## **Supplemental Video Legends**

Supplemental Video 1. Adhesion to collagen by non-NO- and NO-producing platelets.

Fluorescence, brightfield, and merged brightfield-fluorescence video microscopy of Figure 6A demonstrating DAF-FM-loaded platelets adhering to collagen-coated coverslips over the course of 15 minutes. Images were captured every 10 seconds for approximately 15 minutes. A 1 μm fluorescent yellow-green bead is present in the field of view to aid in focusing prior to addition of platelets. Filamentous stands are collagen. Brightfield images capture total platelet adhesion, which is followed by platelet spreading. Fluorescence images capture adhesion by NO-producing platelets, which are identified by a burst of bright green fluorescence lasting 5 - 10 sec (real time 0:50 – 1:40 min). At time 1:16 min (real time 11:40 min), two NO-producing platelets are recruited to a collagen strand by a non-NO-producing platelet that adhered and spread at time 10 sec (real time 1:40 min).

Supplemental Video 2. Adhesion and aggregation by non-NO- and NO-producing platelets under flow conditions. Fluorescence, brightfield, and merged brightfield-fluorescence videos demonstrating binding of DAF-FM-loaded platelets to collagen-coated coverslips under flow conditions. Filamentous stands are collagen. Two 1 μm fluorescent yellow-green beads are present in near the top of the field of view to aid in focusing. Images were captured every 10 seconds. Two platelets can be seen binding a strand of collagen on the right at 3 sec (real time 30 sec), one non-NO-producing platelet (no burst of green fluorescence within the fluorescence video) and one producing NO (burst of green fluorescence) at 8 sec (real time 80 sec).