Editorial

## 2021 Eberhard F. Mammen Award Announcements: Part II— Young Investigator Awards

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Welcome to the latest of our Eberhard F. Mammen award announcements. As noted many times previously, Thieme, the publisher of Seminars in Thrombosis & Hemostasis (STH), has created the Eberhard F. Mammen Excellence in Thrombosis and Hemostasis Awards in honor of Eberhard Mammen (>Fig. 1), and in recognition of his contribution to this field and to the journal that he both founded and steered for over three decades (see **Table 1** for relevant references). These awards began in 2009, under two categories; the current award details and conditions are as follows:

- 1. Most Popular Article Awards: Awarded to the authors of the most popular articles published in Seminars in Thrombosis & Hemostasis. The awards are determined by the Editor in Chief on the basis of user statistics from Thieme e-Journals from the preceding 2 years. Prefaces, Errata, Letters to the Editor, Commentaries and Editorials, and previous award-winning articles are excluded from further consideration of these awards, which currently comprise two categories-one for "Open Access" articles, and another for a "General Category." There are two major cash prizes of US\$1,000 for each category. In addition, winners of the "General Category" awards are granted "free to download" status for these articles thereafter.
- 2. Young Investigator Awards: Best presentation or meeting abstract by a young investigator—as presented or delivered to an international or large regional meeting on a topic related to the fields of thrombosis and hemostasis, and whose subject matter is determined to be in the spirit of Dr. Mammen. Up to six cash prizes of US\$1,000 in any year. There are some additional considerations and conditions for the award, and awardees are expected to prepare a review or other paper related to the topic of their presentation (or as otherwise agreed) for publication in Seminars in



Fig. 1 Eberhard F. Mammen (1930-2008).

Thrombosis & Hemostasis. In general, previous award winners are excluded from a second award to enable more individuals to be recognized. After nominations are received, the awardees are selected by a vote of the Senior Editors of STH. Any potential conflicts of interest are managed by first identifying these, and then excluding those with potential conflicts from voting. Finally, given the ongoing coronavirus disease 2019 (COVID-19) pandemic, many international congresses have become virtual meetings, and accordingly, virtual meeting presentations can also be considered for the award.

Further details of the awards and the award winners are posted online (<https://www.thieme-connect.com/products/ ejournals/journal/10.1055/s-00000077>), and previous award winner announcements are also available in print (see **►Table 1** for a listing of relevant editorials published in this journal as related to the initiation of the Eberhard F Mammen awards, as well as previous award announcements; these publications are also available for free download from the journal Web site: <a href="https://www.thieme-connect">https://www.thieme-connect</a>. com/products/ejournals/journal/10.1055/s-00000077>).

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**Table 1** Listing of relevant editorials published in the journal as related to the initiation of the Eberhard F. Mammen awards, as well as previous award announcements

- 1. Favaloro EJ. Welcome to a special issue of seminars in thrombosis and hemostasis—the closing issue for 2008. Semin Thromb Hemost 2008;34(8):693–696
- 2. Favaloro EJ. A tribute to Eberhard F. Mammen, M.D. (1930–2008). Semin Thromb Hemost 2008;34(8):703–708
- 3. Favaloro EJ. Welcome to the first issue of seminars in thrombosis and hemostasis for 2009. Semin Thromb Hemost 2009;35 (1):1–2
- 4. Favaloro EJ. Winners of the inaugural Eberhard F. Mammen Award for Most Popular Article. Semin Thromb Hemost 2009;35 (7):587–590
- 5. Favaloro EJ. 2009 Eberhard F. Mammen Young Investigator Award winners. Semin Thromb Hemost 2010;36(5):469–470
- 6. Favaloro EJ. Winners of the 2010 Eberhard F. Mammen Award for Most Popular Article during 2008–2009. Semin Thromb Hemost 2010;36(7):685–692
- 7. Favaloro El. 2011 Eberhard F. Mammen award announcements. Semin Thromb Hemost 2011;37(5):431-439
- 8. Favaloro EJ. 2012 Eberhard F. Mammen award announcements. Semin Thromb Hemost 2012;38(5):425-432
- 9. Favaloro EJ. 2013 Eberhard F. Mammen award announcements. Semin Thromb Hemost 39(6):567–574
- 10. Favaloro EJ. 2014 Eberhard F. Mammen award announcements: Part I—Most Popular Articles. Semin Thromb Hemost 2014;40(4):407–412
- 11. Favaloro EJ. 2014 Eberhard F. Mammen award announcements: Part II—Young Investigator Awards. Semin Thromb Hemost 2014;40(7):718–723
- 12. Favaloro EJ. 2015 Eberhard F. Mammen award announcements: Part I—Most Popular Articles. Semin Thromb Hemost 2015;41(7):673–679
- 13. Favaloro EJ. 2015 Eberhard F. Mammen award announcements: Part II—Young Investigator Awards. Semin Thromb Hemost 2015;41(8):809–815
- 14. Favaloro EJ. 2016 Eberhard F. Mammen award announcements: Part I—Most Popular Articles. Semin Thromb Hemost 2016;42(4):325–330
- 15. Favaloro EJ. 2016 Eberhard F. Mammen award announcements: Part II—Young Investigator Awards. Semin Thromb Hemost 2017;43(3):235–241
- 16. Favaloro EJ. 2017 Eberhard F. Mammen award announcements: Part I—Most Popular Articles. Semin Thromb Hemost 2017;43(4):357–363
- 17. Favaloro EJ. 2017 Eberhard F. Mammen award announcements: Part II—Young Investigator Awards. Semin Thromb Hemost 2018;44(2):81–88
- 18. Favaloro EJ. 2018 Eberhard F. Mammen award announcements: Part I—Most Popular Articles. Semin Thromb Hemost 2018;44(3):185–192
- 19. Favaloro EJ. 2018 Eberhard F. Mammen award announcements: Part II—Young Investigator Awards. Semin Thromb Hemost 2019;45(2):123–129
- 20. Favaloro EJ. 2019 Eberhard F. Mammen award announcements: Part I—Most Popular Articles. Semin Thromb Hemost 2019;45(3):215–224
- 21. Favaloro EJ. 2019 Eberhard F. Mammen award announcements: Part II—Young Investigator Awards. Semin Thromb Hemost 2020;46(2):105–113
- 22. Favaloro EJ. 2020 Eberhard F. Mammen award announcements: Part I—Most Popular Articles. Semin Thromb Hemost 2020;46(4):383–392
- 23. Favaloro EJ. 2020 Eberhard F. Mammen award announcements: Part II—Young Investigator Awards. Semin Thromb Hemost 2021;47(3):229–237
- 24. Favaloro EJ. 2021 Eberhard F. Mammen award announcements: Part I—Most Popular Articles. Semin Thromb Hemost 2021;47(5):467–476

The winners of the 2021 Eberhard F Mammen awards for the most popular articles from *Seminars in Thrombosis & Hemostasis* for the period of 2018 to 2019 inclusive were announced in an earlier issue of the journal. It is therefore with great pleasure that we would like to announce the winners of the latest round of Young Investigator Awards.

As mentioned above, the Young Investigator Awards represent winners of the best presentation or meeting abstract by a young investigator—as presented or delivered to an international or large regional meeting (virtual meetings

permissible) on a topic related to the fields of thrombosis and hemostasis, and whose subject matter is determined to be in the spirit of Dr. Mammen. There are additional considerations given that the nominees' presentations are not always seen by all of the possible award nominators, being drawn from the broader editorial team of the journal. The latest winners are identified below, with a running list of previous awardees, and the resulting publications in the journal, given in **-Table 2**. The latest awardees derived from recent meetings of the International Society on

 Table 2
 Eberhard F. Mammen Young Investigator Award winners from previous years

Awardee	Year awarded	Publication arising
Willem M. Lijfering	2009	Lijfering WM, Flinterman LE, Vandenbroucke JP, Rosendaal FR, Cannegieter SC. Relationship between venous and arterial thrombosis: a review of the literature from a causal perspective. Semin Thromb Hemost 2011;37(8): 885–896
Salley Pels	2009	Pels SG. Current therapies in primary immune thrombocytopenia. Semin Thromb Hemost 2011;37(6):621–630
Adam Cuker	2010	Cuker A. Current and emerging therapeutics for heparin-induced thrombocytopenia. Semin Thromb Hemost 2012;38(1):31–37
Giridhara Rao Jayandharan	2010	Jayandharan GR, Srivastava A, Srivastava A. Role of molecular genetics in hemophilia: from diagnosis to therapy. Semin Thromb Hemost 2012;38 (1):64–78
Timea Szanto	2010	Szántó T, Joutsi-Korhonen L, Deckmyn H, Lassila R. New insights into von Willebrand disease and platelet function. Semin Thromb Hemost 2012;38 (1):55–63
Birgitta Salmela	2010	Salmela B, Joutsi-Korhonen L, Armstrong E, Lassila R. Active online assessment of patients using new oral anticoagulants: bleeding risk, compliance, and coagulation analysis. Semin Thromb Hemost 2012;38(1):23–30
Pia Riittaa-Maria Siljander	2010	Aatonen M, Grönholm M, Siljander PR. Platelet-derived microvesicles: multitalented participants in intercellular communication. Semin Thromb Hemost 2012;38(1):102–113
Romaric Lacroix	2011	Lacroix R, Dignat-George F. Microparticles: new protagonists in pericellular and intravascular proteolysis. Semin Thromb Hemost 2013;39(1):33–39
Brad McEwen	2011	McEwen BJ, Morel-Kopp MC, Chen W, Tofler GH, Ward CM. Effects of omega-3 polyunsaturated fatty acids on platelet function in healthy subjects and subjects with cardiovascular disease. Semin Thromb Hemost 2013;39(1): 25–32
Neil A. Goldenberg	2011	Bernard TJ, Armstrong-Wells J, Goldenberg NA. The institution-based prospective inception cohort study: design, implementation, and quality assurance in pediatric thrombosis and stroke research. SeminThromb Hemost 2013;39(1):10–14
Vivien Chen	2011	Chen VM. Tissue factor de-encryption, thrombus formation, and thiol-disulfide exchange. Semin Thromb Hemost 2013;39(1):40–47
Joseph E. Italiano, Jr.	2011	Italiano JE Jr. Unraveling mechanisms that control platelet production. Semin Thromb Hemost 2013;39(1):15–24
Vivian Xiaoyan Du	2012/2013	Du VX, Huskens D, Maas C, Al Dieri R, de Groot PG, de Laat B. New insights into the role of erythrocytes in thrombus formation. Semin Thromb Hemost 2014;40(1):72–80
Andrew Yee	2012/2013	Yee A, Kretz CA. Von Willebrand factor: form for function. Semin Thromb Hemost 2014;40(1):17–27
Sarah O'Brien	2012/2013	O'Brien SH. Contraception-related venous thromboembolism in adolescents. Semin Thromb Hemost 2014;40(1):66–71
Veronica Flood	2012/2013	Flood VH. Perils, problems, and progress in laboratory diagnosis of von Willebrand disease. Semin Thromb Hemost 2014;40(1):41–48
Julie Tange	2012/2013	Tange JI, Grill D, Koch CD, Ybabez RJ, Krekelberg BJ, Fylling KA, Wiese CR, Baumann NA, Block DR, Karon BS, Chen D, Pruthi RK. Local verification and assignment of mean normal prothrombin time and international sensitivity index values across various instruments: recent experience and outcome from North America. Semin Thromb Hemost 2014;40(1):115–120
Kent Chapman	2012/2013	Chapman K, Yuen S. Therapy for thrombotic thrombocytopenia purpura: past, present, and future. Semin Thromb Hemost 2014;40(1):34–40
Andreas Tiede	2014	Tiede A, Werwitzke S, Scharf RE. Laboratory diagnosis of acquired hemophilia a: limitations, consequences, and challenges. Semin Thromb Hemost 2014;40 (7):803–811
Wendy Lim	2014	Lim W. Thrombotic risk in the antiphospholipid syndrome. Semin Thromb Hemost 2014;40(7):741–746

(Continued)

Table 2 (Continued)

Awardee	Year awarded	Publication arising
Susana Nobre Fernandes	2014	Fernandes S, Carvalho M, Lopes M, Araújo F. Impact of an individualized prophylaxis approach on young adults with severe hemophilia. Semin Thromb Hemost 2014;40(7):785–789
Maria Elisa Mancuso	2014	Mancuso ME, Fasulo MR. Thrombin generation assay as a laboratory monitoring tool during by-passing therapy in patients with hemophilia and inhibitors. Semin Thromb Hemost 2016;42(1):30–35
Coen Maas	2014	Tersteeg C, Fijnheer R, Deforche L, Pasterkamp G, de Groot PG, Vanhoorelbeke K, de Maat S, Maas C. Keeping von Willebrand factor under control: Alternatives for ADAMTS13. Semin Thromb Hemost 2016;42(1):9–17
Riten Kumar	2014	Kumar R, Dunn A, Carcao M. Changing paradigm of hemophilia management: extended half-life factor concentrates and gene therapy. Semin Thromb Hemost 2016;42(1):18–29
Juraj Sokol	2015	Sokol J, Skerenova M, Jedinakova Z, Simurda T, Skornova I, Stasko J, Kubisz P. Progress in the understanding of sticky platelet syndrome. Semin Thromb Hemost 2017;43(1):8–13
Ljubica Jovanović	2015	Jovanovic L, Antonijevic N, Novakovic T, Savic N, Terzic B, Zivkovic I, Radovanovic N, Asanin M. Practical aspects of monitoring of antiplatelet therapy. Semin Thromb Hemost 2017;43(1):14–23
Lucia Stanciakova	2015	Stanciakova L, Dobrotova M, Jedinakova Z, Duraj L, Skornova I, Korinkova L, Holly P, Danko J, Stasko J, Kubisz P. Monitoring of hemostasis and management of anticoagulant thromboprophylaxis in pregnant women with increased risk of fetal loss. Semin Thromb Hemost 2016;42(6):612–621
Tina Biss	2015	Biss TT. Venous thromboembolism in children: is it preventable? Semin Thromb Hemost 2016;42(6):603–611
Tobias Fuchs	2015	Jiménez-Alcázar M, Kim N, Fuchs TA. Circulating extracellular DNA: cause or consequence of thrombosis? Semin Thromb Hemost 2017;43(6):553–561
Jonathan M. Coutinho	2015	Silvis SM, Middeldorp S, Zuurbier SM, Cannegieter SC, Coutinho JM. Risk factors for cerebral venous thrombosis. Semin Thromb Hemost 2016;42 (6):622–631
Soundarya Selvam	2016	Selvam S, James P. Angiodysplasia in von Willebrand disease: understanding the clinical and basic science. Semin Thromb Hemost 2017;43(6):572–580
Vincent Muczynski	2016	Muczynski V, Christophe OD, Denis CV, Lenting PJ. Emerging therapeutic strategies in the treatment of hemophilia A. Semin Thromb Hemost 2017;43 (6):581–590
Karen Schreiber	2016	Schreiber K, Breen K, Cohen H, Jacobsen S, Middeldorp S, Pavord S, Regan L, Roccatello D, Robinson SE, Sciascia S, Seed PT, Watkins L, Hunt BJ. HYdroxychloroquine to Improve Pregnancy Outcome in Women with AnTIphospholipid Antibodies (HYPATIA) Protocol: a multinational randomized controlled trial of hydroxychloroquine versus placebo in addition to standard treatment in pregnant women with antiphospholipid syndrome or antibodies. Semin Thromb Hemost 2017;43(6):562–571
Jasmine Wee Ting Tay	2016	Tay J, Tiao J, Hughes Q, Jorritsma J, Gilmore G, Baker R. Circulating microRNA as thrombosis sentinels: caveats and considerations. Semin Thromb Hemost 2018;44(3):206–215
Adi J. Klil-Drori	2016	Klil-Drori AJ, Tagalakis V. Direct oral anticoagulants in end-stage renal disease. Semin Thromb Hemost 2018;44(4):353–363
Ivar van Asten	2017	van Asten I, Schutgens REG, Urbanus RT. Toward flow cytometry based platelet function diagnostics. Semin Thromb Hemost 2018;44(3):197–205
Elodie Laridan	2017	Laridan E, Martinod K, De Meyer SF. Neutrophil extracellular traps in arterial and venous thrombosis. Semin Thromb Hemost 2019;45(1):86–93
Leonardo Pasalic	2017	Blennerhassett R, Curnow J, Pasalic L. Immune-mediated thrombotic thrombocytopenic purpura: a narrative review of diagnosis and treatment in adults. Semin Thromb Hemost 2020;46(3):289–301
Yvonne Brennan	2017	Brennan Y, Favaloro EJ, Curnow J. To maintain or cease non-vitamin k antagonist oral anticoagulants prior to minimal bleeding risk procedures: a

## Table 2 (Continued)

Awardee	Year awarded	Publication arising
		review of evidence and recommendations. Semin Thromb Hemost 2019; 45(2):171–179
Georgia McCaughan	2017	Submission pending.
Mark Schreuder	2018	Schreuder M, Reitsma PH, Bos MHA. Reversal agents for the direct factor Xa inhibitors: biochemical mechanisms of current and newly emerging therapies. Semin Thromb Hemost 2020;46(8):986–998
James McFadyen	2018	Stevens H, McFadyen JD. Platelets as central actors in thrombosis-reprising an old role and defining a new character. Semin Thromb Hemost 2019;45 (8):802–809
David Rabbolini	2018	Mason GA, Rabbolini DJ. The current role of platelet function testing in clinical practice. Semin Thromb Hemost 2021;47(7):843–854
Janka Zolkova	2018	Zolkova J, Sokol J, Simurda T, Vadelova L, Snahnicanova Z, Loderer D, Dobrotova M, Ivankova J, Skornova I, Lasabova Z, Kubisz P, Stasko J. Genetic background of von Willebrand disease: history, current state and future perspectives. Semin Thromb Hemost 2020;46(4):484–500
Tomáš Bolek	2018	Bolek T, Samoš M, Škorňová I, Galajda P, Staško J, Kubisz P, Mokáň M. Proton pump inhibitors and dabigatran therapy: impact on gastric bleeding and dabigatran plasma levels. Semin Thromb Hemost 2019;45(8):846–850
Fraser Macrae	2018	Kearney KJ, Ariëns RAS, Macrae FL. The role of fibrin(ogen) in wound healing and infection control. Semin Thromb Hemost 2022;48(2):174–187
Elisa Danese	2019	Danese E, Montagnana M, Gelati M, Lippi G. The role of epigenetics in the regulation of hemostatic balance. Semin Thromb Hemost 2021;47(1):53–62
Soracha Ward	2019	Ward S, O'Sullivan JM, O'Donnell JS. The biological significance of von Willebrand factor O linked glycosylation. Semin Thromb Hemost 2021;47 (7):855–861
Jonathan Douxfils	2019	Douxfils J, Morimont L, Bouvy C. Oral contraceptives and venous thromboembolism: focus on testing that may enable prediction and assessment of the risk. Semin Thromb Hemost 2020;46(8):872–886
Erik Klok	2019	Boon GJAM, Huisman MV, Klok FA. Why, whom, and how to screen for chronic thromboembolic pulmonary hypertension after acute pulmonary embolism. Semin Thromb Hemost 2021;47(6):692–701
Michelle Lavin	2019	Byrne B, Ryan K, Lavin M. Current challenges in the peripartum management of women with von Willebrand disease. Semin Thromb Hemost 2021;47 (2):217–228
Deeksha Khialani	2019	Khialani D, Rosendaal F, Vlieg AVH. Hormonal contraceptives and the risk of venous thrombosis. Semin Thromb Hemost 2020;46(8):865–871
Hanny Al-Samkari	2020	Al-Samkari H. Systemic antiangiogenic therapies for bleeding in hereditary hemorrhagic telangiectasia: a practical, evidence-based guide for clinicians. Semin Thromb Hemost 2022, in press
Matthias M Engelen	2020	Engelen MM, Vandenbriele C, Balthazar T, Claeys E, Gunst J, Guler I, Jacquemin M, Janssens S, Lorent N, Liesenborghs L, Peerlinck K, Pieters G, Rex S, Sinonquel P, Van der Linden L, Van Laer C, Vos R, Wauters J, Wilmer A, Verhamme P, Vanassche T. Venous thromboembolism in patients discharged after COVID-19 hospitalization. Semin Thromb Hemost 2021;47(4):362–371
Imre Varju	2020	Submission pending.
Ellen Driever	2020	Driever EG, Lisman T. Effects of inflammation on hemostasis in acutely ill patients with liver disease. Semin Thromb Hemost 2022 (e-Pub ahead of print). Doi: 10.1055/s-0042-1742438
Christine Lee	2020	Submission pending.
Maria Selvadurai	2020	Submission pending.



Fig. 2 Young Investigator Award winner Duliëtte Boon.

Thrombosis and Haemostasis (ISTH) and the American Society of Hematology (ASH). All meetings were held virtually or contained virtual presentations.

As often occurs with these awards, the current crop of winners reflects a variety of "Young Investigators" at various stages of their careers. Some awardees are just starting out on their journey in science or medicine, while others are better established in their careers and crossing over into the next phase of their life where they will soon no longer be called "young" investigators.

Duliëtte Boon (Fig. 2) is the youngest of our award recipients, and a PhD fellow at the Department of Thrombosis and Hemostasis in the Leiden University Medical Center, the Netherlands. Her research focuses on the long-term consequences of pulmonary embolism under the supervision of Dr. F.A. Klok and Prof. Dr. M.V. Huisman. Recently, she has started to work as an anesthesiology resident. She was awarded based on an oral communication at an ISTH meeting on "Non-invasive Early Exclusion of Chronic Thromboembolic Pulmonary Hypertension (CTEPH) after Pulmonary Embolism."

Jacob G. Ludington (**Fig. 3**) is another of the younger awardees. He obtained his MD and PhD from Tufts University School of Medicine in 2018. His thesis research focused on the pathogenesis of *Cryptosporidium parvum* and the identification of novel targets for therapeutic intervention. His interest in infectious disease evolved into a fascination with the dynamic relationship between pathogen and host. He began to explore this relationship in earnest during a summer-long anesthesiology research fellowship where he stud-

ied sepsis and the role of various cytokines in the development of clinically appreciable pathology, specifically in relation to coagulation. He recently shifted fields-from anesthesiology to pathology-and he is now a resident at Tufts Medical Center in the Department of Pathology and Laboratory Medicine. During this transition, he worked in the laboratory of Dr. Sol Schulman, MD, PhD, at Beth Israel Deaconess Medical Center. There, he was fortunate to be given the opportunity to revive a project involving severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) and virus-intrinsic mechanisms of coagulopathy. His role in the project changed since starting pathology in his residency, but he remains actively involved in many aspects outside of the benchtop. His goal is to continue his current trajectory of becoming a physician-scientist with a focus on pathogenassociated hematopathology. Dr. Ludington was awarded based on an oral presentation at ASH, ultimately accepted for a plenary session, titled "SARS-CoV-2 Ion Channel ORF3a Enables TMEM16F-Dependent Phosphatidylserine Externalization to Augment Procoagulant Activity of the Tenase and Prothrombinase Complexes." He shared this honor with a team including the principal investigator of the project, and another award winner, Sol Schulman.

Sol Schulman (►Fig. 4) is one of the better established Young Investigator awardees. He also won his award for the same presentation, thereby sharing an award with Jacob Ludington. Sol Schulman is a physician-scientist in the Division of Hemostasis and Thrombosis at Beth Israel Deaconess Medical Center (BIDMC) and Harvard Medical School. After receiving BS/MS degrees in Biochemistry from Brandeis University, he earned his MD/PhD in the Harvard-MIT Division of Health, Sciences, and Technology Program. Dr. Schulman subsequently completed internal medicine residency at Brigham and Women's Hospital and a fellowship in Hematology-Oncology at BIDMC. Dr. Schulman was recently awarded the National Institutes of Health (NIH) Director's Early Independence Award and launched a laboratory that integrates functional genetics, biochemistry, and cell biology to identify new mechanisms regulating the initiation of blood coagulation.

Sukhraj Pal Singh Dhami (**Fig. 5**) is currently working as a postdoctoral researcher, after receiving a prestigious fellowship from the Irish Research Council (IRC), at the Irish



Fig. 3 Young Investigator Award winner Jacob G. Ludington.



Fig. 4 Young Investigator Award winner Sol Schulman.



Fig. 5 Young Investigator Award winner Sukhraj Pal Singh Dhami.



Fig. 6 Young Investigator Award winner Hunter B. Moore.

Centre of Vascular Biology, School of Pharmacy and Biomolecular Sciences at Royal College of Surgeons in Ireland, Dublin. He is currently working on understanding the role of von Willebrand factor in breast cancer metastasis and delineating the antimetastatic role of low molecular weight heparin-tinzaparin. His research interests are in investigating the bidirectional crosstalk between coagulation and cancer and its role in blood-borne metastasis. He was awarded based on an oral presentation at ISTH "Delineating the Role of Low Molecular Weight Heparin in Breast Cancer Metastasis."

Hunter B. Moore (►Fig. 6) began his physician scientist career in Colorado as a surgical resident piloting an integrated clinical and research training program. This unique opportunity enabled him to gain an expertise in fibrinolysis in trauma, which was translated to solid organ transplantation. He was awarded a K99 career development from the NIH during his transplant fellowship, which matured to a R00 at the start of his faculty appointment this year. His 50% effort as a transplant surgeon in Colorado complements his 50% effort running a translational research laboratory investigating the role of dysregulated fibrinolysis driving organ dysfunction in multiple clinical setting. Dr. Moore was awarded based on an ISTH presentation on dynamic changes in fibrinolysis during liver transplantation.

Sajida Kazi (**Fig. 7**) is a staff physician in benign hematology at Newcastle Upon Tyne NHS Hospitals Foundation Trust, United Kingdom. Her interests include thrombosis and obstetric hematology. She has completed her medical and hematology training from the United Kingdom and a clinical fellowship program in Obstetric Hematology from the University of Toronto. She is pursuing a master's in Medical Education from the University of Edinburgh, United Kingdom and is actively involved in both undergraduate and postgraduate teaching programs at the Newcastle University. She is member



Fig. 7 Young Investigator Award winner Sajida Kazi.

of the British Society of Haematology Obstetric Haematology special interest group and involved with research projects in benign hematology. Dr. Kazi was awarded based on a top abstract from an ISTH meeting on the ISTH Registry on Pregnancy and COVID-19 Associated Coagulopathy.

All award winners were thrilled to hear that they had been selected to receive an Eberhard F. Mammen Young Investigator Award, and provided the following additional commentary:

"I am very honored to be awarded an Eberhard F. Mammen Young Investigator Award. This award acknowledges my research efforts on long-term consequences of pulmonary embolism including chronic thromboembolic pulmonary hypertension. Of course, this work was made possible by the collaboration and unwavering support of many others, in particular my supervisors dr. F.A. Klok and prof. dr. M.V. Huisman."

- Duliëtte Boon (►Fig. 2)

"I am truly honored to have been considered and selected for an Eberhard F. Mammen Young Investigator Award. It is beyond humbling to be recognized by an award named after Dr. Mammen, and received in previous years by true visionaries in the field of hemostasis. It's also validating to know that experts in our field find our work to be so compelling. Of course, my recognition should extend to the entire team behind this project. I am grateful to my principal investigator and mentor Sol Schulman for providing me with this opportunity, and the entire Schulman lab, Schwartz lab and everyone else who contributed to this project. Finally, I would like to thank the selection committee for their recognition. This award will have an invaluable impact on my career path toward becoming an independent investigator."

- Jacob G. Ludington (► Fig. 3)

"It is a great honor to be awarded a 2021 Eberhard F. Mammen Young Investigator Award. I am especially excited and satisfied that my trainee Dr. Jacob Ludington was also selected to receive this prestigious award for our work together. Sincere thanks to the editorial team at Seminars in Thrombosis and Hemostasis for recognizing our work on a virus-intrinsic mechanism by which SARS-CoV-2 ion channel ORF3a contributes to aberrant membrane procoagulant activity. This research reflects a talented team of collaborators who are all deserving of this recognition. Finally, I would like to thank my own scientific mentors, Professor Tom Rapoport, Dr. Bruce Furie, and Dr. Robert Flaumenhaft, for their unwavering commitment to my training and career development. I look forward to building on this recognition with continued commitment to advancing the field of hemostasis and thrombosis in the tradition of Dr. Eberhard Mammen."

- Sol Schulman (►Fig. 4)

"I am humbled and honoured to be awarded a 2021 Eberhard F. Mammen Young Investigator Award. I very much appreciate the recognition that I have received for my work on the crosstalk between breast cancer cells and coagulation in blood borne metastasis. I would like to thank the editorial team of *Seminars in Thrombosis and Hemostasis* for selecting my presentation for this award, and Dr Emmanuel Favaloro for delivering the good news. I am also extremely grateful to Dr Jamie O'Sullivan and Prof James O'Donnell for the amazing opportunity to work on this project, and for their support and mentorship. It is also a recognition of the team effort by my co-authors and colleagues. This award will drive me to continue my research efforts in contributing to this field."

- Sukhraj Pal Singh Dhami (►Fig. 5)

"I am extremely honored to receive an Eberhard F Mammen Young Investigator Award. I was fortunate to have worked in a T32 funded research laboratory that was on the cutting edge of understanding fibrinolysis as it related to trauma and hemorrhagic shock. This research time was bolstered by participating as a junior investigator in a multi-center group through the National Heart Lung Blood Institute lead by Ken Mann and Charles Esmon. The time spent with this multidisciplinary group of hematologists, surgeons, and basic scientist was an eye-opening experience. With the continued support I have received from my division through Elizabeth Pomfret and Trevor Nydam, I have been fortunate to continue research endeavors through a strenuous abdominal transplant fellowship. This was successful in part due to the support from my family, in addition to Mark Walsh who has been a mentor and motivator for nearly a decade. I am also appreciative of the opportunities to contribute to STH that Hau Kwaan provided in my early research career. This award is particularly meaningful with the recent passing of a colleague and friend, Michael Chapman, who was a research fellow with me when we began our research careers. Our original curiosity in understanding pathologic fibrinolysis, has led to findings applicable to trauma, transplant, obesity and the COVID pandemic."

- Hunter B. Moore (►Fig. 6)

"I am very grateful and deeply honoured to be awarded an Eberhard F. Mammen Young Investigator Award. The award recognises the importance of the registry in the care of pregnancies complicated by COVID-19 coagulopathy and will help advance research in this patient cohort. I would like to thank the editorial board of *Seminars in Thrombosis* 

and Hemostasis for this wonderful recognition. As this research is very much a team effort, I would like to thank the registry leads Professor Othman, Dr. Malinowski and Dr. Abdul-Kadir for their excellent mentorship in these challenging times and many collaborators for supporting and contributing to this registry."

- Sajida Kazi (►Fig. 7)

In keeping with previous editorials, I have again updated the Young Investigator Awardees from previous years as well as the outcome of their subsequent submissions to *Seminars in Thrombosis & Hemostasis*, as summarized in **Table 2**. The most recent arising publications are also listed in the reference list for the benefit of the readership. I have mentioned several times my personal gratification that most of the papers from earlier years have subsequently appeared in several annual top 100 listings. Of further interest, some of these papers or the young investigators themselves have subsequently won one of the most popular awards (see **Table 1** for a list of prior editorials on these awards).

I continue to look forward to seeing the careers of the current and past Young Investigator Award winners developing over forthcoming years. Very high bars are now established for future Young Investigator Awardees, and I wish all awardees the best of luck to exceed the precedence set by earlier award winners.

Conflict of Interest None declared.

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