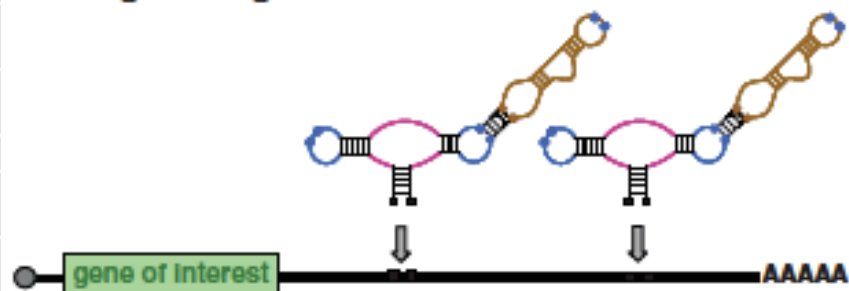
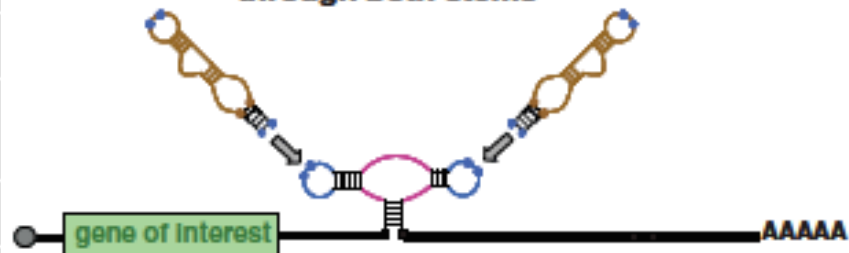


SI 1: Signal Integration within the 3' UTR



SI 2: Signal Integration at the ribozyme core through both stems



SI 3: Signal Integration through a single ribozyme stem

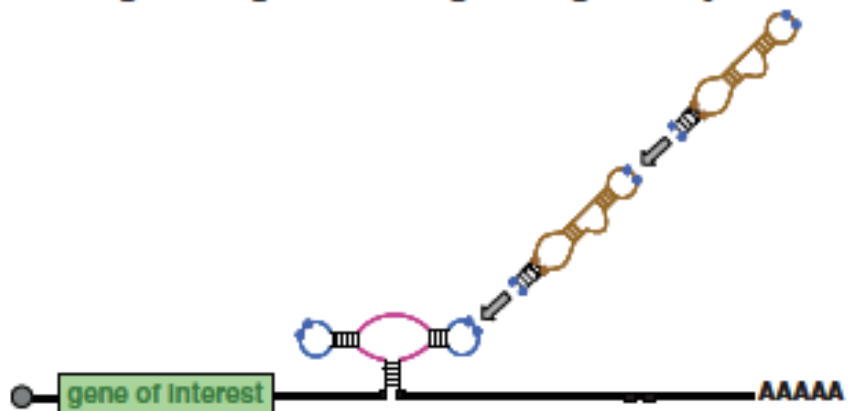


Fig. 1. Functional RNA device composition framework. The color scheme for all figures is as follows: brown, aptamer or sensor component; purple, catalytic core of the ribozyme or actuator component; blue, loop regions of the actuator