

Novartis to represent the United States and Dr. Michael Fehlings, University of Toronto, to represent Canada at a world meeting in Zurich to participate in the writing of the Phase II anti-Nogo protocol.

Innovative Treatment of TBI via Regeneration of Neuronal Microtubules

TATRC is working with MAPREG, a start-up biotechnology company created by Professor Etienne E. Baulieu and his research team, on a novel mechanism for the protection and repair of nerve connections. This innovative treatment for spinal cord and traumatic brain injuries has shown considerable therapeutic potential in animal models. The research also involves the Institut de Médecine Navale du Service de Santé des Armées in Toulon, France.

In acute brain injuries, the neuronal microtubules, a major component of the neuronal cytoskeleton, depolymerize and the neuron networks become disorganized. MAPREG has developed a synthetic neurosteroid, MAP4343, which stimulates microtubule assembly. It has a proven effectiveness in the experimental treatment of spinal cord injury and has shown preliminary effectiveness in treating TBI. The compound is injectable and is

not metabolized into other hormonally active steroids. No other products are as active in animal models as MAP4343. This is a completely new mechanism of steroid action representing a potentially important breakthrough in neuroprotection.



Above: Specific brain regions of interest, such as the red section in the image can be analyzed for metabolic changes that may indicate mild TBI.



NCIRE hosted "The Brain at War: Neurocognitive Consequences on Combat", symposium at the San Francisco VA Medical Center. The meeting brought together peer-national leaders and clinicians in PTSD/TBI research.

DOD-VA-NCIRE Neuroscience Center of Excellence

The Northern California Institute for Research and Education (NCIRE) projects are focused on PTSD/TBI and other behavioral pathologies of war, neurodegenerative diseases, and neuroimaging. NCIRE funds peer-reviewed projects performed by clinicians and scientists affiliated with the San Francisco VA Medical Center and the University of California at San Francisco in the DOD-VA Neuroscience Center of Excellence.

Examples include the demonstration of metabolic derangements and subtle structural alterations of mild TBI. This work is expected to lead to new imaging and biochemical biomarkers for mild TBI. A similar project is researching biomarkers for targeted treatment of PTSD.

Left: Dark Horse medics carry a casualty to a UH-60 Black Hawk during 4th Squadron, 9th Cavalry Regiment, 2nd Brigade Combat Team, 1st Cavalry's Air Medical Evacuation at the Expert Field Medical Badge site, July 24, 2008.