The Nanotech Company

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# NanoTransistorOnCells

## The Scoop

Scientists from Nanomix and UCLA have successfully combined a field-effect transistor (FET) with the living membrane of a particular bacterium. This is a demonstration of the ability to effectively interact nanoelectronic devices with intact biological systems.

## The Sci/Tech Saga

The field-effect transistor, composed of a network of nanotubes, was grown on a silicone substrate through chemical vapor deposition (CVD). The device was then placed on the top of a cell membrane layer. The transistor was able to interact with the electric dipole of the cell membrane, yet both systems remained functioning. This research is aimed at the hope of connecting living cells directly to nanoelectric devices in a field they envision could be one day called 'cellelectronics'.

## The Invest/Biz Buzz

This is a heck of a long way from what futurists imagine, but as they say, "the journey of a thousand miles begins with one footstep." Cellelectronics as "normal" folk would imagine it is decades away.

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