

# **Patterning the Fly Embryo and Its Evolution**

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I will review some of the (social) history of how evolution is pictured and some of the evidence for evolution via changes in gene regulation. Explicit calculations and experiments will be presented for the early patterning of the fly embryo, which is almost entirely a transcriptional network. The microevolution of the fly regulatory sequences between two species of flies shows how similar function can drift to nonhomologous sequence.