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Behavioral analysis of the escape response in larval zebrafish

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Univ of Illinois - Urbana — The behavior of larval zebrafish is of great interest because the limited number of locomotor neurons in larval zebrafish couples with its rich repertoire of movements as a vertebrate animal. Current research uses a priori-selected parameters to describe their swimming behavior while our lab has built a parameter-free model based on singular value decomposition analysis to characterize it. Our previous work has analyzed the free swimming of larval zebrafish and presented a different picture from the current classification of larval zebrafish locomotion. Now we are extending this work to the studies of their escape response to acoustic stimulus. Analysis has shown intrinsic difference in the locomotion between escape response and free swimming.

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