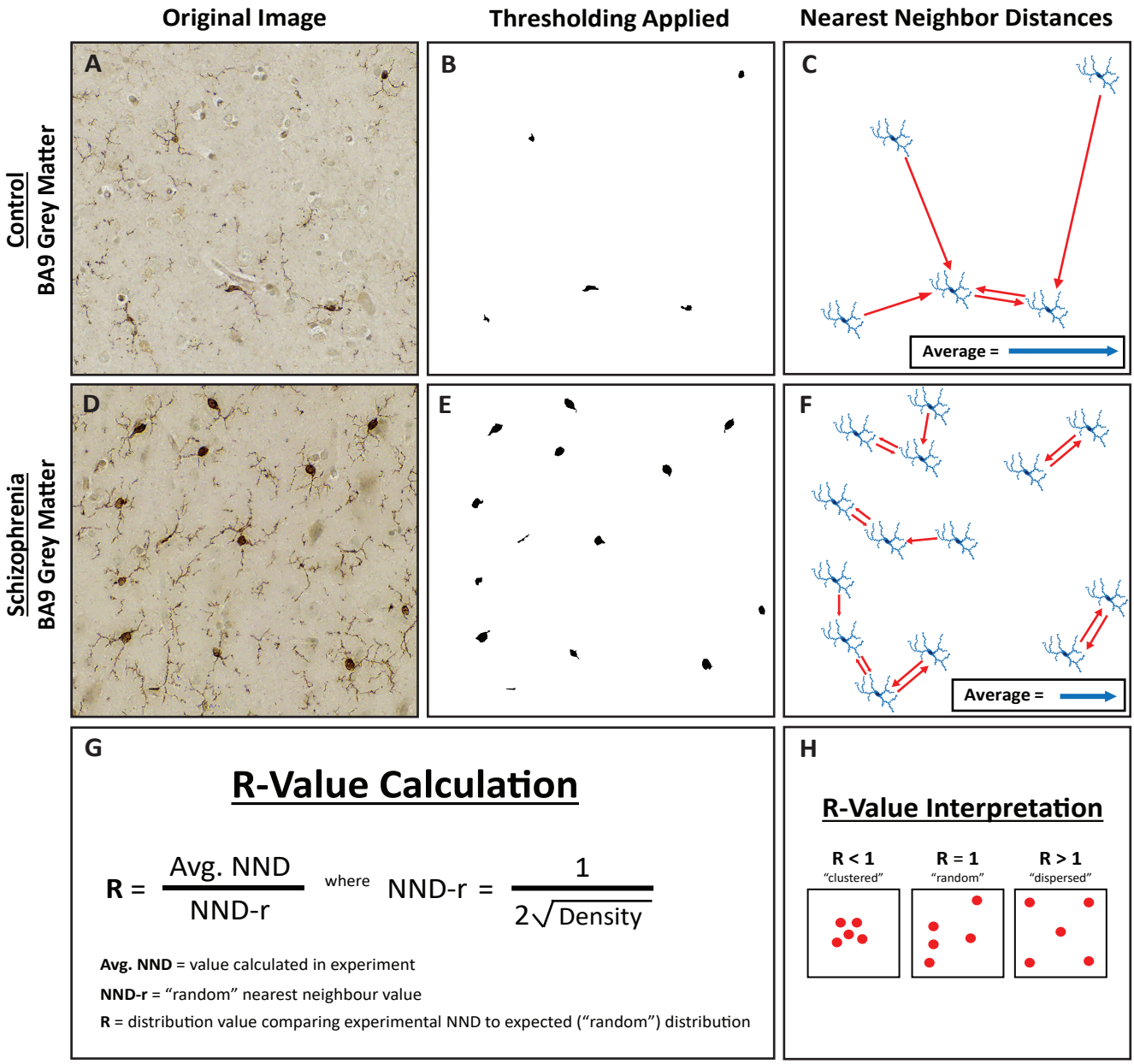
Supplementary Data 1



Supplementary Figure 1. An overview of the computation of the nearest neighbor distances (NNDs) and calculation of a population distribution (R-Value). Examples of microglia captured are seen in (A-C, control; D-F, schizophrenia) where individual microglia were converted to binary (B, E). The Nearest Neighbor Plugin was used to measure the distance of each microglia to its neighboring microglia; allowing the average NND to be calculated (C, F) in each region of interest (ROI). The R-Value equation to calculate the microglial distribution for each ROI as a ratio of the average NND over a hypothetical "random" nearest neighbour value (NND-r) (G). The R-Value is then used to model whether microglia are distributed in a cluster formation (R<1), randomly formation (R=1) or in a dispersed formation (R>1; H). (Choe *et al*., 2016; Thumbi *et al*., 2010)