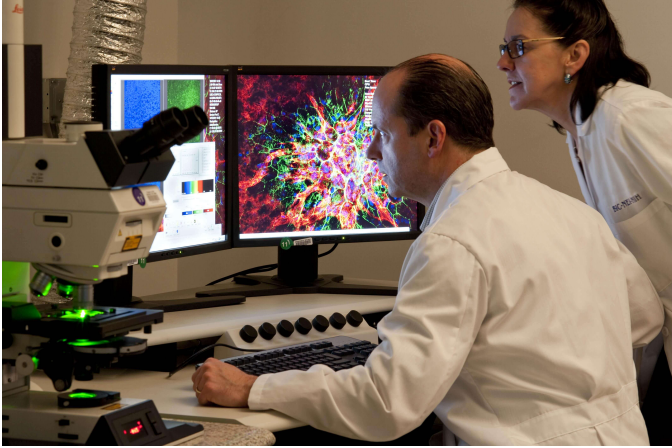


Why eye and vision research?



The eyes are the window to the world. They are why we can appreciate beauty, recognize danger and function in our environments. However, the eye is also a complex organ with many parts to its anatomy that all need to function properly to help the brain receive, understand and interpret images. Understandably, eye diseases and injuries, vision impairment and vision loss can severely impact an individual's quality of life.

Eye and vision researchers study the eye's anatomy and its relationship to the brain to understand how to prevent, treat and correct eye and vision disorders. The information they discover helps inform the development of new medicines, surgeries, procedures and clinical practices that ultimately help ophthalmologists and optometrists better care for eyes around the world.

Protecting and restoring sight does not just occur in a lab though. Eye and vision researchers may work as science writers, helping the public understand why and how to care for your eyes. You can also be a science policy expert/advocate, providing advice to lawmakers on how they can help to advance eye and vision research (e.g., by providing federal funding to support research).

Why you?



Do you like to ask questions? Are you interested in learning about how things work? Then you are already well on your way to becoming a researcher! Researchers are people just like you who took their curiosity and made it a career. We *know* you have what it takes to do the same!

A career in eye and vision science is infinitely rewarding with [numerous paths](https://www.arvo.org/advocacy/setting-your-sights/seeyourfuture2020.pdf) ([/globalassets/arvo/advocacy/setting-your-sights/seeyourfuture2020.pdf](https://www.arvo.org/advocacy/setting-your-sights/seeyourfuture2020.pdf)) that can lead you to making an impact in many peoples'

lives. We hope the resources here will help you on your journey and one day we may welcome you as an ARVO member!

Want to learn more about becoming an eye and vision scientist?

Explore our resources below to get started:

[Eye and Vision Science Career Toolkit](/advocacy/setting-your-sights/toolkit/)

[\(/advocacy/setting-your-sights/toolkit/\)](/advocacy/setting-your-sights/toolkit/)

Get information on:

- What are the qualities of a good researcher
- Recommended courses of study (as a high school, undergraduate, graduate, medical/PhD student)
- How current researchers got started in the field
- A day in the life of a vision researcher

[Visual Science Materials](/advocacy/setting-your-sights/visual-science-activities/)

[\(/advocacy/setting-your-sights/visual-science-activities/\)](/advocacy/setting-your-sights/visual-science-activities/)

Get information on:

- The anatomy of the eye
- The visual system
- Eye conditions and diseases
- Artificial Intelligence (AI) in ophthalmology

Meet an Aspiring Vision Scientist: Sarah Lee

"Ever since I can remember, I have been drawn toward the STEM field, and I became especially interested in the eye and vision world when I found out my younger cousin has congenital cataracts." Currently a high school junior in Utah, Sarah was paired with an ARVO mentor and has since gone on to win her school district's STEM fair and the state STEM fair. Named 'Grand Champion,' she now qualifies to participate in the upcoming International Science and Engineering Fair (May 13 - 19) in Dallas, Tex. "I am extremely excited to go one step further in sharing what I have learned to others and cannot wait to explore more. I am so grateful that I was able to connect with my amazing enthusiastic mentor and other passionate researchers."



* [Setting Your Sights disclaimer \(/advocacy/setting-your-sights/sys-disclaimer/\)](/advocacy/setting-your-sights/sys-disclaimer/)

Eye and Vision Science Learning Opportunities

Available for K - graduate level

[\(/advocacy/setting-your-sights/eye-and-vision-science-learning-opportunities/\)](/advocacy/setting-your-sights/eye-and-vision-science-learning-opportunities/)

STEMM Research and Resources

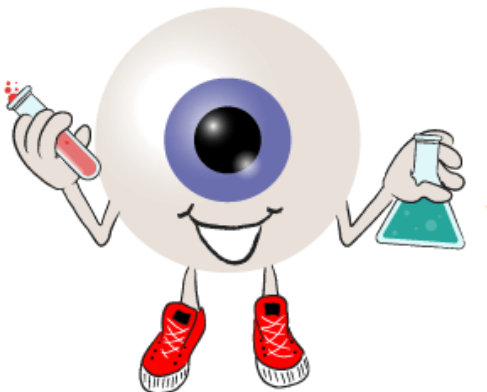
Explore various research and STEMM programs, online learning tools, trainings, and more.

[\(/advocacy/setting-your-sights/STEMM-and-research-resources/\)](/advocacy/setting-your-sights/STEMM-and-research-resources/)

STEM Contests & Challenges

Check out national and international visual science and STEM-related competitions open to middle and high school students

[\(/advocacy/setting-your-sights/stem-contests--challenges/\)](/advocacy/setting-your-sights/stem-contests--challenges/)



Ivan's Lab

Visit Ivan in his research lab where he works everyday to protect eyes and vision through science!

Get Involved

<https://www.arvo.org/advocacy/setting-your-sights/>

Want to help inspire the next generation of eye and vision researchers? Check out all the ways you can get involved with ARVO's Setting Your Sights Program

(/advocacy/setting-your-sights/get-involved/)