PublisherInfo		
PublisherName	:	BioMed Central
PublisherLocation	:	London
PublisherImprintName	:	BioMed Central

Transgenic frogs

ArticleInfo		
ArticleID	:	4388
ArticleDOI	:	10.1186/gb-spotlight-20020130-01
ArticleCitationID	:	spotlight-20020130-01
ArticleSequenceNumber	:	54
ArticleCategory	:	Research news
ArticleFirstPage	:	1
ArticleLastPage	:	2
ArticleHistory	:	RegistrationDate : 2002–1–30 OnlineDate : 2002–1–30
ArticleCopyright	:	BioMed Central Ltd2002
ArticleGrants	:	
ArticleContext	:	130593311

Jonathan B Weitzman
Email: jonathanweitzman@hotmail.com

The binary Gal4-UAS system has been used to drive the tissue-specific expression of transgenes in a number of animal models. In the February 5 Proceedings of the National Academy of Sciences, Katharine Hartley and colleagues at the Wellcome/CRC Institute Cambridge, UK, report application of the Gal4-UAS system to create transgenic *Xenopus* (*Proc Natl Acad Sci USA* 2002, **99:**1377-1382). They generated *Xenopus* lines expressing constructs for the 'activator', the yeast transcription factor Gal4, or 'effector', tandem repeats of the yeast Gal4-binding motif (UAS). In this way they could drive tissue-specific, or stage-specific, transgene expression. Hartley *et al.* used the Gal4-UAS system to regulate expression of the ventralizing homeobox gene *Xvent*-2, resulting in severe developmental and microcephalic phenotypes. They propose that such misexpression studies will be useful for extensive gain-of-function experiments in *Xenopus*.

References

1. GAL4 activates transcription in *Drosophila*.

2. *Proceedings of the National Academy of Sciences*, [http://www.pnas.org]

3. Wellcome/CRC Institute , [http://www.welc.cam.ac.uk]