

In 'Brokeback,' men might not be only gay characters



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*Carnal
Knowledge*

Over the last two weeks, the news media have explored every possible angle of the gay sheep-herder movie *Brokeback Mountain* — except perhaps for the sex lives of the sheep.

And that actually leaves much to consider, because sheep research is beginning to offer some of the greatest new insights into the nature of homosexuality.

This latest gay-theme film has prompted a flurry of pronouncements on blogs and other electronic forums that homosexual acts go against nature. When such rampant guessing about what is natural or unnatural starts infiltrating cultural debate, it might be time to call a scientist.

Scientists who spend lots of time watching ani-
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Sheep studies confirm that rams can be gay, too

SAME-SEX MATING from C1
mals have reported that dozens of creatures from elk to elephants climb onto same-sex partners. Killer whales and manatees engage in gay trysts while frolicking in the sea, while gay geese and ducks latch onto one another in devoted male-male or female-female partnerships.

And for decades, it turns out, homosexual sheep have been a financial drain on their frustrated breeders. About 8 percent of rams are interested only in other rams, says Charles Roselli, a professor of physiology and pharmacology at Oregon Health and Science University. When their time arrives to become lamb chops, Roselli takes the brains and studies them for gay/straight differences. He spoke on his latest research last month at a symposium organized by the Endocrine Society.

Roselli tested the sexual orientation of his research rams by penning each one up with sheep of both sexes. The gay rams showed no interest in the ewes,

but approached other rams and carried out a series of stereotypical mating behaviors.

First a ram will sniff the genitals of the object of his desire, then do some nuzzling and nibbling, Roselli said. Eventually he will mount the other sheep from behind. If it's a same-sex encounter, the mounting ram will ejaculate into its partner's wool. "They don't insert anally," Roselli said. The anatomy isn't quite lined up that way.

That still leaves open questions about the ram on the bottom. Doesn't putting up with this business suggest he's gay too? "No one has systematically studied that," Roselli said. But sheep are pretty placid, he said, and may not be bothered by it.

While a handful of hypotheses have been advanced to explain gay rams, Roselli said he has long suspected differences in the brain. In humans, scientists

have discovered a clump of cells in the hypothalamus that regulates sexual behavior and is significantly bigger in men than women. A study done in 1991 hinted that this brain area, called the sexually dimorphic nucleus, had something to do with sexual orientation. The region appeared to be about half as large in gay men as in straight men, though the researchers were able to examine only a few brains.

With sheep, it's much easier to get lots of brains to study. Roselli eventually found that sheep, too, have a sexually dimorphic nucleus, that it's much smaller in ewes than rams, and that it's also smaller, on average, in gay rams than straight ones.

He and colleagues at UCLA are looking for ways that genes and gene expression set the stage for these brain differences.

Scientists have found differences in the part of the brain that governs sexual orientation.

Critics have contended that gay sheep are the product of domestication — wild sheep would never do anything like this. But in his book *Biological Exuberance*, author Bruce Bagemihl details gay behavior in a huge variety of wild animals. Here's an excerpt from his section on bighorn mountain rams: "Typically the larger male rears up on his hind legs and mounts the smaller male ... the mountee assumes a characteristic posture known as lordosis, in which he arches his back to facilitate copulation."

"Usually the mounting male has an erect penis and achieves full anal penetration," the book goes on to say — apparently the anatomy of wild sheep is suited for it, unlike that of domesticated sheep.

This anatomical coincidence is shared by various other living things, including, it would seem, sheep-herding cowboys.

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