

Parasite Can Control Rodents' Fear of Cats

Rats and mice can be "brainwashed" into liking cat urine, according to a study.

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Rodents can be "brainwashed" to not fear cats, according to a recent study. (Stock photo) part of the brain that makes rodents naturally fear cats, according to a new study.

A parasite can control the

Rats and mice normally flee if they smell cat urine, but the rodents will not run away if they are infected by the protozoan parasite *Toxoplasma gondii*, according to a study published April 2 by the journal "Proceedings of the National Academy of Sciences."

The parasite can complete its life cycle only if its rodent host is eaten by a cat. It "hijacks" the rodent's mind and "brainwashes" the rodent into liking the scent of cat urine, the study concludes.

The parasite seems to reverse the rodent's innate fear by interfering with conditioned responses in the brain.

The parasite did not affect any other rodent phobias. The parasite is very precise and leaves all other neurological mechanisms for learning to avoid danger intact, according to the study's leader, Ajai Vyas of Stanford University. Therefore, the rodents learn to survive all hazards except being eaten by cats, which is the only form of death that benefits the parasite.