Dr. Don McPherson of Enchroma didn’t originally set out to invent a solution for colorblindness. As a glass scientist, he had been working on laser safety glasses for surgeons that seemingly also worked as sunglasses. At an ultimate Frisbee tournament, one of McPherson’s friends borrowed these glasses, and discovered a breakthrough – he could now see colors he never could before. Wanting to explore further, McPherson applied for an SBIR grant through the National Institutes of Health, and today, Enchroma glasses are helping people around the world see a full color palette for the very first time.

The majority of Enchroma’s sales are through its website, though there are over 4,000 eyecare professionals that will soon carry the product, which range from $349-429 depending on frame style. The company’s website is also a place where you can take an online colorblindness test. Currently, only 11 states test for this deficiency in schools, leavings kids with CVD unable to get the diagnosis and care they need. Part of Enchroma’s work has centered around advocacy for greater access to testing in the education system.

Enchroma cultivated a huge following online, as people around the world flocked to hear more about this first-of-its-kind solution. YouTube has hundreds of millions of views on videos that all center around one thing – people’s reactions when they see colors for the first time using Enchroma’s glasses. The emotional and powerful responses keep coming in as Enchroma’s products become more widely available. Next up is a contact lens with the same capabilities that McPherson plans to get to market within the year. Enchroma currently employs around 30 people in a 20,000 sq. ft. manufacturing facility in Berkeley.

Enchroma developed a patented solution in the form of eyeglasses for people with color vision deficiency (CVD). Worldwide, there are over 300 million people with CVD.

To create this technology, Enchroma utilized the latest research on the genetics of color blindness and various anomalies related to photopigments, and linked these into a model where it gives the effect on how people with red or green color blindness perceive colors.

Founded in 2010, Enchroma glasses are the only specialty eyewear that alleviates red-green color blindness, enhancing colors without the compromise of color accuracy.

Total NIH SBIR Investment: $1.15M