### How do immune oligodendroglia contribute to failed remyelination in multiple sclerosis?

**Riley Catenacci** 

### Myelin promotes efficient neuronal communication







Oligodendrocyte (OL)

### Demyelinated axons communicate less efficiently and are vulnerable to damage



## Remyelination is carried out primarily by OPCs





**OPC differentiation** 

### MS is an inflammatory demyelinating disease

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# MS drugs treat early stage disease but not degeneration



#### Oligodendroglia take on an immune phenotype in MS



### MHC proteins are involved in antigen presentation



Janeway Immunology

# Immune oligodendroglia (iOPC/OLs) may contribute to failed remyelination

