



**Supplemental Figure 4.** HFD cause increased CD11b (green) and Iba1 (red) expression in the ONL. Representative retinal immunofluorescence microscopy results, with (left) and without (right) DAPI staining (blue), showing retinal layers of the (A) CL+CON group, the (B) CL+HFD group, the (C) CD+CON group, and the (D) CD+HFD group. Measured fluorescence in the ONL, showing (E) CD11b+ increased (1-way ANOVA,  $F(3, 17) = 8.955$ ,  $p = 0.0009$ ) in both HFD groups while Iba1 increased in the CD+HFD group while ONL Iba1 did not significantly differ between groups (1-way ANOVA,  $F(3, 17) = 3.061$ ,  $p = 0.056$ ). Images from the CL+CON group ( $n = 5$  mice), CL+HFD group ( $n = 4$  mice), CD+CON group ( $n = 7$  mice), and CD+HFD group ( $n = 5$  mice) include both sexes. Data are presented as mean  $\pm$  SEM and analyzed by 1-way ANOVAs with Dunnett tests. \* $p < 0.05$ , \*\* $p < 0.01$ , \*\*\* $p < 0.001$  vs CL+CON group. Scale bar =  $12\mu\text{m}$ .