

Finding Our Passion and Purpose While **Changing Patients** Lives

Carri Russell Rivera, FCLSA, NCLEM





assion vs. Purpose

 Can you tell the difference between having a 'passion' and knowing your 'purpose' in life?

Many people tend to confuse the two in their lives

 They end up doing something that they're passionate about for a short time, thinking that it's their purpose, but ending up finding that their life is missing something.

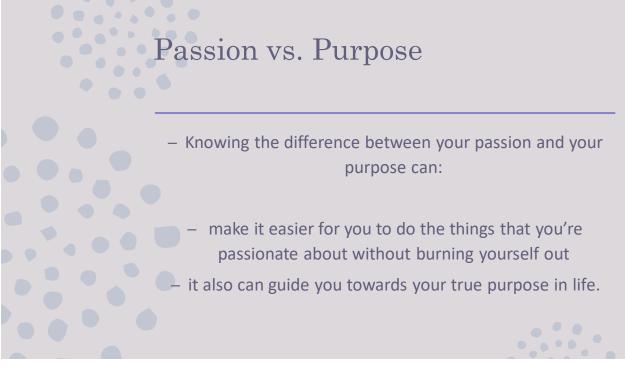
Passion vs. Purpose

Passion is:

- your emotions behind your dreams.
- your feelings that drive your passion.
- sometimes about selfish motives.

Purpose is:

- the **WHY** behind it all.
- the deep reason for your existence
- significantly focused.

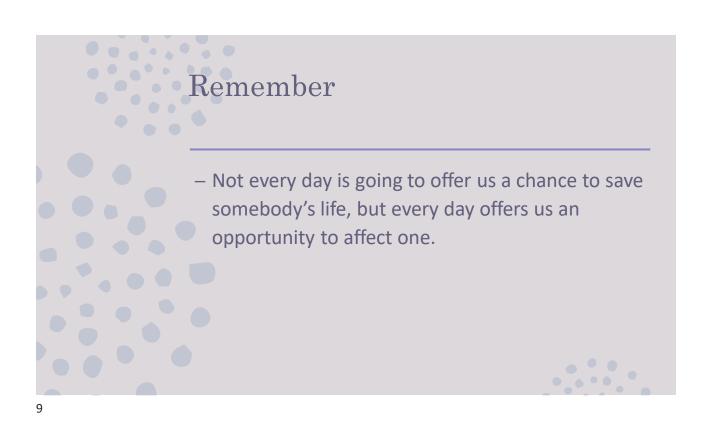




Why is this important?

- Studies show that:
 - Employees that are passionate about their job will be both happier and more productive at work.





Sharing Experiences that have changed MY life

Often while we are helping others,

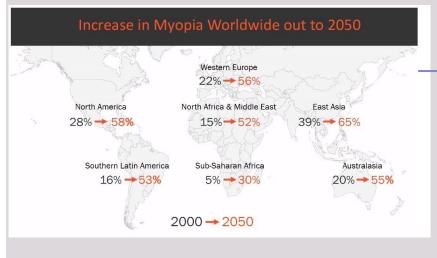
our lives are changed as well

Living out my PASSION and my PURPOSE



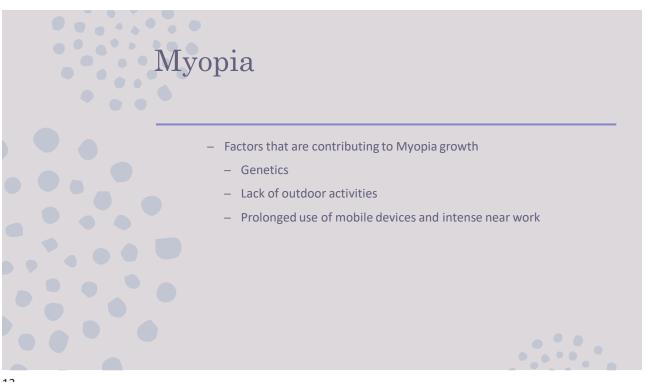
Passionate about Myopia Control

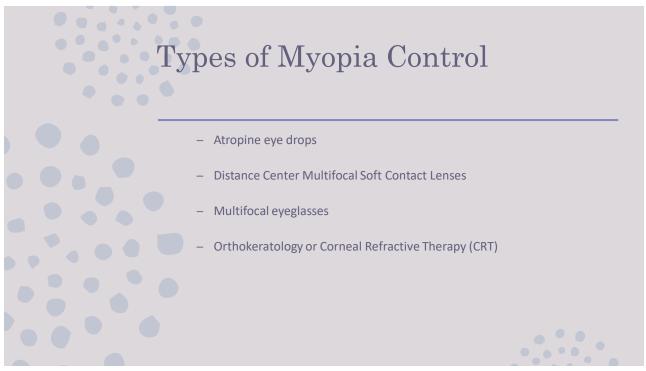
- A public health epidemic
 - Recent rapid rise in the prevalence of myopia globally
 - Future projections of myopia reveal that there will be 5 billion myopic people in 2050.
 - 1 billion high myopes by 2050
 - Myopia to become a leading cause of permanent blindness worldwide



Hot Spots of Myopia

- Right now are in East Asia where countries such as South Korea, Taiwan, Singapore, China and Japan have a prevalence of myopia of 80 to 90 %.
- Even the USA has reported a staggering prevalence of 42%, almost doubling in three decades.



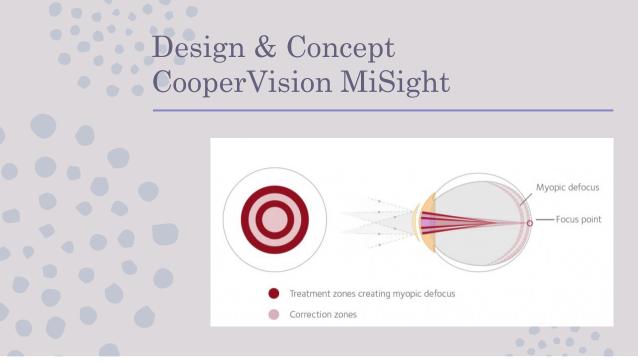


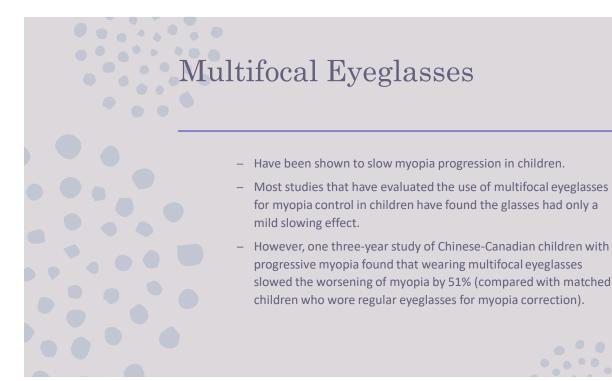
Atropine eye drops

- Commonly are used to reduce the pain associated with certain types of eye inflammation
- Also relieves focusing fatigue by dilating the pupil and temporarily limiting the eye's ability to automatically change focus or accommodate.
 - The effect atropine has on accommodation makes it effective in reducing the progression of myopia in children.
 - Some studies have shown that atropine is the most effective way of controlling myopia; reducing myopia by 77%

Distance Center Multifocal Soft Contact Lenses

- Primarily designed to provide clear vision at all distances for people who have refractive errors and presbyopia.
- One recent two-year study found:
 - Myopic children who wore multifocal lenses daily had a 50% reduction in the progression of their myopia when compared with similarly myopic children who wore regular soft contacts for the same period.
- New daily disposable from CooperVision called MiSight launched 2020
 - FDA approved to slow the progression of myopia in children, aged 8-12 at the initiation of treatment





Orthokeratology or Corneal Refractive Therapy (CRT)

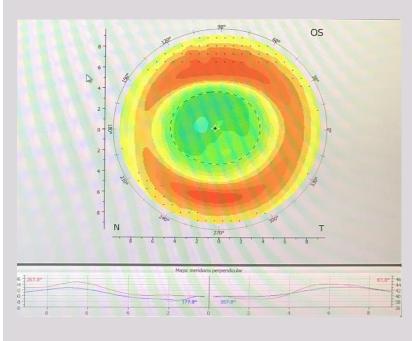
- Specially designed gas permeable lenses that are worn overnight to temporarily correct myopia, hyperopia and astigmatism by reshaping the cornea.
- The use of overnight corneal reshaping with contact lenses for the temporary reduction of myopia was FDA approved in June 2002
- 25 different Corneal Reshaping lenses available
- One two-year study of myopic Chinese children (ages 6 to 10) found that CRT lenses reduced lengthening of the eyeball by 43% compared with matched children who wore regular eyeglasses for myopia correction.





CRT Lens Design

- Lenses are manufactured in high oxygen materials
- The base curve will determine how much myopia is reduced and the alignment curve will control centration.

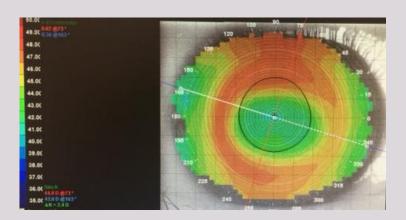


Example 1

- Manifest Refraction:
 - -4.75-.75 X 012
- Lens Base Curve 43.00 Diopters
- Post lens:
 - Plano 20/20

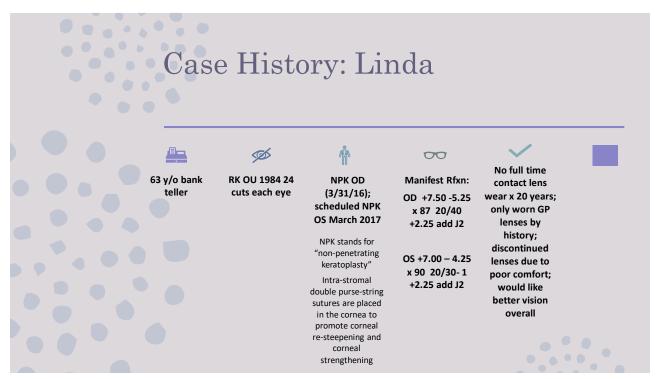
Example 2

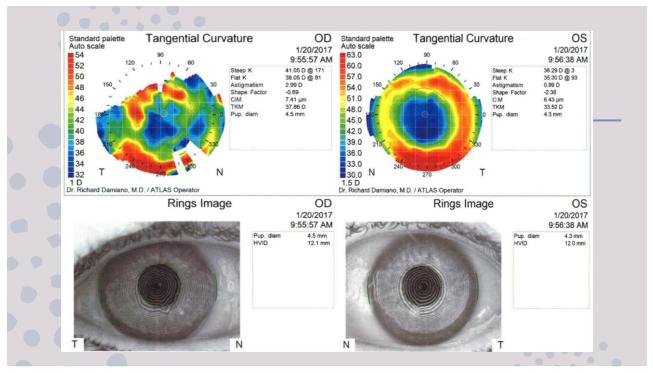
- Manifest Refraction
 - -4.00-.50X175
- 46.40/48.90 toric reverse/alignment curves
- Post lens:
 - +0.25 -0.50x180



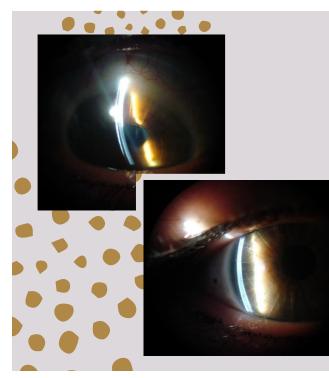


Passionate about Medical Contact Lenses





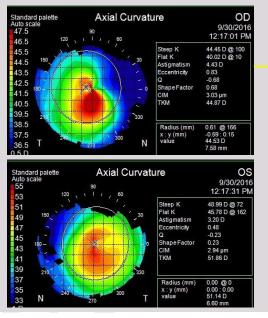
25



Case History: Linda

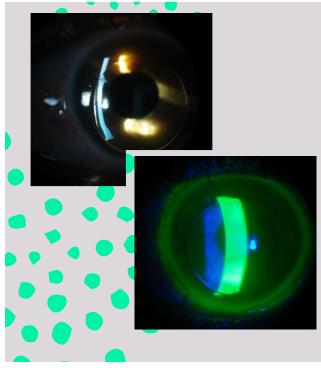
- Ordered: 8.00 -8.25 16.6
- VA 20/20-1
- At 1-week follow-up doing great with vision and comfort.
- Patient wearing 14 hours/day.
- No changes needed in fit or RX.
- Lens removes easily. No discomfort with lens removal.
- No blanching. No fogging of vision during lens wear.





Case History: Tony

- 37 y/o rancher
- Keratoconus
- Pseudophakia OU with Toric IOL OS
- Long time history of corneal GP lenses. In 2013, briefly tried scleral lenses and hybrid lenses but didn't like the insertion and removal process. In order to aid lens comfort with outdoor work environment, we elected to fit piggyback OU.
- Manifest refraction: OD +1.50 - 4.00x 46 20/50-2 +1.00 add J1+
- OS +1.50 2.00 x 54 20/40-2 +1.00 add J1+



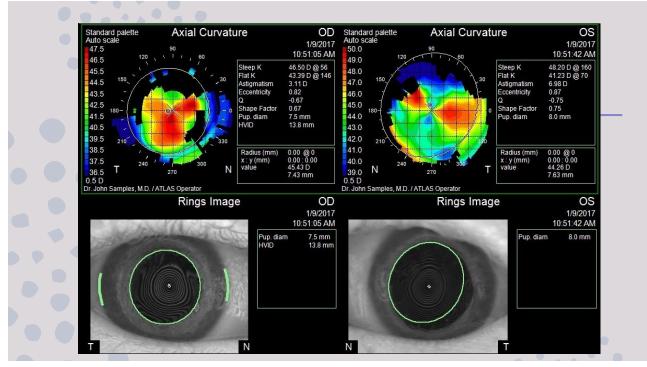
Case History: Tony

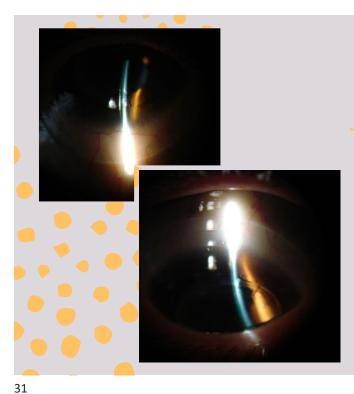
- Fit Keratoconus Gas Permeable lens OU with single use daily disposable soft piggyback lens
- Final Lens parameters
 - OD: 42.00 3.25 9.4 20/20
 - OS: 43.75 +7.00 -2.50 x 90 9.2 20/25+2
- Great vision and comfort
- OS lens stays in place and doesn't rotate







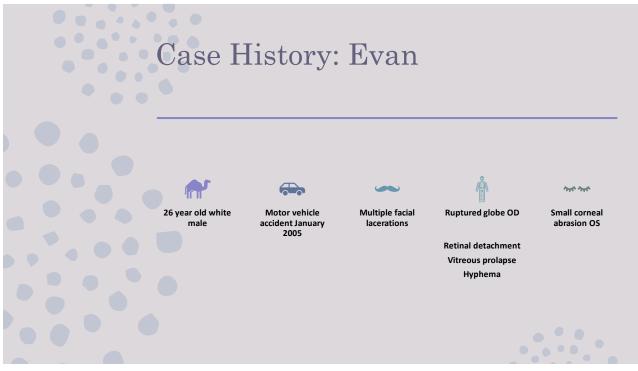




Case History: Dylan

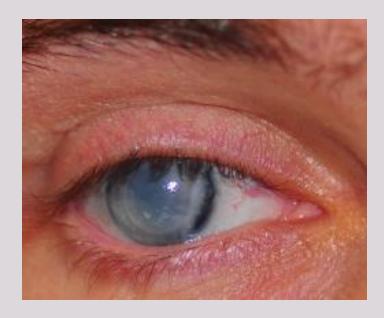
- Lenses remove easily without discomfort or redness
- Ocular surface irritation much better with tear layer from scleral
- Can wear lenses 14-16 hours/day
- 20/20+OU





Case History: Evan





Case History: Evan

- Complete Iris loss OD
- BCVA OD: HM due to recurrent retinal detachments
- September 2012
 - Sent for contact lens evaluation for evaluation of cosmetic contact lens to cover opaque cornea
 - OD is now exotropic due to sensory deprivation

Case History: Evan

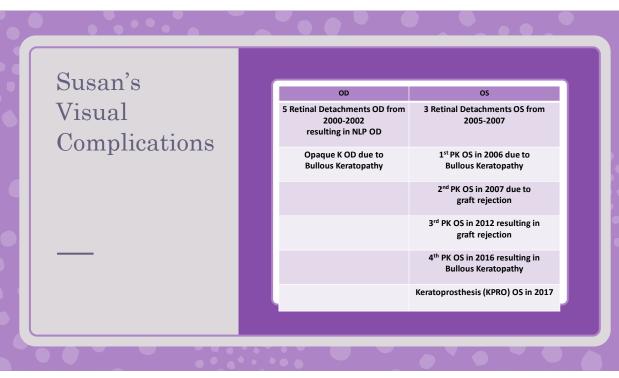






Case History: Susan

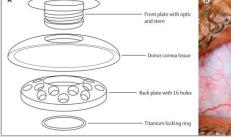
- Susan is a 49 y/o Massage Therapist
- Diagnosed with Stickler Syndrome as a child
 - A systemic connective tissue disorder characterized by defective collagen production. The hereditary conditions are characterized by a distinctive facial appearance, eye abnormalities, hearing loss, and joint problems.
 - Stickler's causes severe myopia.
 Children who have Stickler syndrome often experience cataracts, glaucoma and retinal detachments.



Keratoprosthesis (KPRO)

 Keratoprosthesis is a surgical procedure where a diseased cornea is replaced with an artificial cornea. Traditionally, Keratoprosthesis is recommended after a person has had a failure of one or more donor corneal transplants.

- 39
- Post KPRO OS 2017
 After a KPRO procedure, it is important to protect the ocular surface from corneal melting or corneal perforation.
 Due to Susan's eye structure and severe ocular dryness, she could not keep a soft lens over the KPRO to prevent corneal melting.
 Over the course of 6 months, she would lose a soft lens every few weeks.
 Her Corneal Specialist referred her to the Contact Lens Department to fit her with a custom soft lens or whatever lens modality in order to help protect her ocular surface.





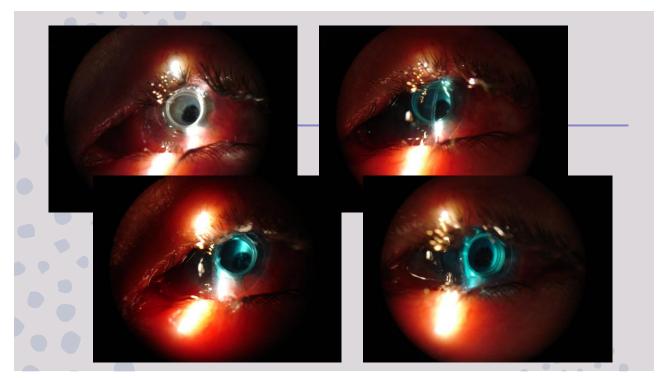
Specialty Contact Lens

- Initial contact lens evaluation 6-2018
- VA sc OD: NLP; OS CF 1'
- HVID OS due to ocular anatomy 9.8 mm
- Elected to fit Susan with a large diameter gas permeable lens
- Would essentially fit like a scleral on her eye since her HVID is so small
- The benefit of the scleral lens, similar to that of a patient with severe ocular surface disease, would be to trap the tear layer over the cornea in an effort to rehabilitate the ocular surface
- Was unable to obtain topography due to extremely flat measurement centrally over KPRO

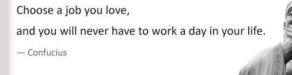
Alignment
Curve1 ment
e2
Park Ontin Zoon
Reverse Curve Base Curve Rad
Peripheral Curve

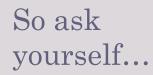
Lens Parameters and Results

- 4 D Reverse Geometry lens due to the extremely flat optic of the KPRO and slightly steeper periphery (A standard spherical GP lens had a persistent central bubble)
- 940mm BC (35.90 D) +11.62 D 10.6mm
- Vision OS with lens during fitting: 20/400
- Vision OS at 2-week follow-up: 20/200
 - No K melting; Ocular surface quiet
- Vision OS after 3 months of wear: 20/100
 - Ocular surface continues to stay quiet
- Susan's estimated BCVA is 20/100 due to the multiple RD's OS





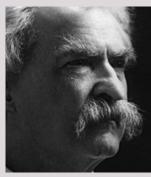




- What are you passionate about?
- What is your purpose?
- Is being an Optician just a job or is it your career?
- Are you living your best life to be fulfilled everyday in what you do?

Thank you

- For helping me to express what I am passionate about
- For helping me to fulfill my purpose to educate and give back to the profession that I love so much!



**

"KINDNESS IS THE LANGUAGE WHICH THE DEAF CAN HEAR AND THE BLIND CAN SEE."

Mark Twain