



# APSTH

Asian-Pacific Society on Thrombosis and Hemostasis

[www.apsth.org](http://www.apsth.org)

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## Message from the Chairman

### Inside

Message from the Chairman	1
From the Editor	2
Review of the 9th APSTH Congress in Taiwan	3
Reports from Recipients of the APSTH 2016 Young Investigator Award	6
Research News	13
World Thrombosis Day Activities in Asia-Pacific	18
Upcoming Meetings	20
ISTH 2017 Congress in Berlin	21

Dear Members of APSTH,

It gives me great pleasure to write this letter once again, wishing everyone a very happy and healthy New Year in 2017.

The APSTH is the foremost international organization in the Asia Pacific in the field of bleeding and clotting diseases, with members from Australia, China, Hong Kong, India, Indonesia, Japan, Malaysia, Myanmar, New Zealand, the Philippines, Singapore, South Korea, Thailand, Taiwan, and Vietnam and with more joining at each biannual congress. The APSTH biannual Congress has been our main focused activity and has served as an excellent learning and collaborative platform for clinicians and researchers in the Asia Pacific region to share knowledge and foster collaborations in a way that is relevant for Asia Pacific countries.



**Lai-Heng Lee**

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In 2016, we saw the 9th biannual APSTH Scientific Congress returning to Taipei after 16 years when the inaugural APSTH congress was held in Taipei in 2000. While the venue remained the same at the Taipei Convention center, the size of the congress grew more than 10 times, with more than 600 participants including 242 local delegates. Impressively high standards of science is evident in the varied array of plenary and symposium lectures and 44 oral presentations and 100 poster presentations. The outstanding work of the local organizing committee is highly appreciated. The APSTH/JSTH Joint Symposium in the JSTH Annual Meeting in Japan is major event where young investigators from the APSTH are invited to present their work in Japan.

We are pleased to have Thrombosis Journal as the APSTH affiliated Journal. This 9th APSTH Congress is the first to have the presentation abstracts and review state of the art articles from the lectures in a supplement issue of Thrombosis Journal. We strongly encourage our members and support our young investigators from the APSTH/JSTH Joint Symposium to publish in Thrombosis Journal and make it a platform for dissemination of scientific knowledge from the Asia Pacific.

APSTH continues to support the initiatives of the World Thrombosis Day by the International Society of Thrombosis and Haemostasis (ISTH) through activities by our member countries and publicity through our newsletter.

Collaborative research work continues with the work of Asia Pacific Micro-Angiopathic Thrombocytopenia (APMAT) Network led by Dr. Ross Baker and the project "Investigation into racial difference in genetic risk factor for venous thromboembolism" led by Dr. Hiroko Tsuda. With the wealth of talents and clinical opportunities in APSTH, we hope to see more collaborative work taking place. To facilitate a better collaborative platform and communications among our members, we have plans to set up a secure website for APSTH in the coming year.

I look forward to us working together to further strengthen the society's function in advancing knowledge and building collaborations in the fields of thrombosis, haemostasis and vascular biology. Wishing you much joy and fulfillment in 2017.

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## From the Editor



Dear Colleagues,

Welcome to the New Year!

In our first newsletter of the year, Prof. Ming-Ching Shen, President of the 9th APSTH Congress 2016, gives us a rundown of the Congress. Whether you attended or not, this is a very good summary, with many photos (with names attached) so you can remember who's who. Over 600 attendees from 28 countries is very impressive. The article notes that APSTH 2016 achieved a major milestone through the publication of "The State of the Art: 2016, Researches

and Reviews from the 2016 APSTH congress", the first ever publication of our Congress proceedings through Thrombosis Journal, the official publisher of APSTH.

Our APSTH Young Investigator Award is an important part of our congresses. We are pleased to have reports here from the five award winners of the 2016 awards. They outline what they did at the Congress and their impressions of it. It's always inspiring to read about what the Congress has meant to the participants. For the 2016 Congress, the young investigators were from Japan, Korea, China, Taiwan, Canada, and Singapore.

Our first Research News is from APMAT, the Asia Pacific Microangiopathic Thrombocytopenia Network. This organization is located in Australia and has links with centers in several countries in the Asia Pacific region. APMAT has an observational retrospective study of patients who have been diagnosed and treated for microangiopathic thrombocytopenia. The next item of research news is "Low grade inflammation switches the pro-angiogenic VEGF signal to anti-angiogenic signal which results in inhibition of endothelial cell migration". This is from Japan. Next, from the Netherlands, comes a VTE Survey about VTE recurrence prevention. Lastly, we outline two types of ISTH fellowship opportunities, Reach-the-World Fellowships and ISTH Training Fellowships. We encourage our eligible APSTH members to apply for these fellowships.

In our next section, "Asia-Pacific Region Elevates Awareness of World Thrombosis Day 2016 with Creative Activities and Educational Programs" we cover activities for World Thrombosis Day 2016 held last October 13 in nine countries. A wide variety of types of activities took place, all aimed to raise awareness about thrombosis among both healthcare professionals and the public. The 2016 campaign featured more than 8,000 activities organized by 675 global partner organizations across 80 countries.

Last but not least, we have the 2017 calendar of upcoming meetings. We hope to see you at some of those meetings! The deadline for submitting the abstract for the ISTH 2017 Congress is February 1, 2017.

If you have something to share with our members, please send an article to me at [pantep.ang@mahidol.ac.th](mailto:pantep.ang@mahidol.ac.th).

**Pantep Angchaisuksiri, Editor**

*Officer of Public Relations and Communications APSTH*

# Brief Review of the 9th Congress of Asian-Pacific Society on Thrombosis and Hemostasis



**Prof. Ming-Ching Shen**  
President of the 9th APSTH Congress 2016

The 9th Congress of the Asian-Pacific Society on Thrombosis and Hemostasis (9th APSTH Congress) held October 6th-9th, 2016 at the Taipei International Convention Center in Taipei, Taiwan, was an overwhelming success bringing together over 600 delegates, speakers, and sponsors from 28 countries (Table 1).

**Table 1:** Summary of Participants.

Country	Number	Country	Number	Country	Number
Australia	20	Indonesia	12	Portugal	3
Austria	1	Ireland	1	Singapore	28
Belgium	2	Italy	4	Sweden	1
Brazil	1	Japan	58	Switzerland	1
Canada	7	Korea	33	Taiwan	261
China	65	Malaysia	11	Thailand	31
Denmark	1	Myanmar	1	U.S.A.	18
France	3	Netherlands	3	Vietnam	40
Hong Kong	12	New Zealand	1		
India	5	Philippines	3	<b>Total</b>	<b>627</b>

The conference began on October 6th with the opening ceremony (Figure 1), a celebration of World Thrombosis Day (Figure 2), and a welcoming reception party for all conference attendees. Two educational programs sponsored by ISTH and WFH (Figure 3, Table 2) and presented by eight leading experts including Dr. Ozaki, Dr. Schulman, Dr. Krilis, Dr. Moll (ISTH, chaired by Dr. McLintock), Dr. Van den Berg, Dr. Peyvandi, Dr. Lillicrap and Dr. Federici (WFH, chaired by Dr. Van den Berg) preceded the opening ceremony and laid a solid, state-of-the-art foundation for the coming three days of scientific discussion.



**Figure 1:** (From left) Conference president Dr. Shen, APSTH chairman Dr. Lee, APSTH key founder Dr. Takada, APSTH key founder Dr. Ruan and Mayor of Taipei Dr. Ko at the opening ceremony.

It was an exciting first day made even more so by Mayor of Taipei, Dr. Ko, a former surgeon at National Taiwan University Hospital, who attended the opening ceremony to express his appreciation for the dedication of our APSTH members and the contributions they have made to global health care (Figure 1).



**Figure 2:** (From left) Dr. Rosendaal, Dr. Schulman, Dr. Takada, Dr. Ruan, Dr. Lee and conference president Dr. Shen at the World Thrombosis Day celebration.





**Figure 3:** (Upper panel from left) Dr. Ozaki, Dr. Moll, Dr. Schulman and Dr. Krilis at ISTH educational program chaired by Dr. Mc Lintock; (lower panel from left) Dr. Van den Berg, Dr. Peyvandi, Dr. Lilicrap and Dr. Federici at WFH educational program chaired by Dr. Van den Berg.

**Table 2: Educational Program.**

Speaker	Title
Dr. Ozaki	Monitoring for anti-platelet therapy
Dr. Moll	New oral anticoagulants: 2016 update
Dr. Schulman	Management of venous thromboembolism: an update
Dr. Krilis	New assays to stratify risk in patients with antiphospholipid antibodies
Dr. Van den Berg	Low dose prophylaxis
Dr. Peyvandi	The risk factors for development of inhibitors in PUP
Dr. Lilicrap	Advances in the pathogenesis and diagnosis of von Willebrand disease
Dr. Federici	Clinical and laboratory diagnosis of inherited vWD

APSTH 2016 featured eight intriguing and inspiring plenary lectures (Figure 4, Table 3), 52 invited symposium speakers from over 24 countries (Figure 5), in addition to 44 thematic oral and 100 poster presentations (Figure 6). It was a rich program that provided the newest advances and information to be shared and discussed. New ideas were hypothesized, and new collaborations were developed within our APSTH family.



**Figure 4:** (Clock-wise from upperleft) Plenary sessions with Dr. Schulman, Dr. Rosendaal, Dr. Kaushansky, Dr. Ljung, Dr. Shima, Dr. Urano, Dr. Chen and Dr. Tsai.

**Table 3: Plenary lectures.**

Speaker	Title
Dr. Schulman	Venous thromboembolism and cancer
Dr. Rosendaal	Causes of venous thrombosis
Dr. Kaushansky	The role of Thrombopoietin and its receptor, c-Mpl, in normal and neoplastic hematopoiesis.
Dr. Ljung	Aspects of prophylactic treatment of hemophilia
Dr. Shima	New concept of the treatment for hemophilia A with a factor VIII mimetic bispecific antibody
Dr. Urano	Demonstration of coagulation-dependent initiation of fibrinolysis by real time imaging analysis in vitro and in vivo
Dr. Chen	Application of next generation sequencing in reproductive genetics: using hemophilia A as an example
Dr. Tsai	TTP and HUS-from bench to clinic and from syndromes to diseases



**Figure 5:** (Upper panel from left) Dr. Angchaisuksiri, Dr. Atsumi, Dr. Chiou, and Dr. Dunkley; (lower panel from left) Dr. Hou, Dr. Lee, Dr. Oh and Dr. Tseng at the symposium sessions.



**Figure 6:** Snapshots from TICC, the conference venue.

We were excited to see the participation of our young participants, which ensures the continuous growth and advancement of our society. Six outstanding scholars including Cho Yeow Koh (Singapore), Zi Sheng (China), Chiharu Takahashi (Japan), Hui-Ju Tsai (Taiwan), Jihoon Yoon (Korea), and Xiaohong Ruby Xu (Canada), were awarded Young Investigator Awards of APSTH 2016 (Figure 7, Table 4) which were presented at the closing



ceremony, together with 15 Poster Awards granted to Yiying Bian (China), Wei-Min Chu (Taiwan), Satoshi Fujii (Japan), Erika Hashimoto (Japan), Tatsuya Hayashi (Japan), Chun-Chieh Hsu (Taiwan), Yu Chen Hsu (Taiwan), Yu-JuKuo (Taiwan), Hsing-Ying Lee (Taiwan), Ching-Yeh Lin (Taiwan), Asuka Sakata (Japan), Chuen Wen Tan (Singapore), Hui Ming Tay (Singapore), Chikahiro Terada (Japan), and Ching-Tzu Yen (Taiwan).

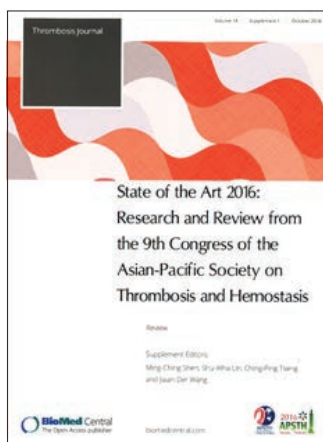


**Figure 7:** (From left) Cho Yeow Koh, Zi Sheng, Chiharu Takahashi, Hui-Ju Tsai, Jihoon Yoon, Xiaohong Ruby Xu. Young Investigator Awardees of APSTH 2016.

**Table 4:** Young Investigator Awardees of APSTH 2016.

Investigator	Title
Cho Yeow Koh et al (Singapore)	Design and development of a novel family of thrombin inhibitors as treatment for arterial thrombosis
Zi Sheng et al (China)	Dysregulated early B cell tolerance in primary immune thrombocytopenia
ChiharuTakahashiet al (Japan)	Carrier-dependent effects of sphingosine1-phosphate on plasminogen activator inhibitor-1 expression in adipocytes
Hui-JuTsai et al (Taiwan)	Integrin activation is regulated by disabled-2 phosphorylation in human platelets
Jihoon Yoon et al (Korea)	Clinical application of Gompertz model in clot waveform analysis
Xiaohong Ruby Xu et al (Canada)	Apolipoprotein A-IV is an endogenous thrombosis inhibitor : a comprehensive in vitro and in vivo study

APSTH 2016 achieved yet another major milestone through the publication of "The State of the Art: 2016, Researches and Reviews from the 2016 APSTH congress." (Figure 8, ref 1). It is the first ever publication of our congress proceedings through Thrombosis Journal, the official publisher of APSTH, and it is a testament to our constant endeavour to advance ourselves.



**Figure 8:** The State of the Art: 2016, Researches and Reviews from the 2016 APSTH congress.

In addition to the scientific program, several social programs (Figure 9) were also planned for attendees to enjoy as a means to strengthen professional connections and personal relationships with friends, and in some cases, even family

(Figure 10-12). Conference participants were encouraged to enjoy each others' company while discovering the multi-faceted vitality of modern Taipei and experiencing first-hand the warm hospitality of Taipei's citizens.



**Figure 9:** Upper left, Dr. Fujii, secretary general of APSTH and president of APSTH 2018, Dr. Shen and Dr. Lee (left to right) started the banquet night; Upper right, A Chinese orchestra smoothed the atmosphere after a long day of symposium; Lower left, Dr. Ni and Dr. Joseph danced with Taiwanese aboriginal dancers; Lower right, Dr. Huang and Dr. Kini, two snake venom researchers and long-time acquaintances, chatted at the banquet.



**Figure 10:** Relay of knowledge and friendship - Students of Dr. Shu-Wha Lin (front row, second from right) are thrilled to meet in person Dr. Stafford (middle, tall), their "grand mentor", and Dr. Carol Miao (front row, first from right), their collaborator.

**Figure 11:** Autosomal dominant familial trend in medicine - President Shen (center) and his two sons, Dr. U-Fu Shen (right) and Dr. Yu-Min Shen (left), at APSTH 2016.



**Figure 12:** At the banquet dinner. From left: Drs. Doyeun Oh, Kwang Hoe Chung, Ming Ching Shen, Lai Heng Lee, Claire McLintock, and Pantep Angchaisuksiri.

Photos from the congress have been uploaded to the APSTH 2016 website at <http://www.apsth2016.org/photo.html>. We welcome you to browse through and to download any of the photos for your souvenirs of our weekend of professional exchange, enthusiasm for science, and warm friendship within our APSTH family that we shared in Taipei.

With our continuing dedication and our ceaseless hard work, there will be many more discoveries to share and much more progress to be celebrated in our near

future. We have an appointment to see each other again at APSTH 2018, and we look forward to seeing all of you again in Sapporo, Japan.

Organizing committee, APSTH 2016

**Reference:**

1. Available at <http://thrombosisjournal.biomedcentral.com/articles/supplements/volume-14-supplement-1>.

## Reports from Recipients of the APSTH 2016 Young Investigator Award



### From Japan: The 9th APSTH Congress 2016 Experience

**Chiharu Takahashi**  
Clinical Laboratory Medicine  
University of Tokyo Hospital  
Tokyo, Japan

My name is Chiharu Takahashi, from Japan. I am a 7th year physician, a 4th year researcher, and mother of Yuma and Haruto, my lovely boys. Four years ago, I took a graduate school examination during the pregnancy, and luckily, I passed it. I really thank my teacher, Prof. Yatomi, who admitted me into the graduate school.

I have been able to continue research, because my family helped me. Sometimes, I had trouble with coexistence of study and child care, and I was almost discouraged. In such a case, my family cheered me up.

I was very glad to receive the Young Investigator award. I participated in this 9th APSTH Congress with my husband and our eldest son. It was my first experience not only to participate in an international conference but also to visit Taiwan. I felt nervous on the airplane from Tokyo to Taiwan because I was not good at giving an oral presentation in English. After we arrived at the hotel, I practiced many times for the presentation in front of my husband and our son. My research theme is mainly on sphingosine 1 phosphate and plasminogen activator inhibitor 1. I was looking forward to sharing my research with the audience.



If you are in the similar situation, very busy as a researcher, and a mother, I believe your effort never goes unrewarded. In near the future, I would like to participate in the next APSTH with my husband, Shinobu, and two boys, Yuma, and Haruto. Many thanks to the organizer for giving me such a wonderful opportunity.





## From Korea: The 9th APSTH Congress 2016 Experience

**Jihoon Geoffrey Yoon**

Department of Laboratory Medicine  
Yonsei University College of Medicine  
Seoul, Korea

I work as a resident doctor in the field of laboratory medicine. Last year, when I had my third training year in laboratory medicine, my professor, Jaewoo Song, introduced me to several topics in laboratory hematology. At that moment, one of the topics seemed to be really interesting and I instantly got an idea about the topic.

The topic was about 'clot waveform analysis (CWA)'. Prothrombin time (PT) and activated partial thromboplastin time (APTT) are the most frequently ordered test in the hematology department in our hospital, however at that time, I didn't know the definite measurement assay principle. Therefore, I started studying the methodology and principles and searched on Google about previous research. I figured out that most of the hematology coagulation analyzers measured the optical properties (e.g. absorbance, transmittance) during a clotting reaction of a sample and produced a specific clotting curve, called 'clot waveform'.

Because this clotting curve was presented as a sigmoidal shape, I thought it can be represented as a mathematical model. Hence, I tested several sigmoidal curve equations and finally modeled the curve. After the modeling, I was curious about the model parameters and whether they are able to provide useful clinical information. In my spare time of routine tasks in the hospital, I did several experiments to prove my thesis and gathered measurement data from several patients. Sometimes it seemed to be endless and tedious, but I learned that this is research. I sincerely appreciate the people helping me at that time, in particular, my co-worker Sun-Kyoung Kim M.T. and my friend Minyong Ricky Lee at Stanford University, Department of Statics. In the end, I could conclude that our model and parameters indicate clotting rate and clot structure which showed advantages in an estimation of hemophilia severity and a direct oral anticoagulant monitoring.



*My first oral presentation at APSTH 2016.*

This was my first oral presentation at an international congress. I was really pleased that the committee of APSTH gave me such a chance. Most of all, it was really exciting that I could talk in front of research celebrities whose names I had seen on the first page of many articles. I had a really productive talk after the presentation with Prof. Midori Shima at Nara Medical Center who has notable professional expertise in my research area. For me, APSTH 2016 was an inspiring and motivating event.

I think it is really important to make a bridge between the researchers and to share ideas and trends. APSTH 2016 did an excellent job of playing the role. At last, I am glad to receive the Young Investigator Award and to write an article on the APSTH newsletter. I am really looking forward to the next APSTH 2018 in Japan.



*Photo with Prof. Shima.*



## From China: The 9th APSTH Congress 2016 Experience

**Zi Sheng**  
Qilu Hospital  
Shandong University  
Jinan, China

I would like to express my sincere thanks to the organizers of the 9th Congress of the Asia-Pacific Society on Thrombosis and Hemostasis, for giving me the opportunity to participate in the meeting and sponsoring me as a young investigator. It was really a privilege to learn from the many outstanding scholars there and make friends with a lot of excellent people. I also want to thank my family, friends and especially my mentor Dr. JunPeng and my co-mentor Song Li, for their support, encouragement and guidance.



Together with the other three participants from Qilu Hospital, Sandong University, we set out on October 6, 2016. The flight from Jinan to Taipei was about three hours. When we arrived, I fell in love with the city at first glance for its beauty and hospitality. On the way to Taipei International Convention Center (TICC), we had a lively discussion about the beautiful scenery along the road.

After arriving at TICC, we took part in the educational program supported by the ISTH. Listening to the lectures given by the well-known experts and scholars helped us learn a lot of new knowledge in the field of thrombosis and hemostasis. The meeting brought together a broad range of talents from all over the world. Participating in the program was motivating and inspiring. At night a fascinating opening ceremony was held in the TICC. I was really honored to see many academic people, including Ming-Ching Shen, the President and Chairman of the organizing committee of the 9th Congress of the Asian-Pacific Society on Thrombosis and Hemostasis, Taiwan. He is really a learned and refined person. I made friends and communicated further about some leading-edge research with Ruby, a young investigator from University of Toronto.



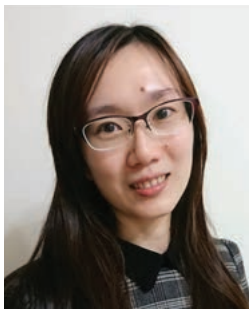
On October 8, I gave my speech named "Dysregulated Early B Cell Tolerance in Primary Immune Thrombocytopenia" in the session of ITP and NETs. The attendees gave me plenty of valuable recommendations. I really appreciated the chance to study and discuss with many preeminent people. It was gratifying to find that those who were there shared the same passion and devoted themselves to the scientific research. I was encouraged and touched by the experience.

The last day of the Congress, there was a brief but grand closing ceremony. I got the young investigator award as the only one from China. It was a great honor for me to be conferred the award. I would work hard in return. I would like to express my sincerest gratitude to the organizers of the Congress, as well as to the people who have helped me.



I really enjoyed this trip to Taipei. The modern but historical city, the friendly and hospitable people, and the excellent scholars from all over the world made the Congress an unforgettable one for me. I look forward to having the chance to attend the Congress in the future.





## From Taiwan: The 9th APSTH Congress 2016 Experience

**Hui-Ju Tsai, Ph.D.**

*Department of Medical Biotechnology and Laboratory Science  
Chang Gung University, Taiwan*

I am a researcher in the field of thrombosis and hemostasis. It was really exciting to hear the news from my mentor Prof. Ching-Ping Tseng that the 9th Congress of the Asian-Pacific Society on Thrombosis and Hemostasis 2016 (the 9th APSTH 2016 Congress) was going to take place in my country, Taiwan. The APSTH Congress is a bi-annual conference and a key event in our field of research. It is a good opportunity to share our study and communicate with experts in the same field. Thanks to the committees of the 9th APSTH 2016 Congress for accepting my application and letting me have this opportunity to present our study. It is also a great honor for me to be a recipient of the Young Investigator Award of the 9th APSTH 2016 Congress.



*During my oral presentation.*

Our research focused on the function of Disabled-2 (Dab2) in platelet activation. Dab2 is a key hemostatic regulator and plays a role in Gα12/13-mediated thrombin signaling by using megakaryocyte lineage-restricted Dab2 knockout mice. Previous studies have shown that Dab2 is a phosphoprotein. However, whether Dab2 undergoes phosphorylation during human platelet activation is not determined. In this Congress, I presented the study of "Integrin activation is regulated by Disabled-2 phosphorylation in human platelets". The functional significance of Dab2 phosphorylation in thrombin-stimulated human platelet activation was addressed in our study. Proteomic analysis of the lysates from thrombin-induced human platelet activation revealed that Dab2 Ser723 was phosphorylated. Dab2 Ser723 phosphorylation (pS723) was induced by Gαq-dependent PLC-PKC activation. The Dab2 Ser723 flanking sequence reveals a motif for the binding of Cbl-interacting protein

of 85 kDa (CIN85). Dab2 was found to bind CIN85 when S723 was not phosphorylated. Our study indicated that thrombin-stimulated pS723 resulted in the dissociation of Dab2-CIN85 interaction and the subsequent integrin αIIbβ3 activation.



*From left to right: Wei-Shan Hung, Prof. Ching-Ping Tseng, Prof. Ming-Ching Shen, Hsing-Ying Lee, and Hui-Ju Tsai.*

There were very interesting topics in the 9th APSTH 2016 Congress. One of the plenary lectures "The role of thrombopoietin and its receptor, c-Mpl, in normal and neoplastic hematopoiesis" was presented by Prof. Kenneth Kaushansky (Stony Brook University, U.S.A.). Thrombopoietin (TPO), a key regulator of stem cell and platelet production, was cloned in 1994 by Prof. Kaushansky's group. Furthermore, Prof. Kaushansky and his team explored the downstream signaling of TPO by a series of transgenic and knockout mice. I had great respect for the depth and breadth of Prof. Kaushansky's studies. The topic of "New horizon in platelet function: with special reference to a recently-found molecule, CLEC-2" was presented by Prof. Yukio Ozaki (University of Yamanashi, Japan). Prof. Ozaki mentioned that the functions of platelets are not just in hemostasis or thrombosis. Platelets also are involved in immune responses, malignancy and organ development and generation. The concept of platelets with multifunction made me think about the application of our work in other models. During the meeting, I met several renowned scientists such as Prof. Satoshi Fujii, Prof. Tetsumei Urano, Prof. Yukio Ozaki, Prof. Yoshiaki Tomiyama, and Prof. Toshiyuki Miyata, whom I knew when I attended the APSTH/JSTH 2016 joint symposium in Nara, Japan. It was really exciting to see and communicate with them again and receive positive comments for our work.



*After the banquet with Prof. Ching-Ping Tseng and other attendants.*



*Receive the award from Prof. Ming-Ching Shen.*

Besides the science aspects, there were a lot of impressive experiences for me during this Congress such as the special show about the origin and history of APSTH by sand painting at opening ceremony, the delicious food and the traditional performing arts at the welcome reception and the aboriginal dance at the banquet. I really enjoyed the 9th APSTH 2016 Congress.

Finally, I deeply appreciated that my mentor, Prof. Ching Ping Tseng, supported my study and encouraged me to attend this Congress. Thanks also for my colleagues Wei-Shan Hung and Hsing-Ying Lee's company at the 9th APSTH 2016 Congress. It is a very wonderful experience for me to share our study with the international scientists and acquire knowledge from the leading scientists in the field of thrombosis and hemostasis. I am looking forward to the next Congress.





## From Canada: The 9th APSTH Congress 2016 Experience

**Xiaohong Ruby Xu**  
University of Toronto  
Toronto, Canada

Firstly, I would like to express my sincere gratitude to the Organizing Committee of the 2016 9th Congress of the Asian-Pacific Society on Thrombosis and Hemostasis (APSTH) for offering me this great opportunity to give an oral presentation at the Congress in Taipei, Taiwan. It was my privilege to obtain the Young Investigator Award, which was very important for my research career development. This conference had attendees from over 24 countries. The 9th APSTH Congress was not only scientific inspiring but also cultural exciting, which gave people invaluable experience and I would love to attend it again in the future.

The Welcome Reception on the first day was unforgettable. There were fantastic performances, showing us the culture of Taiwan and the history of APSTH. I truly enjoyed the Sand Painting performed by one of the artists (I believe the entire audience shared the same feeling). His outstanding painting skills, along with beautiful music and narration, presenting the list of previous congresses of APSTH. I was glad to know that the predecessor of APSTH is the Chinese-Japanese Symposium on Blood Coagulation, Fibrinolysis and Platelets, which was established in 1990 and in which, Dr. Ming-Ching Shen, the President and Chairman of 9th APSTH, was one of the founders.



Scientists from Canada: Dr. David Lillicrap (left); Dr. Sam Schulman (middle) and Dr. Heyu Ni (right).

The Welcome Reception Dinner party provided us incredibly great food, drinks, and a concert. The musicians played several Chinese classical musical instruments, such as the 4-stringed Chinese lute/Pipa, Erhu fiddle, and dulcimer/Yangqin. I met and talked with many scientists and clinicians from all over the world during the dinner party. Nobody would deny that the Congress had a perfect start.



The opening ceremony.



Dr. Xiaohong Ruby Xu (middle) with Dr. Qing Zhang (China) and Dr. Heyu Ni (Canada).



The Sand Painting.

The Scientific Program of the Congress in the next three days allowed me to learn from the well-known speakers and distinguished scientists in the field of thrombosis and hemostasis. The program contained a variety of interesting topics, such as anti-platelet and anti-coagulant therapy, venous thromboembolism, hemophilia and its treatments, immune thrombocytopenia, cancer-associated thrombosis, as well as other thrombotic/hemostatic-related disorders. I was so glad that I attended the 9th APSTH and had the opportunity to listen to these motivating and inspiring talks, to discuss my science with my peers and to network with

the scientists worldwide. In addition, I made several new friends from Australia during the meeting. We had a tour to the Raohe Night Market. The food was so delicious with a lot of variation that we wish we could go back again.



*Raohe Night Market with scientists from Australia.*

During the Award Ceremony, I received the prestigious 2016 Young Investigator Award from 9th APSTH. I would like to thank the Dr. Ming-Ching Shen and the organizing committee for their great effort in making such a successful and unforgettable event. I thank them for giving me this award, which would encourage me to continue pursuing my career in thrombosis and hemostasis. Finally, I would like to thank my former supervisor and manager, Dr. Heyu Ni, for supporting me to do the science I love, to attend this great congress and to present my research.



*Dr. Ming-Ching Shen and Dr. Xiaohong Ruby Xu.*



# Research News


**apmat**

Asia Pacific Microangiopathic  
Thrombocytopenia Network


**Jim Tiao**  
Senior Postdoctoral Scientist



**Ross Baker**  
Study Chair

WACTH Coagulation Laboratory  
Murdoch University  
Murdoch, Western Australia



**Giuliana D'Aulerio**  
Clinical Project Manager

The APMAT Research Network was established under the premise of better clinical outcomes for microangiopathic thrombocytopenia patients. As 2016 draws to a close, the APMAT project has had an exciting and successful year. Major highlights included the Australian National Ethics Application Form (NEAF) approval for APMAT1 (a multicentre retrospective study), IRB approval for numerous countries, a successful ADAMTS-13 standardisation survey 1 results, and productive meetings and presentations at the 9th Congress of APSTH Taipei and HAA Annual Scientific Meeting 2016 Melbourne where the results of the standardisation study was well received by the conference attendees.

## APMAT1

APMAT1 is an observational retrospective study of patients who have been diagnosed and treated for microangiopathic thrombocytopenia; as well as clinical information participant samples will be biobanked for research purposes. Following NEAF approval, many Australian governance applications have been submitted in an effort to initiate additional Australian sites for recruitment. Currently, the APMAT1 study has active sites in New South Wales (Calvary Mater Newcastle), South Australia (Royal Adelaide Hospital) and Western Australia (Hollywood Private Hospital and Murdoch University). In addition to Australian sites, several APMAT study sites in New Zealand have also received IRB approval including Christchurch HDB and Waitemata HDB.

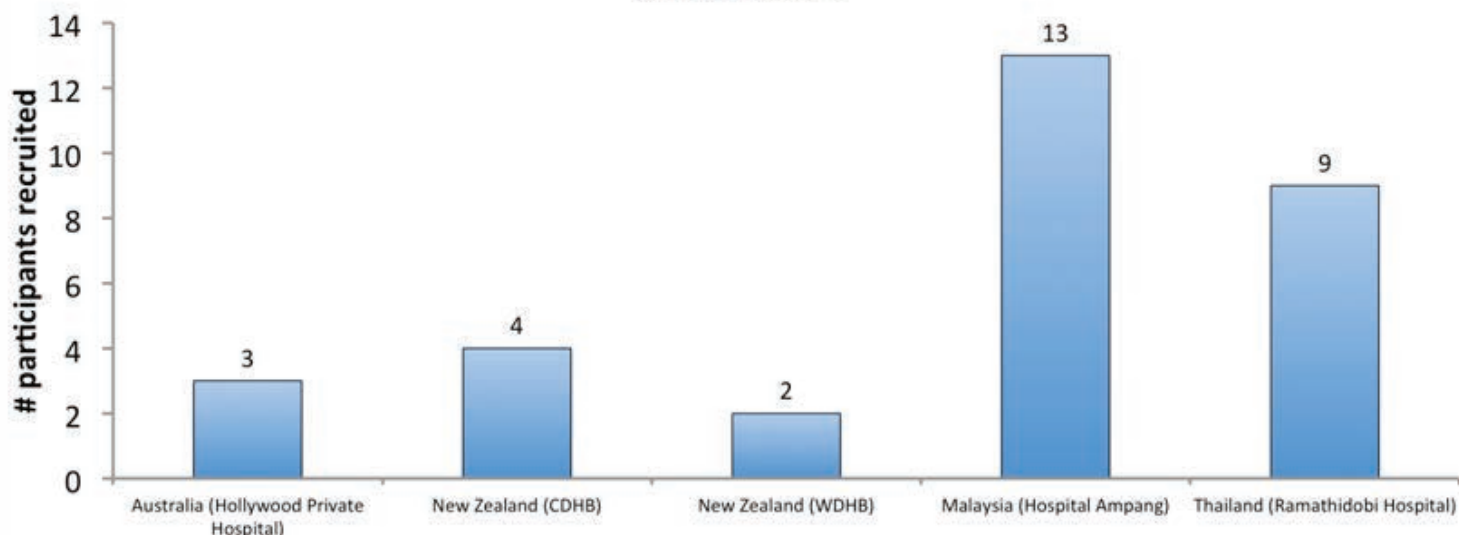
In addition to Australia and New Zealand, the APMAT network has forged strong links in the Asia Pacific

region. Several centres in Asia have gained IRB/HREC approval and commenced recruitment including Prof Pantep Angchaisuksiri (Thailand) and Dr Jameela Sathar (Malaysia) and Dr Renchi Yang (Tianjin China). Submissions are currently in preparation with Dr Raymond Wong (Hong Kong), Dr Doyeun Oh (South Korea), A/Prof Tien Sim Leng (Singapore) and Prof Ming-Ching Shen. We applaud all local efforts in establishing and activating APMAT1 recruitment.



At the time of publication, current recruitment for the APMAT1 biobank stands at 31 participants; cases have come from Malaysia (n=13), Thailand (n=9), Christchurch NZ (n=4), Waitemata NZ (n=2) and Western Australia (n=3).

**APMAT1 Biobank**



## APMAT External Quality Assessment (EQA) ADAMTS-13 Standardisation Study

One of the APMAT project goals is to standardise diagnostic testing for ADAMTS-13 assays across the Asia Pacific region. To this end, two standardisation surveys were performed six months apart, measuring ADAMTS13 activity and inhibitor under EQA conditions. The aim of the study is to improve the fidelity and time frame of confirming suspect TTP samples in the Asia Pacific region. For those of you who attended the 9th Congress APSTH conference, Dr Jim Tiao presented the first survey results which displayed exceptional comparability with the larger ECAT cohort in both the ADAMTS-13 activity and inhibitor assays. Survey 2 of the study closed on the 30th November 2016 and we endeavour to disseminate the study results soon after. Any queries relating to the survey and survey results can be directed to Dr Jim Tiao ([j.tiao@wacath.org](mailto:j.tiao@wacath.org)).

## APMAT2

To further validate clinical experiences and outcomes from APMAT1, an APMAT2 project will be initiated which aims to prospectively collect clinical information and samples of new microangiopathic thrombocytopenia cases as they are presented to emergency departments over a five year period. Biobank samples collected from this study will fill critical information gaps on the life-threatening condition.

If you would like to join our expanding network of centres or need assistance with local IRB/HREC submissions please do not hesitate to contact Dr Jim Tiao ([j.tiao@wacath.org](mailto:j.tiao@wacath.org)) or Giuliana ([giuliana@pbi.org.au](mailto:giuliana@pbi.org.au)). On behalf of the APMAT Network international steering committee we look forward to collaborating with study sites for a successful 2017.



## Low grade inflammation switches the pro-angiogenic VEGF signal to anti-angiogenic signal which results in inhibition of endothelial cell migration



**Sushil Panta**

**Teruto Hashiguchi**

*Department of Laboratory and Vascular Medicine*

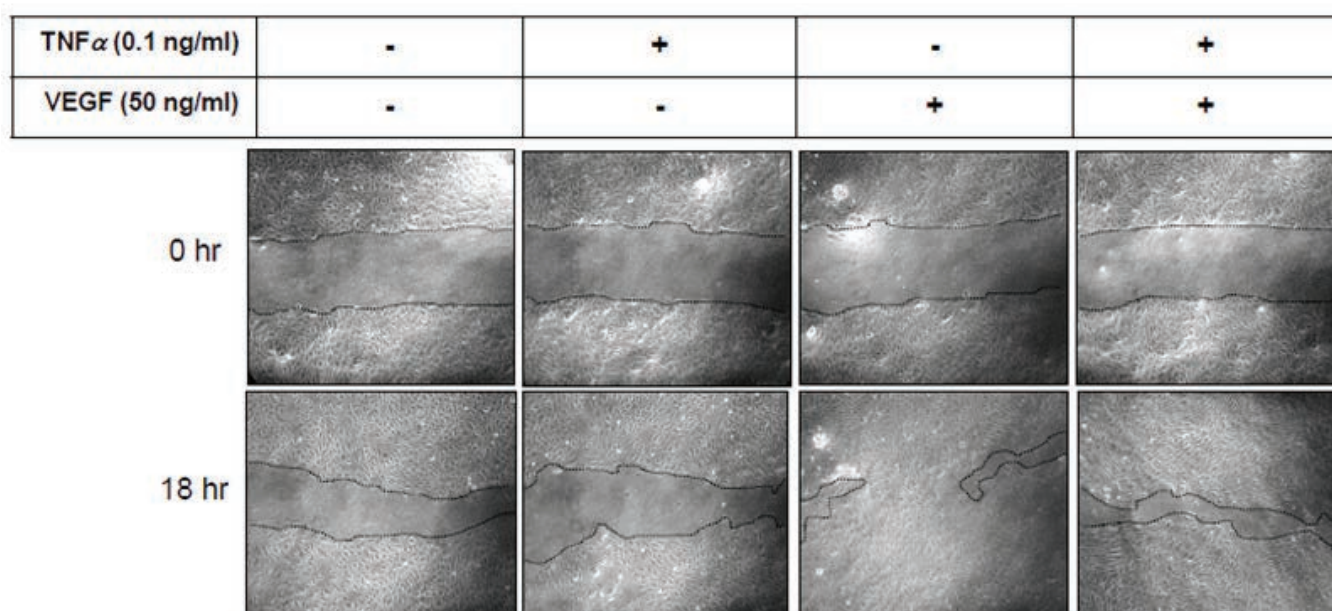
*Kagoshima University Graduate School of Medical and Dental Sciences*

*Kagoshima, Japan*

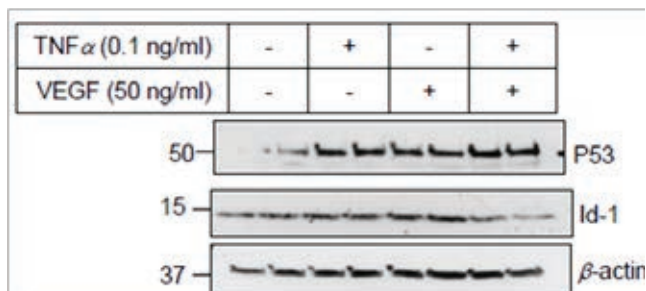
Endothelial cell migration is controlled by complex signaling pathways involving inflammatory factor like TNF $\alpha$  and angiogenic factor like vascular endothelial cell growth factor (VEGF). We studied an inhibitory role of low grade inflammation on VEGF induced migration in human umbilical vein endothelial cells (HUVECs) (BBRC in press). Low grade chronic inflammation is pro-tumorigenic, but low grade acute inflammation, which we focused on, has been used to treat for bladder cancer in the past. TNF $\alpha$  has been reported to exert opposing angiogenic activity depending on its concentration in each tissue. TNF $\alpha$  has been described as tumoricidal agent and we discovered that low dose TNF $\alpha$  exerts inhibition of VEGF induced cell migration through P53

in HUVECs (Figure A and B). Mild upregulation of p53 which do not exert apoptosis, is capable to inhibit cell migration. TNF $\alpha$  enhanced the increase of P53 and PAI-1 levels by VEGF treatment in HUVECs (Figure B and C). In absence of P53, antiangiogenic response triggered by TNF $\alpha$  was not be able to inhibit VEGF induced cell migration because mutated P53 reprograms the TNF $\alpha$  induced signals. Id1 lies downstream of P53 and in our experiment, TNF $\alpha$  pretreatment decreased the VEGF induced Id1 (Figure B). Recruitment of  $\alpha$ v $\beta$ 3-integrin to lamellipodia is important in endothelial cell migration and  $\beta$ 3-integrin expression was significantly downregulated in Id1 silenced HUVECs (Figure D).

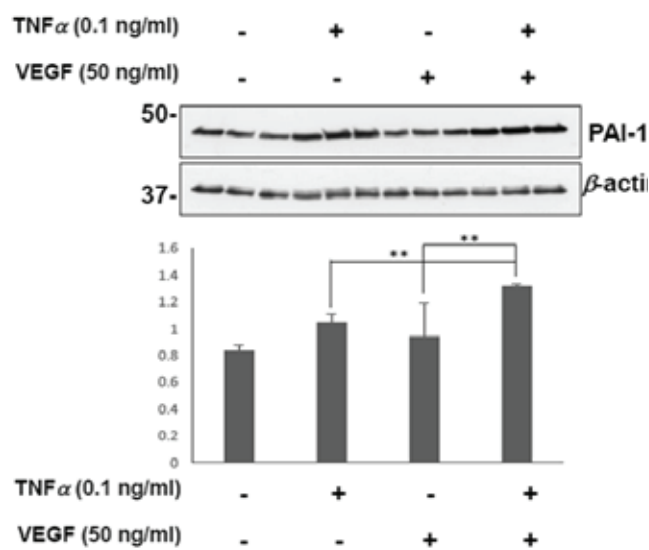
A.



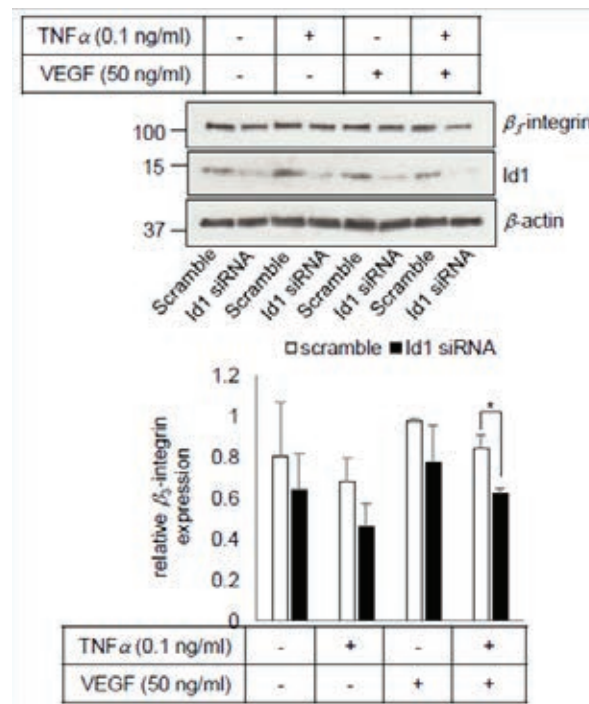
B.



C.

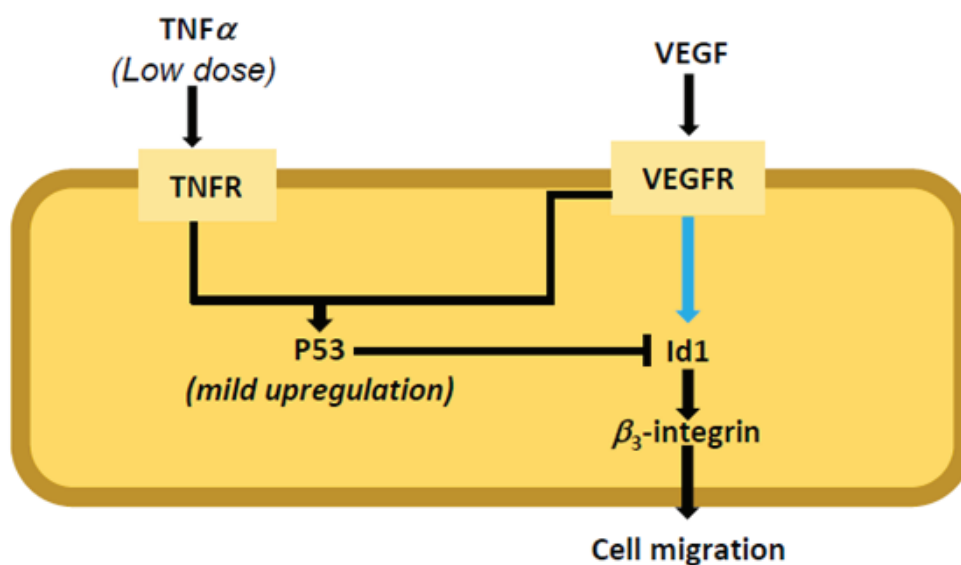


D.



We figured out that TNF $\alpha$  induced low grade inflammation together with VEGF itself has anti-angiogenic effect and the anti-angiogenic signal of TNF $\alpha$  is relayed by P53 to suppress migratory activity in HUVECs (Figure E). We found a surprising fact that low dose TNF $\alpha$  and VEGF work in concert to upregulate P53 and PAI-1. PAI-1 have been described as an inhibitor of cell migration itself. We are now working to decipher the connection of P53 with PAI-1 in inhibiting cell migration.

E.







## VTE Survey

**Vincent ten Cate, MSc.**  
*Department of Epidemiology*  
*Maastricht University Medical Center*

Recurrence prevention in venous thromboembolism (VTE) patients is a difficult task. In order to minimize the risk of VTE recurrence, physicians prescribe a treatment that inherently exacerbates the risk of bleeding. Physicians need to balance these two risks, which in practice is typically achieved by finding the 'sweet spot' of treatment duration: treat for too long and you risk a major bleeding, while treating not long enough nullifies the effect of the treatment. Getting it just right is crucial.

Although many physicians follow the CHEST's or local (regional, national) guidelines in determining treatment duration, increasing evidence shows that physicians just as often deviate from the recommendations outlined in these guidelines. What is the cause of this variability, and where specifically do physicians disagree with one another?

To provide an answer to these questions, we have developed a survey geared to specialists involved in the secondary prophylaxis of VTE. In the survey, you are

presented with 12 fictitious patients exhibiting a range of features (including symptoms). For each patient, you will indicate how high you estimate their VTE recurrence and bleeding risks to be, and choose whether to continue or to stop treatment. The median completion time for the survey is 9 minutes, but there is no time limit.

We currently have 239 respondents from 33 countries, and aim to reach at least 250 respondents. At present, we have particularly few participants from the Asia Pacific region (except Australia and China). We would like to invite VTE physicians reading this newsletter to participate in our online study, and to disseminate it to colleagues or residents if they found it interesting. For any questions, don't hesitate to contact the lead researcher at [vincent.ten.cate@mumc.nl](mailto:vincent.ten.cate@mumc.nl).

The survey can be reached at [www.vte-survey.com](http://www.vte-survey.com). Please note that any information you provide will be anonymized, and will solely be used for research purposes.

## ISTH Fellowship Opportunities

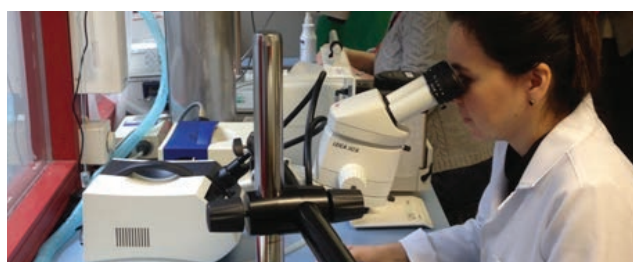
The ISTH offers fellowships for early career professionals and Reach-the-World members.

**Reach-the-World Fellowships** offer junior clinicians and researchers from *developing countries (countries classified by the World Bank as low-income, lower-middle-income, or upper-middle-income)* the opportunity to study at host institutes known for their expertise in thrombosis and hemostasis. The program aims to promote knowledge and expertise in one or all of the areas of medical care, laboratory methods and/or research. Four fellowships will be awarded each year. Funding is for a maximum of four months. Applications periods are open from April 1 - June 1 and November 1 - December 31 of each year.

**ISTH Training Fellowships** are intended to provide support for short-term training opportunities for early career professionals (clinical or basic research) in the field, who wish to study at host institutes known for their expertise in thrombosis and hemostasis. The program aims to promote knowledge and expertise in one or all of the areas of medical/clinical care, laboratory methods and basic or clinical research in this field. The ISTH wishes to provide financial support to enhance knowledge of a new clinical subspecialty, to learn

a new laboratory or research technique or for short term collaborative projects. Funds will be designated for professionals working in each of the following areas: bleeding disorders, clotting disorders, basic or clinical research. Applicants must be a resident of a *high-income economy country as designated by the World Bank*. It is expected that a minimum of 10 Training Fellowships will be awarded each year. Funding is for a maximum of two months. It is intended for clinicians and scientists at an early stage in their career (within 10 years of completion of PhD or completion of clinical subspecialty training). Applications period is open from May 1- September 15 of each year.

More information about the ISTH fellowships can be found at [www.isth.org/page/fellowships](http://www.isth.org/page/fellowships).



# Asia-Pacific Region Elevates Awareness of World Thrombosis Day 2016 with Creative Activities and Educational Programs



**Barbara Krolak**

*International Society on Thrombosis and Haemostasis (ISTH)*



## INTRODUCTION

It's a fact that one in four people worldwide die of conditions caused by thrombosis. World Thrombosis Day (WTD), a global campaign celebrated annually on 13 October, is committed to shining a global spotlight on thrombosis an urgent and often preventable health condition. A campaign of the International Society on Thrombosis and Haemostasis (ISTH), the WTD 2016 movement energized international partners as they organized thousands of educational events in countries around the world. With a theme of **Know** Thrombosis: Keep Life Flowing, the WTD 2016 movement encouraged partners and supporters to understand thrombosis, including its risk factors, signs, and symptoms.

The 2016 campaign featured more than 8,000 activities organized by 675 global partner organizations across 80 countries. This year, the movement secured more than 1.9 billion media impressions, amplifying the WTD message greater than ever before. In the Asia-Pacific region, hundreds of partners joined together to host creative events and activities in their home countries with a common goal of raising awareness about thrombosis. WTD partners in the Asia-Pacific region encouraged a call to action to both healthcare professionals and the public to **Know** Thrombosis and understand the significance of this condition. Below is a sampling of events in the Asia-Pacific region in alphabetical order.

## AUSTRALIA

More than 40 partner organizations in Australia participated in WTD 2016. Among a variety of activities, Griffith University hosted a WTD educational seminar and oral presentation on 13 October. At the University of South Australia, laboratory medicine students celebrated WTD by educating others and raising awareness in conjunction with the university's 25th anniversary. Wimmera Health Care Group celebrated by educating local TV stations about thrombosis and distributing pamphlets.

WTD was featured in a variety of Australian media outlets, including ABC Adelaide Radio, 2SER Radio, 5RPH Radio, 4ZZZ Radio, Get Up & Go Travel Newsletter, The Senior, and more. A radio interview was also conducted by Health Professional Radio in Australia with exclusive commentary from an expert at Monash University. The title of the interview is "Giving Global Priority to Thrombosis Awareness to Reduce Premature Deaths".



## CHINA

The PE-DVT Research Group of China launched WTD 2016 by setting up several regional thrombosis centers, as well as the development of guidelines and a consensus state for thrombosis by key healthcare leaders. The group also engaged local communities and societies with public education booths in high-traffic areas and special workshops for thrombosis patients.



To reach the healthcare audience, education sessions and presentations about thrombosis were held specifically for physicians and nurses in local hospitals.

## INDIA

Hundreds of WTD awareness flyers were distributed by partners in India. In addition, an article about VTE awareness in India was published by the Business Standard. The American Progressive Telugu Association hosted many events in India, including awareness events in hospitals and nursing homes in the regions of Guntur, Vijayawada, Pradesh, Visakhapatnam, and more.





## INDONESIA

The Indonesian Society of Thrombosis and Hemostasis, together with the Division of Hematology-Medical Oncology Department of International Medicine at the University Indonesia in Jakarta, launched a creative offering called the "Thrombosis Awareness Program," featuring lectures designed for the Pilots Association of national carrier Garuda Indonesia, as well as for a company with staff who frequently travel. The lecture, "Thrombosis Awareness for Travelers," took place in October and helped to educate hundreds of employees about thrombosis and risk factors for those while traveling.

## JAPAN

A WTD 2016 educational event was hosted at the University Kurokawa in Japan, including presentations from a panel of experts. The Japanese Society of Thrombosis and Haemostasis hosted a public lecture on 10 October to educate the community about thrombosis. The event program included special lectures on thrombosis topics and a panel discussion. With more than 500 attendees, the event encouraged the public to Know Thrombosis. On 16 October, the Japanese Thrombosis Association hosted a public educational session in Osaka.



## NEW ZEALAND

Staff at North Shore Hospital in Auckland celebrated WTD in a fun way by touring around the hospital dressed as a blood clot and super heroes. They passed out information to staff and patients about VTE prevention. In addition, staff from the hematology wards of the hospital wore WTD t-shirts. WTD sponsor Medtronic re-launched its popular "Dotty the Clotty" figure to hospitals across New Zealand. Many clinicians and the public requested photos with Dotty the Clotty!



Awareness activities were also hosted by partners Obex Medical, Coagulation Conversation, and many national hospitals and healthcare organizations. From a media perspective, there were several WTD-related radio interviews conducted in New Zealand, including a live interview with Eileen Merriman, Clinical Haematologist & Lead Thrombosis Clinician, by station 2UE. WTD was featured in the October issue of the New Zealand Pharmacy Guild's magazine, Contact, which is distributed to more than 1,000 recipients. A placement was also secured in the New Zealand Pharmacy Guild's Magazine.

## SINGAPORE

Partners in Singapore collaborated together to elevate national awareness and understanding of thrombosis. The Academy of Medicine Singapore, College of Medicine Singapore, and the Society of Haematology jointly hosted a public symposium on 2 October designed to educate the community about the significance, risks, signs, and symptoms of the condition. The event was promoted through a variety of public outlets and was well-attended. Additionally, WTD 2016 received exciting media coverage in Singapore. Radio station 938 LIVE conducted an on-air interview with Dr. Tan Chuen Wen to discuss WTD and The Straits Times featured WTD in two issues of the print newspaper. Shin Min, a major Chinese newspaper, also published two articles on thrombosis in its daily health column around 13 October.

## TAIWAN

To celebrate the kick-off of WTD 2016, the Taiwan Society of Thrombosis and Hemostasis spotlighted WTD in the opening ceremony of the 9th Congress of the Asian-Pacific Society on Thrombosis and Hemostasis (APSTH). Taiwan was the host country for this Congress and the 6 October opening ceremony included a fun interactive game with balloons (see pictured) led by leaders in the field.



## THAILAND

In Thailand, the Thai Cardiac Electrophysiology Club and the Thai Society of Hematology organized a running marathon to promote VTE and AFib awareness to the public. With more than 1,000 participants, this was an interactive opportunity to engage the public in WTD and show them how to Keep Life Flowing, which was one of this year's thematic messages. Additionally, the society hosted a VTE Prevention Meeting for healthcare workers led by Professor Pantep Angchaisuksiri, member of the WTD



Steering Committee. The meeting encouraged proper VTE prevention for hospitalized patients, including conducting VTE risk assessments. Education activities were also available for the general public, including an open meeting about VTE prevention steps led by thrombosis experts.

## Upcoming Meetings:

- 1 New Frontiers in Anticoagulation Medicine**  
11-12 January 2017 – Oxford, England  
[www.b-s-h.org.uk/conference-and-events/events/new-frontiers-in-coagulation-medicine](http://www.b-s-h.org.uk/conference-and-events/events/new-frontiers-in-coagulation-medicine)
- 2 10th Annual Congress of the European Association of Haemophilia and Allied Disorders**  
1-3 February 2017 – Paris, France  
[www.eahad2017.com](http://www.eahad2017.com)
- 3 61st Annual Meeting Society of Thrombosis and Hemostasis Research**  
15-18 February 2017 – Basel, Switzerland  
[www.gth2017.org](http://www.gth2017.org)
- 4 Maastricht Consensus Conference on Thrombosis**  
21-24 February 2017 – Maastricht, Netherlands  
[www.mcct.eu](http://www.mcct.eu)
- 5 7th International Symposium on Women's Health Issues in Thrombosis and Haemostasis**  
3-5 March 2017 – Barcelona, Spain  
[www.whith.org](http://www.whith.org)
- 6 2017 Highlights of ASH® in Asia-Pacific**  
10-12 March 2015 – Hong Kong, China  
[www.hematology.org/Highlights/Asia.aspx](http://www.hematology.org/Highlights/Asia.aspx)
- 7 15th WFH International Musculoskeletal Congress**  
5-7 May 2017 – Seoul, Republic of Korea  
[www.wfh.org](http://www.wfh.org)
- 8 39th Annual Meeting of the Japanese Society of Thrombosis and Hemostasis**  
8-10 June 2017 – Nagoya, Japan  
<http://www.jsth2017.umin.jp>
- 9 22nd Congress of the European Hematology Society**  
22-25 June 2017 – Madrid, Spain  
[www.ehaweb.org](http://www.ehaweb.org)
- 10 ISTH 2017 Congress**  
8-13 July 2017 – Berlin, Germany  
[www.isth.org](http://www.isth.org)





# 2017

JULY 8-13

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**Deadline: February 1, 2017**

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You are invited to attend the XXVI<sup>th</sup> Congress of the International Society on Thrombosis and Haemostasis (ISTH). Held in Berlin, Germany, from July 8 –13, 2017, the ISTH 2017 Congress will be the foremost meeting in thrombosis, hemostasis and vascular biology and will be attended by thousands of the world's experts.

Join us in Transcending Scientific  
Boundaries at ISTH 2017!