

**Table S1.** *Post hoc* comparison of rheotaxis between LL+ and LL- fish

Flow (cm s <sup>-1</sup> )	Species	Contrast Estimate (RI <sub>LL+</sub> - RI <sub>LL-</sub> ) $\pm$ 95% C.I.	S.E.	t(df)	Adj. Sig.
0	TLC	-0.056 $\pm$ 0.183	0.090	-0.625(31)	0.537
	BCF	-0.021 $\pm$ 0.159	0.078	-0.274(32)	0.786
1	<b>TLC</b>	<b>0.269 <math>\pm</math> 0.146</b>	<b>0.072</b>	<b>3.727(38)</b>	<b>0.001</b>
	BCF	-0.049 $\pm$ 0.0127	0.063	-0.781(38)	0.439
2	<b>TLC</b>	<b>0.245 <math>\pm</math> 0.169</b>	<b>0.083</b>	<b>2.948(35)</b>	<b>0.006</b>
	BCF	-0.100 $\pm$ 0.147	0.072	-1.384(35)	0.175
3	TLC	-0.001 $\pm$ 0.138	0.068	-0.010(41)	0.992
	BCF	-0.019 $\pm$ 0.121	0.060	-0.315(41)	0.754
4	TLC	0.012 $\pm$ 0.113	0.056	0.206(41)	0.838
	BCF	0.016 $\pm$ 0.100	0.050	0.325(41)	0.747
6	TLC	0.074 $\pm$ 0.104	0.052	1.424(38)	0.862
	BCF	-0.008 $\pm$ 0.090	0.044	-0.176(35)	0.862
0	TLC	0.069 $\pm$ 0.104	0.050	1.374(22)	0.183
	BCF	-0.019 $\pm$ 0.092	0.044	-0.431(21)	0.671
10	TLC	0.033 $\pm$ 0.107	0.052	0.638(20)	0.530
	BCF	-0.008 $\pm$ 0.094	0.045	-0.172(20)	0.865

Pairwise comparisons of rheotactic performance (RI) between LL+ and LL- individuals for both corydoras (TLC) and blind cavefish (BCF). Dunn-sidak corrections were used to control for experimentwise error. Bold rows indicate significance. Contrast estimates represent the actual difference between the two groups (i.e. RI<sub>LL+</sub> - RI<sub>LL-</sub>)

**Table S2.** Boundary layer thickness as a function of flow speed, characteristic length and associated local Reynolds number

Flow Speed (cm s <sup>-1</sup> )	Characteristic Length (cm)	Local 'Re'	BL (cm)
1	25	2500	2.5
2	25	5000	1.8
4	25	10000	1.25
8	25	20000	0.9
10	25	25000	0.8
1	50	5000	3.5
2	50	10000	2.5
4	50	20000	1.8
8	50	40000	1.25
10	50	50000	1.1