

Robot may perform breast exam

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Researchers have built a robotic breast-examining hand that combines ultrasound with an artificial sense of touch, NewScientist reported.

The robotic breast examiner was developed by researchers at Michigan State University to enable medical specialists to examine women from remote locations.

"Just because you're located in the Upper Peninsula of Michigan or even Botswana, it doesn't mean you can't have a sophisticated diagnostic or therapeutic procedure," Carol Slomski, an MSU surgeon who helped design the system, told the magazine.

The robot hand is remotely controlled by an operator wearing a motionsensing glove. The operator's hand movements are measured and sent by computer to the artificial hand, which then mimics the moves.

The robotic arm has an ultrasound sensor and three video cameras, to give the expert a good view of the procedure.

"Having the capability of ultrasound and palpation simultaneously is a major advantage," adds Ranjan Mukherjee, another member of the Michigan team. "Often the ultrasound and exam are done separately. But if the physician can look at the image and feel what he or she is seeing, that's another huge advantage."

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