

## **Andrew Hartwick, OD PhD**

Originally hailing from Thunder Bay, Ontario, Dr. Hartwick graduated with his O.D degree from the University of Waterloo in 1999. Concurrent with his optometric studies, he pursued research projects on the ocular lens in the lab of Dr. Jacob Sivak, then Director of the School of Optometry. This experience ignited his passion for curiosity-driven science, and he remained at Waterloo for an additional year to complete his M.Sc. in Vision Science, defending his thesis and graduating in 2000.

During this period, he also worked as a licensed optometrist in a private optometry practice in Brantford with Dr. H.C. Schuster & Associates and in the School of Optometry's Primary Care Clinic.

In 2001, Andy moved to Halifax, Nova Scotia to commence his Ph.D. studies in the Department of Anatomy and Neurobiology, Faculty of Medicine, at Dalhousie University under the supervision of William Baldrige, PhD. He was awarded an Ezell Fellowship from the American Optometric Foundation and a Canadian Institutes of Health Research (CIHR) Fellowship during his doctoral studies, and he also worked part-time at the Family Vision Clinic, a Halifax-based private optometric practice, owned by Michael Oulahen, OD and Miriam Debly, OD.

In 2005, he received a prestigious Grass Fellowship in Neuroscience Research that enabled him to spend three months at the Marine Biological Laboratory in Woods Hole MA, working on an independent research project on light-sensitive ganglion cells. Upon returning to Dalhousie, he completed and successfully defended his dissertation research related to the effects of glutamate on rat retinal ganglion cells and was granted his Ph.D. in 2006. Dr. Hartwick then moved to Fort Collins CO, and with the support of a post-doctoral fellowship from CIHR, he worked for two and a half years in the lab of circadian biologist Gary Pickard, Ph.D., at Colorado State University.

In the fall of 2008, Dr. Hartwick became an Assistant Professor at the College of Optometry at Ohio State University in Columbus OH. He has been a faculty member there since that time, having been promoted to Associate Professor in 2014. He has taught first and second year courses to optometry students on a variety of topics including the neurophysiology of vision, and has been or is the primary advisor for seven graduate students.

His research interests are centered on how a small group of light-sensitive ganglion cells, which express the photopigment melanopsin, convey information to the brain about ambient light levels that synchronizes internal circadian rhythms to the day/night cycle and regulates the size of the pupil. He has also led clinical-based research on whether the function of these cells is altered in individuals with traumatic brain injury-associated photophobia. His research has been funded by the U.S. Department of Defense, National Institutes of Health, National Center for Advancing Translational Sciences, among others.

Dr. Hartwick is a Fellow of the American Academy of Optometry and has been a member of their Scientific Program Committee since 2014. He is also a member of the Optometric Glaucoma Society, serving as Program Chair of their annual meeting from 2014-16, and has been Co-Chair of the Vision Research Committee of the Ohio Aging Eye Public-Private Partnership since 2014. True to his Canadian roots, Andy remains active in local hockey, as a player and a coach, and lives with his wife Tracy, and their sons Samuel and Elliott, in the Columbus suburb of Worthington, OH.