

Center for Human Phenomic Science

Ophthalmology Core Facilities

The Pediatric Ophthalmology Research Core of the Center for Human Phenomic Science (CHPS) of Children's Hospital of Philadelphia and the University of Pennsylvania is located within the divisional clinical space.

A variety of standardized measures of visual function are currently available for research projects including recognition acuity (pre-literate symbols and letters, using the standardized protocol from the Pediatric Eye Disease Investigator Group and ETDRS), grating acuity using the Teller Acuity Card procedure, contrast sensitivity using the Pelli-Robson chart, and visual fields using the Humphrey automated fields analyzer and Goldman perimeter.

Full-field sensitivity threshold (FST) testing is also available as are electroretinography and visual evoked potential testing performed using standard, internationally accepted protocols. As space permits, double-arc perimetry may also be available to assessing visual field extent in very young children. Optical coherence tomography (OCT) is available for precise assessment of ocular structure. Fundus photography and ocular ultrasonography are also available. Color vision testing is available for red-green and acquired defects using standard pseudoisochromatic plates.

Core Director Gil Binenbaum, MD and Ophthalmology Core [Administrator Agnieszka Baumritter, MS](#) can provide consultation about the use of the core in clinical research. In general, testing will be conducted by trained ophthalmic technicians with interpretation as needed by clinicians in the Division of Ophthalmology.