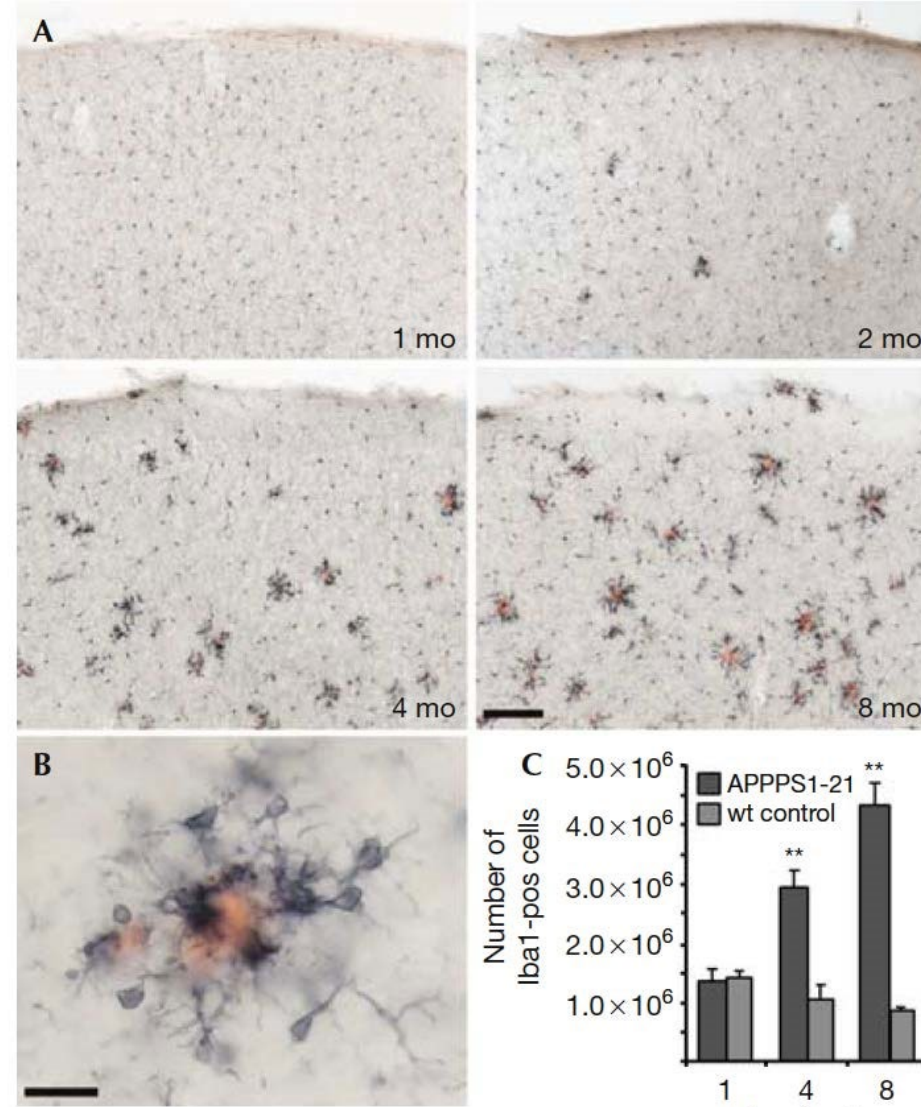
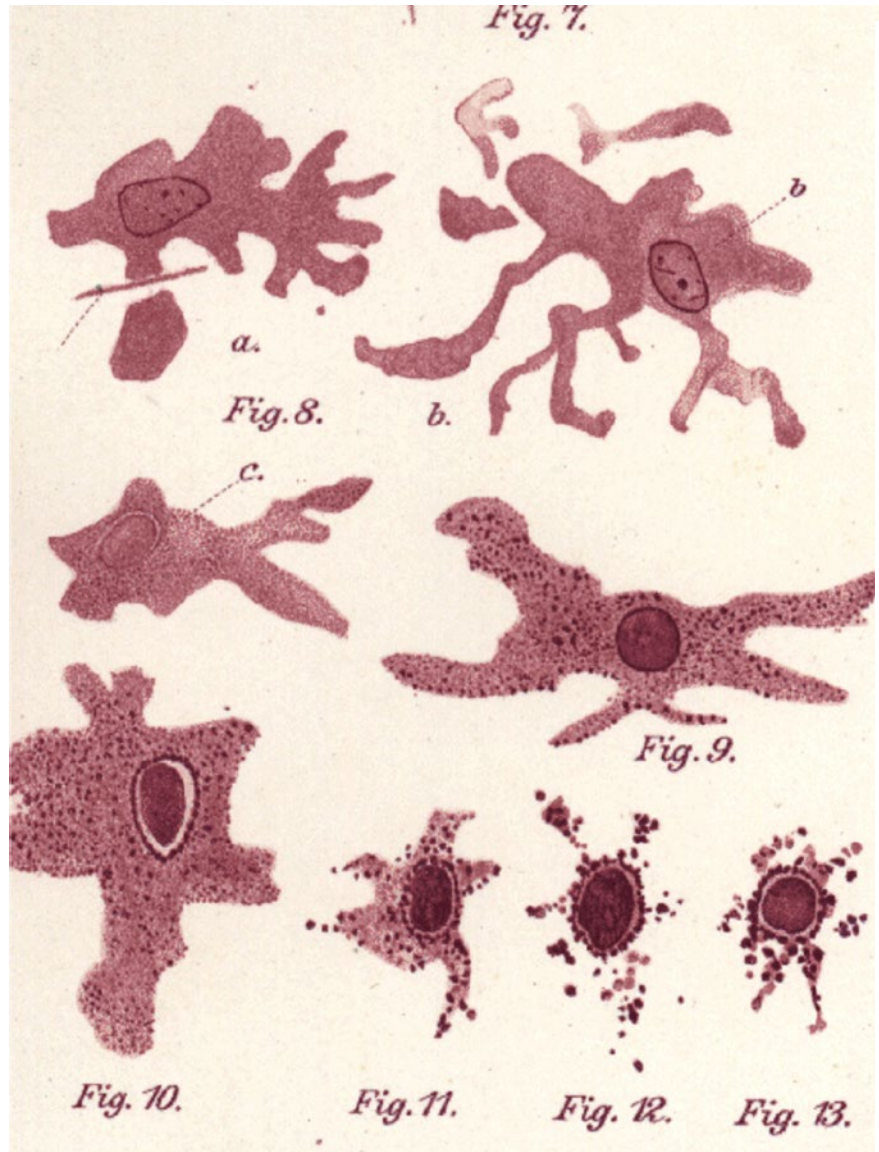


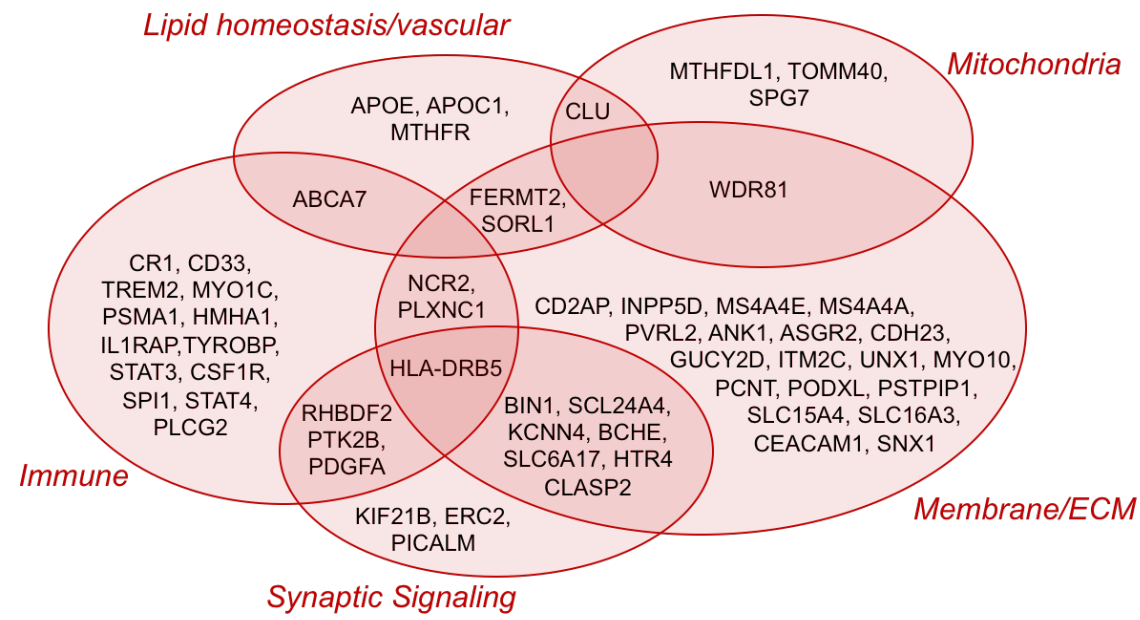
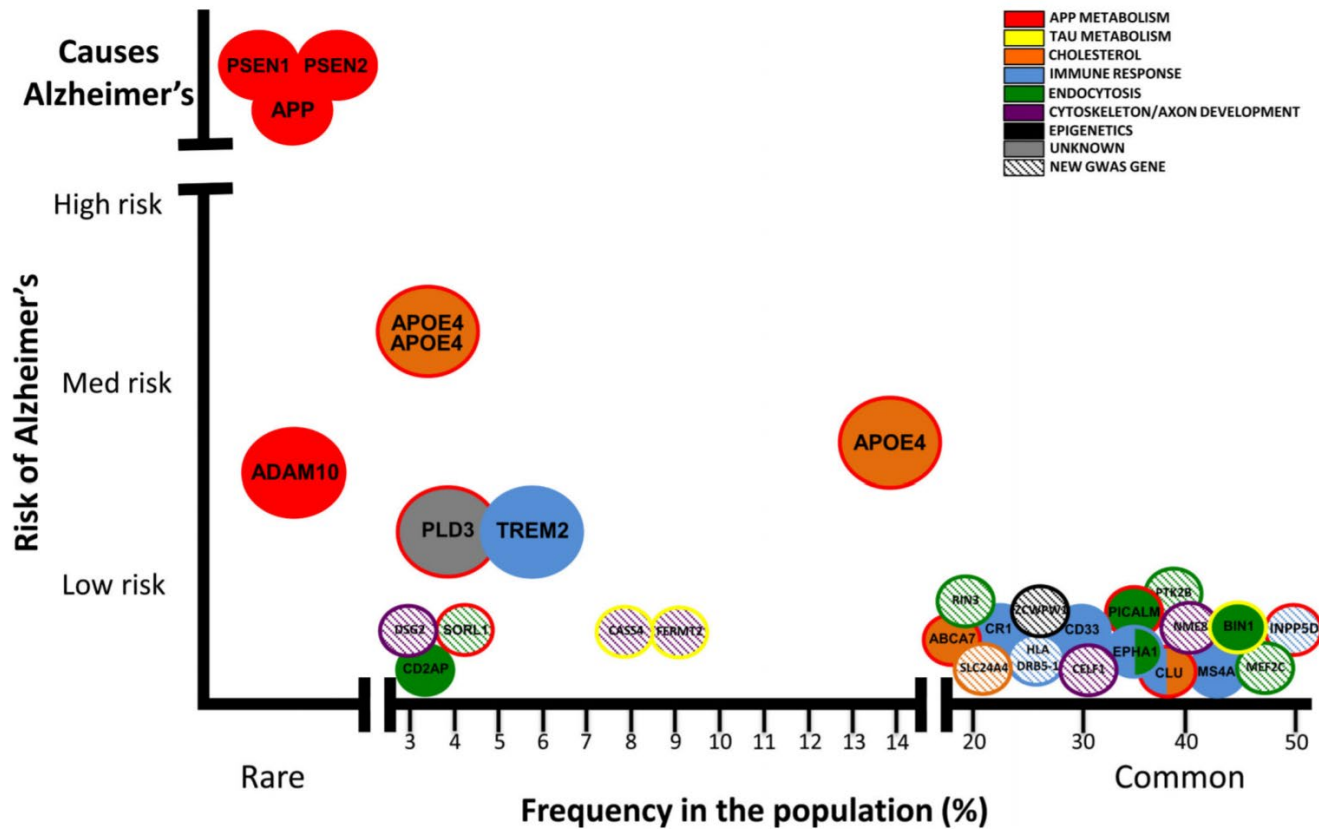
In Addition to A β and Tau, Innate Immune Cells Also Associated with Alzheimer's Disease

APPPS1 Mouse Model of AD

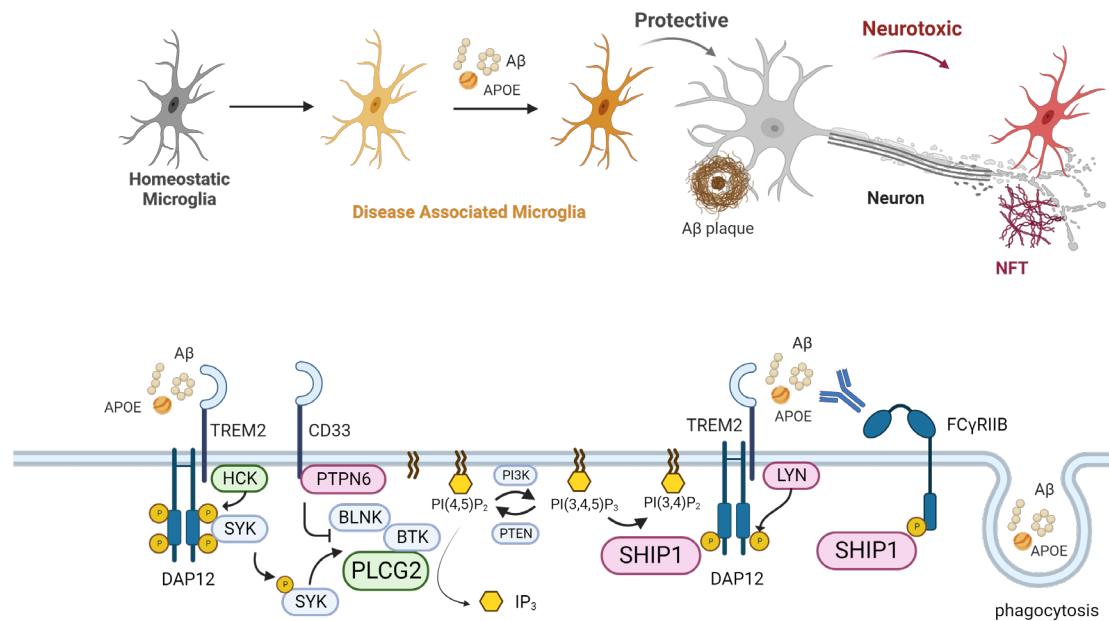


Iba1

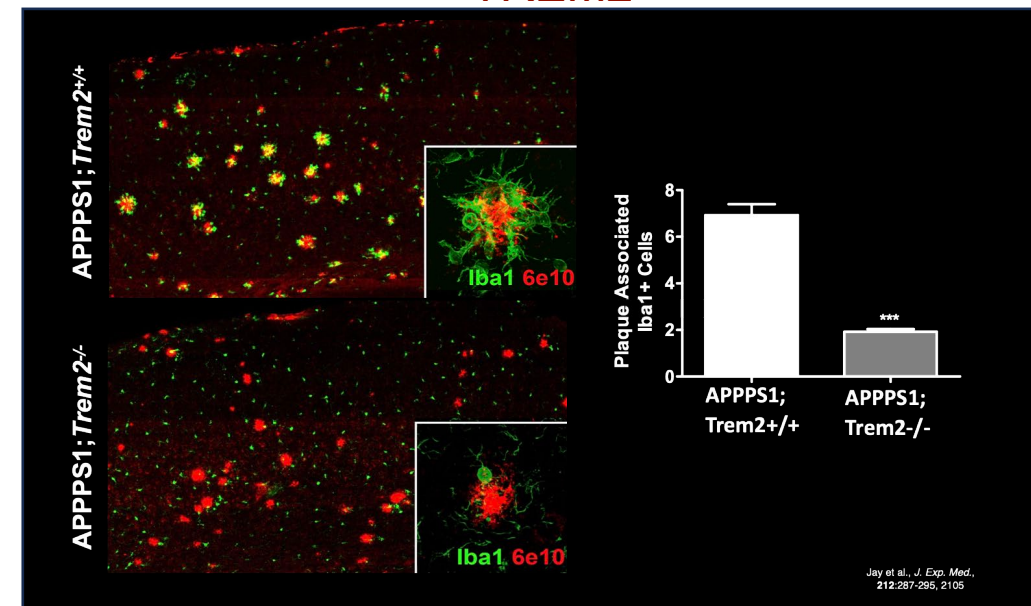
Genetic and Systems Biology Studies of AD Implicate Innate Immune Pathways



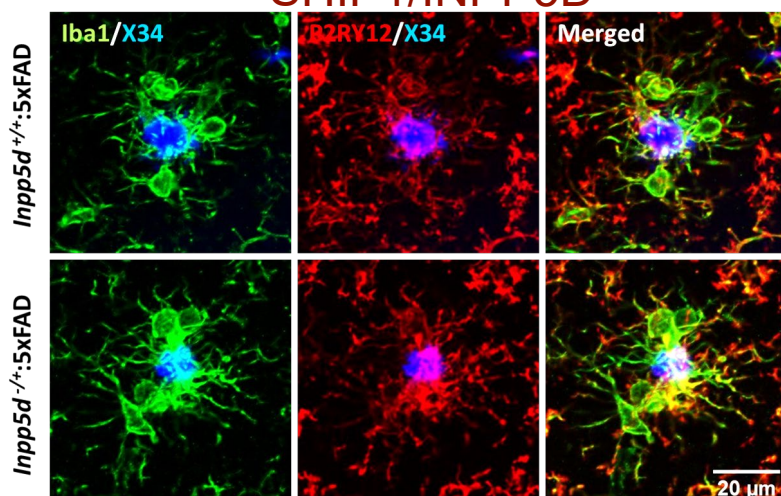
Microglial Pathways in Alzheimer's Disease



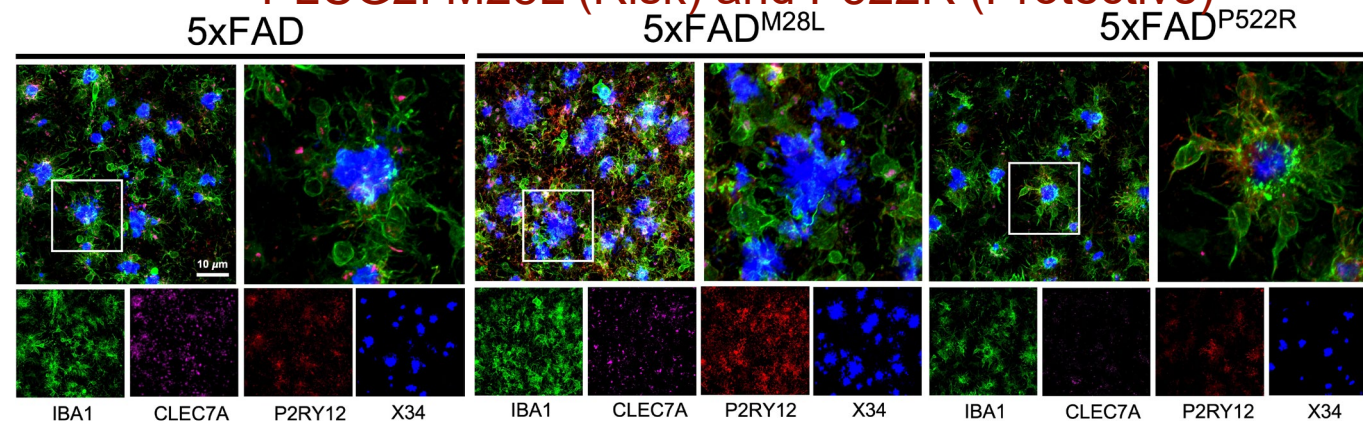
TREM2



SHIP1/INPP5D



PLCG2: M28L (Risk) and P522R (Protective)



Tsai et al., *Immunity*, Sept. 1, 2023



MODEL-AD

Model Organism Development & Evaluation for Late-Onset Alzheimer's Disease

Lin et al., *Alzheimers Dement.* Dec. 16, 2022

IUSM/Purdue TREAT-AD Center Identifying SHIP1 Inhibitors and PLCG2 Activators



TREAT-AD

Target Enablement to Accelerate Therapy Development for AD

Gaps and Priorities for Understanding Immune Factors in Neurodegeneration

- **Pathways Promoting Various Microglial States in Neurodegeneration**
- **The Role of Adaptive Immunity in Neurodegeneration**
- **Links Between Microglial Biology and Astrocytes, Neurons, Oligodendrocytes and Endothelial Cells**
- **Examination of Role of Microglia in Antibody-Dependent Removal of A β and ARIA**
- **Utilization of Broad-Based Cellular (iPS) and Animal Models (MODEL-AD)**
- **Development of Candidate Therapeutics Targeting Specific Immune Molecules**
- **Identification and Characterization of Immune-Based Biomarkers for Therapeutic Development**