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Two transcriptionally distinct pathways drive female development in a reptile with both genetic and temperature dependent sex

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The central bearded dragon (*Pogona vitticeps*) is an iconic Australian species with temperature induced sex reversal, which causes genetic males to develop as phenotypic females. Because of this trait, female development in this species can occur either under the control of sex chromosomes, or via the influence of incubation temperature. Comparing gene expression patterns between these two female types during embryonic development revealed that two distinct pathways are responsible for driving female development. This showed for the first time the unique transcriptional profile of embryos undergoing sex reversal, providing new insights into the development of this fascinating species.

Image credit: Arthur Georges.