Alice ‘Sparky’ Sweedo
PhD Candidate
Biomedical Engineering

“Knocking Down Pump Thrombosis:
Understanding Biomechanical Changes in the Platelet Membrane Following Exposure to Shear and Developing Strategies to Reduce MCS-Associated Hemostatic Dysfunction”

ABSTRACT: Shear-mediated platelet activation is a primary driver of clot formation in patients with mechanical circulatory support (MCS) devices; particularly noteworthy because these thrombotic events occur despite the use of anticoagulant agents. As biochemical approaches to this problem have been shown to have limited efficacy, there is a need to understand the changes that occur in platelets due to shear exposure and how these are distinct from biochemically-induced activation. The membrane is of particular interest as it transduces external physical forces and biochemical agents to the interior of the platelet. Here we will examine membrane properties that change as a result of activation, and discuss approaches to limit shear-induced platelet activation.

Please join us on
Monday, January 28th, 2012
12:00-12:50 pm, Keating Bldg., Room 103
Refreshments will be available at 11:50 am

Host: Minkyu Kim, Ph.D. & Judith Su, Ph.D.
minkyukim@email.arizona.edu / judith@email.arizona.edu

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