

Optical company sees way to success overseas

By GINO FANELLI

When discussing blindness on a global scale, there are some harsh realities that need to be addressed.

According to the World Health Organization, there are approximately 285 million visually impaired people worldwide, 39 million of whom are completely blind. About 90 percent of those cases are found in the developing world, and about half of those cases are caused by cataracts. According to the Himalayan Cataract Project, an organization aimed at providing cataract treatments to the third world, virtually all of those cataract patients are needlessly blind, and can be cured with a 10-minute, \$25 procedure. In fact, the Project estimates 80 percent of all blindness is preventable or treatable. That equals out to about 31.8 million people in the world who go blind unnecessarily.

But access to treatment is only one piece of the puzzle, and Ovitz Corp., a member of the second Luminate NY cohort, is seeking to deal with the other half. Ovitz is the developer of a portable, handheld system for eye-testing, dubbed an "eye profiler," that can help detect potential problems with vision early, before macular degeneration, cataracts or other conditions progress to debilitation.

Founder Felix Kim began experimenting with the technology behind Ovitz while a student at the University of Rochester in 2013.

"So you put it simply in front of the eye and it automatically captures a live image and computes the number, the basis for your eye-glass prescription," Kim said. "So those people in need in the developing world, we can pretty much identify who needs eyeglasses or who needs surgery, so we can at least refer back to our partnering clinics in those countries."

Ovitz has already been im-

plemented in several countries, including Bangladesh, Vietnam and South Korea, as a means to diagnose eye disease and recommend treatment. The company's autorefractor technology isn't exactly new and can be found in any optometrist's office. But Ovitz's handheld version is a game changer for NGOs working off the beaten path in the developing world. Autorefractors, tools which bounce light off the eye in order to determine what kind of corrective lens is needed to fix refractive error in the eye, can be bulky, expensive and sensitive devices that are difficult to bring out into rural areas. By being small and relatively cheap, Ovitz's devices fix that problem.

"It can be up to a fifth of the price of what's been previously sold in the marketplace," Kim said. "Our technology is able to make this a lot cheaper."

The main business model for Ovitz now is based on partnering with NGOs working in the developing world, getting its products into the hands of technicians who can then head out to remote or underserved villages and offer eye-testing. Eye degeneration is a tricky problem to solve primarily because many people suffering from eye issues don't always recognize that they have a condition. Disorders are typically painless, and even if vision becomes obscured, it's usually a gradual progress.

Kim describes a situation that occurred to him while he was in a rural area of Cambodia. He was showing a taxi driver where to go on his Google map. "He couldn't see it, so I thought he might have presbyopia (nearsightedness), so I zoomed in and he still couldn't make it out ... and finally he tells me 'I can't see.' And I'm in his car."

"People have their vision problems, but they just think it's nor-



Provided photo

A technician uses Ovitz's 'eye profiler.'

mal." They don't realize they have it, Kim said. "That leads to economic and productivity loss."

Ovitz is based in Rochester, originally in West Henrietta, and Kim plans on keeping it that way, citing an optics community that has been constantly supportive as his product developed. As far as manufacturing goes, Kim expects it will be split between Rochester and Southeast Asia, making distribution easier.

Kim himself is originally from Seoul, a world-leading tech city itself, but when it comes to optics

in particular, Rochester has a competitive edge.

"It was kind of a natural thing. I came to Rochester just for a degree, and then I started liking the city," Kim said. "A lot of it's because of the infrastructure for an optics or medical device company. There are a lot of resources in Seoul or other big cities — opportunities for software or IT, but when it comes down to developing optics or medical devices, the resources are here."

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