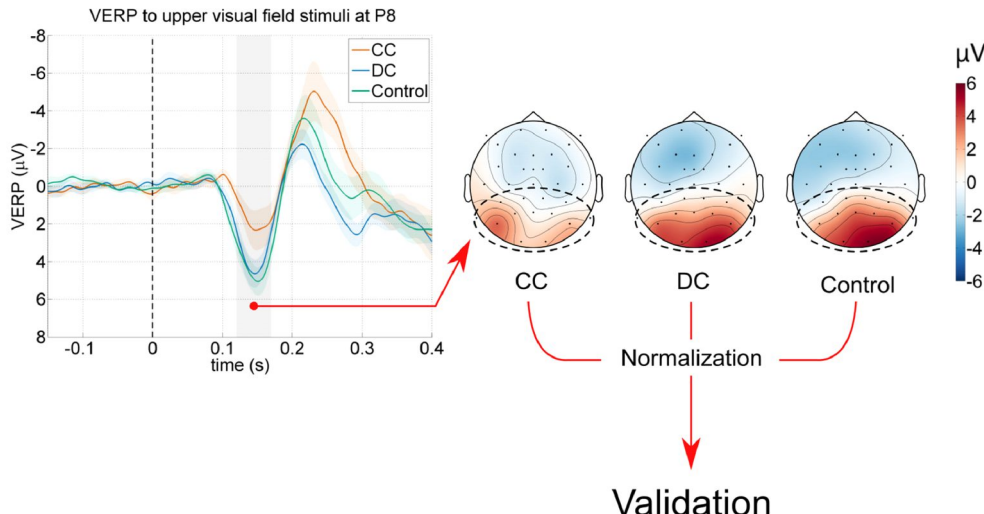


Indo-German Lab of LVPEI

A History of Congenital vs. Developmental Cataracts Can Be Reliably Classified After Sight Restoration by Electrophysiological Methods

Suddha Sourav, Davide Bottari, Idris Shareef, Ramesh Kekunnaya, & Brigitte Röder

Persistent visual processing differences in later cortical stages can be used as an electrophysiological biomarker for diagnosing a history of congenital vs. developmental cataracts after sight restoration. These biomarkers benefit rehabilitation planning after surgery as well as basic scientific enquiry.



The P1 wave, seen in the shaded region (120 – 170 ms after stimulus presentation), is markedly reduced in sight restored bilateral congenital cataract individuals (CC), but not in individuals who had a history of developmental cataracts (DC). These differences can be used as reliable biomarkers, which generalized well over new experiments as well as over new participants.

