Virally vectored immunocontraception. A candidate female fertility associated gene (e.g. mZP3) is isolated from mice. The gene of interest is cloned into a viral vector such as MCMV or ECTV. The recombinant virus is then inoculated into female mice. The ensuing autoimmune response to the encoded fertility antigen produces antibodies that coat the egg and prevent fertilisation by inhibiting the binding of sperm. In cases where male fertility antigens are used, male mice, female mice or both sexes of mice can be treated with the VVIC vector, in which case fertilisation would be inhibited by antibodies bound to sperm.