

Fig. S1. Metronidazole treatment ablates mCherry positive cells in *mpeg1-Gal4 x UAS:nfsB-mCherry* line. To assess the efficacy of macrophage depletion *Tg (mpeg1:G/U:NfsB-mCherry)* larvae were assessed for the number of mCherry positive cells in the caudal hematopoietic tissue (CHT), 6 somites posterior to the anal vent (green outline in B) before 0 hours post treatment (0 hpt) and after 4 and 24 hours with (+Met, black dots, n=15) or without (-Met, red dots, n=15) Metronidazole. **(A&B)** There was no significant difference between +Met and -Met treatment group at 0 hpt and significantly reduced numbers of mCherry positive cells after 4 and 24 hpt in +Met larvae compared to the -Met larvae ($p < 0.001$). Images are overlays of a single slice in DIC channel and maximum projection (25 slices) in the red channel or red channel only. Scale bar represents 250 μm and blue dash line outline the body of the fish.

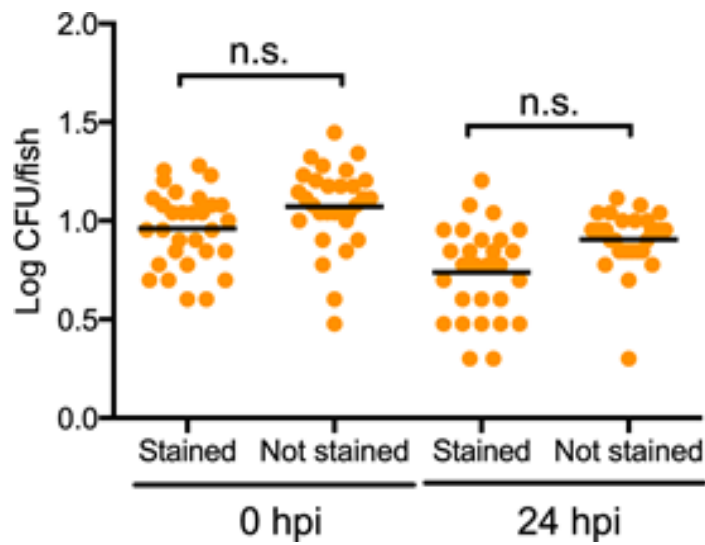
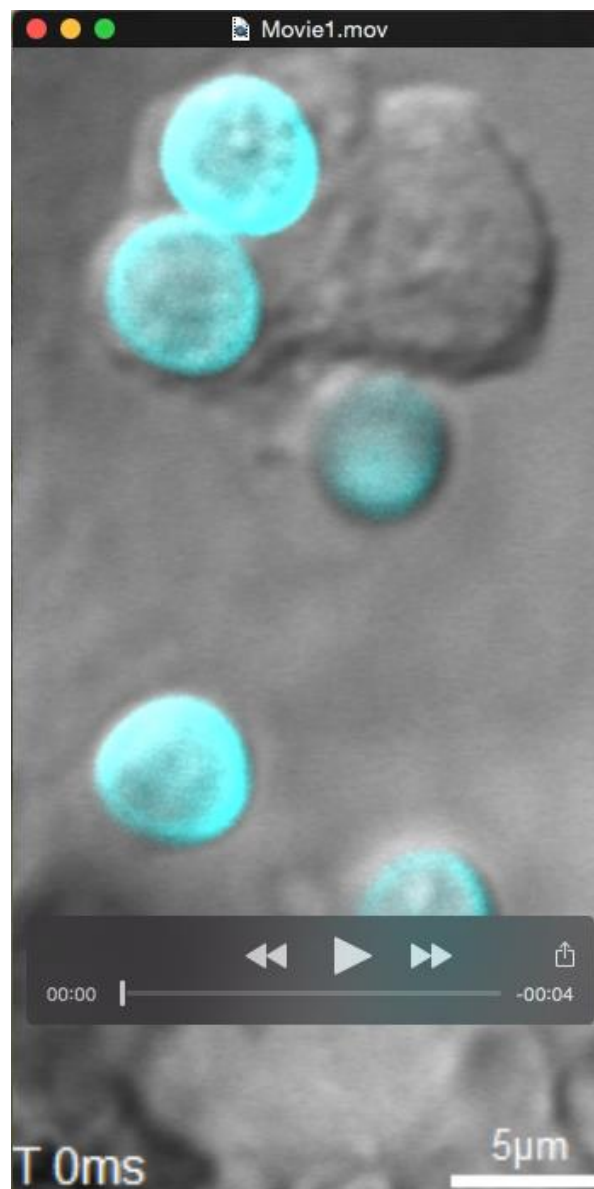
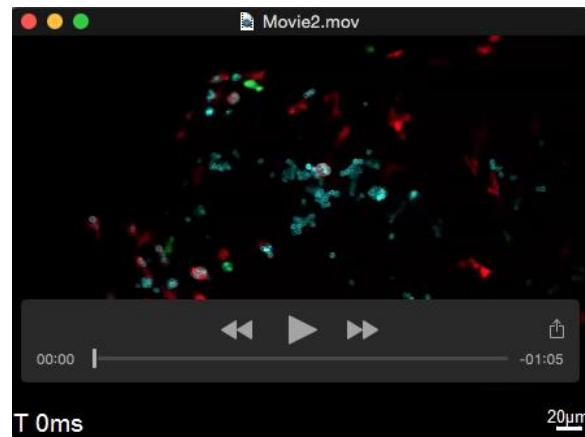


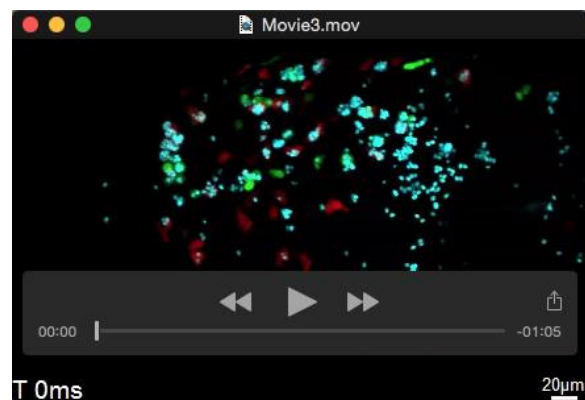
Fig. S2. Calcofluor white staining does not inhibit spore germination. Calcofluor white stained and not stained spores were injected into AB larvae into the hindbrain at Prim25. Larvae were homogenized and plated for CFU counting at 0 and 24 hpi to assess any inhibitory effects of Calcofluor White staining on fungal viability or growth ability. No significant difference between stained and not stained spores was observed (n=30, pooled data from three independent experimental repeats, n=10 each).



Movie 1: Mucormycete spore phagocytosis. Spore phagocytosis can be directly observed *in vivo* (60 frames every 6.25 seconds; scale bar 4µm).



Movie 2: Phagocytes accumulate at the site of live spore injection. Macrophages and neutrophils showed directed movement towards viable spores and once interaction with spores had occurred remained at this location in *Tg* (*mpeg1:G/U:NfsB-mCherry/mpx:GFP*) larvae (144 frames every 5 minutes; z-stack: 15 sections every 7.3 μm ; scale bar 40 μm).



Movie 3: Phagocytes do not accumulate at the site of UV-killed spore injection. Significantly less macrophage and neutrophil clustering was observed in *Tg* (*mpeg1:G/U:NfsB-mCherry/mpx:GFP*) larvae injected with UV-killed spores (144 frames every 5 minutes; z-stack: 15 sections every 7.3 μm ; scale bar 40 μm).

Table S1: Macrophage (A) and neutrophil (B) recruitment, respectively, and recruitment to the site of spore injection in hindbrain ventricle and swimbladder zebrafish larval model of mucormycosis at 4 and 24 hpi. Pooled data presented was obtained from three independent experimental repeats.

A	4hpi			24 hpi		
	Macrophages at infection site		Larvae observed	Macrophages at infection site		Larvae observed
	Mean	SEM	N	Mean	SEM	N
Hindbrain ventricle						
Non-injected	7.5	1.0	28	9.6	0.8	27
PVP	12.2	1.2	29	11.7	0.9	28
Low dose	19.9	2.0	29	27.7	2.5	28
Low dose UV	15.2	1.8	31	12.4	1.2	31
High dose	36.0	2.2	31	35.4	2.3	30
High dose UV	26.0	1.9	30	20.9	1.8	29
Swimbladder						
Non-injected	9.8	0.8	29	8.3	0.9	28
PVP	16.1	1.4	30	15.5	1.1	27
Low dose	22.5	1.6	30	26.0	1.5	22
Low dose UV	17.2	1.1	31	18.5	2.1	24
High dose	29.4	1.8	28	34.7	1.9	25
High dose UV	23.1	1.7	29	24.7	2.6	23
B	4hpi			24 hpi		
	Neutrophils at infection site		Larvae observed	Neutrophils at infection site		Larvae observed
	Mean	SEM	N	Mean	SEM	N
Hindbrain ventricle						
Non-injected	2.5	0.6	29	1.1	0.3	26
PVP	4.3	1.0	29	2.2	0.8	29
Low dose	14.9	1.5	27	14.0	1.6	27
Low dose UV	9.3	1.3	30	3.7	0.6	29
High dose	36.2	2.0	26	31.0	2.9	24
High dose UV	23.1	1.8	28	11.2	1.3	28
Swimbladder						
Non-injected	7.7	0.9	31	6.1	0.9	28
PVP	12.8	1.8	26	5.8	0.7	24
Low dose	22.7	2.0	31	21.5	2.6	26
Low dose UV	11.6	1.3	29	7.9	1.0	19
High dose	33.8	2.6	28	39.7	3.6	23
High dose UV	25.5	2.7	28	15.9	2.5	21

Table S2: Genes and primers used for quantitative real-time PCR (Gratacap, *et al.* 2013).

Gene	Sequence (5'-3')	Reference
<i>illb</i>	Fwd: GTCACACTGAGAGCCGGAAG	A. Planchart, personal communication
	Rev: TGGAGATTCCCAAACACACA	
<i>tnfa</i>	Fwd: CGCATTTTACAAGGCAATTT	A. Planchart, personal communication
	Rev: CTGGTCCTGGTCATCTCTCC	
<i>gapdh</i>	Fwd: TGGGCCCATGAAAGGAAT	Mattingly <i>et al.</i> 2009 {Mattingly, 2009 #12737}
	Rev: ACCAGCGTCAAAGATGGATG	