hemostasis, Thrombosis and Cardiac Injury” at the Amsterdam Medical Center.
- 2014 April, Maastricht (Netherlands). Presented a talk entitled “Roles of tissue factor, coagulation proteases and PARs in Hemostasis, Thrombosis and Cardiac Injury” at the University of Maastricht.
- 2014 January, Keystone (USA). Presented a talk entitled “Novel mechanisms regulating hemostasis and thrombosis” at Keystone Symposia on New Frontiers in the Discovery and Treatment of Thrombosis
- 2013 November, Hamilton (Canada). Presented a talk entitled “Tissue factor, coagulation proteases and PARs in health and disease” at the Thrombosis and Atherosclerosis Research Institute at McMaster University.
- 2013 November, Dallas (USA). Presented the keynote lecture on “Tissue factor, microparticles and thrombosis” to the Chinese American Heart Association and The Academy of Cardiovascular Research Excellence.

- 2013 November, Atlanta (USA). Presented a talk entitled “Tissue factor signaling, the endothelium, and sickle cell disease” at the American Society of Nephrology.
- 2013 October, Vienna, Austria. Presented a talk entitled “The cancer and thrombosis connection: understanding the basic mechanism” at the 10th anniversary of the Vienna cancer associated thrombosis.
- 2013 October, Little Rock (USA). Presented a talk entitled “Tissue factor, coagulation proteases and PARs in health and disease” to the Cardiovascular Center group at the University of Arkansas for Medical Sciences.
- 2013 September, Boston (USA). Presented a talk entitled “The role of tissue factor in venous thrombogenesis” at the International Union of Phlebology.
- 2013 September, Nashville (USA). Presented a talk entitled “Tissue factor, microparticles and thrombosis” at the Vanderbilt University Medical Center.
- 2013 July, Paris, France. Presented a talk entitled “Tissue factor, microparticles and thrombosis” to Inserm U698 at the Hospital Bichat of the University of Paris.
- 2013 June, Amsterdam, Netherlands. Presented a talk entitled “PAR1 contributes to early immune response in the lung after influenza A infection” at the International Society of Thrombosis and Hemostasis meeting.
- 2013 June, Stowe (USA). Presented a talk entitled “Tissue factor and plaque rupture” at the Atherosclerosis Gordon Research Conference.
- 2013 June, Tromso, Norway. Presented a talk entitled “Tissue factor, microparticles and thrombosis” at the 46th Nordic Coagulation meeting.
- 2013 June, Nassau, Bahamas. Presented a talk entitled “Role of PAR-1 in the innate immune response to viral infection” at the FASEB Protease in Hemostasis and Vascular Biology meeting.
- 2013 April, Philadelphia (USA). Presented a talk entitled “Role of tissue factor in arterial and venous thrombosis” at the Sol Sherry Thrombosis Research Center.
- 2013 April, Boston (USA). Presented a talk entitled “Roles of platelet and monocyte microparticles in hemostasis and thrombosis” to the American Physiology Society at the Experimental Biology meeting.
- 2013 April, Boston (USA). Presented a talk entitled “Tissue factor, microparticles and thrombosis” to the American Society of Investigative Pathology at the Experimental Biology meeting.
- 2013 March, Chicago (USA). Presented a talk entitled “Tissue factor, coagulation proteases and PARs in health and disease” to the Department of Pharmacology at the University of Illinois.
- 2013 March, Prague Czech Republic. Presented a talk entitled “Pathogenesis of VTE and translational medicine” at the Global Thrombosis Forum.
- 2013 February, Munich, Germany. Presented a talk entitled “Tissue factor and the extrinsic pathway of coagulation” at the German Thrombosis and Hemostasis Society meeting.
- 2012 November, Los Angeles (USA). Presented a talk entitled “Tissue Factor in Health and Disease” at the American Heart Association Sessions.

- 2012 June, Berlin, Germany. Presented a talk entitled “Tissue Factor, Coagulation Proteases and PARs in Health and Disease” at the Clinical Scientist Summer Symposium on Translational Medicine at Humbolt University.
- 2012 June, Berlin, Germany. Presented a talk entitled “Tissue Factor, Coagulation Proteases, Fibrin and PARs in Thrombosis and Cardiac Injury” at the Department of Cardiology and Pulmonology of the University of Berlin.
- 2012 June, Berlin, Germany. Presented a talk entitled “Circulation Microparticles in Health and Disease” at the European League Against Rheumatism Annual Meeting.
- 2012 April, Big Sky, MT (USA). Present a talk entitled “Tissue Factor and Atherothrombosis” at the Molecular Basis of Inflammation and Atherosclerosis Keystone conference.
- 2012 January, Chapel Hill, NC (USA). Presented a talk entitled “Tissue factor, Coagulation Proteases and PARs in Health and Disease” to the Department of Biochemistry and Biophysics at the University of North Carolina at Chapel Hill
- 2011 December, San Diego (USA). Presented a talk entitled “Role of Microparticles in Hemostasis and Thrombosis” at the American Society of Hematology meeting.
- 2011 November, Orlando (USA). Presented a talk entitled “Circulating and Vessel Wall Tissue Factor in Thrombosis” at the American Heart Association meeting.
- 2011 November, Philadelphia (USA). Presented a talk entitled “Circulating microparticles in Healthy and Disease” at the American Society of Nephrology meeting.
- 2011 October, Paris (France). Presented a talk entitled “Microparticles, Tissue Factor and Thrombosis” at the Paris Cardiovascular Research Center.
- 2011 September, New York (USA). Presented a talk entitled “Circulating Tissue Factor Microparticles” at the State-of-the-art Symposium on Thrombosis and Hemostasis at Memorial Sloan-Kettering Cancer Center.
- 2011 September, Athens, Georgia (USA). Presented a talk entitled “Crosstalk between coagulation and inflammation” to the University of Georgia College of Veterinary Medicine.
- 2011 July, Kyoto, Japan. Presented at a talk entitled “Measurement of a procoagulant state in mice” at the SCC meeting of ISTH.
- 2011 July, Kyoto, Japan. Presented a talk entitled “Hematopoietic and non-hematopoietic tissue factor” at the XXIII Congress of the ISTH.
- 2011 March, Chapel Hill, NC (USA). Presented a talk entitled “Roles of vessel wall and circulating tissue factor in thrombosis” at cardiology grand rounds at the University of North Carolina at Chapel Hill
- 2011 March, Charlottesville, VA (USA). Presented a talk entitled “Roles of vessel wall and circulating tissue factor in thrombosis” at the Robert M. Berne Cardiovascular Research Center of the University of Virginia.
- 2011 March, Rahway, NJ (USA). Presented a talk entitled Roles of vessel wall and circulating tissue factor in thrombosis” at Merck.
- 2010 December, Ann Arbor, MI (USA). Presented a talk entitled “Roles of vessel wall and circulating tissue factor in arterial and venous thrombosis.”.

- 2010 November, Chicago. Presented a talk entitled “Tissue factor and microparticles” at the AHA meeting.
- 2010 September, Oxford (UK). Presented a talk entitled “Microparticles and tissue factor” at the first Micro and Nanovesicles in Health and Disease.
- 2010 September, Cincinnati, OH (USA). Presented Grand Rounds to the Hematology/Oncology Division on “The role of vessel wall and circulating tissue factor in arterial and venous thrombosis.”
- 2010 August, Rochester, NY (USA). Presented a talk at the first Cancer-Associated Thrombosis meeting on “Tissue factor and its role in cancer biology.”
- 2010 June, Los Angeles (USA). Presented a talk at the 13th International Vascular Biology Meeting on “Crosstalk between blood coagulation and inflammation.”
- 2010 May, Boston, MA (USA). Presented a talk at Harvard Medical School on “Cellular sources of tissue factor that drive thrombosis in arteries, veins and the microvasculature.”
- 2010 April, Galveston, TX (USA). Presented a talk at the 13th International Congress on “Antiphospholipid antibodies on tissue factor and thrombosis.”
- 2010 April, Chapel Hill, NC (USA). Presented a talk at the 5th Symposium on Hemostasis with special focus on “Factor VIIa and tissue factor on measurement of microparticle tissue factor activity in cancer.”
- 2010 March, Kyoto (Japan). Presented a talk at the 74th Annual Scientific Meeting of the Japanese Circulation Society on “Role of tissue factor in atherothrombosis.”
- 2010 March, Kyoto (Japan). Presented a talk at the 74th Annual Scientific Meeting of the Japanese Circulation Society on “Activation of platelets and coagulation in acute coronary syndromes.”
- 2010 March, Osaka (Japan). Presented a talk at the National Cerebral and Cardiovascular Center on “The role of tissue factor in hemostasis and thrombosis.”
- 2009 November, Orlando, CA (USA). Presented the Sol Sherry Distinguished Lecture in Thrombosis at the National American Heart Association meeting on “Hemostasis and thrombosis: two sides of the same coin?”
- 2009 October, San Diego, CA (USA). Presented a talk at to Isis Pharmaceuticals on “Cancer and thrombosis.”
- 2009 October, Little Rock, AK (USA). Presented a talk at The University of Arkansas for Medical Sciences Winthrop P. Rockefeller Cancer Institute on “Coagulation and cancer.”
- 2009 October, Newcastle, (UK). Presented a talk at the British Society of Haemostasis and Thrombosis meeting on “Tissue factor in hemostasis and thrombosis.”
- 2009 October, Stockholm, (Sweden). Presented a talk in the Nobel Forum entitled “Tissue factor, coagulation proteases and PARs in hemostasis, thrombosis and inflammation.”
- 2009 September, Marseille, (France). Presented a talk at the 5th Vascular Biology and Medicine meeting on “Tissue factor and thrombosis.”

- 2009 July, Boston, MA (USA). Presented a talk at the SSC meeting of the International Society of Thrombosis and Hemostasis on “The role of tissue factor in hemostasis.”
- 2009 June, Carefree, AZ (USA). Presented a talk at the FASEB Research Conference on Proteases in Hemostasis and Vascular Biology on “PAR signaling in the heart.”
- 2009 April, Knoxville, TN (USA). Presented a talk at University of Tennessee on “The role of tissue factor in hemostasis, thrombosis and inflammation.”
- 2009 March, New York, NY (USA). Presented a talk at the 3rd Annual Theodore H. Spaet Symposium at the Montefiore Medical Center on “The many faces of tissue factor: from basic science to human disease.”
- 2008 December, UNC, NC (USA). Presented a talk to the Carolina Cardiovascular Biology Center on “Crosstalk between coagulation and inflammation.”
- 2008 October, Lexington, KY (USA). Invited to give a talk on “Tissue factor, microparticles and thrombosis” and at the 12th Midwest Platelet meeting.
- 2008 August, St. Pete’s Beach, FL (USA). Invited to give a talk on “The role of tissue factor in hemostasis, thrombosis” at the Advanced Technology Applications for Combat Casualty Care meeting.
- 2008 July, London (UK). Invited to give a talk at the Centre for Respiratory Research at University College London on “Role of tissue factor in hemostasis, thrombosis and inflammation.”
- 2008 May, Toronto (Canada). Invited to give a talk at the American Thoracic Society meeting on “The role of tissue factor in acute lung injury.”
- 2008 March, Department of Hematology/Oncology, Case Western Reserve University, Cleveland, OH (USA). Invited to give a talk on “The role of tissue factor in hemostasis, thrombosis and signaling in cancer.”
- 2008 March, Lerner Research Institute, Cleveland Clinic Foundation, Cleveland, OH (USA). Invited to give a talk on “The role of tissue factor in hemostasis, thrombosis and inflammation.”
- 2008 March, Rochester, NY (USA). Invited to give a presentation at the Aab Cardiovascular Research Institute University of Rochester entitled “Role of tissue factor in hemostasis, thrombosis and cardiac ischemia-reperfusion injury.”
- 2007 December, Atlanta (USA). Invited to the 49th Annual Meeting of the American Society of Hematology to present a talk entitled “Tissue factor, coagulation factors and protease activated receptors in hemostasis, thrombosis and inflammation.”
- 2007 November, UNC Chapel Hill (USA). Invited by the Pathology Department to give Grand Rounds on “The role of tissue factor in hemostasis, thrombosis and cardiac ischemia-reperfusion injury.”
- 2007 October, Bergamo (Italy). Invited to the 4th International Conference on Thrombosis and Hemostasis Issues in Cancer to present a talk entitled “Use of tissue factor deficient mice to study tumor biology.”
- 2007 October, Chapel Hill (USA). Invited to the UNC Kidney Center to present a talk on “Kidney ischemia-reperfusion injury.”

- 2007 September, Shreveport (USA). Invited to the LSU Health Sciences Center to present a talk on the “Role of tissue factor in hemostasis, thrombosis and cardiac ischemia-reperfusion injury.”
- 2007 September, UNC Chapel Hill (USA). Invited by the Pharmacology Department to give a talk entitled “Modulation of LPS-induced coagulation and inflammation by the PI3K-Akt pathway.”
- 2007 July, Geneva (Switzerland). Invited to the ISTH meeting to present a talk entitled “Tissue factor and microparticles.”
- 2007 July, Geneva (Switzerland). Invited to the Animal Models SSC meeting to present a talk entitled “Genetic manipulation of hemostasis in the rodent tissue factor.”
- 2007 July, Geneva (Switzerland). Invited to present a talk at the Vascular Biology SSC meeting entitled “How to measure/detect microparticle-associated tissue factor?”
- 2007 June, Indian Wells (USA). Invited to present a talk entitled “PAR-1 contributes to cardiac remodeling and hypertrophy” at the FASEB summer research conference on Proteases in Hemostasis and Vascular Biology.
- 2007 May, Riverside (USA). Invited to present a talk entitled “Modulation of LPS-induced inflammation and coagulation by the PI3K-Akt pathway” at UC Riverside.
- 2007 April, Chicago (USA). Invited to present a plenary talk entitled “Genetic of hemostasis and thrombosis in humans and mice” at the 8th Annual Conference on Arteriosclerosis, Thrombosis and Vascular Biology meeting.
- 2007 April, Rancho Mirage (USA). Invited to present a talk entitled “Role of PAR-1 in renal ischemia-reperfusion injury.”
- 2007 March, Washington D.C. (USA). Invited to present a talk entitled “Role of tissue factor in thrombosis and inflammation” at the Research Initiatives in Vascular Disease Conference
- 2007 February, Dresden (Germany). Invited to present a plenary talk entitled “The role of tissue Factor in thrombosis and hemostasis” at the German Thrombosis and Haemostasis meeting.
- 2006 August, San Diego (USA). Cytori Therapeutics. Invited to present a talk entitled “Tissue factor and thrombosis.”
- 2006 August, San Diego (USA). 18th International Society for Fibrinolysis and Proteolysis: Proteolysis in the Postgenomic Era. Invited to present a talk entitled “Role of tissue factor, coagulation proteases and PARs in inflammation.”
- 2006 May, Philadelphia (USA). University of Pennsylvania School of Medicine. Invited to present a talk entitled “Role of tissue factor in hemostasis and thrombosis.”
- 2006 May, Chapel Hill (USA). 3rd Symposium on Hemostasis with Special Focus on Factor VIIa and Tissue Factor. Invited to present a talk entitled “Hemostasis and thrombosis in low tissue factor mice.”
- 2006 May, Chapel Hill (USA). University of North Carolina at Chapel Hill. Invited to present a talk entitled “Role of tissue factor in hemostasis and thrombosis.”

- 2006 May, San Diego (USA). San Diego State University. Invited to present a talk entitled “Crosstalk between coagulation and inflammation in sepsis and cardiac ischemia-reperfusion injury.”
- 2005 November, Dallas (USA). American Heart Association Scientific Sessions. Invited to present a talk entitled “Hemostasis and thrombosis in mice.”
- 2005 November, San Diego (USA). Scripps Cancer Center. Invited to present a talk entitled “Tissue Factor and Thrombosis.”
- 2005 November, San Diego (USA). Department of Pathology, UCSD. Invited to present a talk entitled “Role of tissue factor and PARs in endotoxemia and cardiac I/R injury.”
- 2005 September, Fraueninsel (GER). International Conference on the Mechanism of Thrombus Formation. Invited speaker for a presentation entitled “Tissue factor and the TF pathway.”
- 2005 September, Hamburg (GER). 3rd European Meeting on Vascular Biology and Medicine 2005. Invited to present a talk entitled “Tissue factor and its role in coagulation and endothelial cell activation.”
- 2005 August, Sydney (AUS). SSC of the ISTH 2005. Presented a talk entitled “Measurement of blood-borne TF in cancer patients.”
- 2005 August, Sydney (AUS). SSC of the ISTH 2005. Presented a talk entitled “Hemostasis and thrombosis in mice.”
- 2005 August, Sydney (AUS). ISTH 2005. Invited speaker to present a talk entitled “Tissue Factor in hemostasis and thrombosis.”
- 2005 August, Melbourne (AUS). 7th Inflammation World Congress. Invited to present a talk entitled “Tissue factor biology.”
- 2005 July, Saxtons River, VT (USA). FASEB Summer Research Conference, Proteases in Hemostasis and Vascular Biology. Invited speaker to present a talk entitled “Role of tissue factor, coagulation proteases and PARs in the heart.”
- 2005 June, Berkeley, CA (USA). Bayer HealthCare LLC. Invited presentation entitled “Role of tissue factor in hemostasis and thrombosis.”
- 2005 May, Burlington, VT (USA). Department of Biochemistry, University of Vermont. Invited speaker for a presentation entitled “Role of tissue factor in hemostasis and thrombosis.”
- 2005 May, Houston, TX (USA). Tanox, Inc. Invited speaker for a talk entitled “Role of tissue factor in hemostasis and thrombosis.”
- 2005 May, Los Angeles, CA (USA). UCLA Medical School. Invited speaker for a talk entitled “Role of tissue factor and PARs in heart hemostasis, inflammation and hypertrophy.”
- 2005 April, Rockville, MD (USA). EntreMed, Inc., Invited speaker for a talk entitled “Role of tissue factor and PARs in coagulation and inflammation.”

- 2005 February, Ventura, CA (USA). Gordon Research Conference on Vascular Cell Biology. Invited speaker presented a seminar entitled “Role of tissue factor in thrombosis and inflammation.”
- 2004 December, San Diego, CA (USA). American Society of Hematology. Invited speaker to present on “Roles for tissue factor: crosstalk between coagulation and inflammation.”
- 2004 September, San Francisco, CA (USA). Celera Genomics. Invited presentation entitled “Role of tissue Factor in hemostasis, thrombosis and inflammation.”
- 2004 July, Waterville, ME (USA). Hemostasis Gordon Conference. Invited speaker for a talk entitled “Tissue factor biology *in vivo*.”
- 2004 July, Atlanta, GA (USA). Atherogenics, Inc. Presented a seminar entitled “Role of tissue factor in hemostasis, thrombosis and inflammation.”
- 2004 June, Hamilton, Ontario (Canada). Henderson Research Centre, McMaster University. Invited speaker presented a seminar entitled “Role of tissue factor in hemostasis, thrombosis and inflammation.”
- 2004 May, San Francisco, CA (USA). 5th Annual Conference on Arteriosclerosis, Thrombosis and Vascular Biology. Invited speaker on “Tissue factor: role in thrombosis and inflammation.”
- 2004 March, Milwaukee, WI (USA). The Blood Center of Southeastern Wisconsin. Invited speaker for a presentation entitled “Role of tissue factor in hemostasis, thrombosis and inflammation.”
- 2004 March, Davis, CA (USA). University of California at Davis. Invited speaker for the Treadwell Distinguished Lecturer series. Presentation was entitled “Tissue factor: roles in hemostasis, thrombosis and inflammation.”
- 2003 December, Atlanta, GA (USA). 5th Margaux Conference on Critical Illness. Invited speaker for a presentation entitled “Tissue factor and PARS - involvement in sepsis outcomes.”
- 2003 November, San Diego, CA (USA). American Society of Nephrology Renal Week 2003. Invited speaker for a presentation entitled “Tissue factor.”
- 2003 September, San Diego (USA). Tanabe Research Laboratories USA, Inc. Presented a talk entitled “Crosstalk between coagulation and inflammation.”
- 2003 July, Birmingham (UK). 19th Meeting of the International Society on Thrombosis and Hemostasis. Presented a seminar entitled “Role of tissue factor in hemostasis and thrombosis in the mouse.”
- 2003 July, Birmingham (UK). 49th Scientific and Standardization Committee Meeting of the International Society on Thrombosis and Haemostasis. Presented a seminar entitled “Tissue factor: lessons from knock-outs, knock-ins and transgenic mouse models.”
- 2003 June, Biarritz (France). 5th Congress of the French Society on Atherosclerosis (ARCOL). Invited speaker presented “Role of the tissue factor-thrombin pathway in hemostasis, thrombosis and cardiac ischemia-reperfusion injury.”

- 2003 May, New Haven, CT (USA). Yale University. Invited speaker for Medical School Grand Rounds. Presentation was entitled “Role of tissue factor and thrombomodulin in placental development and uterine hemostasis in the mouse.”
- 2003 February, Innsbruck (Austria). 47th Meeting of the German Society of Thrombosis and Hemostasis. Invited speaker on “Mouse models of coagulation.”
- 2003 February, Munich (Germany). German Heart Center of the Technical University of Munich. Invited speaker for a presentation entitled “Role of the tissue factor-thrombin pathway in hemostasis, thrombosis and cardiac I/R injury.”
- 2002 November, South Bend (USA). University of Notre Dame. Invited presentation to the Keck Center for Transgene Research. Presented a talk on the “Role of the tissue factor-thrombin pathway in hemostasis, thrombosis and cardiac I/R injury.”
- 2002 July, Waterville (USA). Gordon Research Conference on Hemostasis. Invited speaker for a presentation entitled “Hemostasis and thrombosis in low tissue factor mice.”
- 2002 April, Chapel Hill (USA). University of North Carolina at Chapel Hill. Invited speaker for a presentation entitled “The tissue factor-thrombin pathway contributes to inflammation during cardiac ischemia-reperfusion injury.”
- 2002 February, Erfurt (Germany). 46th Meeting of the German Society of Thrombosis and Hemostasis. Invited speaker on “Role of the tissue factor-thrombin pathway in cardiac ischemia-reperfusion injury.”
- 2001 November, Anaheim (USA). American Heart Association Scientific Sessions 2001. Invited speaker for a talk entitled “Tissue factor modulates ischemia-reperfusion injury.”
- 2001 September, Charlottesville (USA). University of Virginia. Invited speaker for a presentation entitled “Tissue factor: multiple roles in angiogenesis, thrombosis and inflammation.”
- 2001 August, Rhode Island (USA). Gordon Research Conference on Angiogenesis and Microcirculation. Invited speaker for a presentation entitled “Role of the tissue factor-thrombin pathway in the regulation of blood vessels.”
- 2001 August, City of Hope (USA). Invited speaker for a presentation entitled “Tissue factor: multiple roles in hemostasis, thrombosis and inflammation.”
- 2001 July, Ulm (Germany). Ulm University Medical Center. Invited as visiting professor to present a paper entitled “Tissue factor: multiple roles in hemostasis, thrombosis and inflammation.”
- 2001 May, Osaka (Japan). National Cerebral and Cardiovascular Center. Invited speaker for a presentation entitled “Tissue factor: multiple roles in hemostasis, thrombosis and inflammation.”
- 2001 May, Kumamoto (Japan). The Chemo-Sero-Therapeutic Research Institute. Invited speaker for a presentation entitled “Tissue factor: multiple roles in hemostasis, thrombosis and inflammation.”
- 2001 May, Kumamoto (Japan). ASO International Meeting. Invited speaker for a presentation entitled “Role of tissue factor and thrombin in cardiac ischemia-reperfusion injury.”

- 2001 March, Copenhagen (USA). Novo Nordisk. Invited speaker for a presentation entitled “Hemostatic and non-hemostatic roles of tissue factor revealed by characterization of knock-out and low tissue factor mice.”
- 2000 November, Yountville (USA). Workshop on Coagulation, Activation and Tissue Factor Biology in Critical Care Illnesses. Sponsored by Chiron. Invited speaker for a presentation entitled “Tissue factor biology.”
- 2000 November, San Diego (USA). American Heart Association workshop at the Tobacco Related Disease Research Program's annual scientific meeting. Invited speaker for a presentation entitled “Role of tissue factor in cardiovascular disease.”
- 2000 September, La Jolla (USA). The Scripps Research Institute. Vascular Biology affinity group. Invited speaker for a presentation entitled “Role of tissue factor in embryogenesis and inflammation.”
- 2000 September, San Francisco (USA). Genentech. Invited speaker for a presentation entitled “Role of tissue factor in thrombosis and inflammation.”
- 2000 June, London (England). Thrombosis Research Institute. Invited speaker for a presentation entitled “Role of tissue factor in thrombosis, embryogenesis, and inflammation.”
- 2000 March, Stevenson, Washington (USA). The 2000 Deuel Conference on Lipids. Invited speaker for a presentation entitled “Role of tissue factor in cardiovascular disease.”
- 1999 June, Saxton River, Vermont (USA). FASEB Summer Conference on Thrombin and Vascular Medicine. Invited speaker for a presentation entitled “Tissue factor transgenesis.”
- 1999 April, Baltimore (USA), University of Maryland. Invited speaker for a presentation entitled “Regulation of tissue factor expression *in vitro* and *in vivo*.”
- 1998 November, Los Angeles (USA), UCLA. Invited speaker for a presentation entitled “Hemostatic and non-hemostatic roles of tissue factor in mice.”
- 1998 November, Dallas (USA) 71st Scientific Session of American Heart Association. Invited speaker for a presentation entitled “Embryonically-derived tissue factor contributes to the maturation and integrity of maternal vessels in the placenta.”
- 1998 September, Atlanta (USA), Atherogenics. Invited speaker for a presentation entitled “Regulation of tissue factor expression *in vitro* and *in vivo*.”
- 1998 August, Clayton (Australia), Monash University. Invited speaker for a presentation entitled “Regulation of tissue factor gene expression.”
- 1997 October, New York (USA), New York University Medical Center. Invited speaker for a presentation entitled “Regulation of tissue factor gene *in vitro* and *in vivo*.”
- 1997 June, Florence (Italy), XVIth Congress of the International Society on Thrombosis and Haemostasis. Invited speaker for a presentation entitled “Regulation of the tissue factor gene.”

- 1997 June, Florence (Italy) XVIth Congress of the International Society on Thrombosis and Haemostasis. Presentation entitled “Single-chain human urokinase (scu-PA) binds to hamster and rat cells with high affinity: defining species specificity of the urokinase receptor (u-PAR).”
- 1997 June, Florence (Italy) XVIth Congress of the International Society on Thrombosis and Haemostasis. Presentation entitled “Retinoic acid selectively inhibits the transcriptional activation of the tissue factor gene in human monocytic cells.”
- 1997 June, Stevenage (England), GlaxoWellcome. Invited speaker for a presentation entitled “Regulation of tissue factor expression *in vitro* and *in vivo*.”
- 1997 April, New Orleans (USA), Vascular Biology '97. Invited speaker for a presentation entitled “Tissue factor: knock-out and transgenics.”
- 1997 April, Richmond (USA), Berlex Biosciences. Invited speaker for a presentation entitled “Regulation of the tissue factor gene in monocytes.”
- 1997 January, Osaka (Japan), C.O.E. International Symposium at the National Cerebral and Cardiovascular Center. Invited speaker for a presentation entitled “Regulation of gene wxpression in endothelial cells.”
- 1996 August, Dresden (Germany), Technische Universität, Dresden. Invited speaker for a presentation entitled “Regulation of the tissue factor gene.”
- 1996 August, Stevenage (England), GlaxoWellcome. Invited speaker for a presentation entitled “Regulation of tissue factor gene expression.”
- 1996 June, Andover (USA), Gordon Conference on Hemostasis. Invited speaker for a presentation entitled “Regulation of the tissue factor gene in monocytes and endothelial cells.”
- 1996 June, Paris (France), Université Paris 7. Invited speaker for a presentation entitled “Regulation of the tissue factor gene in monocytes and endothelial cells.”
- 1995 November, Anaheim (USA) 68th Scientific Session of the American Heart Association. Presentation entitled “Lipopolysaccharide induction of the tissue factor gene in human monocytic cells is mediated by a member of the *Rel* family of transcription factors.”
- 1995 September, Copenhagen (Denmark), 3rd Symposium on New Aspects of Hemophilia Treatment. Invited speaker for a presentation entitled “Regulation of the tissue factor gene.”
- 1995 January, La Jolla, (USA), The Scripps Research Institute. Immunology Affinity Group. Invited speaker for a presentation entitled Cooperative Interactions between Fos/Jun and c-Rel/p65 Heterodimers Mediate Transcription Activation of the Tissue Factor Gene in Human Monocytes.
- 1994 November, Dallas (USA), 67th Scientific Session of the American Heart Association. Invited speaker for a presentation entitled “Regulation of the tissue factor gene.”
- 1994 August, London (England), Haemostasis Research Group, MRC Clinical Sciences Centre. Invited speaker for a presentation entitled “Tissue factor expression: a paradigm for the study of mechanisms of gene regulation.”

- 1994 August, London (England), Royal Free Hospital School of Medicine. Invited speaker for a presentation entitled "Tissue factor expression: a paradigm for the study of mechanisms of gene regulation."
- 1994 April, La Jolla (USA), The Scripps Research Institute. Vascular Biology Affinity Group. Invited speaker for a presentation entitled "Tissue factor expression: a paradigm for the study of mechanisms of gene regulation."
- 1993 July, New York (USA) XIVth Congress of the International Society on Thrombosis and Haemostasis. Presentation entitled "Lipopolysaccharide induction of the tissue factor gene in human monocytic cells is mediated by a member of the *Rel* family of transcription factors."
- 1992 December, Anaheim (USA), 34th Annual Meeting of the American Society of Hematology. Invited speaker for a presentation entitled "Regulation of tissue factor expression *in vitro* and *in vivo*."
- 1992 November, New Orleans (USA) 65th Scientific Sessions of the American Heart Association. Presentation entitled "Regulation of murine tissue factor gene expression by lipopolysaccharide *in vivo*."
- 1992 November, Rochester (USA), Mayo Foundation. Invited speaker for a presentation entitled "Regulation of tissue factor expression *in vitro* and *in vivo*."
- 1992 November, Raleigh (USA), Glaxo Inc. Research Institute. Invited speaker for a presentation entitled "Regulation of tissue factor expression *in vitro* and *in vivo*."
- 1992 March, Lake Tahoe (USA), Keystone Symposium on Recognition of Endotoxin in Biologic Systems. Invited speaker for a presentation entitled "Regulation of LPS-induced gene expression."
- 1991 November, Anaheim (USA), 64th Scientific Session of the American Heart Association. Invited speaker as a finalist for the Louis N. Katz Basic Science Prize for Young Investigators. Presentation entitled "Cooperative interactions between NF-Kappa B and AP-1 proteins are required for lipopolysaccharide induction of the human tissue factor promoter."
- 1991 July, Amsterdam (the Netherlands), XIIIth Congress of the International Society on Thrombosis and Haemostasis. Presentation entitled "Regulation of the human tissue factor gene in THP-1 monocytic cells exposed to bacterial lipopolysaccharide."
- 1991 April, Atlanta (USA), FASEB. Presentation entitled "Tissue factor mRNA levels in THP-1 monocytic cells are regulated by both transcriptional and post-transcriptional control mechanisms."
- 1989 November, New Orleans (USA), 62nd Scientific Sessions of the American Heart Association. Presentation entitled "Functional analysis of the human tissue factor gene in COS-7 cells."
- 1989 August, Tokyo (Japan), XIIth Congress of the International Society on Thrombosis and Haemostasis. Presentation entitled "Preliminary characterization of the promoter region of the human tissue factor gene."

- 1988 November, Washington, D.C. (USA), 8th National Conference on Thrombosis and Hemostasis. Presentation entitled “Genomic organization of human tissue factor.”
- 1986 October, Osnabruck (Germany), Overexpression of Membrane Proteins in Prokaryotes. Invited speaker for a presentation entitled “Overexpression and secretion of haemolysin.”
- 1985 March, Wurzburg (Germany), Pathogenicity of Microorganisms. Presentation entitled “Regulation of haemolysin synthesis in *E. coli*.”
- 1985 April, Warwick (England), Invited speaker at Secretion Workshop for a presentation entitled “Secretion of *E. coli* haemolysin.”
- 1983 September, Lunteren (Holland), Protein Transport and Secretion. Presentation entitled Secretion of a 107 Kilodalton Polypeptide into the Medium from Haemolytic *E. coli*. Strains.

Career Summary

I was trained as a molecular biologist in the Department of Genetics at Leicester University. During my PhD studies, I cloned the hemolysin operon from pathogenic *Escherichia coli*. I determined that the operon contained four genes: a gene encoding the hemolysin protein (HlyA), a gene encoding a protein (HlyC) that was required for activation of the hemolysin toxin and two genes that encoded transmembrane proteins (HlyB and D) required for secretion of the toxin into the media. One of the transport genes, HlyB, was highly homologous to the mammalian ATP-binding cassette transmembrane drug transporter called P-glycoprotein. I identified a C-terminal secretion signal in the HlyA protein. Furthermore, I demonstrated that fusion of this sequence to different proteins directed the secretion of these chimeric proteins into the media in cells containing HlyB and D. This discovery was patented.

The majority of my career has focused on tissue factor (TF), which is the primary cellular initiator of blood coagulation. In 1989, I cloned the complete human TF gene followed by a detailed characterization of the TF promoter. I found that LPS induction of the TF gene in human monocytic cells and endothelial cells is mediated by various intracellular signaling pathways and transcription factors, such as AP-1, NF- κ B and Egr-1.

I have studied the crosstalk between coagulation and inflammation in various diseases, including endotoxemia, sepsis and ischemia-reperfusion (I/R) injury. Gram-negative bacteria release LPS that induces TF expression in monocytes. We believe that this response is part of the innate immune response to infection and is designed to create a clot to localize the infection. However, a side effect of this response is thrombosis and disseminated intravascular coagulation. Recently, we found that oxidized LDL induces TF expression in monocytes in a similar manner to LPS. Moreover, we showed in mouse and monkey models that monocyte TF expression mediates a prothrombotic state during hypercholesterolemia. Importantly, treatment of the mice and monkeys with simvastatin reduced monocyte TF expression and coagulation. These results suggest that we can reduce pathologic TF expression without affecting TF expression that is required for hemostasis.

I/R injury is a significant clinical problem that contributes to morbidity and mortality. Recently, we showed that inhibition of either TF or the downstream coagulation protease, thrombin, reduces infarct size

in a rabbit model of myocardial I/R injury. Furthermore, we determined that the TF-thrombin pathway contributed to the inflammatory response during myocardial I/R injury by increasing chemokine expression and recruitment of neutrophils. More recently, we found that activation of the major thrombin receptor, called protease activated receptor 1 (PAR-1), contributed to cardiac remodeling after I/R injury. Recently, we wrote a patent proposing that inhibition of PAR-1 represents a novel therapeutic approach to reduce cardiac hypertrophy and heart failure.

More recently, my lab has generated a number of mouse models expressing different levels of TF. These mice have been used to provide new insights into the role of TF in hemostasis, thrombosis and inflammation. We have used these results to propose a model of tissue-specific hemostasis. In the future, I will continue to study the role of the clotting cascade and platelets in hemostasis, thrombosis and inflammation. I hope to discover new treatments for hemostatic, thrombotic and inflammatory diseases, particularly those affecting the heart.

The early part of my career was spent at the University of Leicester in England. I spent time teaching undergraduate students and supervising graduate students. The second part of career has been spent at The Scripps Research Institute (20 years) and the University of North Carolina at Chapel Hill (7 years). My major focus during this time has been research. I have published 261 original scientific papers, 89 reviews and 29 editorials. I have been a Chartered Member of an NIH Study Section, reviewed for the American Heart Association and served on as Associate Editor on 4 journals (Thrombosis & Haemostasis; Journal of Thrombosis and Haemostasis, Arteriosclerosis, Thrombosis and Vascular Biology; Journal of Clinical Investigation). Currently, I am a Senior Associate Editor for Arteriosclerosis, Thrombosis and Vascular Biology. I spent 2 years as Chair of the Arteriosclerosis, Thrombosis and Vascular Biology council of the American Heart Association. I have mentored 32 postdoctoral fellows and one PhD student. Currently, I mentor 2 postdoctoral fellows. In addition, several of my technicians have gone to either graduate school or medical school. My teaching philosophy is to excite students and postdoctoral fellows with the research activities in my laboratory and to encourage independent thought to solve problems.