The Centre for Blood Research
VIRTUAL SEMINAR SERIES

Wednesday, December 9, 2020
11:00am - 12:00pm PST

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"Gamma' Fibrinogen: The Clot Thickens..."

γ' fibrinogen is an isoform of fibrinogen that normally constitutes about 7% of total plasma fibrinogen and arises from an alternative processing event in the γ chain mRNA. γ' fibrinogen is a newly-emerging cardiovascular disease (CVD) risk factor that appears to have an independent association with CVD from that of total fibrinogen, which is itself a well-established CVD risk factor. γ' fibrinogen increases during inflammation and is differentially regulated from total fibrinogen under pathologic conditions. The biochemical properties of γ' fibrinogen provide support for the hypothesis that, unlike many CVD risk biomarkers, γ' fibrinogen may actually play a mechanistic role in thrombosis. For example, γ' fibrinogen contains a high-affinity thrombin binding site that protects thrombin from inactivation by antithrombin III, and fibrin clots formed from γ' fibrinogen are resistant to fibrinolysis. This seminar will present biochemical and epidemiologic data linking γ' fibrinogen with CVD.