“von Willebrand factor in health and disease”

Von Willebrand factor (VWF) is the largest protein in the blood and involved in both bleeding, when deficient, and thrombosis, when excessive quantities of the largest, most reactive forms are present. These two extremes of VWF quantity are manifested as von Willebrand disease and thrombotic thrombocytopenic purpura, respectively. We are investigating the possibility that VWF is involved in many other diseases, especially those with a large inflammatory component, including sickle cell disease, acute respiratory distress syndrome, malaria, and thrombosis associated with cocaine use. We are also investigating ways to decrease the adhesiveness of VWF in thrombotic syndromes.