

supports the idea that endogenous PcG acts at the early stages of embryogenesis in *Xenopus*.

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**Study on the Role of Yin Yang 1 (YY1),
a Vertebrate Polycomb Group (PcG)
Gene in *Xenopus* Embryogenesis**

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Yin Yang 1 (YY1) is a zinc finger-containing transcription factor that can act as a transcriptional repressor, an activator, or an initiator element-binding protein. This is a homolog of the *Drosophila* Polycomb group (PcG) gene pleiohomeotic (*pho*). To investigate the role of YY1 in early development of vertebrate, we analyzed the expression pattern of this gene using whole mount in situ hybridization and performed the gain-of-function study by YY1 sense RNA microinjection. *Xenopus* YY1 mRNA expresses in ubiquitous fashion during embryogenesis with weak staining in CNS, tail tip and protodeum. The sense YY1 RNA-injected embryos exhibit distortion of axis and gastrulation defects, suggesting that YY1 may have a role during *Xenopus* embryogenesis.