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**Title.** The role of cypin, a guanine deaminase, in *Xenopus laevis* during embryonic development

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Cypin, a guanine deaminase, is critical to neuronal development and dendrite branching. Studies from another lab have shown that cypin is capable of binding to tubulin heterodimers and promote microtubule polymerization *in vitro*. Cypin has a CRMP homology domain that is critical in modulating its guanine deaminase activity and directly affects dendrite outgrowth. Others have shown that overexpression of cypin showed an increase in dendritic branching, both primary and secondary. However, no previous studies have examined the role of cypin during development. In our lab, we seek to gain a better understanding of cypin and its function during *Xenopus* embryonic development. We have begun by examining the role of cypin in regulating microtubule polymerization in neurons as well as determining the localization of cypin expression at different developmental stages of *Xenopus laevis* embryos. Through high resolution live imaging, we found that cypin does not regulate microtubule dynamics via binding to the plus ends. Additionally, we observed that cypin is highly enriched in the pronephric kidneys.