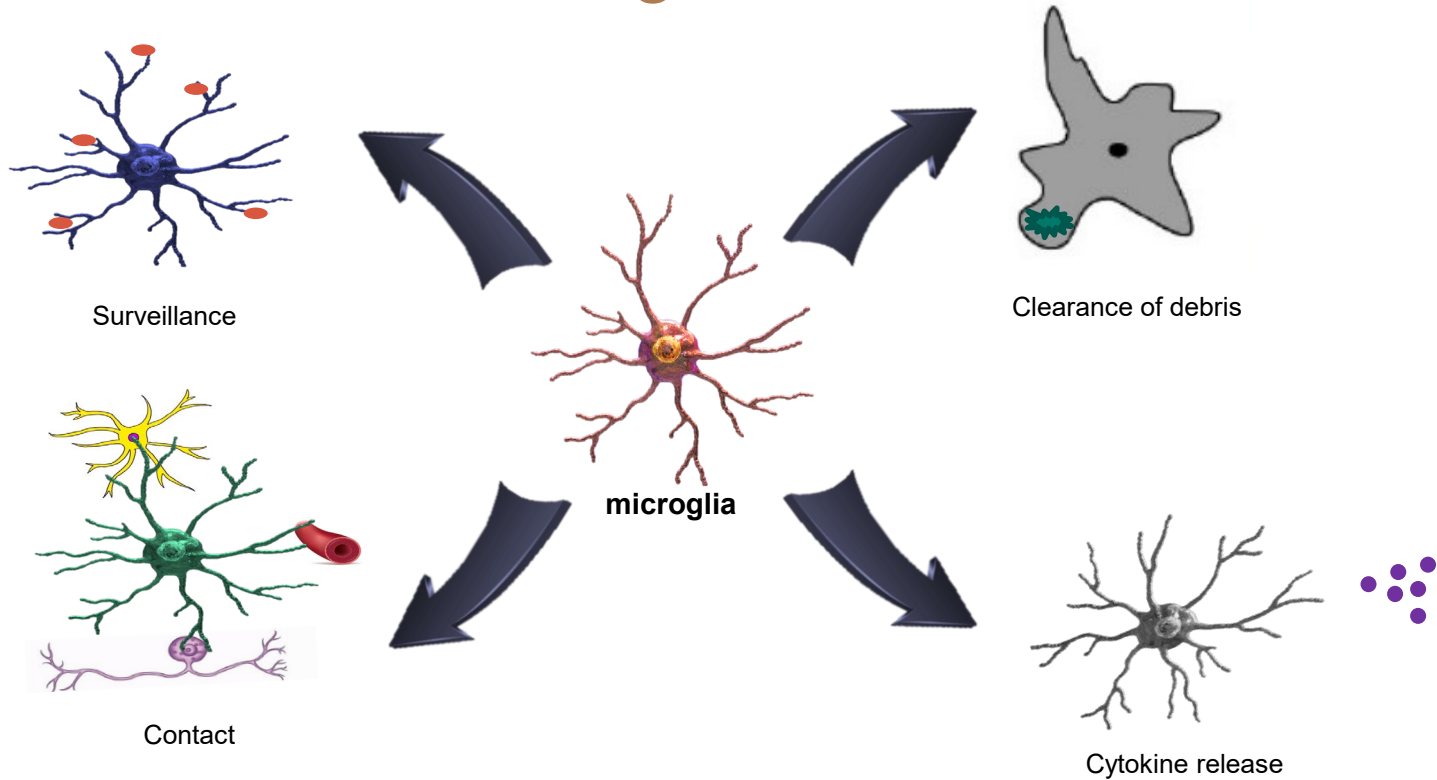


# A Fate Mapping Study to Detect the Existence of Microglia Progenitors in the Healthy Mouse Brain

Chloe Winston

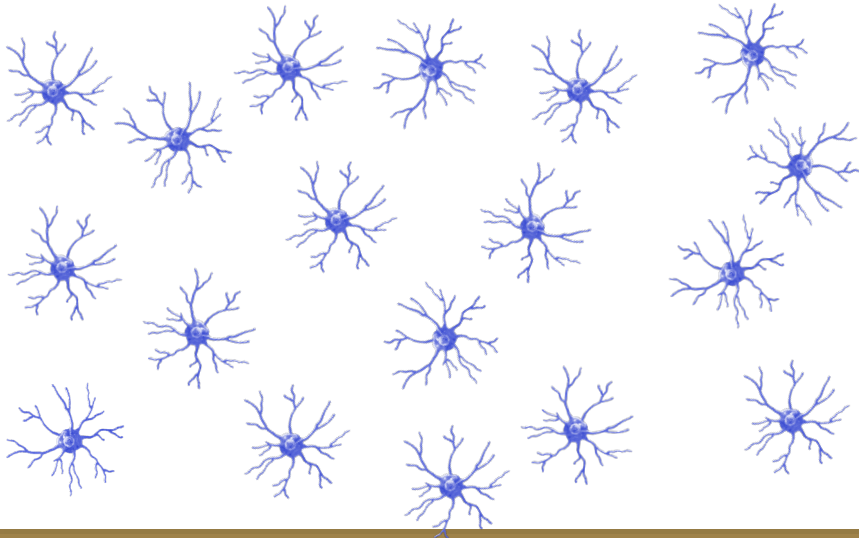
Mentored by Dr. Katherine Prater  
Garden Lab, UW Neurology

# Background

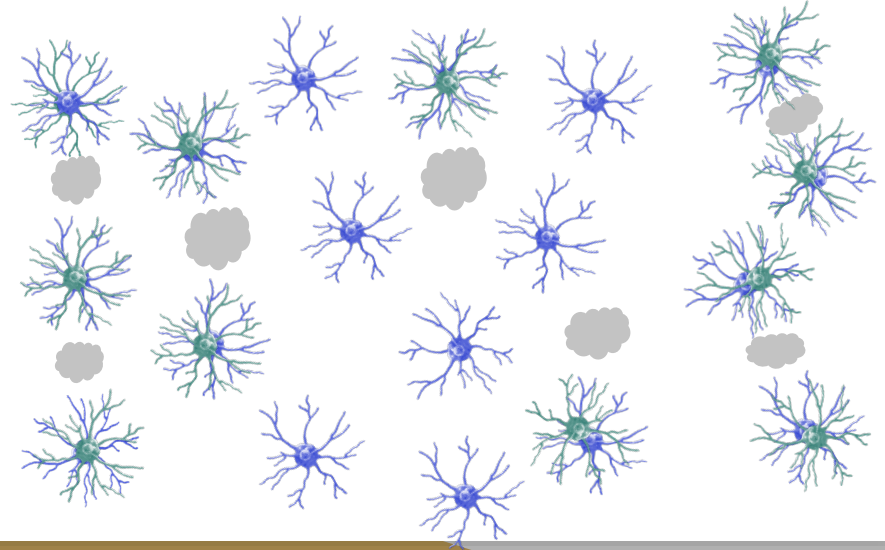


# Microglia Proliferation

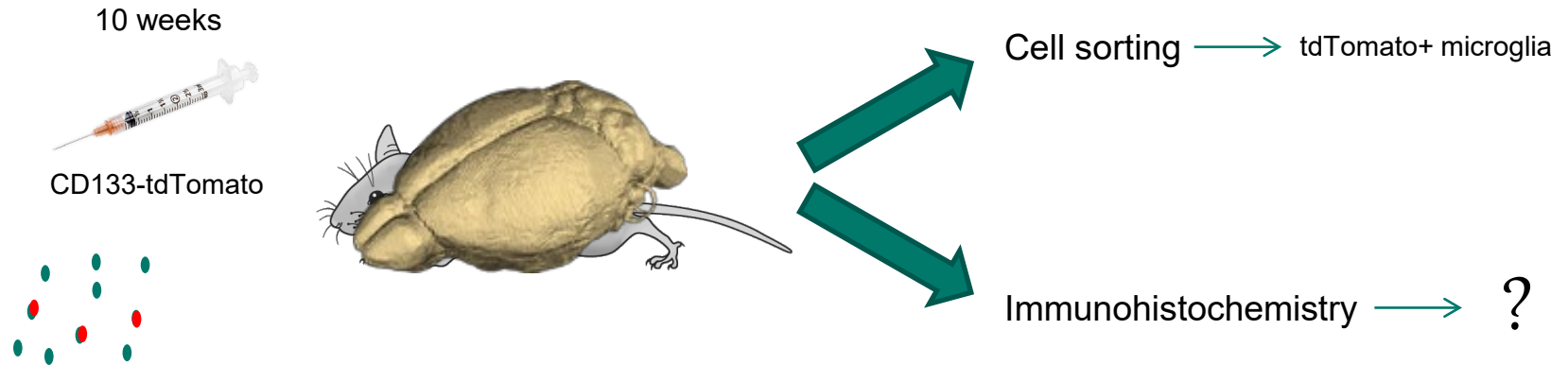
## PROLIFERATION OF REMNANT MICROGLIA



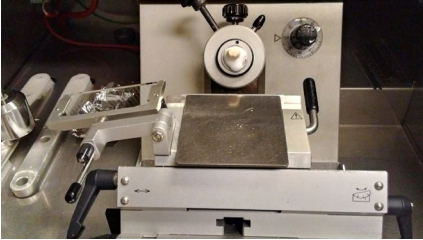
## DIFFERENTIATION OF PROGENITOR CELLS



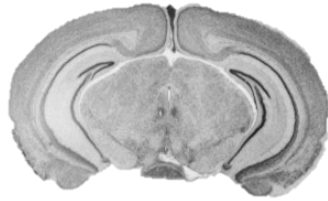
# CNS-Dwelling Microglia Progenitors



# Methods



1. Slice brains



2. Stain sections

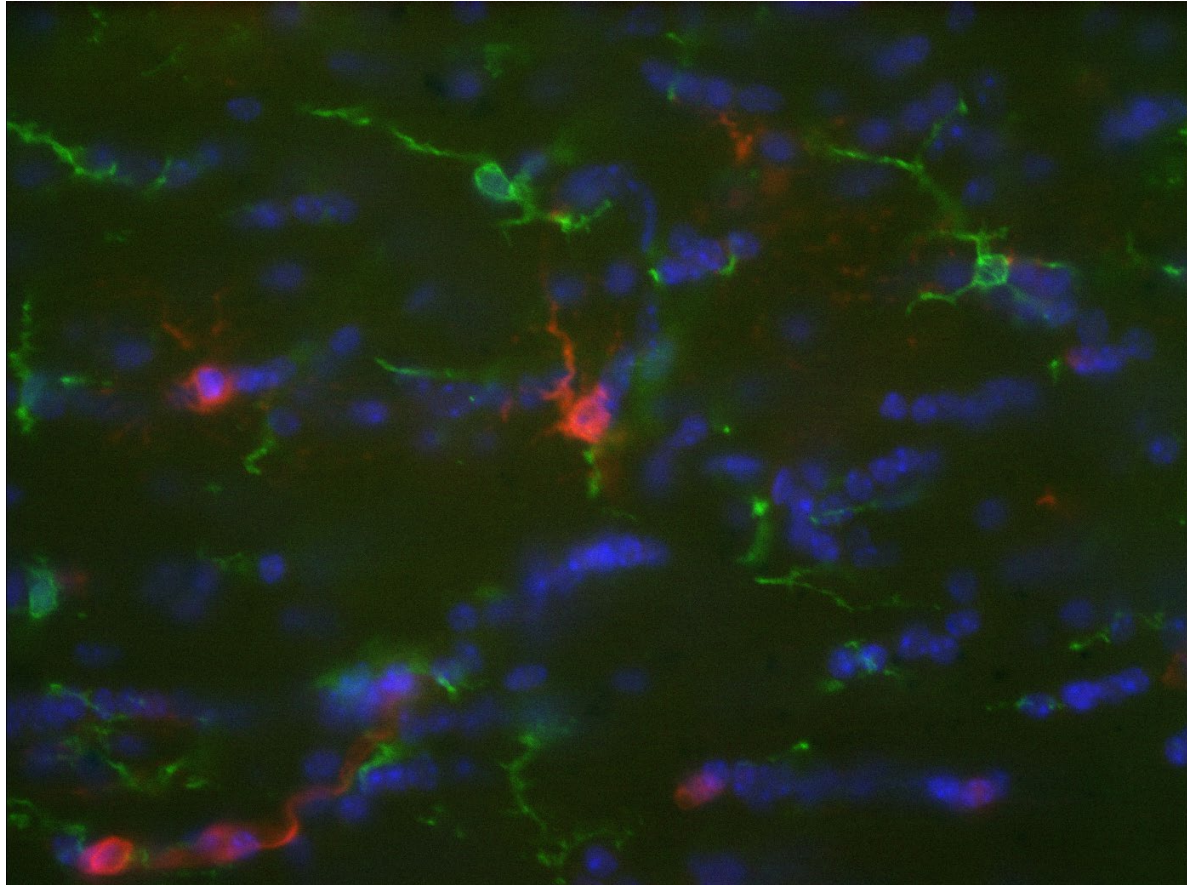


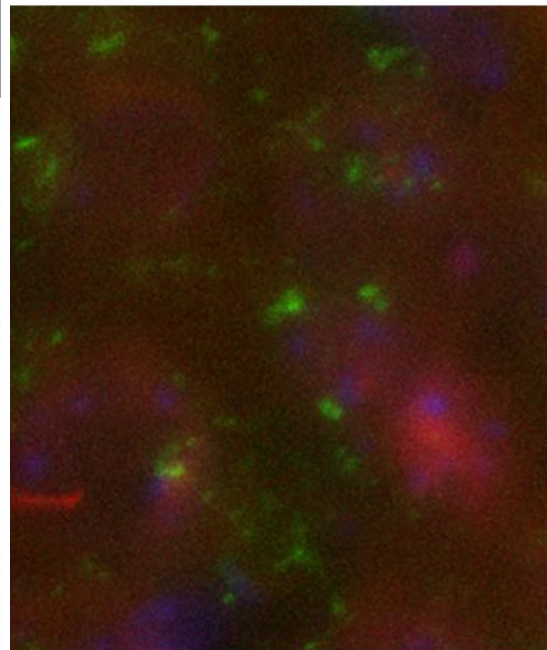
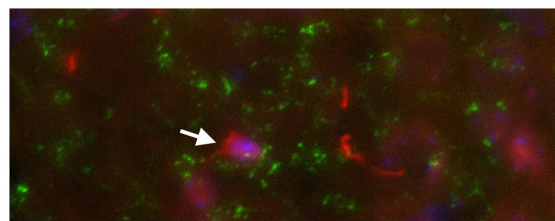
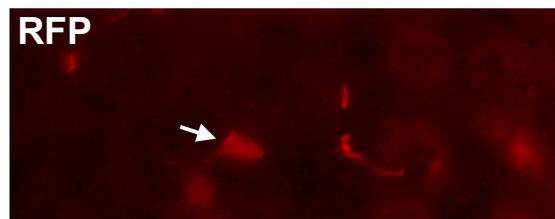
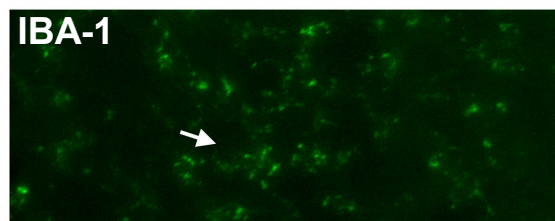
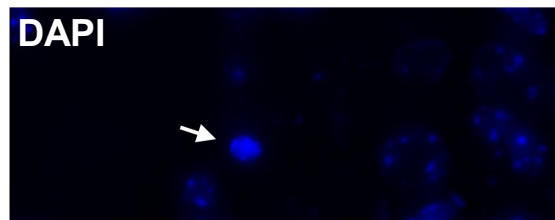
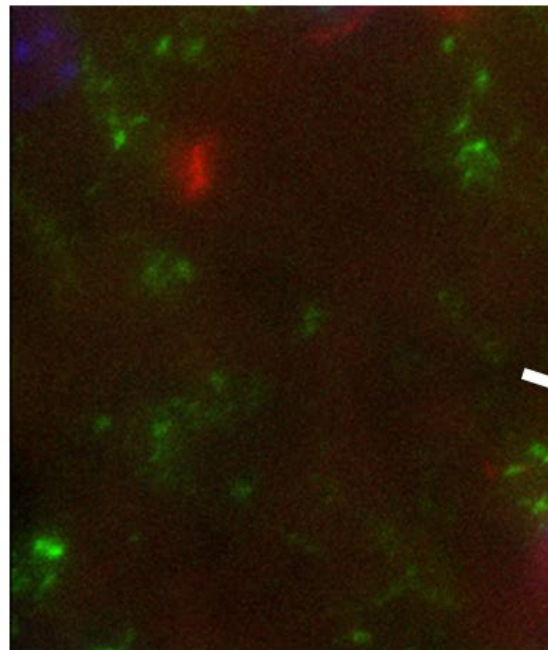
3. Mount onto slides



4. Visualize sections

DAPI Iba-1 RFP







# Conclusion

- Immunohistochemistry may be a viable method to characterize microglia derived from CNS-dwelling progenitor cells
- More immunohistochemistry and microscopy is needed to draw conclusions about populations of microglia derived from CNS-dwelling CD133-expressing cells



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