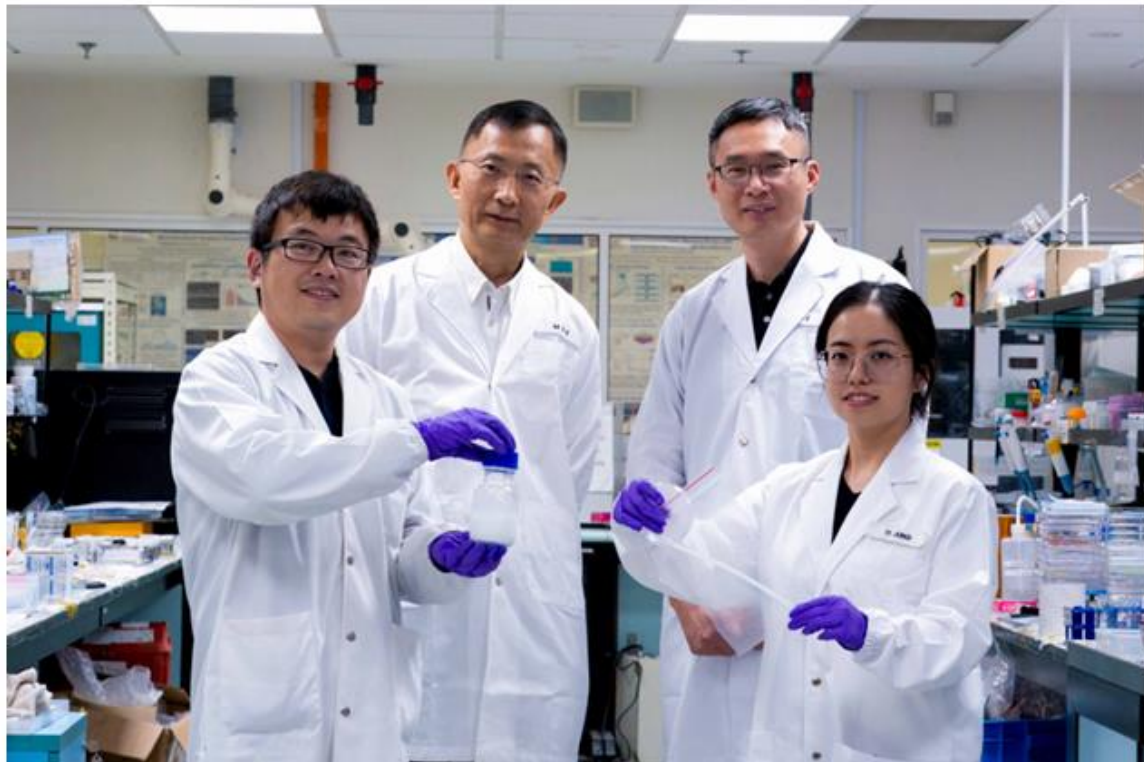




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## **Spider-silk inspired electrode offers new possibilities for the next generation of biomedical devices**

With the ability to fit onto curved or contoured surfaces, such as skin and organs, flexible electronics have great potential in various biomedical applications. Researchers led by NTU have created a stretchable electrode that wraps securely around tissues and organs to deliver electrical stimulation or record electrical signals. Mimicking the properties of spider silk, the electrode contracts when wet to wrap around biological tissues. It is also non-toxic and more sensitive than conventional stretchable electrodes. The scientists showed that the electrode could detect electrical signals from abnormal heart rhythms in rats. Reported in Nature, the innovation could shape the next generation of medical devices that monitor irregular heartbeat, repair nerves, close wounds and reduce scarring.

From Nanyang Technological University

<https://www.ntu.edu.sg/research/research-hub/news/detail/spider-silk-inspired-electrode-offers-new-possibilities-for-the-next-generation-of-biomedical-devices>