

[Prof Carmen Melendez's](#) work was recently highlighted in a Multiple Sclerosis Research Program of Department of Defense

The booklet available [here](#) refers to work on Promoting Myelin Formation via Manipulation of Oligodendrocyte Cytoskeleton see pages 6-7



Also the group's paper on

Acute and chronic demyelinated CNS lesions exhibit opposite elastic properties was published in [Scientific Reports](#)

SCIENTIFIC REPORTS

OPEN **Acute and chronic demyelinated CNS lesions exhibit opposite elastic properties**

Wenwen Li, Vincent J. Martinez, B. Boudreau, & Carmen Melendez-Vasquez^{1,2}
Increased deposition of extracellular matrix (ECM) is a common feature of neural degeneration and repair. However, the mechanical properties of the ECM, including the mechanical properties of the myelin sheath, are not well understood. Here, we use a combination of mechanical testing and electron microscopy to investigate the mechanical properties of myelinated and demyelinated axons. We show that myelinated axons exhibit a higher stiffness than demyelinated axons, which is associated with the presence of myelin. These findings provide a mechanistic basis for the observed differences in the mechanical properties of myelinated and demyelinated axons, which may have implications for the development of therapies for demyelinating diseases.

[Joomla SEO powered by JoomSEF](#)