**Graduate Programs**

**PhD Program**

- Designed to prepare students for careers in vision science research and education.
- Special attention is given to fundamental background in vision science in addition to the student’s specialty area.
- Requires a minimum of 60 semester hours, computer programming, and research methods.
- Awards Master’s and/or Doctoral degrees on a competitive basis.

**RIS Program**

- Provides a broad background in vision science and supervised research training in an area of specialization.
- Requires a minimum of 30 semester hours, including a research project, a written defense, and a dissertation.

**Combined OD/MS Program**

- For OD students who are interested in both clinical practice and research.
- Provides predoctoral education in optometry, physiology, and vision science.
- Special attention is given to a fundamental background in vision science.

- **Combined Residency/Graduate Program**
  - For ODs, ophthalmologists, and optometrists obtaining the OD or PhD degree with advanced clinical training.
  - Residents are available in the areas of contact lenses, pediatric eye care, and ocular surface.
  - Separate applications must be submitted to the residency program and the graduate program.

**Financial Assistance Available for Graduate Students**

- Teaching/Research Assistantships, salaried positions approximately one-third of NIH postdoctoral stipends.
- Tuition support for full-time PhD students.
- Health insurance assistance by the University of Houston.
- Tuition support for the full-time graduate assistantship.
- Tuition support for full-time, resident employees who are residents.
- Tuition support for half-time clinical appointments to qualified students.
- Tuition support for students of veterans and their designated family members.

**Research Specialties**

- **Glaucoma**
  - Amyloid/Biologic Anomalies
  - Ocular Surface/Lens Contact Lenses
  - Retinal Cortical Function and Structure
  - Molecular Cellular Biology of Vision

- **Visual Optics**
  - Visual Performance and Ocular Surface
  - Spatial vision, peripheral vision, reading, statistical and psychophysical methods

**Combined OD/MS Program**

- For OD students who are interested in combining the MS or PhD degree with advanced clinical training.
- Separate applications are submitted to the graduate program in the fall of the 2 year of the program.

- **Combined Residency/Graduate Program**
  - For ODs, ophthalmologists, and optometrists obtaining the OD or PhD degree with advanced clinical training.
  - Residents are available in the areas of contact lenses, pediatric eye care, and ocular surface.
  - Separate applications must be submitted to the residency program and the graduate program.

**Graduate Program in Physiological Optics and Vision Science**

- **ODs, PhDs, and MSs in Vision Science**
  - Designed to prepare students for careers as vision science researchers and educators.
  - Special attention is given to a fundamental background in vision science.
  - Separate applications are submitted to the graduate program in the fall of the 2 year of the program.

- **Combined Residency/Graduate Program**
  - For ODs, ophthalmologists, and optometrists obtaining the OD or PhD degree with advanced clinical training.
  - residents are available in the areas of contact lenses, pediatric eye care, and ocular surface.
  - Separate applications must be submitted to the residency program and the graduate program.
Glaucoma

Laura Frishman, Professor, PhD, University of Pittsburgh. Retinal physiology; noninvasive objective assessment of visual function, analysis and modeling of components of the electroretinogram (ERG), clinical ERG, early detection of glaucoma.

Ronald Harwerth, Professor, OD, University of Houston; PhD, University of Texas Graduate School of Biomedical Sciences. Structure/function relations in glaucoma, animal and human psycholphysics.

Lisa Ostrin, Assistant Professor, OD, PhD, University of Houston. Structural and functional changes in myopia, role of color and light in eye growth, retinal physiology and imaging, glaucoma.

Nimesh Patel, Assistant Professor, OD, Southern College of Optometry; PhD, University of Houston. Optical Coherence Tomography imaging in glaucoma. Neural and non-neural contributions to the retinal nerve fiber layer. The relationship of structural measures with glaucoma progression.

Jason Porter, Associate Professor, PhD, University of Rochester. High-resolution retinal and optic nerve head imaging with adaptive optics; scanning laser ophthalmoscopy, mechanisms of retinal disease, optics of the eye; ophthalmic optics, vision correction strategies and optic nerve.

Vijay Krishna Raghunathan, Assistant Professor, PhD, University of Strathclyde, Glasgow, United Kingdom. Mechanobiology of normal and diseased ocular tissues, novel strategies for tissue engineering/regenerative medicine of ocular tissues.

Amblyopia/Binocular Anomalies

Yuzo Chino, Professor, PhD, Syracuse University. Neural plasticity, binocular vision, amblyopia, development.

Vallabh Das, Professor, PhD, Case Western Reserve University. Eye movement control in strabismus, development of normal and abnormal eye movements, binocular vision, normal and abnormal neural control of oculomotor circuits in the brain.

Karen Fern, Associate Professor, OD, Pacific University. Vision development, assessing visual functions in preschool children, preschool vision screening.

Earl Smith III, Professor, OD, PhD, University of Houston. Myopia, amblyopia, binocular vision, effects of visual experience on visual system development, primate model of glaucoma.

Janice Wensveen, Clinical Professor, OD, University of Waterloo; PhD, University of Houston. Stereopsis in normal and abnormal binocular vision, clinical accommodative/vergence anomalies, risk factors for myopia.

Oculomotor Control

Heather Anderson, Associate Professor, OD, PhD, University of Houston. Accommodative and visual function in children and individuals with Down syndrome.

Vallabh Das, Professor, PhD, Case Western Reserve University. Oculomotor control in strabismus, development of normal and abnormal eye movements, binocular vision, normal and abnormal neural control of oculomotor circuits in the brain.

Scott Stevenson, Associate Professor, PhD, Brown University. Vergence eye movements and binocular coordination, stereoscopic depth perception, modeling of binocular image matching processes.