

VISIONARY

CORNEA RESEARCH FOUNDATION OF AMERICA

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9002 N. Meridian Street • Indianapolis, IN 46260 Tel. 317-814-2993 • www.cornea.org

New Lens For Extremely Near-Sighted Young People First study patient admitted to FDA clinical trial



Lora Nehrig has one of the most challenging jobs in health care: she is an R.N. who works nights in an Intensive Care Unit, a place where patients, families, and doctors interact frequently over life and death issues. Five years on the job, Lora loves the fast-paced environment and the close involvement with families facing challenging circumstances. Working nights has taken its toll on her eyes, however; they are often tired from the strain of reading and writing on computers under the turned-down lights of the evening shift.

When Lora was referred to Dr. Price she hoped to be a candidate for LASIK to treat astigmatism (a condition where images lose their sharpness and crispness). Having worn glasses since the third grade and contacts since the sixth grade, Lora's eyes were often itchy, and dry. She was initially disappointed to find out that she was not a candidate

for LASIK, but then was excited to be offered the opportunity to participate in an FDA clinical trial for a new lens called the Veriflex lens.

The lens is for young people that are extremely near-sighted and it is foldable so it can be implanted through a small incision. Dr. Kathy Kelley is managing the study, just as she managed the earlier study of the Verisyse lens, which is rigid and goes through a larger incision.

Dr. Kelley explained to Lora that, in this trial, each patient will receive the investigational foldable lens in one eye and the FDA-approved rigid lens in their other eye. Participating in the study also provides a helpful chance for patients to benefit from this lens who otherwise might not be able to afford it.

Lora went home to think it over, and discussed it with the two physicians who had referred her to Dr. Price, and with her fiancée. Tired of reaching for glasses in the middle of the night before she could get out of bed, and tired of wearing contacts all day long, Lora decided to enter the study. Her first eye surgery was successfully performed on March 17, just a month after her

initial visit. On March 29, she had the second eye surgery and is now able to see 20/20 with both eyes corrected. "The surgery is quick, only about 15-20 minutes long, and Dr. Price and his staff were just wonderful," Lora said, "They did a great job explaining everything to me ahead of time so I was really well prepared and knew what to expect."

For patients who are considering being part of a clinical trial or study, Lora cautioned, "Ask a lot of questions, consider your options carefully and once you decide, do whatever you can to improve your life. It's worth it!"

For more information about the new FDA Study, please contact Dr. Kathy Kelley, the study manager at 317-814-2859. You can read more stories of people with extreme nearsightedness in our book, *Celebration of Light*, which is available for a \$20 donation to the Cornea Research Foundation of America. To order a copy, please go to www.Authorhouse.com or pick one up at Price Vision Group when you come in for your next visit. (You can also call Elaine Voci at 317-814-2993 for more information, and ask her about coming to speak to your group at no cost.)

New Grant Spurs Research on Cultured Corneal Cells Local businessman turns personal experience into desire to help

Local businessman, Jim Butler, recently provided a \$45,000 grant to the Cornea Research Foundation to help fund an exciting project to develop cultured corneal cell sheets. The Foundation will collaborate on the project with Dr. Merv Yoder, a world-renowned expert in adult stem cell research whose lab is located in the Wells Center on the Indiana University Medical School

campus. Working together, the hope is to develop cell sheets suitable for the small incision corneal transplants that Dr. Price has helped pioneer. Success in this endeavor would help alleviate the chronic worldwide shortage of donor corneas and provide superior, longer-lasting tissue for each corneal transplant recipient.

Jim has firsthand experience with vision

loss and a strong desire to find new ways to restore vision. His wonderful generosity in funding this collaborative effort is an exciting milestone in the Foundation's growth as one of the top leading vision research centers in the world.

Foundation Staff News

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National Writing Program Recognition

Development Director Elaine Voci, author of three inspirational-educational books, was selected for recognition in "Authors Across America" a national program sponsored by publisher AuthorHouse, Writers Digest magazine and The Write Stuff writers' conference. On Friday, April 27 and Saturday, April 28, Elaine was featured as one of four Indiana authors chosen to provide insights, advice, and encouragement to about 120 aspiring writers in attendance. Must be the right planets shining on Elaine because she was also featured in Fishers-Geist magazine, May-June issue, in an article on book publishing.

Prevent Blindness New Board Member is One of Our Own

Prevent Blindness Indiana announced Marianne Price, Ph.D. recently joined its Board of Directors.

Clorissa Quillin Recognized by Lux Biosciences

The manufacturer of the Lux Corneal Transplant Implant (named "Lucida") has recognized Research Foundation Clinical Coordinator Clorissa Quillin for enrolling the first subject in the Lucida Clinical Study Program.

New Foundation Board Member Added Newly elected to the Board

Michael ("Mike") Maher senior vice president of Charter One commercial banking in Indianapolis, IN. Welcome, Mike!



Calendar

Where we've been on your behalf and upcoming events of interest to you

March 3

Dr. Francis Price spoke at The Ohio State University Medical Center / 50th Annual Postgraduate Symposium in Ophthalmology.

March 17-18

Cornea Research Foundation hosted the AMO/Ophtec VeriFlex™ investigator meeting on our site.

March 20

Dr. Francis Price spoke at the 22nd Biennial Walter Reed Ophthalmology Postgraduate Course and Alumni Meeting.

April 24 – May 1

Drs. Price attended American Society of Cataract and Refractive Surgery (ASCRS) where Dr. Francis W. Price, Jr. presented papers entitled "Penetrating keratoplasty with a femtosecond laser using an independent laser refractive center" and "Endothelial keratoplasty: current state of the art and impact on cataract surgery decision

making", and Marianne Price, Ph.D., presented papers entitled "Factors influencing endothelial cell loss after DSEK and 2-year trend" and "Outcomes with eye bank-cut vs. surgeon-dissected donor tissue for DSEK". Marianne received a "Best paper of session" award for the second year in a row.

June 19

10th Annual Golf Classic
Bent Tree Golf Club in Westfield, IN.

COMING UP!

Saturday, November 3, our annual Focus on Education...seminar for optometrists; being held at Ritz Charles in Carmel, IN, offers continuing education.

Sunday, November 18, our bi-annual Open House; held at the offices of Price Vision Group in Indianapolis, IN. Free; Refreshments provided.

Life Changing Surgery

Restored sight is a miracle for energetic Pastor Clarence Moore



Pastor Clarence Moore of the Northside New Era Baptist Church regards his inner city ministry as his life's calling. He's grateful for the life-changing surgery he had with Dr. Francis

W. Price, Jr., which has enabled him to carry out his life purpose.

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Pastor Moore's vision challenges began in his early twenties. One day a co-worker came to his cubicle and said, "Clarence, do you realize how close you are holding that paper to your face?" It dawned on him then that he had gradually adjusted to a significant loss of sight and it shocked him to learn how much accommodation he had made just to carry out his work. By the time he graduated seminary and became a minister, he could not see his Bible or sermon notes. As a result, he felt these limitations were not

God wanted. There had to be a better way and he decided that it was time to do something about his sight.

His optometrist treated him for keratoco-

nus and astigmatism and referred him to an ophthalmologist in Kokomo, Indiana. After the exam, Pastor Moore told him he wanted a second opinion and asked him to recommend someone. It was Dr. Francis W. Price, Jr., in Indianapolis.

Pastor Moore describes his first meeting with Dr. Price, "Although Dr. Price was a young man, he seemed very knowledgeable and he had experience with all kinds of things that impacted the cornea." It was the year 2000 and he had his left cornea, the "worst" eye, replaced with a transplant. During surgery, he was put to sleep and when he woke up, he had no pain in his eye at all. Twenty-four hours later, Dr. Price took the bandages off. Pastor Moore looked at him with awe and said, "Wow, I can see you really well. I know that God has used you to

work a miracle."

In 2004, he had a corneal transplant in his right eye. Dr. Price predicted that it would do better than the first transplant because, in the interim, he had gained even more experience and the technology had gotten better. Pastor Moore's left eye had become dominant and the right eye had become dependent. With correction in both eyes his overall vision was much better. Dr. Price did two relaxing incisions after the transplant to improve his vision as much as possible and he has had LASIK twice. His restored vision became 20/30 – another of God's miracles from his perspective.

Pastor Moore summarizes the experience this way, "The miracle of sight allows this preacher to "...rightly divide the word of Truth..." as I preach the Gospel. The sight that has come through the hands of Dr. Price allows me to not just function as an average pastor, but my sightedness has allowed me to use all of my gifts with greater confidence. I owe my ministerial work to him and his staff. God uses each of them to bring miracles into our lives."

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Diabetes Can Impact Your Sight

A quick quiz for keeping your diabetes under control

Uncontrolled diabetes can lead to blindness. It's important to your vision health to keep your diabetes under tight control. Because diabetes is a progressive, chronic disease, it can have harmful effects on your overall health. How well are you doing?

1. I follow my diabetes food plan...
 - Every day
 - Most days
 - What food plan?

2. I check my feet for cuts and sores...
 - Often
 - Occasionally
 - When my doctor reminds me

3. I exercise...
 - Regularly, and I also check my blood sugar before and after
 - I don't work up a sweat unless I am emotionally involved

4. I check my blood sugar levels...

- I follow my doctor's instructions
- Only when I am in the mood
- I keep forgetting to do it

Answers:

(1) Follow your diabetes plan daily; if you don't have one, ask your doctor to schedule a visit for you with a dietitian who specializes in diabetes. (2) Check your feet daily and maintain proper care including nails and skin care. (3) Get 30- 60 minutes of activity 4-5 days of the week. Talk about it with your doctor before beginning an exercise plan. (4) Check your blood glucose the way your doctor has told you; high blood sugar can make you feel thirsty and tired, can cause blurry vision, and make you urinate more often.



Women's Health and Eye Care

The oft-reported differences between the sexes have implications for your eyes



Did you know that...

- More women develop Fuchs' corneal dystrophy than men? It is thought that because women live longer, they may be at greater risk to age-related conditions such as Fuch's which strikes when people are in their most productive years, between 40-65 years of age.
- Two out of three blind people in the world are female? The financial and cultural status of women in de-

veloping and industrialized nations affects their education and access to health care, especially vision care.

• Age-related macular degeneration is the major cause of blindness and, because they live longer than men, women are more affected by the condition.

• There are more female heads of household living in poverty? That translates to low employment, lack of insurance and a lack of medical

and vision care treatment.

• In developing countries, a family's health is related to the mother's literacy? Literacy includes the empowerment, development, and education of females from the time they are school age. As a woman's literacy increases, she is better able to make good decisions for her family's health, to actively seek medical care, and to improve living standards and conditions.

CELLS GO WILD!

Rare condition can be cleared up with new DSEK surgery

Some patients have a rare condition called ICE syndrome, where the cells lining the inside of their cornea go wild! They quit doing a good job of keeping the cornea clear and, instead, start dividing and moving over onto the iris. They even plug up the drain where fluid exits out of the eye, so these patients often end up with glaucoma prob-

lems. Dr. Price has found that DSEK can help clear up these people's corneas. He and co-author, Marianne Price, Ph.D., recently described the outcomes of his first three DSEK surgeries to treat ICE syndrome in the journal *Cornea*. All three patients ended up recovering 20/20 to 20/30 vision!



Losing An Iris Is Easier Than You Think

New surgery brings unexpected advantage to corneal transplant patients

Sometimes when people take a hard hit to the eye, they can lose their iris (which is as fragile as tissue paper). They may also lose their lens, along with damaging their cornea.

The new DSEK "cornea-sparing" transplant can help treat the corneal damage but is somewhat risky to perform if there is no

iris or lens present to separate the front from the back part of the eye. In fact, the donor graft could easily fall back onto the retina in these eyes! Dr. Francis Price, Jr., has developed a nice way to secure the donor graft at all times so that this won't happen. He and his co-author, Marianne Price, Ph.D., recently described the technique in the

Journal of Cataract and Refractive surgery so that other surgeons and their patients can benefit from it as well.

This dedicated pair of researchers also recently reported an extremely rare flap complication that can occur after LASIK. (They have only seen it occur in nine out of 17,100 LASIK eyes.)

One In Six Americans 40 and Older Has Cataracts

Good news is that vision loss may not be permanent

One in six people represents about 20.5 million Americans. And it is likely to get worse. According to a study by Prevent Blindness America, by the year 2020, more than 30 million Americans will be affected by cataracts. There is great hope for all of

us, however, because cataract surgery can restore vision. You can do some things to help prevent it in the first place: you can stop smoking (or never start), and wear sunglasses when out in bright sunlight. And one more thing: get an annual eye exam.

As Dr. Price advises, "If we live long enough, we will all develop cataracts. It's just part of normal aging. Luckily, cataract surgery is a simple surgery that can restore vision quickly."

From the Research Corner

CRFA begins 3 new clinical trials that hold promise for restoring vision

By Marianne Price, Ph.D.

In the last few months we've been able to offer patients with vision challenges an opportunity to participate in three new clinical studies.

The first is for young adults who are extremely near-sighted. Folks participating in his study will have a small lens placed in each eye to correct their vision. One eye will receive an approved lens and the other will receive an investigational foldable lens. The new foldable lens is designed to fit through a smaller incision to help speed visual recovery. This study is now underway at nine sites in the United States. Surgeons from across the country came to Indianapolis on Saturday, March 17, to watch Dr. Price perform surgery on the first study patient, Lora Jehrig. You can learn more about Lora's inspiring story on page 1.

Two other new studies involve a novel slow-release drug implant designed to help reduce graft failure in patients with corneal transplants. Unfortunately, up to one third of recipients are at increased risk of losing their graft.

“Cornea transplants are the most common type of solid tissue transplant, with over 30,000 performed in the US each year.”

Rejection is the most common reason.

The new implant steadily releases a drug called cyclosporine for a one year period. Many people have taken this drug by mouth to help prevent rejection of a heart, liver, or kidney transplant. Now, the implant makes it possible to provide high concentrations directly to an eye with a cornea transplant.

The implant is being evaluated at 32 sites around the world for use in two groups of patients, those who are planning to receive

a transplant but are at high risk of having it fail, or those who have already had a transplant and recently experienced a rejection episode. Patients in both groups will be randomized (like flipping a coin) to determine whether they receive an implant containing drug or placebo. Dr. Price was the first surgeon in the world to implant this new device in a cornea transplant patient and he has provided a training video for use by the other surgeons in the study.

Currently, no drugs are approved in the United States to prevent corneal transplant rejection. Steroids are often prescribed for this purpose, but they have a number of unpleasant side effects. So we are hopeful that these landmark studies will result in the first approved treatment to prevent corneal graft rejection!

Bananas Show A Big Bunch of Affection

Patient chooses unusual gift to show appreciation

“Most staff went ape when they saw the sheer mass of sweet yellow fruit, and some even admitted to monkeying around by indulging themselves in banana bread, bananas a la carte, and bananas over cereal.”

Freddie Gershon, friend of the Foundation from New York City, and his wife Myrna, provided the Research Foundation with tickets to see a play, Guys and Dolls, at the local Beef n Boards theatre in April. A large thank you note sent to Freddie and Myrna



Clinical Assistant Rex Slater shares his amazement with Dr. Price.

was signed by many of the 60 staff who attended the show. Not to be outdone, the Gershons responded by sending an enormous basket of fresh bananas to Dr. Price and his team with a note saying that they had “gone bananas” when they saw the thank you note.

We're Ready To Make A Leap: Will You Help Us?

We have the ambition; we have the dreams; we have the potential. What we don't have is enough staff. We're not a university. Nor a prosperous medical school with endowments and wealthy alums. We're vulnerable. But we continue to win our battles, day after day,

thanks to your faithful support. We need to hire three part-time staff (ophthalmologist, technician, data entry person).

Total bill: \$175,000.

You have made everything possible in the past 20 years; please help us reach this

pivotal goal by giving in any amount you can. **Donate online at www.cornea.org or by sending a check to CRFA, or you can call Elaine at 317-814-2993 to make a credit card donation.**



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Ask Your Doctor

A regular feature of Visionary in which Dr. Price answers your questions about vision



By Dr. Francis Price, Jr.

Q: My 72 year old Dad is in excellent health but he has Fuchs' syndrome and cataracts on his eyes. He would like to have cataract surgery, but an eye specialist advised him to not have it done because it could cause him to lose his sight immediately. He would also need a corneal transplant. Have there been any new strides in the treatment of Fuchs' syndrome with cataracts?

A: We have just finished a number of studies on Fuchs' Dystrophy and cataracts. What I would recommend is that he go ahead with the cataract surgery and see how he does. If the vision improves enough to help him see better, then that is all he needs.

If the vision either does not improve, or gets worse, because of the Fuchs' Dystrophy then he should have a DSEK corneal transplant surgery performed to treat the Fuchs' Dystrophy. The only exception would be if his cornea is already turning cloudy. In that case he may want to have both surgeries done at the same time.

As we learn more about how the eye responds to the DSEK corneal transplant, we are changing some of our previous recommendations on how and when to treat people with problems like these. We will keep you informed as we learn more.

