HOPE in FOCUS
Seeing a cure for blindness
Supporting the LCA and rare retinal disease community

SEEING HOPE | Newsletter

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Life Through a Different Lens: *They Just Talked About Eyes!*

By Katherine L. Kraines, MS

Iliana Gonzales

Christine and Anthony Gonzales dreamed of having a large family and were thrilled when their first child, Iliana, was born in August 2018. However, within a few months, their excitement turned to concern. "About a week after Iliana received her four-month childhood vaccine, we noticed her eyes making erratic movements," Christine said. "We took her to Lucile Packard Children's Hospital (LPCH) at Stanford and stayed a few days. They ruled out neuroblastoma and did whole-body MRIs to make sure everything was negative. Her eye movements decreased, so she was cleared."

As Iliana moved into toddlerhood, the couple noticed some things seemed "off." "Iliana was learning to walk, and occasionally, she would trip and run into things or halt if the lighting changed," said Anthony. "At other times, she couldn't locate things or find us. As the months passed, we realized that she wasn't growing out of it and that something else was at play."

Increasing Complexity

Then, just before Iliana turned two, her sister Malaya was born in June 2020. At the same time, Iliana's eye movements increased in frequency. The couple decided to take both girls to LPCH. "Iliana's extensive workup, which included genetic testing and an eye exam under anesthesia (EUA), revealed retinal inflammation. They also recommended genetically testing Malaya because getting the results takes a while," Christine explained.

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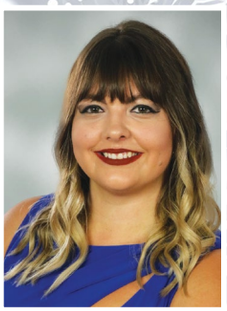
From the Director



Courtney Coates

As 2024 draws to a close, we think about how grateful we are for our supporters and the Leber congenital amaurosis (LCA) community and how thankful we are for our successes. It was a busy year, with our tenth anniversary marked by reflection and celebration. We engaged in a strategic planning initiative to map our course for the next five years. As a result of that effort, one of our first activities was to strengthen our full-time staff to expand our offerings to our community. As a result, Eve Orcutt joined our team in October.

We co-hosted a successful Vision Seminar with the Foundation Fighting Blindness, which was held just before Dinner in the Dark. We capped the day off with the most donations ever received at Dinner in the Dark.

As we look ahead to 2025, we're excited about the new connections we will make as we expand our initiatives and activities to advance treatments for blindness and support our community. I am also looking forward to meeting more of you next year, including at our LCA Family Conference, June 20–21, 2025, in Minneapolis. (Save the date!)

Thank you to everyone who supports our vital mission. We cannot do this without you.

With gratitude,

Courtney Coates

Courtney

Life Through a Different Lens: *They Just Talked About Eyes!*

Amari, Iliana and Malaya Gonzales

Malaya Gonzales

Gonzales Family

Continued from page 1

Although the cause of Iliana's inflammation wasn't clear, a member of the Stanford medical team treating Iliana, whose clinical focus was ocular inflammatory disease, suggested treating her with steroids. As a nurse, Christine was acutely aware of possible side effects, and she and Anthony had serious questions about treating the inflammation without knowing its source. But hoping it might help, they consented.

"In December 2020, Iliana was hospitalized again, and the doctor suggested doing infliximab (a drug used to treat autoimmune diseases) infusions in addition to the steroids because the inflammation was so severe," said Christine. "We started Iliana's infliximab infusions in January 2021, and Malaya's first EUA was in February 2021. According to the retinal specialist, Iliana's inflammation was worse than Malaya's, causing her vessels to become "leaky."

At about the same time, the genetic tests revealed that both girls had the *CRB1* mutation. "Even so, the doctor recommended continuing Iliana's once-a-month infusions, which were given for a year," Christine said.

At Iliana's follow-up EUA in April 2021, their doctor admitted that the inflammation hadn't reduced as much as anticipated. But it was still coming down, and he wanted to continue the infusions. "After the December 2021 EUA, he suggested using methotrexate, a chemotherapy drug, but we said no," said Christine.

Weighing Choices

The fact that their doctor was leaving Stanford, the relative ineffectiveness of the infusions and that the Gonzales family was moving all contributed to the decision to stop the treatments. This choice provided Iliana with a much-needed break from the poking, prodding, and stress associated with the infusions and testing. It also gave Christine and Anthony the time and space to evaluate their situation, which was now even more complex with Malaya's diagnosis. They planned to monitor the girls and get a second opinion.

Between 2018 and 2024, the Gonzaleses consulted with eight doctors at four different medical facilities in California to identify what was affecting their daughters' vision. While the genetic testing revealed the *CRB1* mutation in 2021, the focus of the retinal specialist at that time was on treating Iliana's retinal inflammation. A definitive diagnosis of LCA wasn't made until 2024, when the Gonzaleses took their daughters to see Jacque Duncan, MD, at the University of San Francisco. Dr. Duncan confirmed a diagnosis of Leber congenital amaurosis (LCA) for both girls and connected the family with the Foundation Fighting Blindness (FFB) to help them find more resources and a supportive community.

Embracing a New Reality

Receiving the genetic diagnosis was simultaneously helpful and crushing. Throughout their medical journey, Christine had done extensive online research, and it was discouraging when she discovered no treatment was available for the *CRB1* gene.

It is an understatement to say that the recessive gene mutation had already handed the family a one-two punch, but it wasn't done. In October 2022, their son Amari was born and found to be a *CRB1* carrier. While this diagnosis wouldn't impact his vision, the information could have implications later in life if he decides to have children. With no family history of eye disease, their children's genetic diagnoses were shocking for Christine and Anthony and their extended family.

"What was so hard about this process is that young children can't express what they are feeling or experiencing. There is only so much you can do. It's like banging your head against the wall, and there is a lot of self-doubt as a parent," said Christine. "But it's tough to get the genetic diagnosis. After all of the searching and finding, it comes down to us, as their parents, causing this by passing on a gene mutation we didn't know we had."

Malaya and Iliana Gonzales

Creative Next Steps

Determined to soldier on, Christine and Anthony decided to homeschool the children. Iliana is currently in the first grade and is a bright and eager student. Malaya and Amari are too young for school but are very active and curious, which means there is never a dull moment in the Gonzales household. The couple share child care and homeschooling responsibilities via a carefully choreographed work schedule. Anthony is employed at a local hospital in the dietary department, and Christine, an RN, works nights at the same hospital. The family is working with the county and school to create an individualized education plan (IEP) for Iliana and one for Malaya when she starts kindergarten.

Regarding the girls' current vision status, Iliana was tested in 2024 and found to have significant peripheral vision loss. For now, Malaya's vision may not be as impacted as Iliana's. "Malaya is strong-willed," Anthony explained, "and she isn't very compliant at this point, so testing is tricky! But we're noticing similarities in Malaya's vision that we initially observed with Iliana."

Like Iliana, Malaya struggles with night blindness. "It's hard when the light is dim at night, and they can't see us," said Anthony. "And if Malaya drops a toy, she has trouble locating it. Seeing them both feel around for things hurts." The Gonzaleses have a follow-up visit scheduled for the girls with Dr. Duncan to learn more about their daughters' vision status.

Eager to Learn More

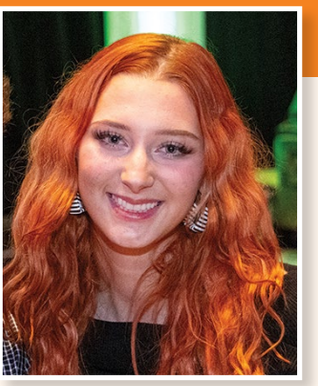
When Christine and Anthony heard about the FFB's June VISIONS conference in Chicago, they decided to attend and bring Iliana. During the information sessions, Iliana sat quietly beside her parents, dangling her feet over the seat as she beamed smiles to everyone around her.

The Gonzaleses were relieved to learn more about inherited retinal diseases (IRDs) and LCA at the conference. Anthony said it was impressive to see so many people managing well with a visual disability or blindness, but it was also emotionally challenging. While the information was beneficial, it confirmed that the repercussions of LCA would be a life-long journey for their family.

Excited to be at the conference with her parents, Iliana absorbed as much information as a five-year-old could. When the family returned to California, Iliana's grandfather asked her about the conference. She quickly summarized her experience without missing a beat by saying, "They just talked about eyes!"

The Gonzaleses met the Hope in Focus (HIF) team at VISIONS 2024 and plan to attend the HIF Family Conference in Minneapolis, MN, on June 20–21, 2025. We hope to see you there also. Scan the QR code for more information on our upcoming conference, or visit our website.

Meet our newest team member, Eve Orcutt!



In October, we were excited to welcome Genevieve (Eve) Orcutt as our Marketing and Community Engagement Manager. Eve joined our team earlier this year to manage our social media outreach and walk with us in the Walk for Rare Diseases. In June, she joined us at VISIONS in Chicago, where she had her first opportunity to engage with our community. More recently, you may have seen her at the Northeast Vision Seminar and Dinner in the Dark at Foxwoods. Hailing from Buffalo, NY, Eve holds a Bachelor's degree in Marketing from Buffalo State University, has a passion for art, and loves to travel.

"I'm truly excited to be part of this team and eager to learn more about inherited retinal diseases while doing my part to support the families impacted by them."

Eve can be reached at 860-266-6081 or Eve@hopeinfocus.org

Thank

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DINNER IN

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FOUNDATION FIGHTING BLINDNESS

Before dinner, we hosted the free NORTHEAST VISION SEMINAR with the Foundation Fighting Blindness.

ANTHONY FERRARO shared his compelling story about growing up as a blind athlete.

330 ATTENDEES

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THE DARK
ue serving and
LCA community.

We honored Susette Tibus, Chuck Sneddon, and the SIMPLY MAJESTIC TEAM for a decade of support for Hope in Focus.

THE CARTELLS helped us dance the night away and we had a special performance from our keynote speaker.

ANIMALS
tendance—three dogs, enguins, and one zebra!

RAISED OVER $225,000

Photos by PubliCreatives

Opus Genetics Merges with Ocuphire to Boost Development of Several IRD Gene Therapies

Ben Shaberman
Vice President,
Science Communications
Foundation Fighting Blindness

Opus Genetics was launched in the fall of 2021 by the Foundation Fighting Blindness to clinically develop gene therapies for some of the rarer inherited retinal diseases (IRDs) including several forms of Leber congenital amaurosis (LCA). The Foundation's goal was to get more treatments into the clinical development pipeline for IRDs that weren't being addressed by industry because of small market opportunities.

Raising money for a start-up biotech company, regardless of its disease targets, is inherently challenging because of high therapy development failure rates. Failure is the nature of the biomedical therapy beast, and large companies, therefore, prefer investing in an emerging therapy once it has shown efficacy in a clinical trial. Raising capital is even more daunting for companies like Opus that are trying to enter small markets with assets that are approaching or just entering early human studies.

Unfortunately, the biotech investment market cooled considerably in the fall of 2021, making raising capital for Opus much more challenging. Fast-forward three years, and the biotech sector is still struggling to recover.

But a new merger with Ocuphire Pharma gives Opus a welcome boost in capital to continue its gene therapy development programs. The newly formed company took the Opus Genetics name and is trading on the NASDAQ under the symbol "IRD." Ocuphire Chief Executive Officer, George Magrath, MD, will continue in that role with the newly formed company. Ben Yerxa, PhD, former chief executive officer at Opus, will serve as president.

Opus's most advanced program is a gene therapy for Leber congenital amaurosis 5 (LCA5), which causes significant vision loss in infancy. In a Phase 1/2 clinical trial, the LCA5 gene therapy restored vision in three legally blind adults. All three had improvements in light sensitivity and mobility, which were sustained at six months. The treatment was well tolerated, and no serious adverse events were reported. The company plans to enroll pediatric LCA5 patients in the trial during the first quarter of 2025.

Opus also reported that it is ready to begin a Phase 1/2 clinical trial in Germany for its *BEST1* gene therapy. Mutations in *BEST1* can cause a few different retinal diseases including Best disease and retinitis pigmentosa (RP). *BEST1*-associated disease usually affects central vision and is slow-progressing. Successful, Foundation-funded canine studies of *BEST1* gene therapy at the University of Pennsylvania helped the company gain regulatory authorization for the clinical trial.

The company is also developing IRD gene therapies for people with mutations in: *RHO, RDH12, MERTK, NMNAT1,* and *CNGB1.*

Make no mistake, Opus's road ahead will invariably have some bumps and hurdles. However, the merger provides momentum for leveraging its early success with LCA5 and advancing more gene therapies into and through clinical trials.

Stay tuned. Stay hopeful.

Jack McCormick column

EMBRACING THE UNKNOWN: Trailblazing the Backcountry

Jack and his guide dog, Baloo

I often say yes to a challenge, and this response has served me well personally and professionally. Tackling new experiences has given me exciting learning and growth opportunities and increased my confidence. My recent hiking trip to British Columbia is an excellent example of immersing myself in a new challenge.

Our group was hiking in the rugged backcountry about 25 miles from a real road. (I'm defining "real road" as a road that isn't an old, poorly maintained logging road.) My tent, sleeping bag, food, and clothes for the five-day trip were all in my backpack. I wore all my clothes at night because sleeping 8,000+ feet is cold!

Now that I've set the stage, let me answer some questions you may be asking.

Anyone can find a five-day backcountry hiking trip challenging. Being visually impaired created some additional hurdles, but nothing that couldn't be overcome with creativity and support from my exceptional hiking companions.

When I started the hike, I wanted to be as independent as possible. I climbed by feeling my way with my cane and a hiking pole. However, I quickly learned that this technique was not sustainable! I was exerting much more energy than the other hikers as I felt for safe spots to step and promptly got exhausted. Walking across a few logs that formed a makeshift bridge over a stream was incredibly tiring. I did not want to fall in!

I quickly realized that I needed to accept the offers of support from the people around me. I started by following directly behind someone who operated as my guide. We held onto opposite ends of a hiking pole, and I could feel where my guide was stepping. When we reached tricky points, my guide placed my pole exactly where I should step. With these simple adaptations, I kept up with everyone, didn't exert as much energy, and had a much more enjoyable time.

Some visually impaired people have accomplished much more challenging things, and there are fully sighted people who haven't come close to achieving anything nearly as demanding as this experience. For me, this trip was exciting, developmental, and a lot of fun!

I'm sharing this story because I want you to choose how you want to engage with and tackle life with a visual impairment. I discovered that my life is much more fulfilling when I challenge myself. The key is to find opportunities that push you out of your comfort zone, which is different for each person. By doing this, you set yourself up to learn and develop new skills that enable you to take on even more significant challenges in the future. I encourage you to push yourself. You will be pleasantly surprised!

Jack hiking in British Columbia

Jack McCormick is a human resources professional working in the tech sector. He was diagnosed in high school with LCA2 (RPE65). Jack is a Hope in Focus ambassador, helping people living with LCA and IRDs. You can read more about him on his LinkedIn profile by scanning the QR code to the right.

Events

DO YOU HAVE AN EVENT YOU WANT TO SHARE? LET US KNOW!
Email info@hopeinfocus.org with the information and a link.

Rare Disease Day
February 28, 2025
rarediseaseday.org
Rare Disease Day is the globally coordinated movement for rare diseases, working towards equity in social opportunity, healthcare, and access to diagnosis and therapies for people living with a rare disease. Show your stripes and share your colors.

Hope in Focus • Chef's Menu at Cedars
Friday, February 28, 2025 • 7:00 p.m.
Cedars Steaks & Oysters at Foxwoods Resort Casino • Mashantucket, CT
hopeinfocus.org *(See Events Tab)*
Enjoy a four-course dinner with wine pairings at Cedars Steaks & Oysters. Bring a friend and reserve your seat at the table on Rare Disease Day. 100% of your purchase goes to Hope in Focus's mission through the generosity of Foxwoods Resort Casino. Limited seating is available. Act soon!

Hope in Focus • LCA Family Conference
June 20–21, 2025 • Minneapolis, MN
hopeinfocus.org/hif-announces-location-for-the-lca-conference-2025
This conference will provide information about advances in research, deepen your understanding of the roles various stakeholders play in developing treatments, and provide an opportunity for those living with IRDs and those involved in research and the development of treatments to connect and learn from one another.

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The *Seeing Hope* Newsletter
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Learn more at hopeinfocus.org

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