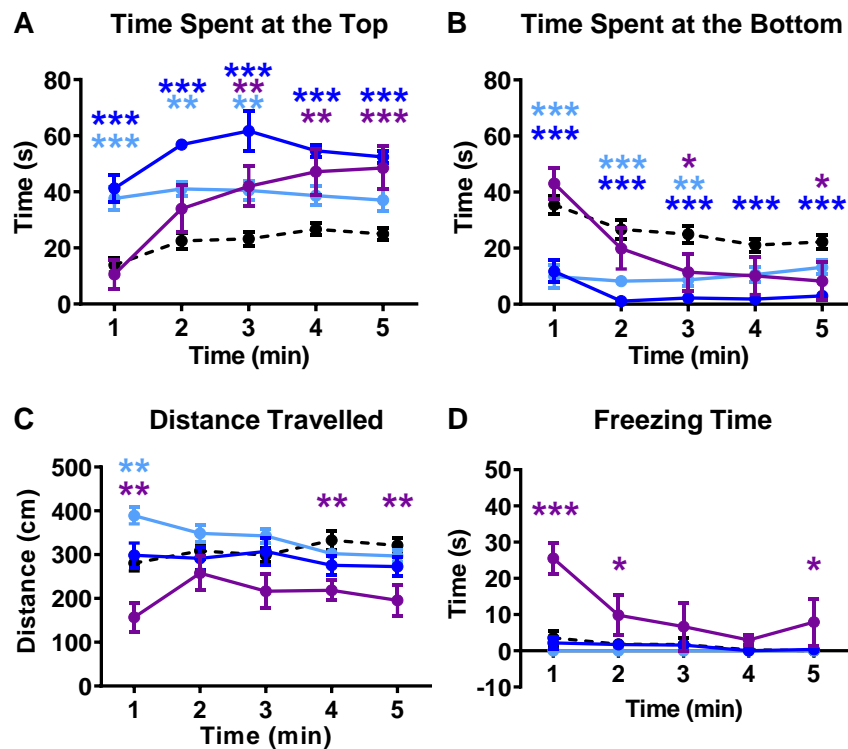


**Supplementary Figure 1. Representative swimming traces**

Corresponding swimming traces for heat maps in **Figs. 2A-C** and **3A-C** are presented for (A) harmane (3 mg/L), (B) norharmane (3 mg/L), (C) TIQ (100 mg/L), (D) TMN (30 mg/L), (E) clorgyline (100 mg/L), and (F) pargyline (10 mg/L), representing swimming behavior for one zebrafish per compound. Data are expressed as mean  $\pm$  SEM. \*  $p < 0.05$ ; \*\*  $p < 0.01$ ; \*\*\*  $p < 0.001$ .



**Supplementary Figure 2. Zebrafish NTT results for buspirone**

(A) Time spent at the top, (B) time spent at the bottom, (C) total distance travelled, and (D) freezing time are presented for buspirone. Black dashed line = control (n = 35); light blue = 10 mg/L buspirone (n = 12); blue = 30 mg/L buspirone (n = 18); purple = 100 mg/L buspirone (n = 9). Data are expressed as mean  $\pm$  SEM. \* p < 0.05; \*\* p < 0.01; \*\*\* p < 0.001.