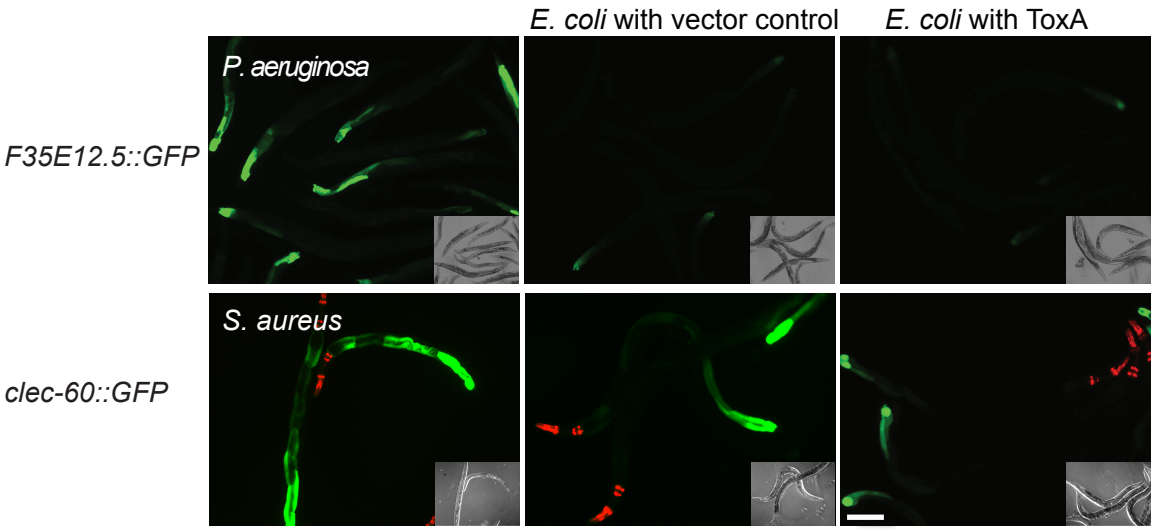
Figure S1


E. coli with vector control
E. coli with ToxA
P. aeruginosa
F35E12.5::GFP
S. aureus
clec-60::GFP

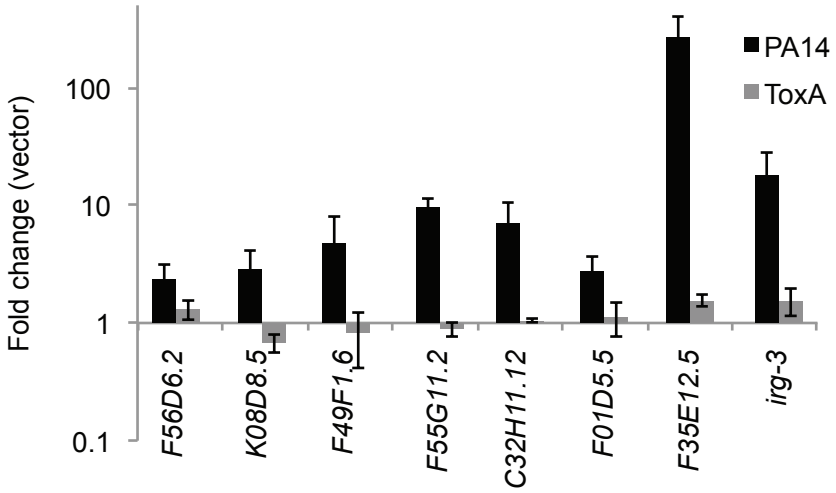

PA14
ToxA
Fold change (vector)
100
10
1
0.1
F56D6.2
K08D8.5
F49F1.6
F55G11.2
C32H11.12
F01D5.5
F35E12.5
irg-3

Figure S2

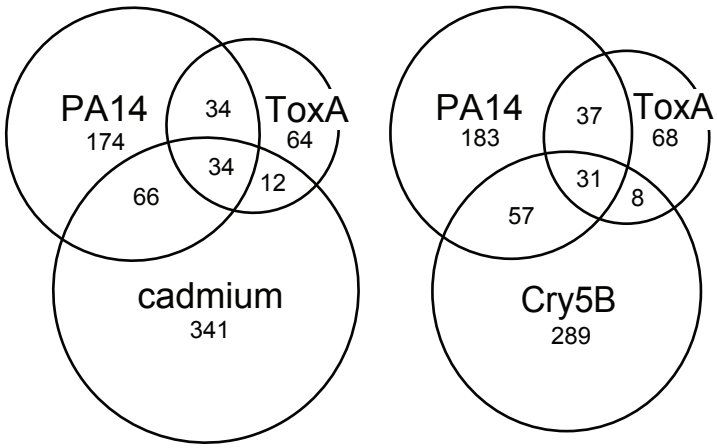

PA14
174
34
ToxA
64
34
12
66
cadmium
341
PA14
183
37
ToxA
68
31
8
57
Cry5B
289

Figure S3

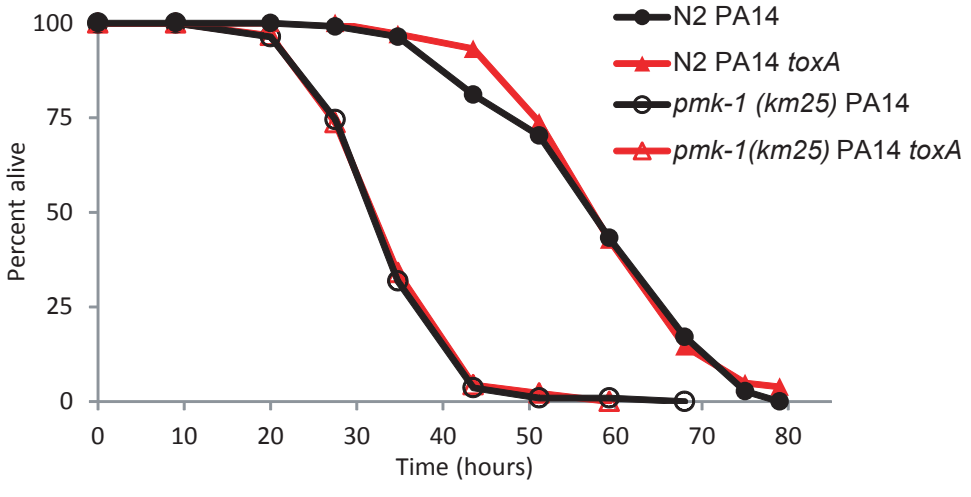

N2 PA14
N2 PA14 toxA
pmk-1 (km25) PA14
pmk-1(km25) PA14 toxA
Percent alive
100
75
50
25
0
0
10
20
30
40
50
60
70
80
Time (hours)

Figure S4

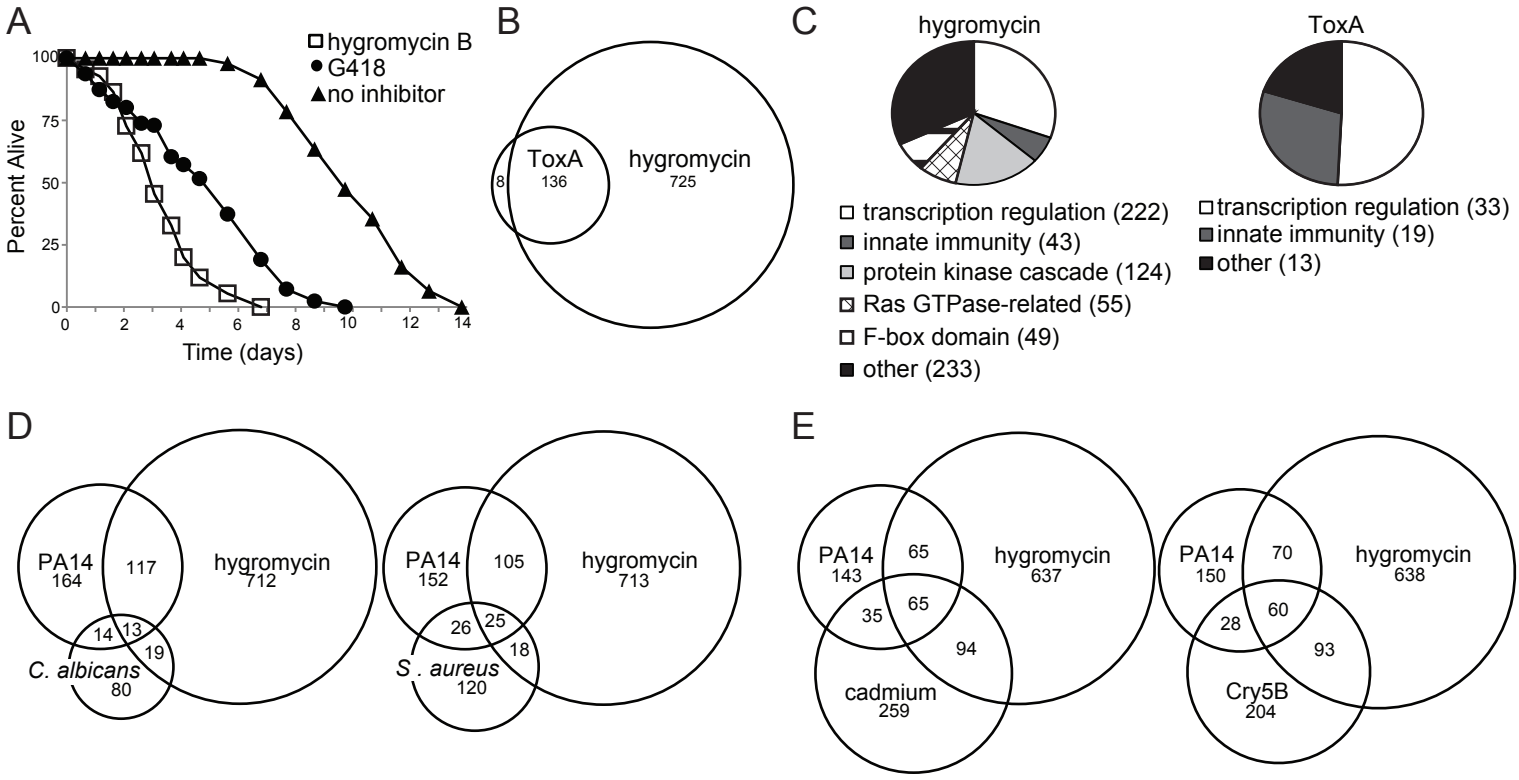

A
hygromycin B
G418
no inhibitor
Percent Alive
Time (days)
B
ToxA
136
8
hygromycin
725
C
hygromycin
transcription regulation (222)
innate immunity (43)
protein kinase cascade (124)
Ras GTPase-related (55)
F-box domain (49)
other (233)
ToxA
transcription regulation (33)
innate immunity (19)
other (13)
D
PA14
164
117
hygromycin
712
14
13
19
C. albicans
80
PA14
152
105
hygromycin
713
26
25
18
S. aureus
120
E
PA14
143
65
hygromycin
637
35
65
94
cadmium
259
PA14
150
70
hygromycin
638
28
60
93
Cry5B
204

Figure S1: **ToxA does not broadly activate *C. elegans* immune genes.** (A and B) *C. elegans* strains containing the *P. aeruginosa* reporter *F35E12.5::GFP* (A) or the *S. aureus* reporter *clec-60::GFP* (B) were exposed for 24 hours to *P. aeruginosa* PA14, *S. aureus* NCTC8325, or *E. coli* expressing ToxA or an empty expression vector. Images for each strain were taken at the same time using the same camera settings. Red pharyngeal expression is due to the co-injection marker *myo-2::mCherry* which confirms the transgene is present. Scale bar represents 100 μm. Insets are the corresponding bright field image. (B) qRT-PCR analysis of genes that respond to *P. aeruginosa* but not ToxA. Results shown are an average of 3 biological replicates. Error bars represent SEM.

Figure S2: The ToxA response does not mimic other intestinal stressors. Venn diagrams summarizing the overlap between genes upregulated by ToxA, *P. aeruginosa* PA14, and the heavy metal cadmium (left) or the pore-forming toxin Cry5B (right) (Huffman et al., 2004). All microarrays were conducted with the Affymetrix platform using animals infected at the L4/young adult stage and collected after 24 hours (ToxA), 4 hours (PA14), or 3 hours (cadmium, Cry5B).

Figure S3: ToxA is dispensable for *P. aeruginosa* PA14-mediated *C. elegans* lethality. Lifespan comparison between N2 and *pmk-1(km25)* animals exposed to either wild-type *P. aeruginosa* PA14 or a *toxA* mutants starting at the L4 stage.

Figure S4: Hygromycin upregulates ToxA-induced genes and a subset of *P. aeruginosa*-induced genes. (A) Lifespan comparison of N2 animals exposed hygromycin or G418 starting at the L4 stage. (B) Venn diagram summarizing the overlap between genes upregulated by hygromycin and ToxA. (C) Functional classes enriched in each data set as determined by DAVID analysis. Number of genes in each category is indicated in parenthesis. Classes with few genes [<40 (hygromycin) or <5 (ToxA)] are categorized as “other”. (D-E) Venn diagrams

summarizing the overlap between genes upregulated by hygromycin and the pathogens *P. aeruginosa* PA14 (Troemel et al., 2006), *C. albicans* (Pukkila-Worley et al., 2011), and *S. aureus* (Irazoqui et al., 2010a) (D); or hygromycin, PA14, and cadmium or Cry5B (Huffman et al., 2004) (E). All microarrays were conducted with the Affymetrix platform using animals infected at the L4/young adult stage and collected after 24 hours (ToxA), 8 hours (*S. aureus*), 4 hours (PA14, *C. albicans*), or 3 hours (cadmium, Cry5B).

Table S1: *C. elegans* genes differentially expressed following ToxA exposure. This table lists all the Affymetrix probe sets differentially expressed in N2 animals fed *E. coli* expressing ToxA or an empty vector for 24 hours (≥2-fold change and a modified Wilcoxon rank test >1.45).

Table S2: *C. elegans* genes differentially expressed following hygromycin treatment. This table lists all the Affymetrix probe sets differentially expressed in N2 animals fed *E. coli* with an empty vector and exposed to hygromycin or no inhibitor for 24 hours (≥2-fold change and a modified Wilcoxon rank test >1.45).