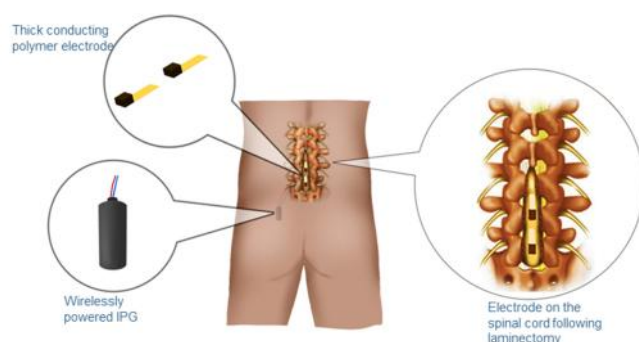


# Low frequency implantable device

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](mailto:enquiries@innovation.ox.ac.uk) and quote the project number.

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