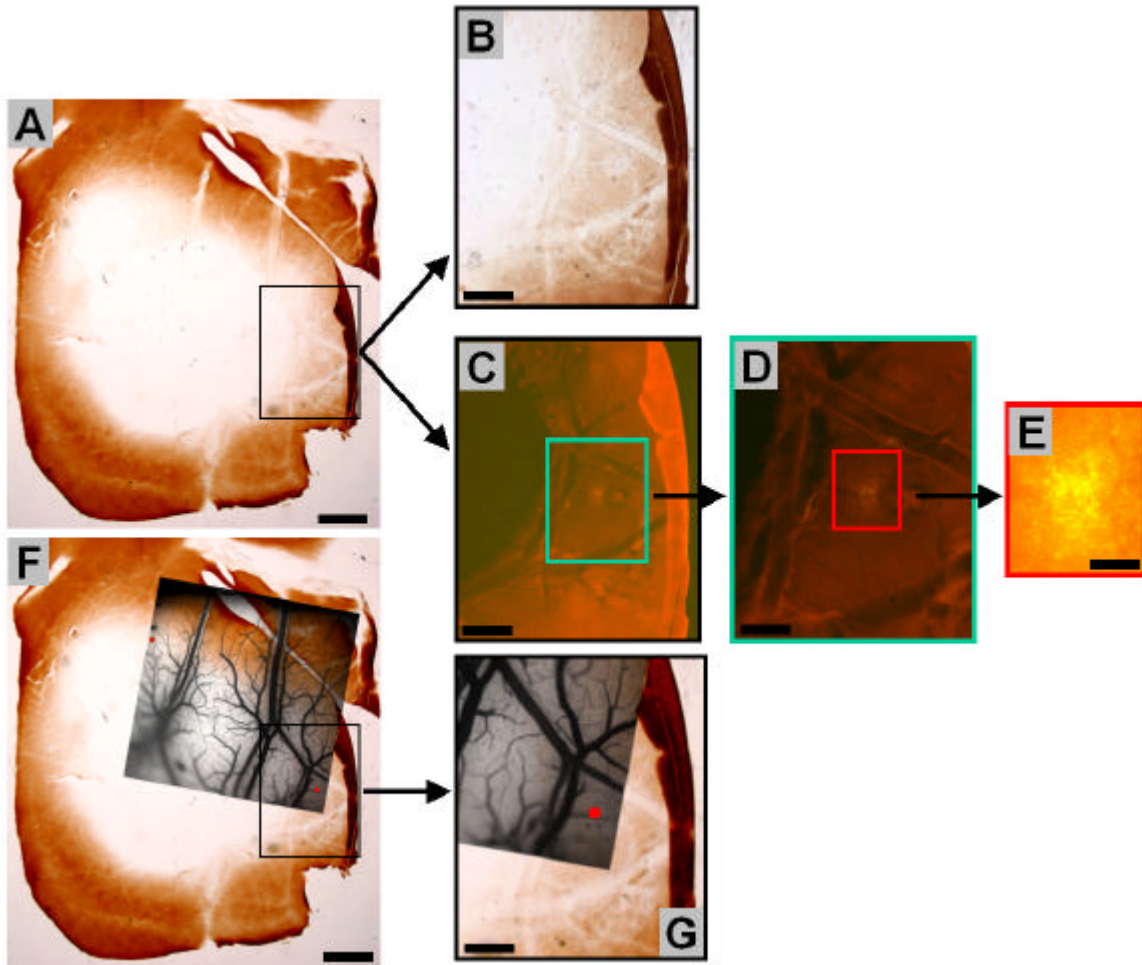


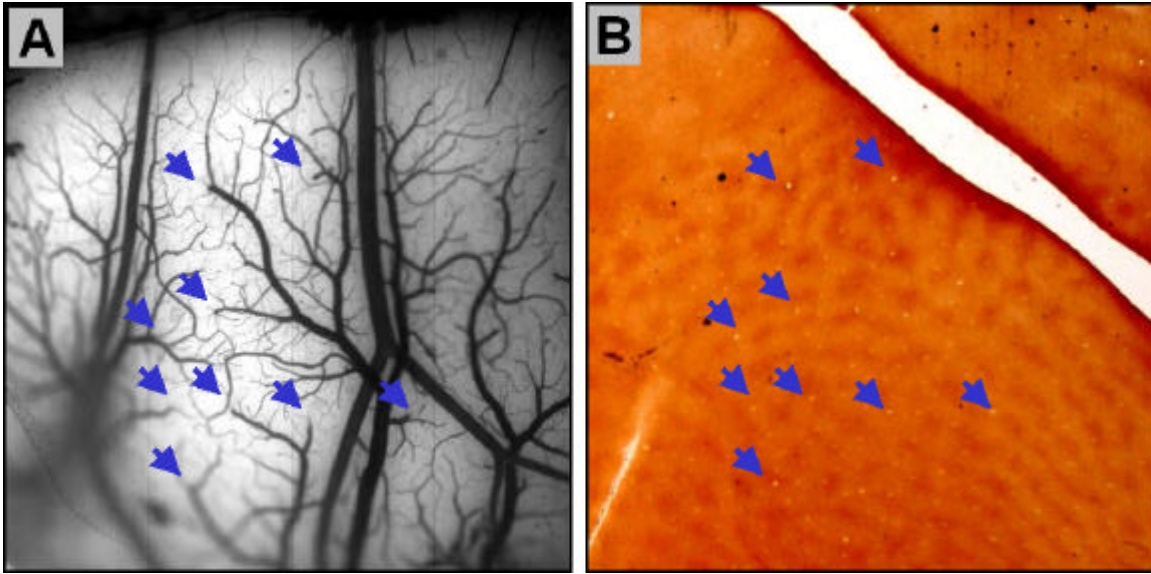
Supplemental Figure 1.



Supplemental Figure 1. Fluorescent tracer aided alignment, case 2. All images are from the same section of cytochrome-oxidase stained tissue.

A. Large field of view of cytochrome-oxidase stained top section contains imaged region (see F). **B.** Enlarged view of framed area in A. **C.** Florescent image of the same region in B, which shows tracer injection cite at the center. **D & E.** Higher power magnification of the the tracer region in C with florescent light. **F.** Same section as A, with blood vessel map from optical imaging overlain. Tracer injection site is marked with a red dot. **G.** Enlarged view of framed area in F. Scale bars: in A&F: 2 mm, in B, C &G: 1mm, in D: 0.5mm, in E: 0.125mm.

Supplemental Figure 2.



Supplemental Figure 2. Fine alignment of optical image (A) and CO tissue image (B) using vessel information. Blue arrows indicate common points from both images that indicate vessel dive-in locations.