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Australia develops nanoworms-based anti-viral coating for face masks

September 16, 2021 | News

An antiviral surface coating technology sprayed on face masks could provide an extra layer of protection against COVID-19 and the flu



A coating developed at The University of Queensland in Australia has already proven effective in killing the virus that causes COVID-19, and shows promise as a barrier against transmission on surfaces and face masks.

UQ's Australian Institute for Bioengineering and Nanotechnology researcher Professor Michael Monteiro said the water-based coating deployed worm-like structures that attack the virus.

"When surgical masks were sprayed with these 'nanoworms', it resulted in complete inactivation of the Alpha variant of Sars-CoV-2 and influenza A," Professor Monteiro said.

The coating has been developed with Boeing as a joint research project, and was tested at the Peter Doherty Institute for Infection and Immunity at The University of Melbourne.

"These polymer 'nanoworms' rupture the membrane of virus droplets transmitted through coughing, sneezing or saliva and damage their RNA," Professor Monteiro said.