Neural Prosthesis Seminar

“Exploring the Intersection of Regenerative Medicine and Rehabilitation”

March 11, 2011 • 8:30 AM

Biomedical Research Building • BRB 105
Case Western Reserve University

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Abstract:

Functional recovery after a traumatic injury is dependent on a complex set of variables. These include the extent of the initial injury, our ability to modulate inflammation in the acute setting, the regenerative capacity of the tissue involved, and ultimately our ability to maximize endogenous functional capacity with or without assistive technologies. Currently, there are exciting developments in three disparate fields of research that potentially have a direct bearing on functional outcomes for people with traumatic injuries when applied synergistically. These fields include Regenerative medicine, Neuroprosthetics and Rehabilitation. In my talk, I will illustrate some state of the art technologies and discoveries that may, together, shape the future of patient care after traumatic injury. I will use specific examples from our laboratory in building such an synergistic approach, including peripheral nerve repair, modulation of inflammation after SCI, and tapping the endogenous regenerative capacity of the nervous system for designing better neural interfaces. My talk will attempt to place our laboratory’s work in the context of other relevant advances in the field including stem cell therapy.

For more information, please contact Cathy Naples at (216) 707-6490.

Live stream video link for each lecture at www.FEScenter.org/Seminar