

A vibrant autumn scene in a park. The ground is covered in a thick layer of fallen yellow and orange leaves. In the background, a calm pond reflects the colorful foliage. Several trees with bright yellow and orange leaves are scattered throughout the scene. A wooden bench is visible on the right side, and a black lamppost stands nearby. The overall atmosphere is peaceful and beautiful.

Pre-Optometry  
GBM 5

# Great Job Everyone!

- Great Bake Sale outcomes
- Great Glasses drive Outcome
- We have our Merchandise FUND!!!
- We will be ordering T-shirts, and books soon!
- Looking into calling Optometry School recruiters.
- Pre-Health Social had a great outcome, hopefully we all can go next time.
  - Maybe even plan an event of our own...

# Who knows what a dry eye is?

- What causes dry eye?
- How do Optometrists solve the problem of dry eye in patients?

# Who knows what a dry eye is?

- What causes dry eye?
- How do Optometrists solve the problem of dry eye in patients?
  - Computer use, reading, aging/menopause, drugs such as antihistamines, and prolonged use of contact lens are some of the few reasons.
  - Artificial tear eye drops, Prescription eye drop, Steroid eye drops, slow release lubricant, punctal plugs, pulsed light therapy, warm compress etc...

# Problems with these treatments?

- Typically for patients with dry eye issue, optometrists prescribe lubricating eye drops.
- Problem with this is that eye drops deliver a volume of 30 $\mu$ l to 50 $\mu$ l of medication to the eye, most of which drains into the nasolacrimal system.
- Only 1-5% of the drug is absorbed by the eye
- Negative outcomes of treatment or no effect at all.

# Emerging technology that could solve the dry eye issue.

- Iontophoresis
- Uses small electric current to deliver concentrated topical drug into eyes maximizing the effect of treatment.
- Better than intravitreal injection which is much more invasive and can lead to infection.

<https://www.reviewoptometry.com/article/iontophoresis-wave-of-the-future>

Lasik Surgery...what is it?

The background of the image is a dense collection of autumn leaves. The leaves are in various stages of color change, ranging from bright yellow and orange to deep reds and purples. The leaves are scattered across the frame, creating a textured and colorful backdrop for the text.

# Lasik Surgery...what is it?

- The word "LASIK" is an acronym for "laser-assisted in situ keratomileusis."
- Used to treat myopia (nearsightedness), hyperopia(farsightedness), and astigmatism
- It's a laser surgery and uses ultraviolet light beam to remove ("ablate") microscopic amounts of tissue from the cornea to reshape it so light entering the eye focuses more accurately on the retina for improved vision.



# What is LASIK Surgery and how is it done?



Cataracts...what is it?



# Cataracts...what is it?

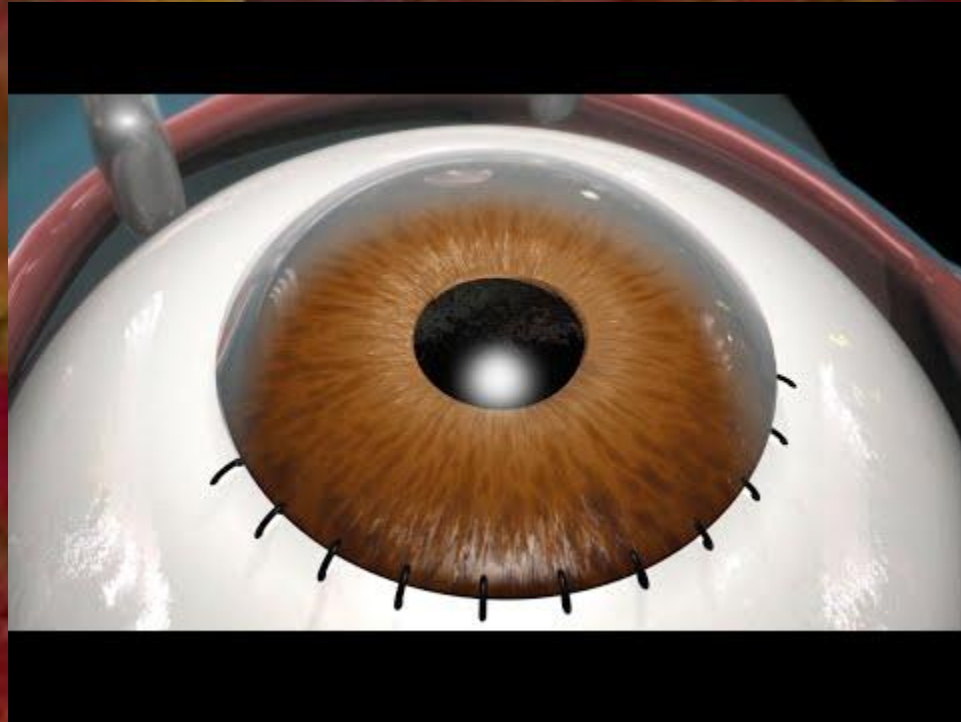
- Clouding of the eye's natural lens
- Three types:
  - A subcapsular cataract occurs at the back of the lens. People with diabetes or those taking high doses of steroid medications have a greater risk of developing a subcapsular cataract.
  - A nuclear cataract forms deep in the central zone (nucleus) of the lens. Nuclear cataracts usually are associated with aging.
  - A cortical cataract is characterized by white, wedge-like opacities that start in the periphery of the lens and work their way to the center in a spoke-like fashion. This type of cataract occurs in the lens cortex, which is the part of the lens that surrounds the central nucleus.
- The lens is mostly made of water and protein. The protein is arranged in a precise way that keeps the lens clear and lets light pass through it.
- But as we age, some of the protein may clump together and start to cloud a small area of the lens. This is a cataract, and over time, it may grow larger and cloud more of the lens, making it harder to see

# Treatments for Cataracts

- Only surgery can solve this problem.
- Surgery is used to clear the lens with cataract and replaced with an intraocular Lens (IOL).

<https://www.allaboutvision.com/conditions/cataracts.htm>

# A look at Cataracts Surgery!



# Game of Kahoot if we have it...

Pun of the DAY

**Q. WHY SHOULD YOU  
LOVE YOUR EYE DOCTOR?**



**A. IT'S AN EYE-DEAL  
RELATIONSHIP!**



JUST FOR LAUGHS

A bone doctor and an eye doctor  
were telling each other jokes

The bone doctor's jokes were humorous  
but the eye doctor's jokes were cornea.

FunnyAndAmusing.com



It was a wonderful semester! Hope to see you ALL in  
Spring 2020!!!

HAPPY THANKSGIVINGGG!!!

STUDY HARD FOR THOSE FINALSS!!!!

GO GET THEM A'ssssss!