





## Indo-German Lab of LVPEI

## Sound Suppresses Earliest Visual Cortical Processing After Sight Recovery in Congenitally Blind Humans

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## Standardized source current density (sLORETA solution) Unimodal Visual Stimulation: Spatially Incongruent Audiovisual Stimulation: Spatially Congruent CC MCC DC MDC

CC: congenital cataract reversal individuals, MCC: matched controls for the CC group, DC: developmental cataract reversal individuals, and MDC: matched controls for the DC group.

When sounds were presented simultaneously, the earliest, stimulus-driven retinotopic visual cortical activity (< 100 ms) was suppressed in sight-recovery individuals with a history of congenital pattern visual deprivation (CC group). Moreover, this sound-driven suppression of retinotopic visual activity in the CC group was spatially specific.

→ Atypical crossmodal brain networks are not completely lost after sight recovery, but coexist with spared visual networks

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