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Pheromone phenotypes

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The *V1r* genes encode a large superfamily of receptors that are expressed in the sensory neurons of the vomeronasal organ (VNO) and are thought to be important in pheromone detection and responses. In the September 5 *Nature*, Del Punta *et al.* describe the phenotypes of mice lacking a large genomic region that contains *V1r* genes (*Nature* 2002, **419**:70-74). They used the *Cre-loxP* system to engineer a 600 kb deletion in the mouse genome, removing a cluster of 16 genes (12% of the functional *V1r* repertoire). The mutant mice displayed defects in a subset of VNO-dependent behaviours, including reduced maternal aggression towards intruders and dysfunctions in male sexual behaviour. The deletion also abolished the electrophysiological response of the VNO to a subset of *V1r* ligands (the authors use the term "specific anosmia").

References

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