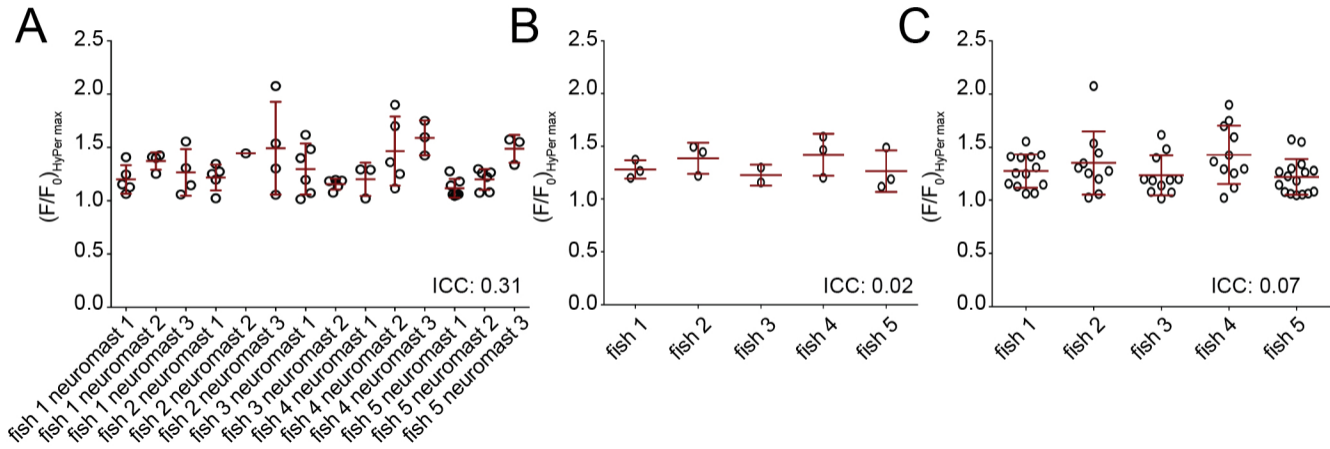
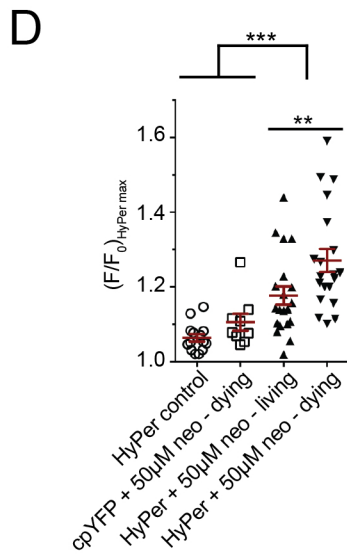
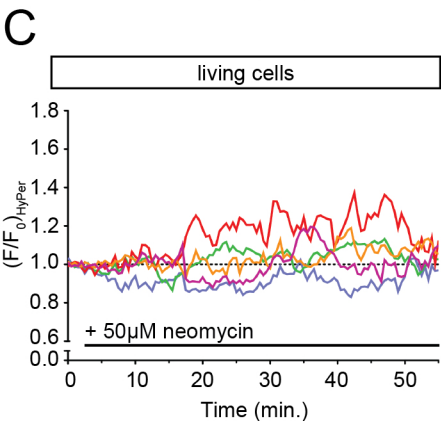
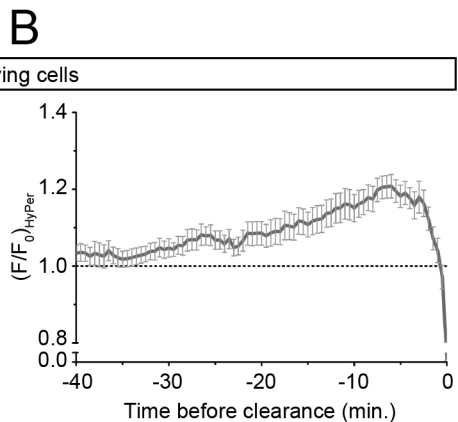
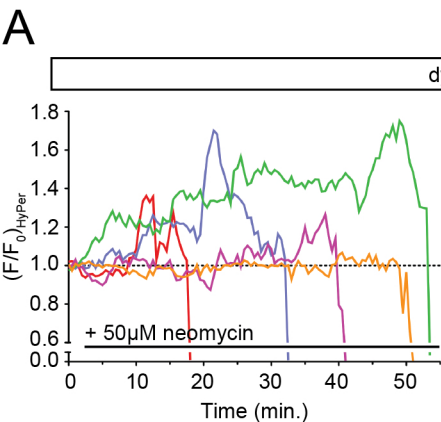


Supplemental Figure 1

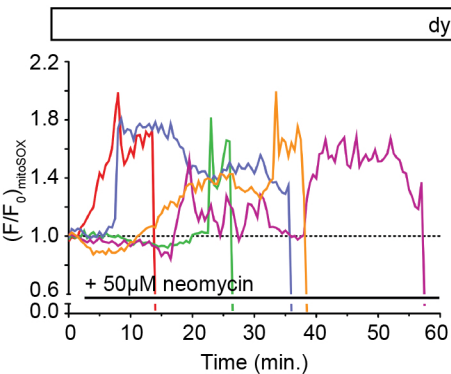


Supplemental Figure 2

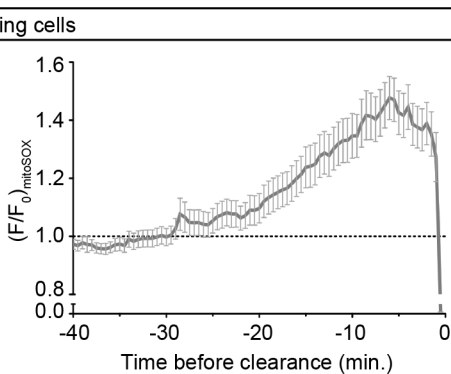


Supplemental Figure 3

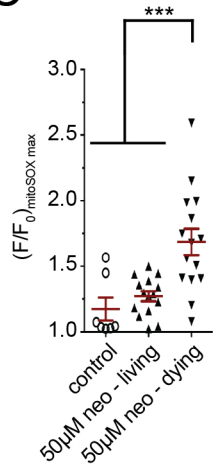
A



B



C



	<u>Sensor Name</u>	<u>Detects</u>	<u>Properties</u>	<u>References</u>	<u>Ex (nm)</u>	<u>Em (nm)</u>
<u>Biosensors</u>	HyPer	cytoplasmic hydrogen peroxide	reversible	34	420*/500	516
	mitoRGECO	mitochondrial calcium	reversible	40	577	600
<u>Dyes</u>	cellROX	oxidative stress within nucleus, cytoplasm, and mitochondria	irreversible		485	520
	mitoSOX	mitochondrial oxidation	irreversible	37	510	580
	TMRE	mitochondrial transmembrane potential	reversible	35	549	574

* we did not use the 420nm excitation wavelength as zebrafish are prone to substantial autofluorescence at this wavelength

Supplemental Table 1