

TWIN CITIES

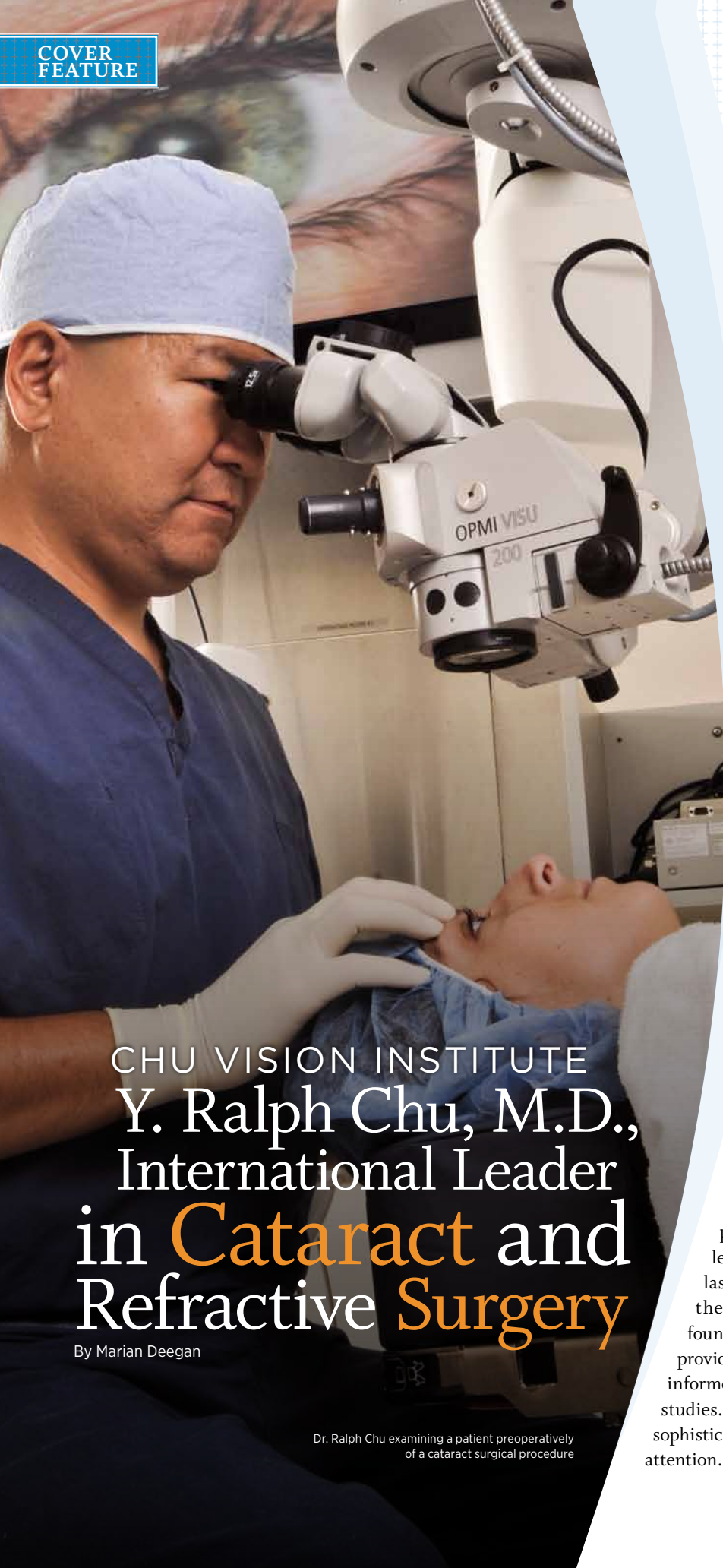
MD NEWS

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Chu Vision Institute

Y. Ralph Chu, M.D., International Leader in Cataract and Refractive Surgery



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By Marian Deegan

Dr. Ralph Chu examining a patient preoperatively
of a cataract surgical procedure

BABY BOOMERS ARE NOT GOING SEDATELY INTO THEIR GOLDEN YEARS. THEY EXPECT HEALTH CARE TO SATISFY THEIR EXPECTATIONS OF A VIBRANT LIFESTYLE WITH A LONGER PROFESSIONAL CAREER, AND THEY RESEARCH THEIR MEDICAL OPTIONS WITH THE SAVVY OF DEMANDING CONSUMERS. THIS GENERATION WANTS A LONGER, HEALTHIER LIFE EXPERIENCE WITH LITERAL CLARITY AND PREFERABLY WITHOUT THE INCONVENIENCE OF READING GLASSES. CATARACTS ARE NOT PART OF THEIR GAME PLAN.

HOWEVER, THE NATIONAL Eye Institute reports that cataracts are one of the leading causes of visual impairment currently affecting 3.3 million Americans age 40 and over, a figure projected to reach 5.5 million per year by the year 2020. Approximately 60% of people over the age of 65 will develop cataracts, with symptoms that can include double vision, dulled colors and sensitivity to bright sunlight and headlight glare.

The ophthalmology practice of Y. Ralph Chu, M.D., has evolved to provide premium visual care to patients at this crossroad of medical need and heightened-lifestyle expectations. Dr. Chu is an international physician instructor on cataract and intraocular lens implantations, phakic lens implantations, laser vision correction technologies and ocular therapeutic treatments. Eleven years ago, he founded the Chu Vision Institute with a mission to provide state-of-the-art refractive surgery techniques informed by participation in clinical research and FDA studies. His solo practice developed a reputation for sophisticated medical care delivered with personalized attention. In 2007, Dr. Chu responded to his practice's

increasing need for cataract surgery by relocating and expanding the Chu Vision Institute. His Bloomington site is designed to incorporate new technology developed for cataract treatment, as well as glaucoma, oculoplastics, refractive and corneal surgery. Dr. Chu shares his perspective on the evolution of cataract surgery in recent years and the advantages that these advancements offer to his patients.

“There has been a continuous drive towards improving the quality of vision that ophthalmology can deliver,” says Dr. Chu. “As a result, the surgery experience and visual outcomes of cataract patients today have dramatically improved. Concurrent with these advances, we are seeing the average age of our patients seeking cataract surgery drop. I attribute this in part to the increased demand of computers and technologies on vision. Five years ago, 10% of patients seeking cataract treatment were under 65. Now, roughly 30% of our cataract patients are under 65. These patients are better informed than ever before. They expect refined options that will increase their visual function.”

Historically, the prospect of cataract surgery involved daunting procedures, lengthy recovery times and limited visual rehabilitation. Surgery could only be performed on large hardened cataracts, necessitating uncomfortable anesthesia injections, 12 to 13 millimeter incisions, stitches, postoperative eye patches and several weeks of bed rest recovery. There were few replacement lens options available, limiting the ability to enhance visual outcomes.

Today, rapidly evolving technology and the development of less-invasive surgical techniques have made cataract surgery a far less intimidating prospect with significantly improved outcomes. Anesthesia is handled with drops. New phacoemulsification technology uses ultrasound to treat cataracts earlier in their development by delivering low levels of energy, preserving the fluidics inside the eye and improving patient safety. Minimally invasive surgery techniques shorten surgery times to about 10 minutes, and typically do not require stitches or postoperative patches. Most patients walk out of surgery able to instantaneously experience sight improvement and can resume their lives without interruption once the effects of the mild IV anesthetics wear off. Although instructed not to engage in heavy physical exertion for a couple of weeks after surgery, most patients can immediately return to work, walk, shower, bend over to tie their shoes and use a computer.

Improvements in the surgical experience are complemented by the availability of nine new or enhanced lens implant options. Each lens offers distinctive strengths and advantages that can be tailored to an individual patient’s lifestyle, significantly expanding visual outcomes. The nine available lens options reflect four basic categories of lenses: monofocal, toric, multifocal and accommodating. In the past, intraocular lens implants were only spherical in nature. Now, most lens implants offer an aspheric surface to help balance patients’ optical systems and improve night vision after cataract surgery. Toric implants correct a patient’s astigmatism just as glasses do, reducing the need for distance glasses. The other available implants help reduce the need to wear reading glasses after cataract surgery. They include multifocal implant technology like the ReZoom Multifocal Lens, AcrySof IQ ReSTOR IOL, TECNIS Aspheric

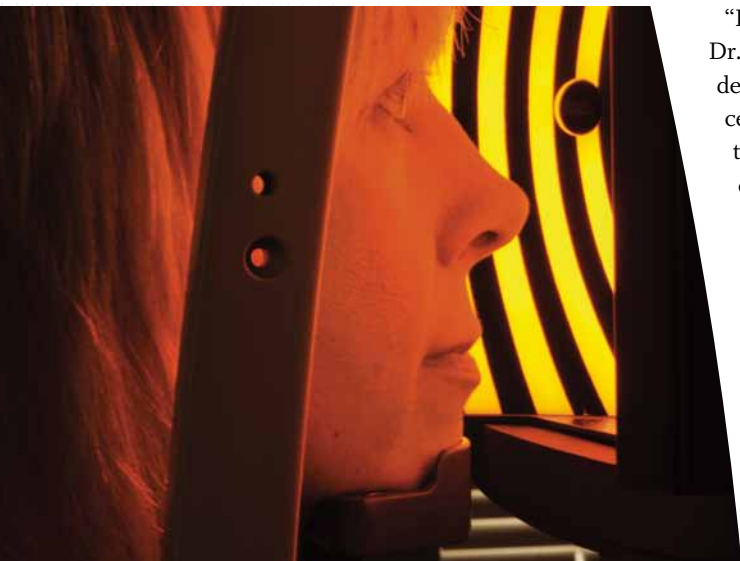
IOLs and the Crystalens accommodating implant. Many of the procedures and products now available were tested by Dr. Chu in clinical evaluations and FDA trials at the Chu Vision Institute.

“The most obvious change in cataract treatment is the explosion in the number of intraocular lens implants available,” notes Dr. Chu. “Only a few years ago, patients had one lens choice, which required them to wear reading glasses. Some cataract patients still come in assuming that they will have to wear reading glasses after surgery. It’s important for doctors and patients to know that today’s technologies mean that reading glasses after cataract surgery aren’t necessarily a given. The science of ophthalmology now offers a sophisticated technical menu of tools and techniques that marry refractive and cataract procedures to optimize visual outcomes. This is a revolutionary development.”



“These technologies continue to rapidly evolve and improve in the marketplace,” says Dr. Chu. “Keeping up with the pace of change is extremely challenging and exciting. Crystalens implants have gone through four iterations since FDA approval, each improving on the optical design to deliver better-quality reading vision without sacrificing distance vision. Crystalens now offers three different types of lenses.”

Dr. Chu performs over 1,000 surgeries a year, using both refractive and cataract surgery techniques to customize outcomes to individual patient needs. “Cataract techniques are done in fractions of a millimeter; laser corneal surgery is done in fractions of a micron,” Dr. Chu explains. “Cataract patients want refractive outcomes. We can respond to patient expectations and achieve better visual outcomes by using the fine tuning of laser vision-correction procedures to enhance new premium cataract implant technologies like Crystalens, ReSTOR and TECNIS multifocal lenses.”



Not all practices are able to deliver the customization technologies offered by Chu Vision Institute. National surveys of ophthalmology practices indicate that new lens technologies are used for only 6% to 7% of patients. At Chu Vision Institute, over 40% of patients choose to be treated using new lens options.

“Our model is based on my belief that delivering comprehensive care requires an ophthalmology practice to offer the refractive surgery techniques like LASIK and PRK [photorefractive keratectomy], as well as cataract surgery techniques,” says Dr. Chu. “Control over the surgical experience is critical to optimal results. This is what prompted us to expand our practice to offer both a surgery center and a laser surgical suite, so that we can treat the entire patient under one roof. It’s also very comforting — especially for patients with visual issues — to have one treatment destination that’s easy to find in a quieter suburban setting where parking is simple.



“Delivering available technology to patients remains a challenge,” Dr. Chu acknowledges. “Practices that offer a more personalized care delivery model and refractive surgery expertise have been more successful. We have personally tested many of the surgical techniques and technologies now approved by the FDA. These are the procedures we offer, and the products we use. Involvement in clinical trials with new surgical technology and pharmaceutical techniques that are directly applicable to our practice definitely keeps us on the cutting edge of technology and gives us an opportunity to evaluate effectiveness, safety and see how those technologies would fit into practice.”

New instruments developed at the Chu Vision Institute include a precision Limbal Relaxing Incision (LRI) marker and a LRI diamond knife used in refractive cataract procedures. “This astigmatism correction procedure can be performed in conjunction with cataract surgery,” he explains. Additional procedures to eliminate the need for reading glasses are also on the ophthalmologic frontier. Within the next few months, Chu Vision Institute is scheduled to begin clinical research trials on new technologies to address reading glasses alone.

“Expanded choices in lens implant technologies put more emphasis on the art of medicine,” Dr. Chu says. “We feel a responsibility to educate patients to make the right decisions for themselves. We listen to the patient’s needs and do an intense amount of education about available technological options. Some new technologies may not be fully covered by patients’ insurance plans, so patients are making economic as well as technological choices when considering the techniques and procedures available. My attention is focused on taking care of the patient, learning to use the latest techniques and delivering those techniques to the patient to give them an optimal-quality result.

“With all the fundamental political and economic changes that are happening in the field of medicine,” says Dr. Chu reflectively, “I still believe that the most important focus is the relationship between the patient and doctor. One of the nice things about ophthalmology is the opportunity to develop patient relationships over a lifetime. I see patients when they are young for their refractive surgical needs. I see them again in their 40s and 50s, when they are looking for options to reduce their need for reading glasses. As our patients get older, they have medical needs for conditions, including cataracts and glaucoma. Our system is designed to give patients as much time as they need, with an emphasis on patient contact with the doctor. We listen, identify needs, educate about available technologies, match technology to lifestyle and fine-tune the results. The best part of my practice is getting to know my patients. Matching the right technology to a patient’s needs requires connection at a personal level. It is important for me to know that my 56-year-old cataract patient is a retired teacher who loves to play golf, knits as a hobby and doesn’t want to have trouble seeing what she wants to do. When we make the right decisions together and deliver visual results that make her happy, that’s my definition of success.”

To contact Chu Vision Institute for referrals or questions, call (952) 835-1235 or visit www.chuvision.com. ■