Vivid Vision, a San Francisco-based eye care start-up, has signed an exclusive license agreement with The Research Foundation for The State University of New York to employ a new device to treat lazy eye and other disorders of binocular vision invented by Dr. Benjamin Backus, an associate professor at the SUNY Optometry, with his colleagues Dr. Kenneth Ciuffreda and Dr. Diana Ludlam. The patented system uses eye tracking to provide direct and precise binocular visual stimulation at known locations on the retinas of both eyes simultaneously.

Vivid Vision is building a vision care platform that works with new virtual reality technology to treat amblyopia, strabismus (the most common cause of amblyopia), and disorders of binocular vision. Dr. Backus, whose work at the SUNY Optometry focuses on understanding how binocular vision works, joined Vivid Vision as chief science officer.

“We believe eye tracking is integral to the next generation of treatment tools for binocular dysfunction such as amblyopia, strabismus and convergence insufficiency,” said Vivid Vision CEO James Blaha. “We couldn’t develop these new tools without collaboration with the Research Foundation for SUNY and the licensing of their patent. Having Dr. Backus as our chief science officer at Vivid Vision ensures we can translate this exciting technology into clinical practice.”

Dr. David Troilo, vice president and dean for academic affairs at SUNY Optometry, noted, “The research on binocular visual function that is the basis of this technology was conducted as part of SUNY Optometry’s active research mission on the eye and vision. Translating our research efforts to improvements in patient care is a major goal at the college. We are very pleased that Vivid Vision will help us make this a reality for patients with these conditions.”