Remote Diagnostics of Cells, Tissues and Organoids

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In the context of telehealth and internet of things (IOT), there are unprecedented needs for developing remote diagnostic tools that can monitor chemical and biological markers remotely anytime anywhere, such as via a smart phone. Such sensing devices are ideally soft and thin so that they can "bio-friendly" interface with soft biological systems. However, traditional biosensing devices are typically constructed by bulk electrodes which are rigid and planar limited electroactive surface areas.

Here, I will present our skin-like sensing devices that can establish intimate "soft contact" with cells, tissues and organoids so that their health can be diagnosed in real-time and in-situ, even remotely via a smartphone.

References

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