

Plenary excellence!

The thirtieth ISTH Congress concluded successfully in mid-July after a three-year absence of an in-person meeting of our global thrombosis and hemostasis community. As anticipated, the mood of the 5000 in-person attendees was excited and enthusiastic, and the logistic excellence of the Congress greatly facilitated the very positive re-entry experience of congress participation.

ISTH Congresses fulfill a range of functions for attendees and provide outstanding opportunities for scientists and clinicians at every stage of their careers to advance their knowledge and establish new networks of colleagues to further their goals of discovery and enhanced clinical management. The unique mix of basic and clinical content of these meetings enables interactions that facilitate the transfer of knowledge across discipline boundaries and encourages innovation in our field.

A highlight of any ISTH Congress is the Plenary Lectures that are chosen by the local scientific committee on the basis of scientific merit, novelty and general interest to the Congress attendees. In the current schedule of ISTH Congresses there are only four Plenary talks each year, and thus competition for these lectures is immense, guaranteeing that the speakers and their presentation topics are of outstanding quality and interest. In 2022, this tradition of excellence was maintained with four diverse and fascinating talks by global leaders in our field.

Over the past decade, the interconnections between hemostasis and innate immunity have become increasingly apparent. As a physiologic process this interaction is elegant and critical, but dysfunction or imbalance of the hemostasis-immune axis results in immunothrombosis, a phenomenon highlighted by the worldwide impact of the COVID coagulopathy. In this context, Steffen Massberg's plenary lecture describing novel innate immune functions of platelets was a revelation, describing activities that clearly surprised and excited the appreciative and well-informed audience. The combination of Dr. Massberg's lucid commentary and memorable videomicroscopy images provided a perfect opening to the Congress.

Next up was Robert Medcalf's presentation linking fibrinolysis, immunity and the injured brain. Fibrinolysis is often the Cinderella of hemostasis, but this talk reminded us that no matter how much we think we may know about the elements of hemostasis and their functions there are still important new facts to uncover. Dr. Medcalf's discussion of the surveillance role of fibrinolysis and its association

with protein aggregate pathologies, particularly in the central nervous system, was thought provoking and revealing. Similar to Dr. Massberg's lecture, this description of novel non-hemostatic roles for elements of the fibrinolytic system very successfully caught the audience's attention.

The third plenary talk, delivered by Dr. Anne Godier, reminded the audience of the dreadful toll that acquired bleeding pathologies take globally through perioperative bleeding, trauma induced coagulopathy and post-partum hemorrhage. As an anesthetist and intensive care specialist, Dr. Godier is perfectly placed to assess the challenges that we face to optimize the clinical management of these complex and dynamic hemostatic disorders. Her presentation of the evidence, and more often lack of evidence, for what do in these situations was perfectly delivered, and no doubt left the audience appreciating that there is much to do to improve this area of our clinical practice.

The final plenary presentation, the David Weatherall Memorial Lecture, was presented by Dr. Sarah Teichmann and focused on innovative approaches to our understanding of cell fates and functions. In her description of the Human Cell Atlas project, Dr. Teichmann illustrated the power of single cell analysis that has enabled so many novel observations in the past few years. With a particular emphasis on blood and the human vasculature, Dr. Teichmann highlighted the heterogeneity of these cell populations and no doubt prompted thoughts about distinct functional roles that might be associated with these sub-populations.

The plenary lectures at the 2022 ISTH Congress were individually and collectively outstanding. In addition to providing important new insights into basic and clinical aspects of our field they were presented in an engaging and wonderfully clear manner. If you have not heard them, you still have an opportunity at the ISTH Academy website. Take a look – you will not be disappointed!

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