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Inactivation of one of the two X chromosomes in females is regulated by sequences on the X-chromosome within the *X inactivation center* (*Xic*). In the May 10 Science, Percec *et al.* report the identification of *trans*-acting autosomal elements involved in choosing the particular X chromosome for inactivation (*Science* 2002, **296:**1136-1139). They performed a phenotype-driven genetic screen for mutations that affect X-chromosome silencing choices in mice: they screened mice from parents exposed to chemical mutagens and looked for changes in X-chrmosome inactivation patterns. They then identified two mutant females that transmitted altered X inactivation patterns to early embryos. Both mutations exhibited autosomal dominant modes of inheritance. Percec *et al.* mapped one of these mutations to mouse chromosome 15; characterization of these autosomal factors (named *Xiaf1* and *Xiaf2*) should provide insights into the molecular mechanisms underlying the complex epigenetic process of x-chromosome inactivation.

References

1. X-chromosome inactivation: counting, choice and initiation.

2. *Science*, [http://www.sciencemag.org]