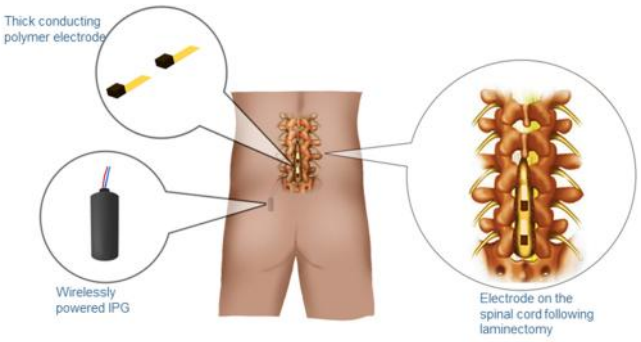
PROJECT NUMBER

22150

Low frequency implantable device

High capacitance electrode materials for ultra low frequency stimulation.

Applications: Stimulation of tissue for regeneration



Features	Benefits
Low operating frequencies – the generator can reverse polarity with a period of at least 300 seconds	A longer pulse period has been shown to allow for better tissue regrowth, suitable for injuries or chronic wounds
Novel material stable at low frequencies	Avoids the risk of toxicity present with other materials
The device is flexible as the substrate exhibits elastic deformation	Can conform to specific injury sites, such as being wrapped around the spinal cord
High capacitance electrodes reduces total number of electrodes required, minimising size of device	Allows device to be implanted and removed through a small incision
The substrate is a conductive polymer layer	There is no need for a separate conductive layer, simplifying manufacture

Awaiting patent and Available for

- Co-development

- Consulting
- Licensing

To find out more, contact enquiries@innovation.ox.ac.uk and quote the project number.

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