

## Spinal cord injury and therapeutic targets: Defining a clinically informed pathway toward discovery.

Linda Noble-Haeusslein, Ph.D. - University of Texas

This seminar will tackle the challenges of developing therapeutic interventions, designed to protect the acutely injured cord from secondary damage, while supporting a wound healing environment that is favorable to neurological recovery. The focus will be on the matrix metalloproteinases (MMPs), a large family of proteases that are best known for their ability to cleave constituents of the extracellular matrix and which exhibit time and context-dependent divergent roles in the injured spinal cord. Findings reveal the contributions of MMPs to loss of white matter and glial scar formation and that their early blockade enhances long-term recovery. With greater sparing of tissue, resulting from early blockade of MMPs, rehabilitation may be optimally positioned to enhance the recovery process.

**Dr. Noble-Haeusslein** is a Professor in the Departments of Neurology (Dell Medical School) and Psychology at the University of Texas at Austin. She directs a research laboratory that focuses on the pathobiology of traumatic injury to the



developing brain and spinal cord with the goals of defining early mechanisms underlying cell injury and applying that knowledge to the development of candidate therapeutics for brain and spinal cord injured patients. She has been funded by the National Institutes of Health (NIH) for well over 25 years, has served on study sections for that Institute, and has chaired two regular NIH/NINDS study sections. In addition, she has participated in 3 Institute of Medicine Committees on traumatic brain injury. Her research has been funded by the NIH, the Department of Defense, and the Craig H Neilsen Foundation.

Friday, February 8, 2019

1:00 p.m. – 2:30 p.m.

SEA 4.244 Refreshments will be provided.