

ART Optical: Specialty Contact Lens Travel Grant Application
**Management of post-refractive oblate corneal shape and myopic regression with a novel
custom-soft dual base curve lens design**

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My interest in specialty contact lenses is what jumpstarted my interest in optometry overall. I've been a long-term wearer of orthokeratology lenses for daily vision correction that made such a positive impact on my life that I decided to pursue this field. Currently, I'm completing my Cornea and Contact Lens residency and can confirm that we can help patients in a very rewarding way. The patient demographic that I've decided to focus on are post-refractive myopic patients that still find that their vision is inadequate following the procedure, whether it's due to myopic regression or over- or under-correction. I find that this patient population is often overlooked as there are no surgical complications involved, yet they still struggle with visual challenges. Patients often seek out refractive surgeries to minimize dependence on spectacle and contact lens correction. When outcomes are less than ideal, many post-refractive patients cannot return to regular, conventional soft contact lens wear due to the mismatch between the oblate corneal shape and prolate lens design. For this reason, many patients are fit in specialty lenses such as rigid gas permeable lenses or scleral lenses with a reverse curve geometry. However, using rigid lenses may have their own drawbacks including an extensive fitting process, more adaptation required, decreased comfort, and more complex handling. Patients deserve a modality they are comfortable and familiar with pre-surgery, which is often a soft lens. For this reason, we've decided to partner with ART Optical to create a custom soft contact lens with an oblate or dual base curve design in order to provide the most stable fit and optimize vision in these patients. Going back to my inspiration to enter the optometry profession, I have no ocular health concerns and was beyond the typical age of myopia control treatment when I started my personal specialty lens journey. There is definitely a place for custom contact lenses in patients simply seeking more creative and innovative options to improve their vision. With the help of ART Optical and this novel lens design, I hope we can provide this lens option for post-refractive patients seeking a comfortable and familiar modality for best vision correction.