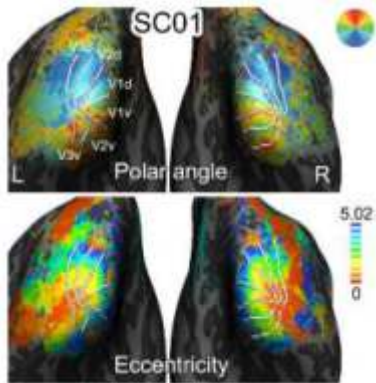


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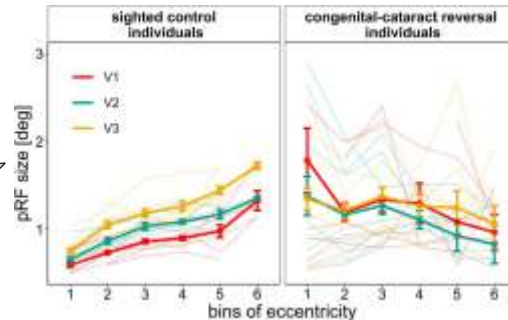
Early visual experience refines the retinotopic organization within and across visual cortical regions

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Functional magnetic resonance based **retinotopic polar angle** (top) and **eccentricity** (bottom) maps of a normally-sighted individual.

Population receptive field sizes for controls and congenital-cataract reversal individuals as a function of eccentricity for the visual areas V1-V3.



In individuals with **reversed congenital cataract**, brain imaging-based **population receptive field sizes** in visual cortex were larger and did neither increase with eccentricity nor across visual areas as known for normally-sighted individuals. The **cortical magnification** factor was lower in the patient group. The brainimaging measures predicted visual acuity.

These results suggest a critical role of early vision for the refinement of the retinotopic organization in visual cortex.