



# Visual Assessment Laboratory

## Centre for Vision Research

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The Visual Assessment Laboratory provides a common facility to assess basic visual and visual-motor functions, including visual acuity and contrast sensitivity, colour vision, stereovision, eye movements and pupil responses, movements in 3D space and perimetry.

It contributes crucial capacity for research in vision and migraine, recovery from stroke, normal visual and motor aging studies, and early-stage Alzheimer's research.

The visual perimeter allows researchers to conduct basic measurements of a subject's visual sensitivity at many different places in the visual field. It helps to identify areas where individuals are less sensitive or may have impaired vision, which is common in diseases related to aging such as macular degeneration, glaucoma and diabetes. This functionality is crucial to York University's expanding specialization in aging and diabetes research.

Perimetry also has applications to migraine research. By frequently testing individuals who experience migraines, researchers can determine how visual sensitivity fluctuates over time in response to migraine episodes, and use the data as a measure of changes in some aspect of eye-brain function over time.

Eye trackers monitor eye position and follow a person's gaze from instant to instant as they inspect a visual scene. Stereovision tests, such as stereograms viewed through red and green glasses, allow researchers to study how the brain interprets 3D images.

