

# Meet the Praxis SCI Incubate 2021/22 Cohort

Praxis Spinal Cord Institute is pleased to announce the five transformative technologies following a worldwide call for innovations.

Carefully selected by an expert panel of spinal cord injury (SCI) consumers, researchers, and commercial leaders, these five early stage innovations address careand cure-related treatments for people with SCI and have the potential to transform healthcare outcomes for the broader community.

The Praxis Spinal Cord Institute's SCI Incubate program is made possible through support from:





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**Our Cohort** 









SomaSense

#### Meet the 2021/22 Cohort



"First Smart Cushion designed to assist in the healing and prevention of pressure ulcers or bedsores."

www.kalogon.com

Kalogon is dedicated to improving the quality of life for wheelchair users. The Smart Cushion is created by former SpaceX engineers who also developed wheelchair technologies endorsed by Stephen Hawking. Kalogon is the first Smart Cushion designed to assist in the healing and prevention of pressure ulcers or bedsores. Since 2020, the proprietary adaptive technology has been optimized to deliver maximum relief and comfort to all people who live an active, seated life.



### "Improve neurostimulation rehabilitation through neural interface" www.neuraldrive.ca

NeuralDrive is a Canadian medical device company specializing in the recovery of movement after spinal cord injury. Through pre-clinical experiments, we demonstrated that neurostimulation through our neural interface can alleviate spinal cord injury deficits and can train the user to regain voluntary control of leg movement even after the stimulation has been turned off. We developed our neural interface to improve rehabilitation through neurostimulation therapies and a neurostimulation optimization module to deliver personalized cortical stimulation during motor training. Our device enables clinicians to perfectly tailor neurostimulation to an individual's unique characteristics.



#### "Cutting edge health solutions through material science." www.nanotess.com

NanoTess is a material science company whose first product, NanoSALV, is a nanotechnology-enabled medical device designed to treat chronic wounds. It was initially focused on diabetic foot ulcers (DFUs) and pressure ulcers. NanoSALV is a wound dressing containing proprietary nanomaterials that aims to provide broad-spectrum antimicrobial protection without harming the wound and facilitate natural healing. The technology has achieved wound closure in DFU individuals with severe and stagnant ulcers including people prescribed for amputations.



## "Treating neuropathic pain in SCI through neuro-protection." www.neurovig.com

**Neuro Vigor** is developing a new class of drugs that reduce reactive aldehydes to treat neuropathic pain in SCI, a largely unmet medical challenge much in need of a more effective solution. The same class of drugs may also provide secondary benefits via neuro-protection to enhance functional recovery.



### "Providing intelligent sensing and personalized user solutions for pressure ulcers and chronic wounds."

SomaSense is a Vancouver-based start-up company focusing on improving the quality of life of individuals susceptible to pressure ulcers with intelligent sensing and personalized user solutions. The SmartSheet technology developed by SomaSense is a soft, flexible and stretchable pressure sensor array that is scalable in size and resolution. Together with the accommodating prevention algorithm and system, users are alerted prior to the formation of this complex chronic wound, as well as educated on their pressure distribution via a generated pressure heatmap displayed on smart devices.