

Hong Kong researchers design tiny robots for treating diseases

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An international team of researchers, led by the Chinese University of Hong Kong, has developed micro-robots by coating a microscopic algae with non-harmful, biocompatible magnetic particles. The devices can smoothly swim in biological fluids, such as dilute blood and gastric fluid.

The devices were found to release potent compounds from the algae core during degradation, which selectively attacked cancer cells while leaving healthy cells unharmed. Further research could show whether this might have potential as a treatment.

The robots could also sense chemical changes linked to the onset of illness within parts of the body, which makes them potentially useful as probes for remote diagnosis.

The time taken for the robots to function and biodegrade within the body could be tailored by adjusting the thickness of their manufactured coating.

Scientists suggest their findings could lead to a way to deliver drugs to parts of the body that are otherwise difficult to treat.