Dr. Heather Anderson's research interests include pediatrics, binocular vision, and objective measurement of accommodation. In addition, Dr. Anderson conducts research with individuals who have Down syndrome with the goal of optimizing visual performance for this population. Her work with Down syndrome includes evaluation of objective spectacle prescribing strategies for refractive error, assessment of accommodation, and measurement of corneal anomalies and optical aberrations.

Dr. Melissa Bailey's laboratory, Lab4Eyes (u.osu.edu/bailey352), is devoted to helping children and adults see better and read better. Dr. Bailey has an active research program, studying cilary muscle development and how it relates to myopia, accommodative function, and academic achievement. She is also working to develop and commercialize new devices that will allow healthcare providers to make more accurate eye measurements and improve access to vision care for patients around the world.

Dr. Angela Brown studies color vision and infant visual development. She collaborates with Dr. Delwin Lindsey in a study of the perception and naming of colors by the Somali people who live in Columbus Ohio. Recently, Dr. Brown was the first person ever to measure the contrast sensitivity of newborn and premature infants, and she is working to develop new methods to measure contrast sensitivity test for use in clinical infant vision testing worldwide.

Dr. Andrew T.E. Hartwick’s primary research focus examines the mechanisms by which cataracts and secondary cataracts form, and there are several ongoing projects in her laboratory that pertain to protein regulation in the cornea. Research opportunities include: reducing secondary cataract formation through surgical or pharmacologic intervention and improving corneal wound healing. While Dr. Chandlers research is laboratory-based, the overall goal of her lab is to take bench research findings and clinically apply them to the chairside.

While Dr. Stacey Choi's research interest is the application of adaptive optics (AO) retinal imaging systems to enhance understanding of disease mechanisms of retinal and optic nerve diseases. The AO technology allows us to visualize cellular structures in the retina and optic nerve head in living eyes. We are particularly interested in identifying early biomarkers of these diseases from our in-vivo images and functional tests for earlier diagnosis, hence leading to better prognosis for the patients.

Dr. Timothy F. Plageman, Jr.'s research interest is the design, construction and use of high resolution retinal imaging systems to study the structure and function of the human eye. This is achieved through the use of adaptive optics to overcome the ocular aberration allowing for the ability to observe single cells in-vivo. The overall aim is to use cell based measurements of retinal health to predict disease at a much earlier stage than is currently possible clinically.
Dr. Bradley Dougherty conducts research to better our understanding of the impact of vision impairment and to evaluate rehabilitation approaches for patients with low vision. He is currently conducting a study in collaboration with the Department of Ophthalmology of the relationships among stress and depression, inflammation, and treatment outcomes in patients with low vision. Another research focus is road safety in drivers with low vision who use biopic telescopispectacles.

Dr. Jennifer Fogt's interests include anterior segment, tear lipid layer research, contact lens and solution design, and visual aspects of human performance. Dr. Fogt is involved in research at both the OSU Human Performance Contra-

Dr. Nick Fogt's laboratory, eye movements and head movements are monitored with a variety of devices. The eye movement studies are focused in two main areas. The first area of study involves eye and head coordination in sports. The second area of study looks at the neural pathways involved in coordination of the two eyes. Problems with eye movement coordination between the two eyes are common clinically.

Signals travel from the eye to the brain via retinal ganglion cells (RGCs), and the anatomy and physiology of these neurons are the focus of Dr. Andy Hartwick's research investigations. He is particularly interested in studying the function of a subset of RGCs that capture light and directly convert it into an electrical signal. In addition, he directs clinical stud-

Dr. Lisa Jones-Jordan is responsible for the data coordi-

Dr. Marjean Kulp's research interests lie in the areas of pediatrics, binocular vision, and refractive error. Her research experience includes serving as a Principal Investigator of the Vision in Preschoolers-Hyperopia in Preschoolers Study and as principal investigator of the OSU College of Optometry clinical center for the Convergence Insufficiency Insufficiency Treatment Trial studies, Vision in Preschoolers study, and pirenzepine for myopia control.

Dr. Lynn Mitchell serves as Director of the Data Coordinating Center for research studies in binocular vision (Convergence Insufficiency Treatment Trial – Attention and Reading Trial) and contact lens trials (Contact Lens Assess-

Dr. Melkun's research activities concentrate on issues in low vision, visual performance, and visual optics. He uses various techniques to evaluate the optical and visual characteristics of the eye, and novel techniques to design and correct optical defects of the eye. Interests also in-

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Dr. Don Mutti's research focused on determining whether youth is an independent risk factor for contact lens complications, and has since expanded toward understanding risk factors associated with adverse contact lens events in both children and adults to promote healthy contact lens wear for all ages.

Dr. Teng Leng Ooi uses psychophysical methods to study how surface contour and top-down processing influence the sensorimotor mechanisms of stereopsis, binocular rivalry and space perception. The knowledge gained is used to advance clinical care of low and binocular vision.

Dr. Bradley Dougherty conducts research to better our understanding of the impact of vision impairment and to evaluate rehabilitation approaches for patients with low vision. He is currently conducting a study in collaboration with the Department of Ophthalmology of the relationships among stress and depression, inflammation, and treatment outcomes in patients with low vision. Another research focus is road safety in drivers with low vision who use biopic telescopispectacles.

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