

UW researchers shed light on nearsightedness

By Joe Reidt

Among the many institutions within the University of Waterloo is the Centre for Contact Lens Research, which is conducting an ongoing study in nearsightedness, or “myopia,” seeking young participants from ages 8–12.

Current research shows that not only have cases of nearsightedness increased, but they can also lead to other health problems. Recent attempts have been made to try to control the eye from growing in a way that it becomes nearsighted, which occurs when internal growth prevents light from being processed through the retina. Although it is usually found during childhood, studies have also shown that nearsightedness has begun to develop in older ages.

“One thing that has become quite apparent in the last 25 years is the percentage of nearsightedness at fairly high levels ... which has become extremely common. The levels seem to be increasing around the world,” said Jill Woods, a clinical scientist at the CCLR.

The development of nearsightedness in higher years complicates things because it can lead to other health problems.

“High levels of nearsightedness are associated with other pathological conditions like glaucoma, cataracts, and retinal detachment. The fact that more people are becoming nearsighted itself isn’t such an issue, but that more people are becoming nearsighted at higher levels. That’s something that can have an effect on the economy worldwide, and health care too,” Woods said.

The research underway at the CCLR will focus on nearsightedness in children, which will hopefully provide information to eliminate potential health risks or strain on the economy. This makes sense, as it coincides with the University of Waterloo’s Sixth Decade Plan to increase Waterloo’s contribution to society. Or in other words, if Woods and other scientists can draw positive results from their studies, those suffering from nearsightedness and other related conditions will benefit around the world.

The University of Waterloo has over 35 senate-approved research centers and institutes, and had a research budget of \$192.6 million from public and private sources for 2011/2012. This is also great news if you’re a kid that doesn’t want to wear glasses underneath your hockey helmet.

“They all want contact lenses,” says Woods of the child participants. “Some because they’re playing sports. Spectacles under a hockey helmet, playing basketball, or running around on a hot soccer field is not the best. Contact lenses are much more conducive for sporting children.”

Woods says that the children have had no major issues with the daily disposable contact lenses.

“They’re extremely keen,” she said.

The study will take place for three years, and children can earn up to \$210 for their participation.