This is the motto based on a poem that Ann Crupi, 68, a Cornea Research Foundation study participant lives by. Raised on a family farm in western Kentucky, Ann was diagnosed with Fuchs’ dystrophy and map-dot-fingerprint dystrophy in her early 40s, and later cataracts. She was told she would need a cornea transplant or she would eventually go blind. Doctors advised her to postpone the surgery at that time citing the ongoing research and said it was probable that she would not have to have a full-thickness cornea transplant in the future. When she asked to have the cataracts removed to improve her vision, she was advised to wait as the cataract surgery would mean she would likely need a cornea transplant sooner.

Fast forward to 2010, and her vision was significantly impacting her freedom and quality of life. She was fearful of driving and her little grandchildren would now hold her hands so she wouldn’t fall while walking as their mother had told them, “Grandma doesn’t see too well anymore.” She felt herself closing off from the world and realized the time had come. She found an online support group and read hundreds of stories. “I couldn’t read the computer very well so I would print off pages in large font and go sit underneath a bright lamp to read and Dr. Price’s name kept coming up.” She and her husband decided it was best to make the five hour drive to see Dr. Price.

“The poem is about trusting God even while you continue to persevere. For me, that meant doing the research to find the best medical care for my condition. I would tell anyone in this situation to do your research,” says Ann. When Dr. Price looked at my eyes, he exclaimed, “Well, you have it all don’t you!” Dr. Tenkman, a fellow at the time, was in the exam room as well and asked to look at my eyes. After he finished he put his hand on my knee, looked me in the eyes and said, “you’re going to be so glad you came here.” She said, “I was excited to learn I would no longer need to do two different surgeries. I had been reading about the triple procedure—DMEK transplant, cataract removal and new lens placement and I was a candidate. It’s wonderful that the research has enabled doctors to provide more efficient care for patients.”

Ann first realized a big difference just five days after her surgery. While sitting in the waiting room of the Price Vision Group clinic, the Foundation video played on the television featuring the song “Amazing Grace”. “I started crying because it was really true—I once was blind and now I see. I thank God for Dr. Price, Marianne and the Foundation for their research and for the caring staff of Price Vision Group.”

“I see so well now. I can drive again, read with ease and have even started blogging! I’ve always loved writing and want to document life growing up on a farm in the 50s and 60s for my grandchildren. Without my improved vision I would not have been encouraged to do that. I’m also enjoying springtime in Kentucky—the dogwoods are blooming on the hillsides,” she said.

**What are cataracts?**

Young people can see things clearly, both at a distance and up close, because a lens inside the eye adjusts for near and far focusing. As we age, our crystalline lens becomes stiffer, reducing our range of focus. That’s why many of us start to need glasses for reading as we reach our 40s and 50s.

Eventually our crystalline lens takes on a yellow tint and becomes cloudy—this is called a cataract. Cataracts impair vision in over half of people who are over 60 years old. In fact, everyone who lives long enough develops cataracts. As such, cataract surgery is the most common procedure performed in the United States with over 95 percent of patients restoring complete visual clarity after the procedure.

Cigarette smoking and extra exposure to UV light, including sunlight, can cause cataracts to form at an earlier age than normal. Wearing UV blocking sunglasses during outdoor activities may help delay cataract formation. (Continued on Page 3)
Interns and Staff Accepted to Medical School

We are proud to announce the acceptance of staff member Kelly Fairchild and two interns—Lauren Gunderson (current) and Maraya Baumanis (former, 2011-2012) into medical school this August.

Kelly will be joining Des Moines University in Iowa, Lauren has narrowed her decision down between two choices and Maraya will be attending Indiana University.

“We are pleased to assist students with building their skills in clinical research as they navigate their way through their education and begin their careers as medical students,” said Dr. Price.

We have been very fortunate in finding qualified interns through local universities that have aspirations to become doctors. It’s beneficial for the students as they gain clinical experience in a medical practice as well as medical research. “Kelly joined the Foundation as a college intern and was later promoted to clinical research coordinator and has been with us for five years. She has been a tremendous asset to the Foundation and will be greatly missed. We know she will make an excellent doctor,” said Marianne Price.
Did you know that the famous Impressionist artist Claude Monet suffered from cataracts late in life? As his natural lens turned yellow and then brown, clouding his vision, his paintings changed from being bright and colorful to looking dark and muddy. He postponed having cataract surgery until he was nearly blind because the procedure was considerably more dangerous in the early 1900’s. After he could see clearly again, Monet was horrified by the dark paintings he had made while his vision was clouded by cataracts, and he ended up destroying many of them.

Fortunately, cataract surgery is far safer today and is performed as an outpatient procedure. Dr. Price achieves excellent results just using eye drops to numb your eye—he doesn’t use any injections around your eye. Also, he makes a very small incision and doesn’t use sutures or “stitches” for routine cataract surgery.

Dr. Price and the Cornea Research Foundation are working actively to make cataract surgery ever easier and safer for patients. Recently, we evaluated new eye drops to reduce pain and inflammation, and we’ve tested new antibiotic eye drops to help prevent infections. We’ve assessed intraocular lenses that filter high energy blue light as well as ultraviolet light to better protect the back of your eye. Also, we’ve shown that use of a small ring-shaped device improves safety in high-risk patients when the fibers holding the lens in place are loose or damaged.

Beyond just improving safety, we are also working to give cataract patients even better visual results. For example, we recently tested an exciting new intraocular lens that can be fine tuned with a light beam after it has healed into place in your eye.

With cataract surgery we strive to select a lens that will give each person the best possible vision without glasses. Since we see many people who have cornea problems, such as Fuchs’ dystrophy, in addition to cataracts, we frequently combine cataract surgery with a cornea transplant to treat both problems at the same time. However, Fuchs’ dystrophy causes the cornea to swell and change shape, and this makes it a lot harder to figure out exactly what lens power to place in the eye when the cataract is removed.

What are your lens options for cataract surgery?

**Monofocal:** Patients receiving monofocal, or single focus IOL, generally will experience excellent vision but will need glasses for either intermediate/near or distance depending on patient’s choice and visual goal.

**Multifocal:** Patients choosing multifocal lenses usually experience a greater independence from glasses and contacts. Multifocal lenses incorporate correction for both distance and near vision.

**Astigmatism Management:** If you have cataracts and astigmatism, your astigmatism management options include corneal relaxing incisions or laser refractive surgery. Typically, you will need to wear reading glasses or bifocals following your procedure.

**Toric:** A toric lens is designed to correct higher amounts of astigmatism in cataract surgery. Most patients receiving a toric lens enjoy excellent distance vision, but still may need readers or bifocals.

Therefore, we are now using a special imaging device to carefully characterize how the shape changes in Fuchs’ dystrophy corneas following a transplant. Dr. Price is one of the few transplant surgeons in the country using the minimally invasive transplant procedure known as DMEK, in which a single cell layer on the back of the cornea is exchanged for healthy donor tissue. With DMEK we don’t have any thickness variation in the donor tissue, so we can focus on just better understanding how the patient’s cornea changes. We appreciate our many donors who support our efforts to give each patient the best possible vision and the safest possible surgery!

What are cataracts? Continued from page 1

Once cataracts begin to impair your daily activities such as reading or driving, an ophthalmologist can remove your crystalline lens and replace it with a small plastic intraocular lens as an outpatient procedure. Lenses can be chosen that correct near-sightedness, farsightedness and astigmatism (see lens options above). Special premium lenses can provide good vision at both near and far distances to avoid having to wear glasses. Wearing UV blocking sunglasses starting at a young age during outdoor activities may help delay cataract formation.
Ask Your Doctor  By Dr. Francis Price, Jr.

Q: I’ve been told I have Fuchs’ dystrophy and need a cornea transplant in addition to cataract surgery. My eye doctor told me he will do the cataract surgery, then I can visit Price Vision Group for my cornea transplant. I’ve read online that some patients have both procedures at the same time. Can you please explain the benefits and risks of doing both at the same time?

A: This is a good question - each approach has certain advantages. The principal advantage to having the two surgeries done separately is that the transplant surgery is easier to perform after the new intraocular lens (IOL) has settled firmly into place. We use an air bubble to hold the new transplant in place, and we can use a smaller air bubble that absorbs more quickly if the new IOL has had a month or longer to stabilize.

Until about a year ago, we thought that there might be less risk to the donor tissue if the surgeries were performed separately, but new research we have done tracking surgical results shows we can safely combine the cataract and transplant procedures, which can be easier for the patient.

Our research has also shown that patients can safely have both eyes transplanted with DMEK one to two weeks apart rather than waiting months or years. DMEK substantially decreases the risk of graft rejection compared to full thickness transplants (PK) and DSEK/DSAEK. Moreover, DMEK typically provides more rapid visual recovery than the other two surgeries. We also do our DMEK surgery with just topical anesthesia allowing more rapid recovery for both the eye, its surrounding tissue, and the overall body compared to either general anesthesia or local injections of anesthetic. This has been a great benefit for our patients traveling long distances to see us for surgery. What a dramatic change from the time when PK was the only option!

Thank you for your continued interest and support!
All donations to the Foundation are tax-deductible and support our sight-restoring research.