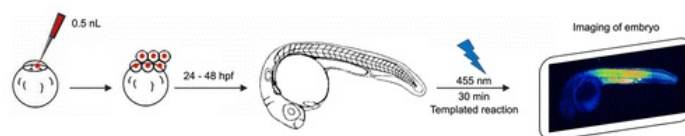


**Nucleic Acid Templated Chemical Reaction in a Live Vertebrate**M. Anzola<sup>1</sup>, E. Lindberg<sup>1</sup>, N. Winssinger<sup>1\*</sup><sup>1</sup>University of Geneva

Nucleic acid templated reactions are enabled by the hybridization of probe-reagent conjugates resulting in high effective reagent concentration and fast chemical transformation. We have developed a reaction that harnesses cellular microRNA (miRNA) to yield the cleavage of a linker releasing fluorogenic rhodamine in a live vertebrate. The reaction is based on the catalytic photoreduction of an azide by a ruthenium complex. We showed that this system reports specific expression of miRNA in living tissues of a vertebrate.



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