The BBC recently featured the work of Texas ECE professor Deji Akinwande on the graphene tattoo:

A graphene-based tattoo that could function as a wearable electronic device to monitor health has been developed at the University of Texas.

Gold is often used in electronic components, but graphene is more conductive, can be hundreds of times thinner and allows the tattoo to wrinkle naturally with skin.

It is hoped that as the cost of graphene falls, such tattoos will become affordable for medical use.