## **Supplemental Information**

- **Table S1**. Differential gene expression analysis comparing each of the 15 clusters to all other 14 clusters, Related to Figure 1.
- **Table S2**. Differentially gene expression analysis comparing P60 IEG+ microglia to P60 homeostatic microglia, Related to Figure 3.
- **Table S3**. Differentially gene expression analysis for bulk RNA-seq and scRNA-seq comparing microglia from each brain region to microglia from all other regions, Related to Figure 3.
- **Table S4**. Cell cycle phase-specific genes identified by pseudotime analysis of dividing microglia, Related to Figure 4.
- **Table S5**. Differentially gene expression analysis comparing P7 microglia clusters, Related to Figure 5 and Figure 6.
- **Table S6**. Gene ontology analysis for enriched biological process and cellular component terms in early postnatal PAM relative to P7-C0 immature microglia, Related to Figure 8.
- **Table S7**. Manually curated genes that were enriched in early postnatal PAM and involved in energy metabolism, lysosomal functions and lipid metabolism/transport, Related to Figure 8.
- **Movie S1**. 63X confocal stack showing CLEC7a<sup>+</sup>(red) CX3CR1-GFP<sup>+</sup> microglia in the P7 cerebellum engulfing other nuclei (see also Figure 8A for a presentative single plane, and Figure 8B for 3D reconstruction of a typical microglia phagocytosing a pyknotic nucleus), Related to Figure 8.
- **Movie S2**. 3D reconstruction of early postnatal PAM (CX3CR1-GFP<sup>+</sup>) engulfing cCASP3<sup>+</sup>MBP<sup>+</sup> oligodendrocytes in the P7 white matter, Related to Figure 8.