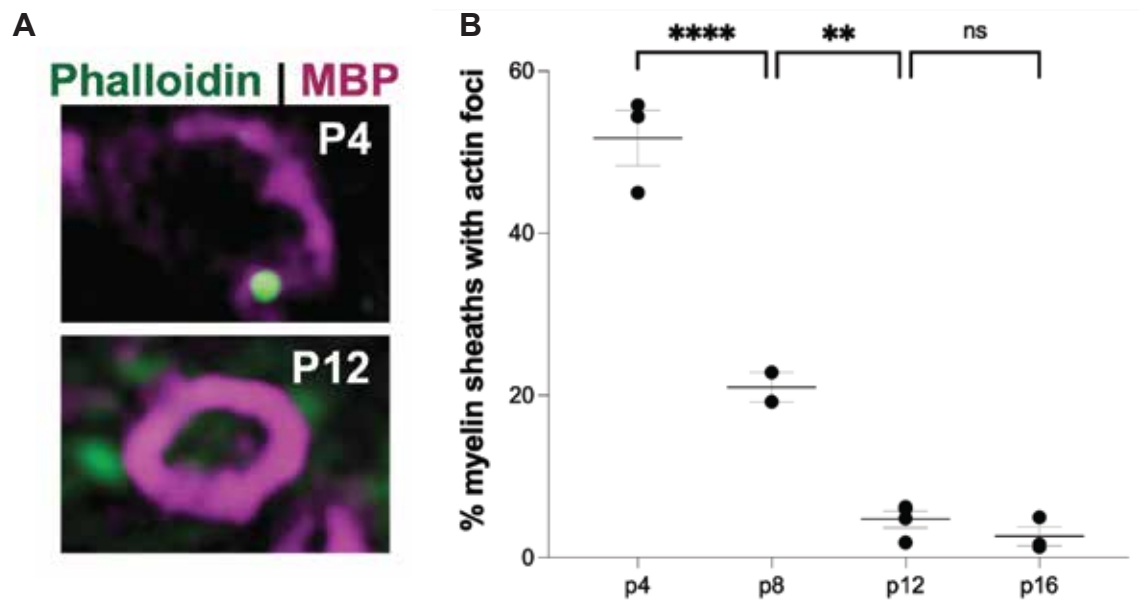
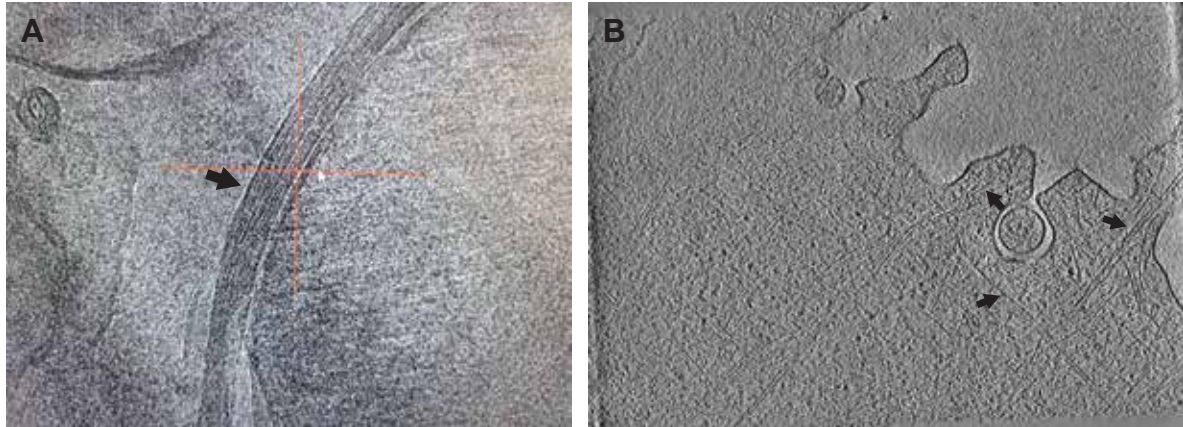


**Figure 1.** Developmental timeline of myelination within the mouse spinal cord. Room-temperature electron micrographs from mouse spinal cords at various timepoints. We aim to look for actin filaments within the cytoplasmic regions of oligodendrocyte processes, pseudocolored blue.



**Figure 2.** Actin filaments in the mouse spinal cord. A) Cryo-confocal images of actin filaments (green) and MBP (purple), a myelin marker. B) Quantification of the percentage of myelin sheaths with overlapping actin foci.



**Figure 3.** CryoET of myelin. A) Myelin membrane (arrow) in a cryo-TEM micrograph from mouse brain tissue. Arrow points to layers of myelin membrane. B) Actin filaments (arrows) in z-slice from a cryo-tomogram of cultured rat oligodendrocytes.