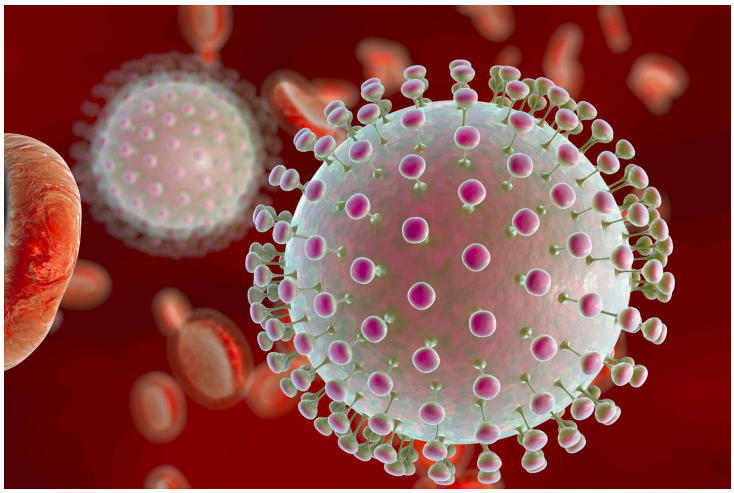
BioSpectrum
the business of Bio & Health Sciences
ASIA EDITION

US scientists to develop rapid diagnostic test for Zika

June 29, 2018 | News

The team has developed tiny platinum nanomotors that target Zika as well as microbeads that bind the virus.



Investigators from Brigham and Women's Hospital in the US are working to develop a new way to rapidly and accurately diagnose Zika using mobile health technologies that could potentially be deployed in resource-limited settings.

The researchers also envision that the tool could provide home testing for couples who are trying to conceive, particularly in locations with high risk of infection.

The team has developed tiny platinum nanomotors that target Zika as well as microbeads that bind the virus. When both components are added to a sample containing Zika, they form a three-dimensional complex that moves in the presence of hydrogen peroxide. This movement can be detected using a smartphone hooked up to a $5 optical device.

The new work highlights the potential of using cell phone technology for viral diagnostics, and the research team plans to further explore and apply the approach to other viruses.