

## Platelet Production in the Human Vasculature

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*Jonathan Thon holds joint appointments within the hematology division at Brigham and Women's Hospital, and Harvard Medical School in Boston, and is an American Society of Hematology Scholar.*

*Dr. Thon received his doctorate from the University of British Columbia, Canada, where he worked closely with Canadian Blood Services for the improvement of processing and storage of blood platelets. His research entailed the application of proteomic, molecular biology, and biochemistry techniques toward the identification of mechanisms regulating the storage-related deterioration of platelets.*

*While blood platelets are critical components of vascular hemostasis and thrombosis, the final stages of their production remain poorly understood. Dr. Thon's research now focuses on the cytoskeletal mechanics and signaling pathways that culminate in the formation of platelets. He is currently developing model systems to (1) improve directed therapies for thrombocytopenia, (2) control platelet production in vitro for the purpose of producing usable numbers of clinically viable platelets for transfusion, and (3) develop 'designer' platelets that exploit existing functions of platelets as regulators of hemostasis, angiogenesis, and innate immunity to serve as vehicles for drug delivery.*