



**Supplementary Figure 1. Schematic of the two-photon laser scanning microscope (TPLSM).** Our realization is based on an 800-nm femtosecond (fs) laser with an integrated continuous-wave (CW) 532-nm laser for photothrombotic clotting. The CW laser, attenuated using neutral density (ND) filters, is directed onto the beam axis of the TPLSM with a dichroic mirror (600-nm long pass, dichroic 1). An approximately 2-mm hole was etched in the coating of the TPLSM dichroic (dichroic 2) to allow transmission of the green laser beam. The 532-nm laser was aligned so it focused in the same plane as and at the center of the TPLSM image. The rat is bolted, via a metal head frame affixed to the skull, onto a two-dimensional translation stage that allows precise positioning of the rat relative to the TPLSM field of view and the CW laser focus.  $\lambda/2$ : half-wave plate, PMT: photomultiplier tube.