A-A''. To assess co-label of *mpeg1:GFP* and *mpeg1:mCherry* transgenes in retinal tissue, embryos were obtained from a cross of gl22 Tg x gl23 Tg fish. At 3 days post-fertilization (3 dpf), embryos were screened for expression of both *mpeg1:GFP* and *mpeg1:mCherry* transgenes. Embryos were fixed, washed, and eyes removed then mounted for imaging. A z series (5 micron step size) was obtained. Images show selected z-projections from whole eyes, with white lines indicating the eye boundary. A, *mpeg1:GFP* signal. A', *mpeg1:mCherry* signal. A'', Merge to show colabel. Scale bar in A'' = 20 microns. Whole retinas from adult *mpeg1:GFP* (gl22 Tg) and *mpeg1:mCherry* (gl23 Tg) were stained for L-plastin. Images show expression of of each individual transgene (B, *mpeg1:GFP*, green or C, *mpeg1:mCherry*, red) with L-plastin stain (magenta, B' and C'). In both transgenic lines, essentially all transgene signal coincides with L-plastin (B'' and C''). Scale bars in B'' and C'' = 100 microns.
Supplementary Figure 2

Images show retinal cryosections corresponding to peripheral (A) or central regions (B), adjacent to the optic nerve head (denoted by **) at 12 hours post injection (12 hpi) of saline. Cryosections were stained for PCNA (green), L-plastin (magenta), and DAPI (blue). Saline injection did not induce substantial PCNA expression at 12 hpi. Scale bar in B = 20 microns and applies to both images.

Supplementary Figure 3

Images show retinal cryosections corresponding to peripheral (A) or central regions (B, adjacent to the optic nerve head, denoted by **) at 12 hours post injection (12 hpi) of ouabain. Cryosections from mpeg1:mCherry transgenic fish were stained for mpx (green) and DAPI (blue). Few neutrophils can be seen in peripheral regions. Scale bar in B = 20 microns and applies to both images.
Supplementary Figure 4

Images show retinal cryosections from mpeg1:mCherry fish following intravitreal saline (A) or ouabain (B) injection at 72 hours post injection (hpi). Cryosections were labeled with anti-phosphorylated histone 3 (PH3, green) and DAPI (blue). Arrows indicate PH3+ nuclei. Red signal in the outer retina is autofluorescence from photoreceptors. Scale bar in A = 20 microns and applies to A and B.

Supplementary Figure 5

Images show retinal cryosections from zebrafish following intravitreal injection of ouabain, at 24, 48, and 72 hours post injection (hpi). Cryosections were labeled with the neutrophil specific mpx antibody (red) and DAPI (blue). Scale bar = 20 microns and applies to all images.