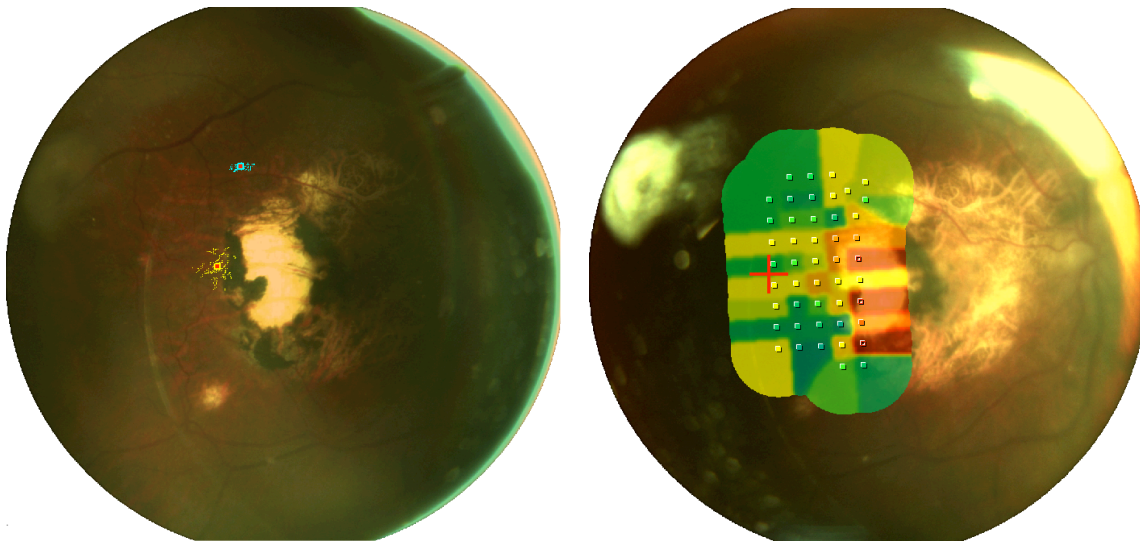


Plasticity of Fixation in Patients with Central Vision Loss
Tarita-Nistor, González, Markowitz, & Steinbach

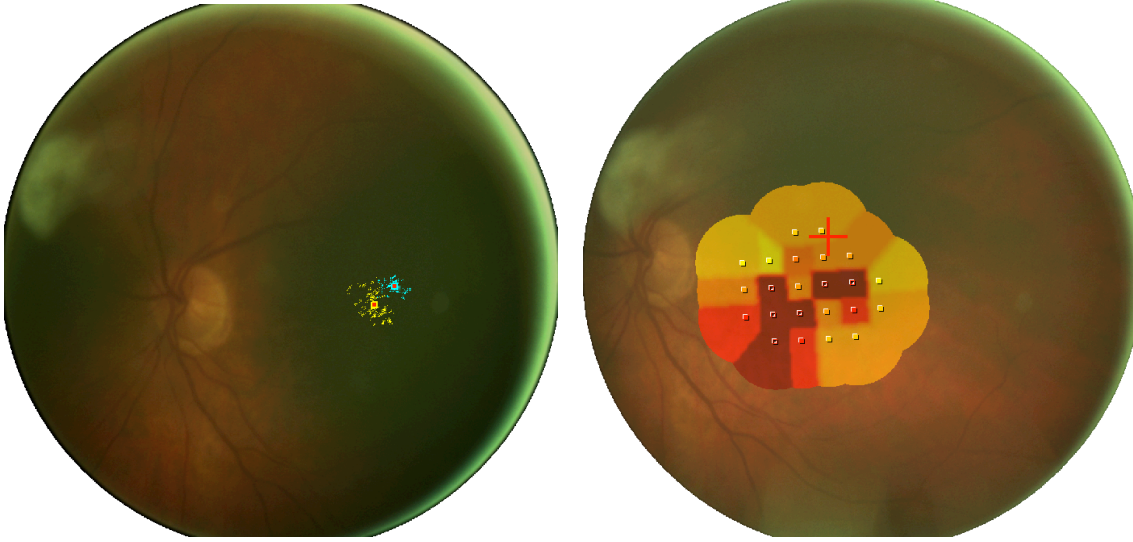
Supplementary Information

Below are the fundus photographs and microperimetry results of the six patients tested. The left panel shows the differential map analysis of the fixation stability before training (yellow dots) and after training (blue dots). The right panel shows the microperimetry results (interpolated color map): green indicates the most sensitive retinal areas and red indicates unresponsive areas (absolute scotoma). Additional information is provided for each patient.

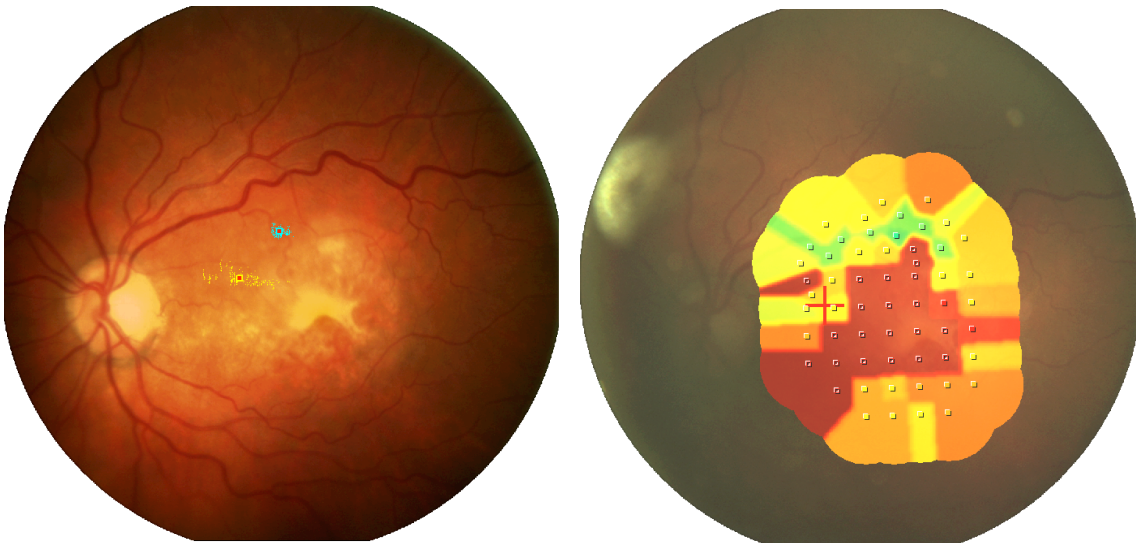
(Note that the colours used in the differential map analyses and microperimetry results are those produced by the MP-1 microperimeter.)



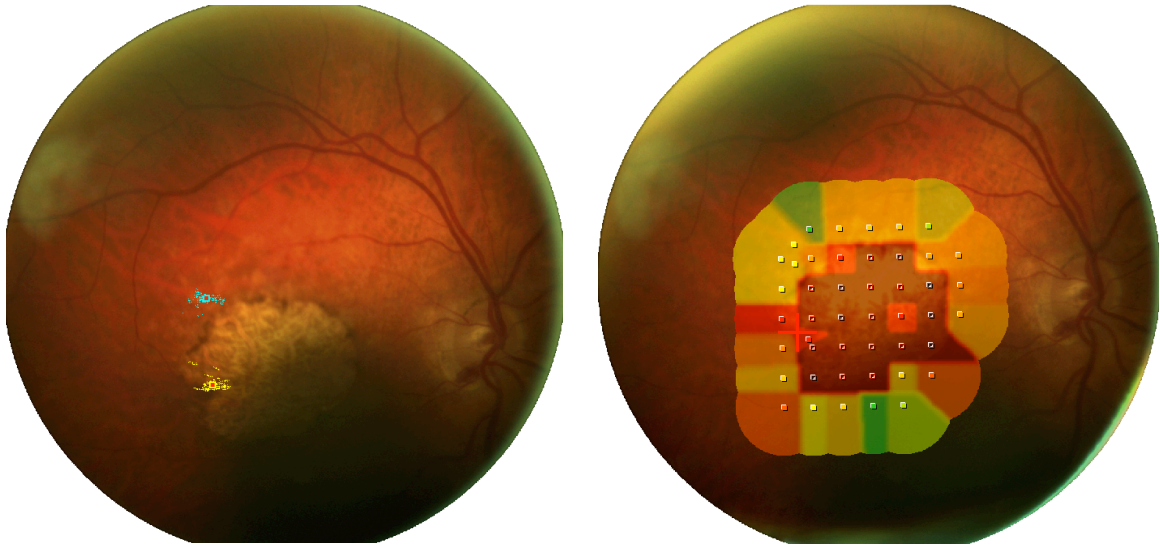
Patient #1: He used to be an avid reader, but stopped reading books several years before training. He is registered with Canadian National Institute for the Blind. He lost the left eye (he uses a prosthesis) due to infection after cataract surgery. The old PRL was on the side of scotoma and the most sensitive retina on top. After training, fixation improved, the patient finished the whole book we assigned homework from, and wanted to try large print books.



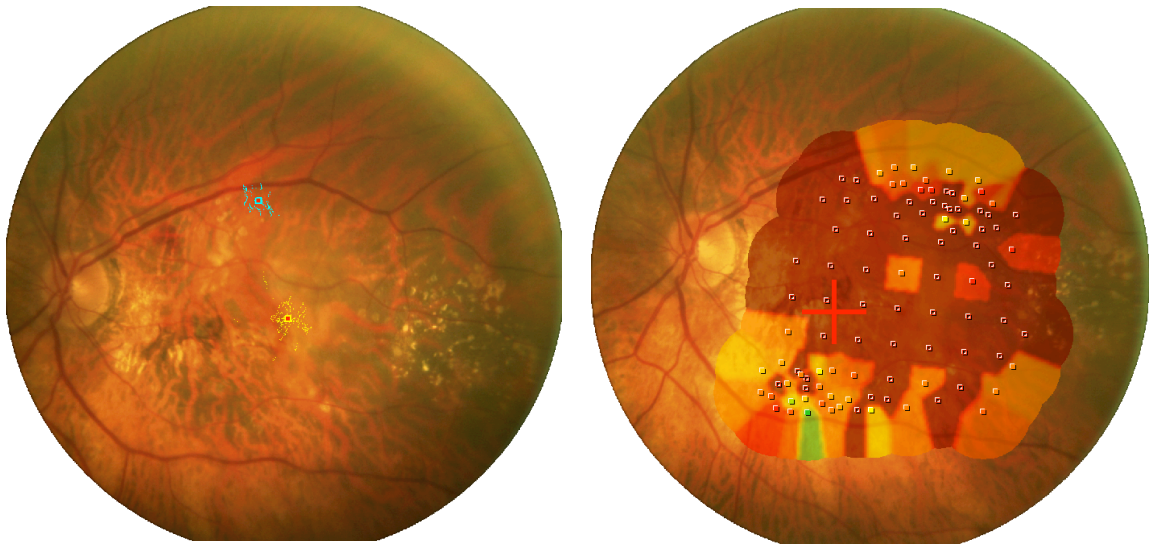
Patient #2: She had mild cataract, used to be an avid reader, read with a magnifier, but not for long periods because she experienced headaches when reading. After training, fixation improved, the patient finished the whole book and the headaches disappeared. She was very satisfied with her progress and wanted to try large print books.



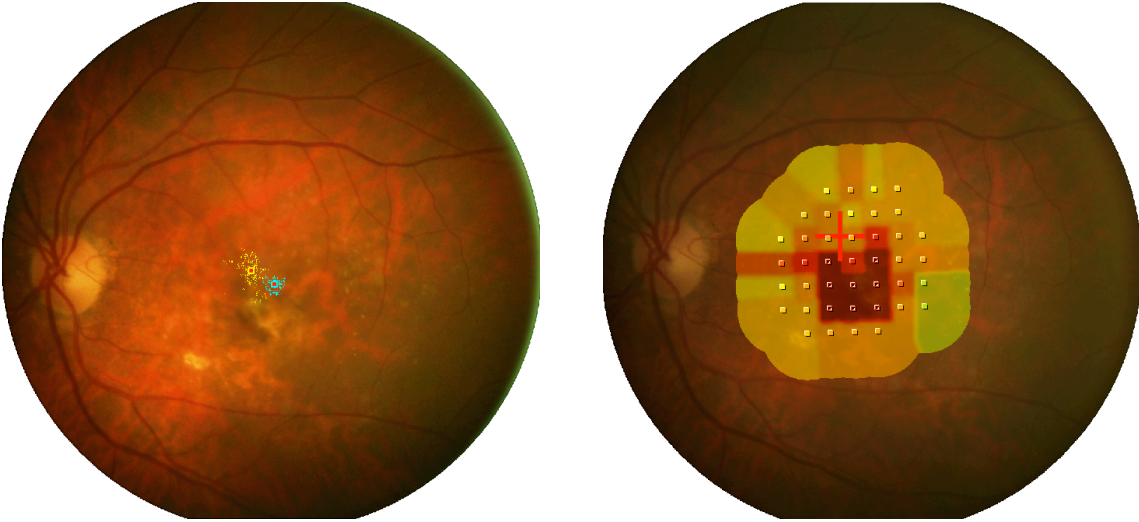
Patient #3: PRL was located between optic disc and scotoma. Most sensitive part of the retina was on top of the scotoma. Fixation improved after training and the patient was able to finish the book. She was very satisfied with the program.



Patient #4: He could not read, PRL was located on a small island of good retina surrounded by scotoma. He experienced Charles-Bonnet syndrome (spider-web image) during training. After training, he could see better when watching TV. He became aware of his scotoma. He was not as much interested in reading as in watching TV.



Patient #5: She had very poor vision, did not read at home, not even with magnifiers. The patient was very frustrated with her loss and the impairment severely affected her activities of daily living. She was not aware of any island of good vision. After training, she was able to read labels in stores and see features of faces.



Patient #6: This patient could only read headlines, could not read bills. She was very sad about her impairment. Fixation stability was poor and she displayed disorganized eye movement strategies. After training, fixation stability improved and she was able to finish the whole book. The patient was very satisfied with the progress and borrowed large print books form the library.