

**Joint Webinar on**  
**3<sup>rd</sup> Annual summit on**  
**Cell Signaling and Cancer Therapy**  
**&**  
**15<sup>th</sup> World Congress on**  
**Advances in Stem Cell Research and Regenerative Medicine**  
**December 10-11, 2021 | Webinar**

### **Peripheral nerve injury is a frequent cause of lifelong impairments**

The most clinically applied approaches to date have relied on surgical procedures, including autografts. However, the clinical success of the autograft is limited by a low functionality and mismatching between the damaged and donor nerves. Therefore, the disease will continue to be a serious public health problem, with over one million cases worldwide annually. Artificial biopolymer conduits have been shown to afford to be an alternative to autografts. These conduits are used to bridge the gap between the proximal and distal ends of a damaged nerve via orienting axonal growth in an organised fashion. However, mechanical trauma, fistula formation, extrusion, and inflammatory reaction caused by the conduit rigidity are fundamental challenges of these conduits. As such, an appropriate conduit must have a closely similar structure to the PNS and proper biomimetic features. This talk aims to discuss the main challenges that need to be addressed to develop and apply bioengineered nerve conduits in clinical practice. It describes some promising solutions that, so far, have been shown to promote neural cell adhesion and growth on artificial tissue-engineered scaffolds to provide a supportive structure for peripheral nervous system regeneration.

#### **Biography**

She is a Postdoctoral Research Fellow in the Clem Jones Centre for Neurobiology and Stem Cell Research (CJCNSCR) at Menzies Health Institute Queensland. She currently have 12 years of experience as a researcher in the field of science and am highly interested in tissue engineering and regenerative medicine. During my PhD program, she involved in academic research related to degenerative diseases.

She have taught different university courses since 2008. During my teaching, She have achieved the status of Associate Fellow of The Higher Education Academy based on UK Professional Standards Framework for teaching and learning support in education.



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