



The state-of-the-art  
**LASIK Laser Eye Center**

**Connie S. McCaa, MD, PhD**  
**LASIK Laser Eye Center**  
4800 Lakeland Drive  
Flowood, MS 39232  
601-933-1080



## LASIK Laser Eye Center

Connie S. McCaa, MD, PhD

### LASIK is a proven procedure

Connie S. McCaa, MD, PhD, was one of the first ophthalmologists in the United States to be trained in the LASIK procedure. She has successfully performed LASIK on thousands of patients in Jackson, Miss. Nearly 32 million people worldwide have had LASIK – and an estimated 290 million more are candidates.

### Who are LASIK candidates?

LASIK, or *laser in situ keratomileusis*, means using a laser underneath a corneal flap (in situ) to reshape the cornea (keratomileusis). This refractive surgery permanently corrects middle- and long-distance vision by reshaping the cornea.

The laser procedure is FDA-approved to correct vision for:

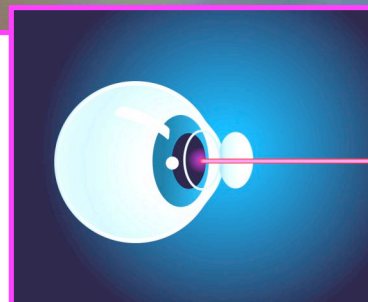
- **Nearsighted** or *myopic* patients, with or without astigmatism.
- **Farsighted** or *hyperopic* patients, with or without astigmatism.

The next frontier in LASIK is correcting **presbyopia**, or the condition suffered when patients at about age 40 lose their ability to see up-close for reading. Because **LASIK already corrects astigmatism**, many presbyopic patients who formerly used prescription lenses for reading are able use inexpensive “drug store” glasses to read after receiving LASIK.

### Why does LASIK equipment and experience matter?

The experience of the physician and the sophistication of the LASIK equipment **increases the accuracy of the LASIK procedure**, thereby improving patient outcomes and reducing complications. A national authority on LASIK, Dr. McCaa maintains the highest-caliber of LASIK equipment available. She also is well known as a consultant surgeon for other physicians to correct their LASIK patients’ complications.

Dr. McCaa’s LASIK Laser Eye Center is the **only iLASIK Certified Laser Center in Mississippi**. She also uses the first and, to date, only Pentacam unit in the Jackson area. The Pentacam, which detects which patients should not have LASIK due to preexisting cornea conditions, is used as part of Dr. McCaa’s pre-LASIK eye exam for patients.



LASIK Laser Eye Center  
4800 Lakeland Drive  
Flowood, MS 39232  
601-933-1080



## LASIK Laser Eye Center

Connie S. McCaa, MD, PhD

### LASIK Makes You Ready for Life!



### Benefits of LASIK Vision Correction

LASIK ends the hassle and recurring expense of buying contact lens and eyeglasses for middle and distance vision – and the limitations they place on your life and activities.

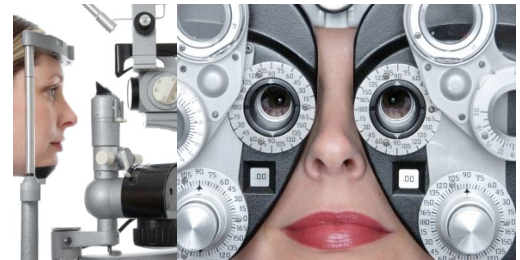
Better vision and fewer complications are the trends in LASIK today, thanks to a new Advanced CustomVue system used by Dr. McCaa. Because no two eyes are like, new sophisticated equipment permanently is on site at her LASIK Laser Eye

Center. This equipment maps a vision correction plan unique for every patient in this state-of-the-art iLASIK procedure.

Dr. McCaa usually performs LASIK two days per week. The media is welcome to observe the procedure and cover it, with advanced arrangements. Due to federal HIPAA regulations that protect privacy, patients must grant permission for the media to observe.



Dr. McCaa consults data in preparation for a patient's LASIK treatment. *Jay Ferchaud Photo*



**LASIK Laser Eye Center hours:** Tuesdays & Thursdays

**LASIK Laser Eye Center**  
4800 Lakeland Drive  
Flowood, MS 39232  
601-933-1080



## LASIK Laser Eye Center

Connie S. McCaa, MD, PhD

Enjoy  
Beauty  
Without  
Visual  
Assistance ...



## The LASIK Procedure ...

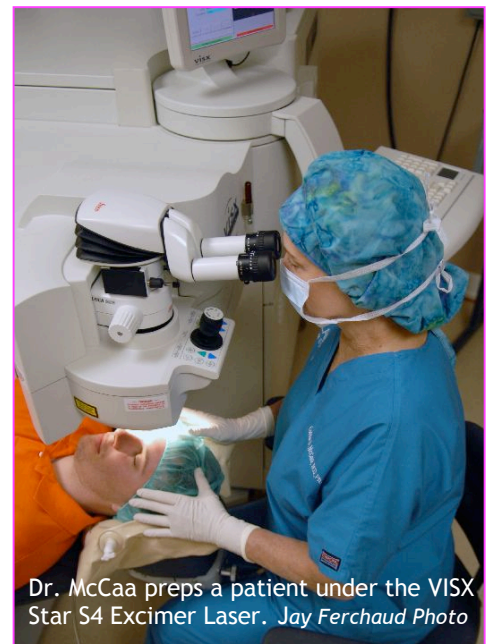
LASIK uses an excimer laser to permanently change the shape of the cornea (the clear covering over the front of the eye). Before this excimer laser is used, however, another laser device is used to precisely create a flap in the cornea.



In the past, this flap was cut with a mechanical blade. But the newest devices create a desirably thinner flap using a more accurate, high-speed, cool laser to make the separation. A hinge is left at one end of this flap, where the cornea remains attached.

The flap is folded back revealing the stroma, or midsection of the cornea. Then pulses from the computer-controlled excimer laser vaporize specific abnormal portions of the stroma to reshape the cornea and correct vision problems. The excimer also is a cool laser. Then the flap is resealed.

LASIK is a painless or nearly painless procedure. Only local anesthesia eye drops are needed to keep the patient comfortable during the few-minute procedure.



Dr. McCaa preps a patient under the VISX Star S4 Excimer Laser. Jay Ferchaud Photo

LASIK Laser Eye Center  
4800 Lakeland Drive  
Flowood, MS 39232  
601-933-1080



## LASIK Laser Eye Center

Connie S. McCaa, MD, PhD

### Dr. McCaa's State-of-the-Art Equipment for LASIK

Dr. McCaa's patients at the LASIK Laser Eye Center are treated not only by one of the most experienced LASIK physicians in the nation. Dr. McCaa is known for using the newest, proven ophthalmological and LASIK equipment available to maximize visual outcomes and to minimize complications. If patients are not good LASIK candidates, there is no charge for pre-screening.

Four major units of equipment are used for LASIK patients by Dr. McCaa. Her LASIK Laser Eye Center is the only *iLasik Certified* Laser Eye Center in Mississippi. This equipment is ...

#### Pentacam HR

Dr. McCaa has the **first and, to date, the only Pentacam HR** in the greater Jackson region.

#1

This 3-D corneal scanner is used during LASIK patient's initial eye examination to ensure they are **good candidates for LASIK**. The Pentacam HR precisely measures and analyzes the center of the cornea by reading up to 138,000 elevation points in the cornea's structure.

Corneal alterations caused by trauma, implants or previous refractive treatments are identified. Most importantly, the Pentacam HR detects whether patients have *keratoconus*, a marked bulging coning condition of the cornea, which means they should not have LASIK. This unit's rotating, 3-D camera overcomes errors that could arise if using older one-directional scanning instruments. Because the Pentacam is used for both pre-LASIK and other eye exams, it is at Dr. McCaa's St. Dominic Hospital clinic.

It is manufactured by Oculus Inc. of Germany.

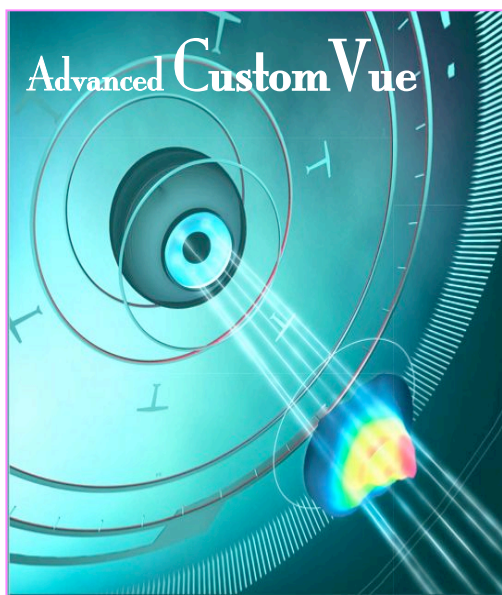


LASIK Laser Eye Center  
4800 Lakeland Drive  
Flowood, MS 39232  
601-933-1080



## LASIK Laser Eye Center

Connie S. McCaa, MD, PhD



### LASIK wavefront guided technology ...

All LASIK procedures worldwide are performed with an excimer type of laser. But there are three types of laser treatments that may be given: conventional laser treatments, wavefront-optimized treatments, or *wavefront-guided treatments*. The latter, wavefront-guided treatments or **Advanced CustomVue**, are the most advanced and the type Dr. McCaa performs.

Three state-of-the-art units of equipment permanently are on site at the LASIK Laser Eye Center to perform the trademark iLASIK procedure. **This iLASIK equipment (labeled as #2, #3 and #4)** is manufactured by Advanced Medical Optics, Inc., of Santa Clara, California.

# #2



## VISX Wavescan

This equipment scans light into the eyeball to evaluate the eye and detect abnormal areas that cause astigmatism and vision problems. It also features iris registration (IR) and tracking. Its scan captures 240 data points over a 7 mm pupil, which is 25 times more precise than standard measurements for glasses or contact lens

The IR feature allows a unique treatment blueprint for every patient – since no two irises are alike, (which is why iris scans are used for identification purposes). This Wavescan evaluates each eye and creates a treatment plan that will precisely line up the excimer laser (equipment #4) to correct vision problems. Even the slightest shift between eye alignment and treatment alignment can prevent optimum LASIK outcomes, so this unit is a the “brains” of the latest LASIK technology.

This helps create better vision outcomes, including better night vision and visual acuity.

**LASIK Laser Eye Center**  
4800 Lakeland Drive  
Flowood, MS 39232  
601-933-1080



## LASIK Laser Eye Center

Connie S. McCaa, MD, PhD

### Intralase FS laser

Part of the traditional LASIK process is using a blade (a mechanical microkeratome) to create a corneal flap. But Dr. McCaa's state-of-the-art procedure instead uses the super-high-speed Intralase FS laser to create the corneal flap to begin the LASIK procedure.

This FS or high-speed *femtosecond* laser is completely different from the excimer laser later used later in Dr. McCaa's LASIK process for corneal reshaping. The Intralase FS makes the temporary corneal flap, which is resealed at the end of the procedure and quickly settles back into place.

This laser separation process increases accuracy, reduces complications, and makes thinner flaps – which causes less interruption to the cornea and quicker healing. To date, Dr. McCaa's Intralase FS is the only such unit permanently on site in the greater Jackson area.

# #3



# #4

### VISX Star S4 Excimer Laser

This equipment has the excimer laser that actually provides LASIK vision correction by reshaping the cornea. This VISX Star S4 also is equipped with state-of-the-art iris registration and tracking.

Information about each patient's eyes is fed from the VISX Wavescan into the VISX Star S4. This allows the physician to put the correction for astigmatism exactly where it should be. This iLASIK procedure also allows for accidental patient eye movement and instantly re-registers the alignment to prevent treatment errors.

*State-of-the-art LASIK has proven so successful that the procedure now is approved by NASA for astronaut candidates.*



**LASIK Laser Eye Center**  
4800 Lakeland Drive  
Flowood, MS 39232  
601-933-1080



## LASIK Laser Eye Center

Connie S. McCaa, MD, PhD

### Dr. Connie S. McCaa, MD, PhD

Connie S. McCaa, MD, PhD, is one of the leading refractive surgeons in the United States.

Dr. McCaa received the MD from the University of Mississippi School of Medicine in 1977 in Jackson, Miss. She also received the PhD in biochemistry from the University of Mississippi. Her ophthalmology residency was completed at the University of Mississippi Hospital in 1981. She also completed the cornea, external disease and refractive surgery fellowship in 1985 at the Louisiana State University - LSU Eye Center in New Orleans, under the direction of Herbert Kaufman, MD, and Marguerite McDonald, MD.



She is board certified by the American Board of Ophthalmology, since 1983.

Dr. McCaa served as Director of the Division of Cornea, External Disease, and Refractive Surgery at the University of Mississippi Medical Center in Jackson for 25 years. She was one of the first LASIK surgeons in the United States and has performed the procedure on thousands of patients. A leading corneal transplant surgeon, Dr. McCaa historically performed the most such surgeries annually in Mississippi. Now a professor emeritus of ophthalmology, Dr. McCaa established a private practice in Jackson and founded the LASIK Laser Eye Center in nearby Flowood, serving as its Medical Director. She also has an ophthalmology clinic in the West Tower of St. Dominic Hospital in Jackson, suite 656.

Dr. McCaa's LASIK Laser Eye Center is the only certified iLASIK center in the state. She also is well known as a consultant surgeon for correcting other refractive surgeon's LASIK complications.

Dr. McCaa is active in the Mississippi Eye, Ear, Nose, and Throat Association, (the state ophthalmology society) and has served as its president. She also has been a Councilor of the American Academy of Ophthalmology. She received the Secretariat Award from AAO and has served on the Nominating Committee and the Credentials Committee of the AAO Council.

For at least a decade, Dr. McCaa has been named by peers as one of the **Best Doctors in America**. She also is ranked among the **Top Ophthalmologists in America**.

LASIK Laser Eye Center  
4800 Lakeland Drive  
Flowood, MS 39232  
601-933-1080