

Working to Walk Conference

Neurotechnology for SCI with Interactive Demonstrations

April 14 from 8:45am to 10:45am

Introduction to Neurotechnology: Jennifer French – 8:45am to 9:05am

Description: This session will provide an overview of neurotechnology, the developments in the past to the present, fundamental science behind the devices.

- a. Fundamentals: Electrical stimulation and the nervous system*
- b. Neurotechnology Categories: with definition, common applications and availability/access for each category*
 - i. Neural Protheses*
 - ii. NeuroModulation*
 - iii. NeuroRehabilitation*
 - iv. NeuroSensing and Diagnostics*
- c. Growth in practice*
 - i. Barriers in practice*
 - ii. Future developments*
- d. Resources*

User Demonstrations and Practitioner Testimonials: 9:05am to 10:45am

1. Exercise with FES – Restorative Therapies, Judy Kline – 9:05am to 9:20am (5 min Q&A)
2. Spasticity Management – Medtronic, Kelly Emmett – 9:25am to 9:40am (5 min Q&A)
3. Nerve Controlled Computing – NeuroSwitch, Caitlin Smith – 9:45am to 10:00am (5 min Q&A)
4. Drop Foot Stimulation – Bioness, Jody Feld & Duane Morrow – 10:05am to 10:20am (5 min Q&A)
5. Oscillating Frequency Stimulation – Cyberkinetics, Beverly Walters, MD – 10:25am to 10:40am (5 min Q&A)

Closing Remarks – Jennifer French