



**Supplementary Figure 1. Age-related changes in RPE autofluorescent and pigmented granules.**

Representative bright field images overlaid with epifluorescence image in the green-red (A, C, E, G) and far-red (B, D, F, H) channels. Human cryosections of a 38 week-old fetal RPE (A, B), a 3 year-old (C, D), a 7 year-old (E, F), and a 72 year-old (G, H) donor were observed on epifluorescence in the green-red and far-red channels; autofluorescence was merged into bright field images. The fetal RPE showed the presence of pigmented apical granules non-fluorescent (A, B, arrows). In the 3 year-old RPE donor the majority of the pigmented granules were also fluorescent in the far-red channel (D); a few granules fluorescent in the green-red channel were already present (C). In the 7 year-old RPE donor the majority of the granules were fluorescent in both the green-red (E) and the far-red (F) channels. The RPE from old donors displayed the presence of pigmented non-fluorescent granules apically localized; their cytoplasm is filled with granules fluorescent in both the green-red (G) and the far-red (H) channels. Scale bar = 100 $\mu$ m.