

Worm sperm gives clue to male infertility

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U.S. scientists say they have used the nematode worm to identify a raft of new proteins vital for healthy sperm production.

Barbara Meyer and colleagues at the University of California-Berkeley said the quality of sperm chromatin -- DNA packaged with associated proteins -- is known to be an important indicator of male fertility. Meyer's team wanted to identify proteins important for sperm chromatin structure.

They purified those proteins uniquely and richly associated with sperm chromatin in the worm *Caenorhabditis elegans* and tested their function using RNA interference of all 132 proteins identified.

The team found some were vital for DNA packaging, chromosome segregation and fertility.

In some cases, it's already known that disabling the equivalent proteins in mice causes male sterility. That list of proteins may help identify causes of and diagnostic tests for unexplained male infertility in humans or provide targets for male contraceptives.

The findings appear online ahead of publication in a future issue of the journal *Nature*.

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