

Colorado School of Mines Office for Technology Transfer

Micropatterning of prothrombotic surfaces for measuring platelet function, coagulation, and anticoagulation

Drs. Keith Neeves, Ryan Hansen and Abimbola Onasoga Department of Chemical and Biological Engineering

Description: There is an unmet need in clinical hematology for global assays of hemostatic potential. We define global assays are those that incorporate all the major elements of clot formation including platelets, coagulation, blood flow, and endothelial function. This invention describes methods for patterning prothrombotic molecules on surfaces with micrometer precision The novelty of the invention is the description of methods to co-pattern molecules that induce platelet adhesion and aggregation, coagulation, and anticoagulation.

Potential Areas of Application

- Coagulation and platelet function testing
- Evaluation of antiplatelet and anticoagulation drugs

Main Advantages of this Invention

- Ability to measure in both static and flow based assays
- Incorporates coagulation, anticoagulation and platelet function into one assay
- More accurate than current methods

Intellectual Property Status: Provisional patent filed December 18, 2011

Opportunity: We are seeking an exclusive or non-exclusive licensee for marketing, manufacturing, and sale of this technology.

Contact

William Vaughan Director, Technology Transfer Colorado School of Mines 1500 Illinois Street Guggenheim Hall, Suite 314 Golden, CO 80401 Phone: 303.384.2555

Phone: 303.384.2555 Fax: 303.273.3244

Email: wvaughan@mines.edu