

**Organized in Partnership with the Thai Society of Hematology (TSH)**



You're invited to the ISTH Workshop on Thrombosis and Hemostasis in Bangkok, Thailand. This workshop is designed to offer the latest training in coagulation and bleeding disorders management

**Topic:**

Congenital bleeding disorders, acquired hemostatic disorders, women's issues in Hemostasis and venous thrombosis

**Course Chairmen:**

Pantep Angchaisuksiri, MD  
Ponlapat Rojnuckarin, MD, PhD

**Target Audience:**

1. Trainees in hemostasis, hematology, transfusion medicine, vascular medicine, or intensive care medicine
2. A Ph.D. wishing to acquire clinical and basic knowledge in the field
3. A senior hematologist looking for an update

**Objectives:**

1. Obtain an understanding of the latest developments in coagulation and bleeding disorder management
2. Learn to identify, diagnose and have knowledge of the latest treatment for patients with risk of thrombosis
3. Have the opportunity to network with leading experts in the field of thrombosis and hemostasis, benefiting from the small training size (250 maximum participants)

**Venue:**

Arnoma Grand Bangkok Hotel, Rajadamri Road, Bangkok, Thailand

**Registration Rates:**

Attendee Type	Early Registration Ends Aug. 15	Late Registration Aug. 16 - Nov. 7
Non-Member	\$350 USD	\$450 USD
ISTH Member	\$250 USD	\$350 USD
Reach the World ISTH or TSH Member*	\$150 USD	\$250 USD
ISTH Associate Member (Student)	\$100 USD	\$200 USD

\*TSH member rate discount will be applied at check-out with the specific promotional code (Promo Code); you must enter the code "TSHmember17" while registering to receive the discount. Registration and payment must be made via online system at <http://www.isth.org/page/workshop17reg>

# WORKSHOP PROGRAM

## November 3

16:00-19:00 Registration

## November 4

07:00 Registration opens

08:30-12:45 Pre-workshop supported symposia

08:30-09:45 Medtronic sponsored symposium

10:00-11:15 Shire sponsored symposium

11:30-12:45 Abbott Laboratories sponsored symposium

12:45-13:30 Lunch

## Subtopic: Introduction

Time	Event	Speaker
<b>INTRODUCTION AND GLOBAL IMPACT/EPIDEMIOLOGY:</b>		
13:30 - 14:00	<b>Venous thrombosis in Asia</b>  Participants in this session will gain an understanding of the current incidence and burden of VTE in Asia; how to increase awareness of VTE in Asian populations and learn about World Thrombosis Day activities.	Pantep Angchaisuksiri (Thailand)
14:00 - 14:30	<b>Bleeding disorders in Asia</b>  Participants in this session will gain an understanding of the epidemiology of bleeding disorders in Asia; knowledge of unique bleeding problems in Asia, (e.g. Acquired Platelet Dysfunction with Eosinophilia (APDE), tropical infections); and understand the principles of management of bleeding disorders with limited resources.	Ponlapat Rojnuckarin (Thailand)
14:30 - 15:30	<b>Current concepts of the coagulation system with emphasis on hemostasis</b>  In this presentation participants will review traditional and novel concepts of the coagulation 'cascade'; gain an understanding of how single coagulation deficiency states may manifest clinically and review the pathophysiology of some complex coagulopathies that manifest as bleeding.	Nigel Key (USA)
15:30 - 16:00	Coffee break & networking	
<b>OVERVIEW OF HEMOSTATIC ASSAYS AND THEIR CLINICAL USES</b>		
16:00 - 16:30	<b>Coagulation assays</b>  In this presentation participants will review the basic principles	Nigel Key (USA)

Time	Event	Speaker
	of traditional coagulation assays; review the basic principles of global assays of coagulation and gain an understanding of the strengths and limitations of commonly used assays.	
16:30 - 17:00	<b>Platelet function assays</b> This presentation will provide basic knowledge on various platelet function tests, ranging from the conventional adhesion and aggregation test, to the more recently-developed instruments simulating in vivo blood flow. The participants will gain a deeper understanding of platelet physiology as well as various techniques to elucidate numerous facets of platelet functions.	Yukio Ozaki (Japan)
17:00 - 17:30	<b>Fibrinolytic assays</b> Following this presentation, participants will be able to explain the assay method to detect fibrinolytic activity and to evaluate the obtained values.	Tetsumei Urano (Japan)
<b>WORK-UP OF A PATIENT:</b>		
17:30 - 18:00	<b>How to approach a patient with thrombosis</b> Participants in this session will learn to be cognizant of key medical history taking and physical exam details that enable accurate diagnosis, appropriate treatment and optimal counseling of the patient with VTE; how to recognize the pitfalls of diagnostic tests (venous Doppler ultrasound, nuclear-medicine lung ventilation-perfusion scan, computer-tomography venography) and how to make evidence based decisions on length of anticoagulation treatment in patients with VTE.	Stephan Moll (USA)
18:00 - 18:30	<b>How to approach a patient with bleeding</b> In this presentation participants will review bleeding assessment tools used in the clinical evaluation of a possible bleeding disorder patient; review the major categories of disorders that present with mild to moderate bleeding and gain an understanding of the term 'bleeding of uncertain cause' and the clinical management of these patients.	Nigel Key (USA)
18:30 - 21:00	Welcome dinner & networking	

## November 5

### Subtopic: Congenital bleeding disorders

Time	Event	Speaker
<b>VON WILLEBRAND DISEASE</b>		
8:30 - 9:15	The diagnosis of VWD: Interpreting laboratory tests for a complex genetic disorder	David Lillicrap (Canada)

Time	Event	Speaker
	Participants will learn about the range of phenotypic tests available to assist in the diagnosis of VWD. Participants will be provided with guidance on the application and interpretation of these tests. Finally, the integration of genetic testing in the diagnosis of VWD will be discussed.	
9:15 - 10:00	<b>Management of VWD</b> Participants will learn about the different von Willebrand disease scenarios that require treatment both during active bleeding and prophylaxis. After the lecture they will be familiar with the two main treatments of desmopressin and FVIII/VWF concentrates and understand their appropriate uses. They will also learn about the VWD within subtype heterogeneity and how this influences treatment.	Michael Makris (UK)
10:00 - 10:30	Coffee break & networking	
	<b>HEMOPHILIA:</b>	
10:30 - 11:15	<b>Laboratory testing for the diagnosis and monitoring of therapy in hemophilia</b> In this presentation, the participants will be provided with guidance on the types of laboratory testing that can be used to optimize diagnostic approaches and treatment outcomes in hemophilia. Recommendations on the use and interpretation of genetic testing will also be discussed.	David Lillicrap (Canada)
11:15 - 12:00	<b>Management and complications</b> In this presentation participants will learn about the current treatment landscape and its limits for hemophilia patients, evolution of emerging therapies obtained by bioengineering technologies, data on efficacy in prophylactic treatment and safety of these innovative drugs, treatment complications including inhibitors development and its risk factors and types of FVIII concentrates - the latest updates on plasma-derived or recombinant FVIII.	Flora Peyvandi (Italy)
12:00 - 13:30	Lunch & Instrumentation Laboratory (a Werfen Company) sponsored symposium	
	<b>HEMOPHILIA:</b>	
13:30 - 14:15	<b>Future treatment of hemophilia: Spoiled for choice</b> The participants of this session will be provided with information relating to the range and diversity of future therapies for hemophilia. New engineered protein replacement therapies will be discussed as well as the growing number of non-factor replacement treatments. Lastly, an update will be provided relating to the advances in gene therapy for hemophilia.	David Lillicrap (Canada)
14:15 - 15:00	<b>Management of hemophilia under limited resources</b> Participants will learn about the advantage of replacement at an early bleeding episode; affordable options for low-dose prophylaxis and the initiation of immune tolerance as soon as	Ampaiwan Chuansamrit (Thailand)

Time	Event	Speaker
	possible.	

15:00 - 15:30 Coffee break & networking

15:30 - 16:00	<b>Rare bleeding disorders</b>	Flora Peyvandi (Italy)
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This session will describe the clinical manifestations in patients affected with rare bleeding disorders (RBDs). Participants will learn about laboratory testing and its technical limitations, particularly in patients with very low factor activity levels, the association between coagulation factor activity levels and clinical bleeding severity in different RBDs, the management of acute bleeding events and which patients require prophylactic treatment.

16:00 - 16:30	<b>Congenital platelet disorders</b>	Michael Makris (UK)
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In this lecture participants will learn about the classification of inherited qualitative and quantitative platelet disorders. For the qualitative defects the relative role of tranexamic acid, rFVIIa and platelet transfusions together with their complications will be addressed. They will understand the impact on treatment of the expanding list genes causing inherited thrombocytopenias and how they influence the phenotype.

16:30 - 17:00	<b>Thrombotic thrombocytopenia purpura</b>	Flora Peyvandi (Italy)
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The advances in understanding the pathogenic mechanisms and its implications in clinical management of thrombotic thrombocytopenia purpura (TTP) will be discussed in this presentation. Participants will learn about the laboratory tests necessary for diagnosis of congenital and acquired TTP diagnosis, receive an overview of clinical trials results using novel therapies, learn about novel therapies on TTP and the potential predictive markers of relapse and its implications on treatment management of patients during the remission state.

17:00 - 18:00 Meet the Expert session

## November 6

### Subtopic: Acquired hemostatic disorders

Time	Event	Speaker
8:30 - 9:00	<b>Acquired hemophilia</b>	Theera Ruchutrakool (Thailand)
9:00 - 9:30	<b>Hemolytic uremic syndrome</b>	Doyeun Oh (Korea)

8:30 - 9:00	<b>Acquired hemophilia</b>	Theera Ruchutrakool (Thailand)
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After this presentation, participants will understand the pathogenesis of FVIII inhibitor development; be acquainted with the manifestation of acquired hemophilia and laboratory for the diagnosis and treat the bleeding manifestation properly.

9:00 - 9:30	<b>Hemolytic uremic syndrome</b>	Doyeun Oh (Korea)
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Participants in this session will gain an understanding of the pathogenesis of hemolytic uremic syndrome; understand the

Time	Event	Speaker
	differential diagnosis methods of Shiga toxin-producing hemolytic uremic syndrome (STEC-HUS), atypical hemolytic uremic syndrome (aHUS), and thrombotic thrombocytopenic purpura (TTP) and gain an understanding of the current guidelines to manage HUS and aHUS.	
9:30 - 10:00	<p>Disseminated intravascular coagulation</p> <p>Participants will learn about the recent progress in diagnosis and treatment of DIC, especially about the scoring system, anticoagulant therapy, and new drug clinical trials.</p>	Yu Hu (China)
10:00 - 10:30	Coffee break & networking	
10:30 - 11:00	<p>Thrombosis in bleeding disorders</p> <p>Whilst patients with inherited bleeding disorders have a reduced thrombotic risk overall this is increasingly recognized as an issue. In this lecture, participants will learn about the baseline and treatment associated thrombotic risks, together with the evidence as to whether certain concentrates are more prothrombotic than others. Participants will also learn about the treatment of acute thrombosis, surgical thromboprophylaxis and management of atrial fibrillation in inherited bleeding disorder patients.</p>	Michael Makris (UK)
11:00 - 11:30	<p>Heparin-induced thrombocytopenia</p> <p>Participants in this session will learn to integrate clinical and laboratory criteria in the diagnosis of heparin-induced thrombocytopenia; to manage acute HIT with and without thromboembolic complications; and to plan for future anticoagulation of patients with a past diagnosis of HIT.</p>	Christopher Ward (Australia)
11:30 - 12:00	<p>Hemostasis in liver disease and management</p> <p>Liver disease is often accompanied with severe blood clotting problem, how to diagnose and manage the issues are very important in clinical practice. Through the lecture, participants will learn to master the diagnosis and differential diagnosis skills, and learn about the new progress in comprehensive treatment.</p>	Yu Hu (China)
12:00 - 13:30	Lunch & Novartis sponsored symposium	
13:30 - 14:00	<p>Hematologist approach to management of postpartum hemorrhage (PPH)</p> <p>Participants in this session will develop an understanding of the epidemiology of PPH, different definitions of PPH used and clinical relevance of definitions; learn to identify risk factors for PPH and action required to minimize risk of adverse outcome in women who bleed, acknowledging that most women who have major PPH have no identifiable risk factors so clinicians must always be aware that major PPH can occur in any woman; develop an understanding of the role of the hematologist in management of women with PPH working with other team members, that a rapid response required to establish early if underlying unanticipated coagulopathy that requires treatment with blood and plasma products; and develop an understanding of the evolving role of conventional laboratory</p>	Claire McLintock (New Zealand)

Time	Event	Speaker
	testing and point of care testing in management of PPH.	
14:00 - 14:30	<p>Laboratory tests for transfusion on massive bleeding</p> <p>Upon completion of this course, participants should be able to discuss the pathophysiology of high-risk disorders for massive bleeding; interpret the laboratory test values to diagnose and evaluate bleeding; discuss the management strategies for patients with massive bleeding risks and describe hemostatic agents to prevent and reduce the bleed during and after invasive procedures.</p>	Satoshi Fujii (Japan)
14:30 - 15:00	<p>Fibrinolysis related hemostatic- and thrombotic- disorders</p> <p>Following this presentation participants will be able to explain the physiological role of fibrinolytic system; explain the risk factors to suppress fibrinolytic activities and to induce thrombosis and explain the mechanism to induce bleeding tendency due to malfunction of regulatory system of fibrinolysis.</p>	Tetsumei Urano (Japan)
15:00 - 15:30	<p>Coffee break &amp; networking</p> <p><b>REGIONAL SUBJECTS:</b></p>	
15:30 - 16:00	<p>Hypercoagulability in thalassemia</p> <p>Participants in this session will gain an understanding of the pathophysiology of hypercoagulability in thalassemia, learn how to detect hypercoagulable state by using global coagulation assays and management of thromboembolism in these patients.</p>	Pichika Chanrathammachart (Thailand)
16:00 - 16:30	<p>Snake venom and coagulopathy</p> <p>By participating in this session participants will gain an understanding of the epidemiology of venomous snakebite in Asia; understand the effects of snake venoms on human hemostatic system; and gain knowledge on diagnosis, severity assessment and treatments for viper bite patients.</p>	Ponlapat Rojnuckarin (Thailand)
16:30 - 17:00	<p>Hemostatic derangement in Dengue infection</p> <p>In this lecture, participants will learn to update the current WHO revised classification of Dengue fever; to understand the hematologic and hemostatic changes in dengue infection; to discuss the clinical and laboratory predictor in patients with severe dengue, the role of thromboelastometry to monitor hemostatic defects in patients with dengue infection and to review current treatment modalities of bleeding in dengue patients.</p>	Darintr Sosothikul (Thailand)
17:00 - 17:30	<p>Case study/interactive presentation – patient with bleeding history</p> <p>Participants will be invited to prepare case presentations for the audience and a discussion of the presentations will be moderated by Dr. Nigel Key.</p>	Moderator: Nigel Key (USA)
17:30 - 18:30	Meet the Expert session	

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**November 7****Subtopic: Women's Issues in Hemostasis/Venous Thrombosis**

<b>Time</b>	<b>Event</b>	<b>Speaker</b>
<b>WOMEN'S ISSUES IN HEMOSTASIS</b>		
8:30 - 9:00	<b>Diagnosis of VTE in pregnancy</b>  Participants in this session will develop an understanding of the epidemiology of VTE in pregnancy, risk factors specific to women (including an understanding of any ethnic differences) and risk factors specific to pregnancy; the diagnostic relevance of D-dimer testing in the setting of VTE in pregnancy; the diagnostic algorithms for DVT and PE in pregnancy; and the issues related to maternal and fetal radiation exposure in diagnostic procedures for PE.	Claire McLintock (New Zealand)
9:00 - 9:30	<b>Management of VTE in pregnancy</b>  Following this lecture, the participants should be able to decide which pregnant patient with a thrombophilia or a history of VTE should receive VTE prophylaxis; order the appropriate imaging tests for a pregnant patient presenting with symptoms and findings suggestive of DVT or PE; treat a pregnant patient with VTE with anticoagulation and manage the peri-delivery period and advise a patient which anticoagulants are safe to use postpartum while breastfeeding.	Stephan Moll (USA)
9:30 - 10:00	<b>Bleeding in women/pregnancy</b>  Participants in this session will develop an understanding of the relevance of bleeding disorders to women during pregnancy and how the bleeding disorder impacts on risk of pregnancy complications and how the pregnancy impacts on the bleeding disorder. After this session, participants will be able to institute treatment algorithms for women with inherited bleeding disorders during pregnancy that involve a multidisciplinary approach to care and also takes into consideration the potential impact on and risk to the baby.	Claire McLintock (New Zealand)
10:00 - 10:30	Coffee break & networking	
<b>VENOUS THROMBOSIS:</b>		
10:30 - 11:00	<b>Diagnosis and the role of thrombophilia testing</b>  Participants in this presentation will gain an understanding of acquired and inherited causes of thrombophilia, the role of thrombophilia as risk factors for DVT, the role of thrombophilia in management of DVT and appropriate testing for thrombophilia in DVT.	Lai Heng Lee (Singapore)
11:00 - 11:30	<b>Risk assessment and prevention of VTE</b>  Participants in this session will learn to recognize the benefits and the importance of the prevention of venous thromboembolism; understand risk factors and risk assessment models to identify patient at risk for venous thromboembolism and gain an understanding of current guidelines for prevention of venous thromboembolism in	Doyeun Oh (Korea)

Time	Event	Speaker
	surgical and medical patients.	
11:30 - 12:00	<p>Recent advances in VTE treatment</p> <p>Following this lecture, the participants should be able to decide which patient with DVT or PE is suitable for pharmaco-mechanical thrombectomy; weigh the pros and cons of the different anticoagulants before initiating anticoagulation in the patient with DVT or PE; use the appropriate anticoagulant in special patient populations with DVT or PE, such as the patient who is obese, underwent bariatric surgery, is elderly, has cancer or with renal failure; discuss with the patient with DVT the benefits of compression stockings and advise a patient interested in taking testosterone on the thrombotic risk.</p>	Stephan Moll (USA)
12:00 - 13:30	Lunch & Bayer sponsored symposium	
	<b>VENOUS THROMBOSIS (SPECIAL POPULATIONS)</b>	
13:30 - 14:00	<p>Cancer associated thrombosis</p> <p>Participants in this session will gain an understanding of the pathophysiology and risk factors of VTE in cancer patients; learn to assess individual cancer patient's risk of VTE and learn the current management of VTE in cancer patients.</p>	Pantep Angchaisuksiri (Thailand)
14:00 - 14:30	<p>Antiphospholipid syndrome</p> <p>Participants in this session will learn to apply current diagnostic criteria for the antiphospholipid antibody syndrome (APS); to develop strategies for treatment and prevention of thromboembolism in APS patients; and to recognize catastrophic APS and additional therapies that may improve patient outcomes.</p>	Christopher Ward (Australia)
14:30 - 15:00	<p>Pediatric thrombosis</p> <p>During this presentation, participants will learn the thrombophilic risk factors in children, gain an understanding of the development of hemostasis especially anticoagulation proteins during infancy and childhood and have the opportunity to join the network and registry of childhood thrombosis.</p>	Nongnuch Sirachainan (Thailand)
15:00 - 15:30	Coffee break & networking	
	<b>ANTITHROMBOTICS</b>	
15:30 - 16:00	<p>DOACs in the real world</p> <p>Participants in this presentation will gain an understanding of the real world indications and usage of DOACs, the real world evidence in safety and efficacy of DOACs, and the need to develop antithrombotic and bleeding protocols.</p>	Lai Heng Lee (Singapore)
16:00 - 16:30	<p>The risk of bleeding with DOACs in East Asia</p> <p>By the end of this session, participants will be able to explain</p>	Satoshi Fujii (Japan)

<b>Time</b>	<b>Event</b>	<b>Speaker</b>
	the concerns with the use of direct oral anticoagulants (DOACs) in East Asian patients with relatively small body weight; summarize the evidence regarding the use of DOACs as prophylaxis and treatment for thrombosis in East Asian patients and make clinical decisions about adjusting the doses of DOACs for patient management.	
16:30 - 17:00	<p><b>Bleeding complications of anticoagulants</b></p> <p>Participants in this session will learn about the update in the management of bleeding-associated with anticoagulant therapy, particularly the recent progress in the development and clinical studies of specific reversal agents of direct oral anticoagulants, and perioperative management of anticoagulants.</p>	Bundarika Suwanawiboon (Thailand)
17:00 - 17:30	<p><b>Antiplatelet therapy</b></p> <p>This presentation will elaborate on anti-platelet agents and anti-platelet therapy for various diseases, and the controversial issue of monitoring for anti-platelet therapy will also be covered. The participants will be able to utilize their knowledge from the presentation in various clinical settings, which require anti-platelet therapy.</p>	Yukio Ozaki (Japan)
17:30 - 18:00	<p><b>Case study/interactive presentation – patient with venous thrombosis</b></p> <p>Participants will be invited to prepare case presentations for the audience and a discussion of the presentations will be moderated by Dr. Stephan Moll.</p>	Moderator: Stephan Moll (USA)
18:00 - 18:15	Evaluation and farewell	