



CASEY EYE
Institute



Seeing the Future Clearly: Casey Program Helps Prevent Vision Problems Before They Start

Every parent knows the routine: your child squints at the board at school, you schedule an eye exam, and they come home with a new pair of glasses. A year later, the prescription is stronger and the cycle repeats.

At OHSU Casey Eye Institute, Drs. Amanda Dieu and Margaret Overstreet have created a myopia management program that's breaking this cycle of progressive nearsightedness and transforming children's lives.

Understanding the growing problem

Myopia, or nearsightedness, happens when a child's eyeball grows longer than it should, making distant

objects blurry. It's not just an inconvenience—it's a rapidly growing health crisis.

"By 2050, half the world's population will have myopia," explains Margaret Overstreet, O.D., assistant professor of ophthalmology in the Elks Children's Eye Clinic at Casey Eye Institute. "When the eyeball stretches too much, it creates serious health risks later in life"—including glaucoma, retinal detachment, and other vision-threatening conditions. The culprits? More time indoors and increased screen time.

For Marisela Schwarck's son Adam, the problem revealed itself unexpectedly. "Because of his young age, he simply assumed that was how everyone

Seeing the future, page 2

Seeing the future, from page 1

saw the world,” she recalls. “It wasn’t until Adam mentioned to his pediatrician that he couldn’t see the vision chart that we realized something was wrong.” The news was alarming: Adam’s myopia was progressing much faster than expected.

A different approach to treatment

Traditional treatment meant simply giving children stronger glasses each year. Casey Eye Institute’s program takes another approach: stopping the progression before it accelerates.

“We intervene in early childhood to slow myopia progression,” says Dr. Overstreet. “We want to make sure they have clear vision now as well as good long-term eye health.”

The program uses three proven treatments. Low-dose atropine eye drops applied at bedtime help slow eyeball growth. Special contact lenses called MiSight® provide clear vision while using advanced optics to keep the eyeball from elongating. For some children, overnight contact lenses temporarily reshape the eye’s surface to reduce myopia.

Studies have shown that these treatments could cut myopic progression by as much as half. A child whose prescription might have worsened from -3 to -7 could instead progress only to -5—a dramatic difference that protects their long-term vision.

Real results for real families

When Adam’s optometrist referred the family to OHSU, they found more than just treatment—they found hope. The energetic 11-year-old had frequently broken or misplaced his glasses because they felt heavy and uncomfortable. His 9-year-old sister Luna was more careful but wasn’t happy wearing glasses, especially having to remove them to read—an activity she loves.



▲ Luna, 9 and Adam, 11, are treated for myopia at Casey Eye Institute

Marisela credits Amanda Dieu, O.D., and Shazib Haq, O.D., both assistant professors in Casey Eye Institute’s medical contact lens clinic, for making the children comfortable with their care. “Dr. Dieu is patient, gentle, and kind,” she says. “She took time to meet the children at their level.”

For active children, the impact has been transformative. “Adam and Luna have been on the swim team for years but never enjoyed wearing prescription goggles. Now with clear vision throughout the day, they fully enjoy being active—whether playing tennis, jumping on the trampoline, or just running around—without the hassle of glasses. They absolutely love it,” their mother says.

What makes Casey's program different

While many eye doctors now offer myopia treatments, Casey Eye Institute provides something unique: comprehensive monitoring and all available treatment options under one roof.

"We measure every child's eyeball length every six months, using specialized equipment that most practices don't have," explains Dr. Dieu. "This lets us track not only whether our treatments are actually improving vision, but also if they are preventing the eye from growing too long, therefore reducing the risk for vision-threatening conditions later in life."

The program draws patients from across Oregon, Washington, and Idaho—families who travel hours because their local providers don't offer this level of specialized care.

Removing barriers to care

The program's biggest challenge isn't medical—it's financial. MiSight® contact lenses can cost more than \$1,000 annually, while atropine eye drops cost \$125 every few months. Most insurance plans don't cover these preventive treatments.

"We intervene in early childhood to slow myopia progression. We're thinking about both function and long-term eye health."

– Margaret Overstreet, O.D.

Assistance from The Clark Foundation previously allowed the clinic to provide free care to low-income families. This philanthropic support is enormously helpful when it is available.

"The gratitude from families is immense. Parents understand they're not just getting help with glasses—they're protecting their child's vision for life," shares Dr. Dieu.

An investment in the future

Many children in the program continue treatment through college, then transition to regular contacts as young adults. "Myopia management in child eye care is not just helping patients right now – it's helping them 30 years from now. This treatment has a lifetime impact," says Dr. Overstreet.

She and her colleagues have two goals: continuing to offer the highest caliber treatment and management based on evolving research, and giving as many patients as possible access to this high-quality care. Now that effective treatments are available for the problem of myopia, this program represents hope for a generation of children. ■



◀ Dr. Amanda Dieu helps a young patient with her contact lenses.

Casey Eye Institute gives sight, hope to child with rare eye condition

By Josh Friesen

Watching a child grasp a toy for the first time is a highlight for any parent.

But for Ellie Morris, the moment carried even more meaning. It meant her infant son, Silas, could see.

“I’ll never forget it,” she said. “I laid him down on his playmat that has all these toys hanging from it, but he never really knew they were there because he couldn’t see them. I saw him look up in a different direction for the first time — like he could see something different — and he intentionally reached out to grab a little Nemo toy fish that was hanging down.”



▲ Silas shortly after undergoing full-thickness corneal transplants at the OHSU Casey Eye Institute.

After being told when Silas was born that he would always be blind, Morris saw he now had sight. The OHSU Casey Eye Institute had made something she’d once thought impossible, possible.

“It’s literally a miracle what these doctors at Casey Eye were able to make happen,” Morris said.

“Silas’ story is so inspiring and exemplifies the Casey Eye Institute’s continued dedication to discovering innovative, novel ways to give sight to patients like him,” said Andreas Lauer, M.D., director of the Casey Eye Institute and Margaret Thiele Petti and August Petti Chair of Ophthalmology. “I am proud every day of the work we do, the people we have, the care we provide and the patients we impact, and I am grateful for how private philanthropy enables us to push the boundaries of what is possible in vision science and ophthalmology.”

A rare blindness

Silas was born Dec. 12, 2023, in Spokane, Washington, where Morris and her family reside. Morris could tell right after he was born that something was off about his eyes.

“They were very, very opaque,” she said. “None of the doctors or nurses had ever seen anything like it. Immediately, he was rushed to the NICU.”

Specialists were summoned to examine Silas’ eyes, and eventually, he was diagnosed with bilateral sclerocornea, an extremely rare congenital eye condition in which the cornea — the thin, transparent, protective layer that envelops the front side of the eyeball — is cloudy instead of clear.

Morris’ specialists in Spokane had never encountered bilateral sclerocornea before and advised Morris on how to care for a blind child. A second opinion, however, directed her to the Casey Eye Institute. When Morris brought Silas to see the

institute's expert cornea team in February of 2024, she immediately knew she'd made the right decision.

"The Casey Eye Institute and OHSU feel like a whole different group of individuals and staff that were so passionate," she said. "They gave our family so much hope and connected to us on a pretty personal level."

Silas' care team saw that despite the bilateral sclerocornea, his optic nerve and retinas were perfectly fine. They suggested full-thickness corneal transplants on both eyes. A month after that initial appointment, Silas was back at the Casey Eye Institute undergoing the procedure. But because Silas' condition is so rare, they couldn't be certain the treatment would work.

Until Silas reached out for the toy.

"Everything just kind of fell into place," Morris said. "We have this great team that we've made connections with that were just there to support us with whatever decision we were making to help best benefit Silas and his wellbeing."

The gift of sight

As Silas grows, so, too will his eyes. His body will eventually reject his new corneas, and he'll need to continue receiving corneal transplants in the future.

So far, he has had three corneal transplant surgeries at the Casey Eye Institute. His most recent transplant was this August.

"It's been a great success," Morris said. "We've just been blown away by everything the team has done. After the first transplant, he had the most clear cornea and they were able to see all the way to the back of his eye."

The older Silas gets, the fewer transplants he'll need. Morris is hopeful the next one will be able to last up to five years. Silas' care team is hopeful he'll go on to have relatively clear vision with little to no issues.

"The Casey Eye Institute and OHSU feel like a whole different group of individuals and staff that were so passionate. They gave our family so much hope and connected to us on a pretty personal level."

– Ellie Morris

"Things are just going to keep getting better for Silas," Morris said. "The Casey Eye Institute at OHSU just really helped give us hope. The thing that sticks out to me is how passionate and hands-on everyone we've interacted with is. Everyone is so invested. The work they do just really tells us that this is going to work out." ■



▲ Silas at one year old.

Virtual reality transforms surgical training for residents

Every day at OHSU Casey Eye Institute, residents are learning to perform some of the most delicate procedures in medicine—eye surgery. Developing the precision required to restore and protect sight takes years of practice and expert guidance.

Thanks to donor support, that journey begins in a high-tech simulation lab—long before residents ever step into the operating room.

“Eye surgery is not a skill people naturally have. With surgical simulation, our residents can safely master skills before ever touching a patient,” says John Clements, M.D., associate professor of ophthalmology and associate residency program director at OHSU Casey Eye Institute.

A safer way to learn

“Just a generation ago, training meant limited practice in a much simpler simulated setting,” said Clements. “Now with the donor-funded EyeSi® virtual reality simulator and a state-of-the-art microsurgical lab, residents can perform every step of cataract surgery dozens of times before their first live case.”



▲ Thanks to donors, residents practice surgical techniques in a state-of-the-art microsurgical lab.

“We are deeply grateful to our donors for supporting our responsibility to train future surgeons safely. Their generosity ensures our residents are prepared, our patients are safe, and our program is world-class.”

– John Clements, M.D.

The simulator tracks each learner’s progress, allowing supervising faculty to personalize instruction and helping residents build confidence and skill. The result: residents advance to live surgery sooner and perform procedures with greater safety and precision.

The power of philanthropy

Generous donors, including the late Dr. Joe Matarazzo, have strengthened Casey’s residency program by funding the EyeSi simulator and equipping the lab with microscopes, instruments, and resources.

“We are deeply grateful to our donors for supporting our task to train future surgeons safely and effectively,” said Clements. “Their generosity ensures our residents are well-prepared, our patients are safe, and our program is world-class.”

Donor investment in surgical education isn’t just about technology—it’s about people. “Many ophthalmologists in Oregon trained at OHSU-Casey Eye Institute,” said Clements. “We have a fundamentally important responsibility to safely train the future eye surgeons of Oregon and surgical leaders in our country.” ■

Remembering Dr. Joe Robertson

With profound sadness, we convey that Joseph E. Robertson Jr., M.D., M.B.A., President Emeritus of OHSU and a distinguished physician, surgeon, and leader, passed away on September 26, 2025. He leaves a legacy of exceptional contributions to OHSU, Oregon, Casey Eye Institute, healthcare, and ophthalmology.

In his role as Director of Casey Eye Institute, his civility, collaboration, kindness, and perseverance brought people together to propel the department of ophthalmology to national renown. Dr. Robertson served with great distinction, significantly advancing patient care and medical education throughout his career as a residency and retina fellowship program director, as well as head of the retina service and department Chair.

As a visionary Dean of the medical school and President of OHSU, Dr. Robertson fostered environments of excellence, inspiring colleagues, and students to reach the highest standards in medical practice, research, education, and outreach. He led initiatives like the Knight Cancer Challenge, the Katie Robertson Global Program, the Elks Children's Eye Clinic, Center for Health and Healing, Skourtes



▲ Joseph E. Robertson Jr.,
M.D., M.B.A

Tower and the Portland Aerial Tram, just to name a few. Furthermore, his tireless support of people and programs led to breakthroughs that improved the sight and lives of countless individuals in Oregon and far beyond.

Known for his
compassionate approach

and unwavering commitment to the well-being of people, Dr. Robertson's impact extended far beyond the operating room, clinics, and conference rooms. His remarkable life of service, scholarship, and leadership deeply affected innumerable people on a very personal level. To everyone, he was Joe—a truly extraordinary person. He will be profoundly missed by his family, friends, and the entire health care community.

He is survived by his wife, Patricia; his son, CJ; and his niece, Hannah. His daughter, Katie, preceded him in death. ■

WELCOME NEW FACULTY



Marcus Altman, M.D.
Retina and uveitis

Dr. Altman is an assistant professor of ophthalmology. He completed his residency at Casey Eye Institute before going on to complete fellowships in both retina and uveitis. Dr. Altman joins our retina clinics in Portland and Longview, WA, and our uveitis clinic in Portland.



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