

# Researchers develop 'smart' orthopedic coatings to detect implant failure

Researchers at the University of Illinois Urbana-Champaign created a coating for orthopedic implants that can monitor strain and alert to implant failure, according to a May 5 [feature](#).

A team developed the coating, which has flexible sensors and a nanostructured antibacterial surface, according to the university. They found the coatings prevented infections in live mice and mapped strain in sheep.

Next, the researchers plan to develop wireless power and data communications interfactcs for the coatings. They're also aiming to develop large-scale production of their nanopillar-textured bacteria-killing foil.

The research was published in [Science Advances](#).

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