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Getting a Teeny-Tiny Grip

In a report in the *Proceedings of the National Academy of Sciences USA,* Johns Hopkins University researchers discuss their invention of a "microgripper," a metallic device the size of a speck of dust that can float through tissue and latch on to individual cells. Adam Hinterthuer reports

[*The following is an exact transcript of this podcast.*]

Forget the scalpel, researchers at Johns Hopkins University have created a tool that can move easily through tissue, potentially making biopsies much less invasive. They call it a "microgripper." And the wireless, dust-particle sized device is able to grab single living cells from hard-to-reach places. Their report appeared in the online early edition of the *Proceedings of the National Academy of Sciences*.

The researchers assembled out of tiny metallic plates a "palm" with six three-jointed "fingers." This metal hand is truly tiny: just one-tenth of a millimeter in diameter. In the lab, scientists used magnets to pilot the microgripper through a tube of animal tissue and up to a living cell. Then, by applying heat as a trigger, the joints softened and the "fingers" closed around the cell.

The researchers hope the device will have applications beyond cell retrieval. It could be used to manufacture microchips or deliver medicine to specific locations in the body. But first, they must refine its motor skills. Right now, the microgripper can only grab—it can't let go. And we're still years away from shrinking Raquel Welch to go in after it.

—Adam Hinterthuer

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