

FALL 2013

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University of Cincinnati Medical Center



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UC Health™

Cincinnati's Only Academic Medical Center

Provides Nationally Recognized Care



Nearly 200 years ago, the Ohio General Assembly appropriated \$10,000 to build Ohio's first hospital, which would eventually become today's University of Cincinnati Medical Center, Cincinnati's **only** academic medical center and the leader in providing advanced specialty care.

Our founders probably had no idea the General Assembly's seed money

would germinate so rapidly and ultimately grow into a nationally and internationally recognized academic medical center backed by one of the finest public research universities in the nation, the University of Cincinnati.

Simply put, UC Medical Center's affiliation with UC and its College of Medicine is what makes us different and uniquely qualified to provide care to you or your loved ones, especially when the care you or they need is highly complex.

The UC Health physicians practicing here are another feature that sets us apart. More than 250 of them were recognized this year in lists including "Top Doctors" in *Cincinnati Magazine*, "Best Doctors in America" in *Cincy Magazine* and "Top Doctors" in *U.S. News & World Report*.

U.S. News & World Report also recognized us as "high performing" in nine different programs this year, including cancer; cardiology and heart surgery; diabetes and endocrinology; ear, nose and throat; gastroenterology and gastrointestinal surgery; geriatrics; nephrology; pulmonology; and urology.

In other words, if you're facing a medical crisis, please think of us first before you buy a plane ticket. If we can't answer your questions and provide you the advanced specialty care that you need, then we'll work with you to find a provider who can. Our commitment is to you and our community. We're here to help and serve you.

Best in Health,

Lee Ann Liska

Lee Ann Liska

President and CEO

University of Cincinnati Medical Center



Sid Khosla, MD, and Kelly Holterhoff, opera diva

A Winning Duet:

UC Medical Center and Cincinnati Opera

When Cincinnati Opera singers experience vocal strain, they are likely to call Sid Khosla, MD, otolaryngologist and director of the UC Health Performance & Professional Voice Center.

A nationally known expert in vocal cord and airway reconstruction, Khosla is the official voice care provider for the company. Based on the University of Cincinnati Medical Center campus, the UC Health Performance & Professional Voice Center is one of a handful in the country offering a laryngologist, speech therapist and research studies.

Khosla, the only fellowship-trained laryngologist in the region, also treats students at the University of Cincinnati College-Conservatory of Music, as well as national artists.

The partnership with the opera is a win-win for the community. The singers get world-class care from the UC Health team, and in turn they give back by performing several times a year in and around UC Medical Center for patients and employees.

"We know music is beneficial to healing," Khosla says.

Opera Diva Tips

Soprano Kelly Holterhoff is a graduate of the Indiana University Jacobs School of Music, director of ROKCincy and a Cincinnati Opera staff member. Keeping her voice in tip-top shape is crucial. She shares a few tricks of the trade and home remedies to combat a dusty stage or waking with an itchy throat.

Apple juice and gummi bears are a great way to combat dry mouth—in fact, I've known many singers who sing with a throat lozenge in their mouth at all times. With the onset of winter and the dryness of central heating, a singer's best friend is their humidifier and a constant supply of tea or hot water and honey.

What are the vocal issues opera singers usually have?

"Many of the problems are the ones everyone has," Khosla says. "Opera singers are probably the healthiest in terms of habits and techniques, but they are more sensitive to smaller problems. The demand they put on the voice is so great they may complain of vocal fatigue or inability to reach a very high note."

Opera singers, and other professional voice users can be sensitive to overuse. That in turn can cause trauma to the vocal cords, forming lesions or nodules.

For opera singers and the general population, the most common everyday problems affecting the voice are allergies and acid. Stomach acid can have a detrimental effect that impacts the voice box.

"It's not something you always know is happening because it doesn't take much acid to attack the larynx," Khosla says.

Warning signs that may be reason enough to see a specialist include:

- *persistent coughing*
- *throat clearing*
- *a lump in your throat*
- *a voice that takes a while to kick in after waking up*

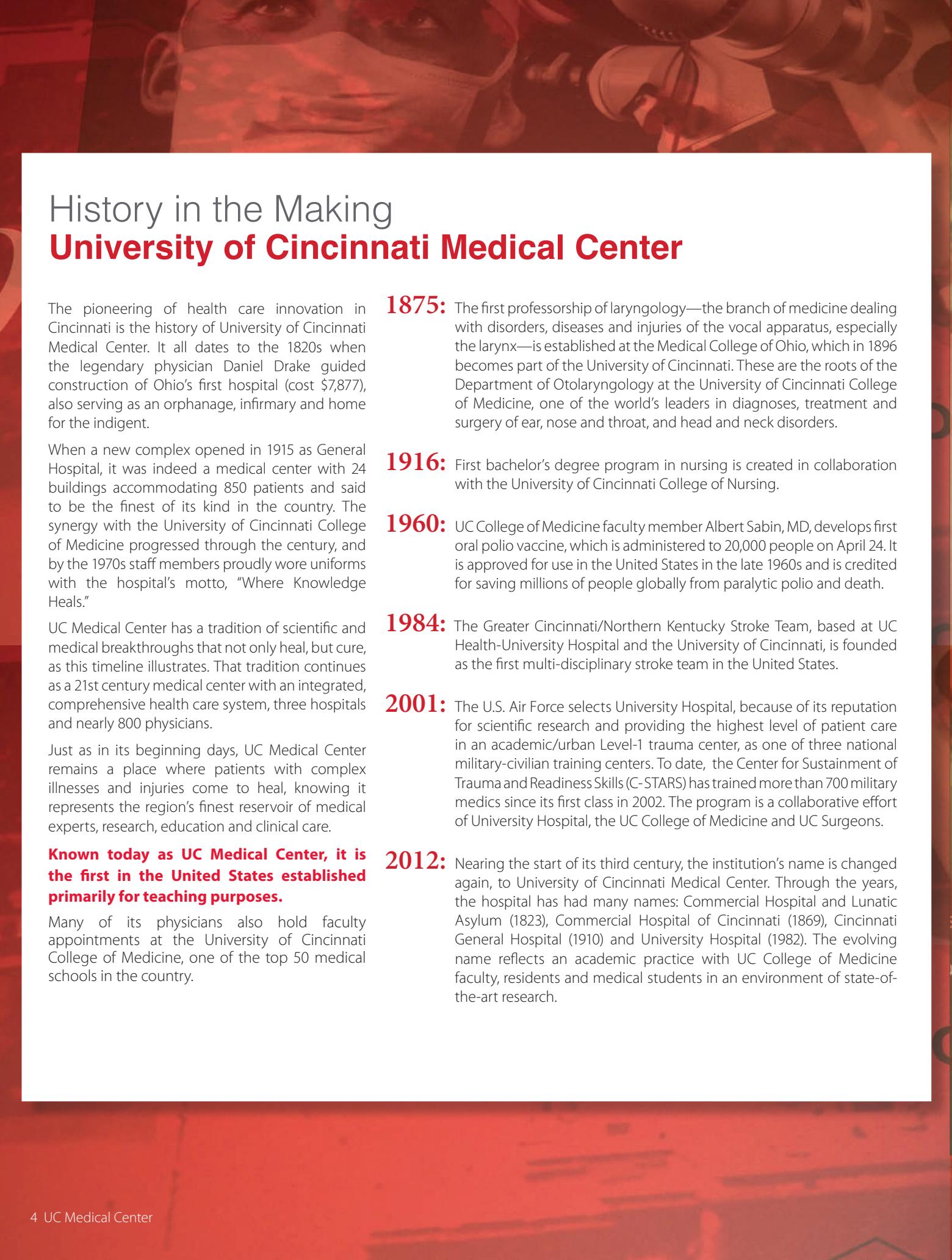
Khosla's research focuses on what exactly causes the vocal cords to vibrate and produce a sound.

"The voice is still very mysterious," Khosla says. "Even much of what we know (is) theories not proven experimentally. In our current research, we are learning in the lab there are different ways of producing a loud voice and some ways are less traumatic than others. We are studying these theories about loudness production in opera singers and music theater students, looking at the different styles."

It is with the help of experts such as Khosla working behind the scenes that enable us to enjoy the rich and exquisite vocals of Cincinnati's finest artists.

To learn more about otolaryngology services or schedule a voice screening at UC Medical Center, please call (513) 475-8400 or visit UCHealth.com/otolaryngology.





History in the Making University of Cincinnati Medical Center

The pioneering of health care innovation in Cincinnati is the history of University of Cincinnati Medical Center. It all dates to the 1820s when the legendary physician Daniel Drake guided construction of Ohio's first hospital (cost \$7,877), also serving as an orphanage, infirmary and home for the indigent.

When a new complex opened in 1915 as General Hospital, it was indeed a medical center with 24 buildings accommodating 850 patients and said to be the finest of its kind in the country. The synergy with the University of Cincinnati College of Medicine progressed through the century, and by the 1970s staff members proudly wore uniforms with the hospital's motto, "Where Knowledge Heals."

UC Medical Center has a tradition of scientific and medical breakthroughs that not only heal, but cure, as this timeline illustrates. That tradition continues as a 21st century medical center with an integrated, comprehensive health care system, three hospitals and nearly 800 physicians.

Just as in its beginning days, UC Medical Center remains a place where patients with complex illnesses and injuries come to heal, knowing it represents the region's finest reservoir of medical experts, research, education and clinical care.

Known today as UC Medical Center, it is the first in the United States established primarily for teaching purposes.

Many of its physicians also hold faculty appointments at the University of Cincinnati College of Medicine, one of the top 50 medical schools in the country.

1875: The first professorship of laryngology—the branch of medicine dealing with disorders, diseases and injuries of the vocal apparatus, especially the larynx—is established at the Medical College of Ohio, which in 1896 becomes part of the University of Cincinnati. These are the roots of the Department of Otolaryngology at the University of Cincinnati College of Medicine, one of the world's leaders in diagnoses, treatment and surgery of ear, nose and throat, and head and neck disorders.

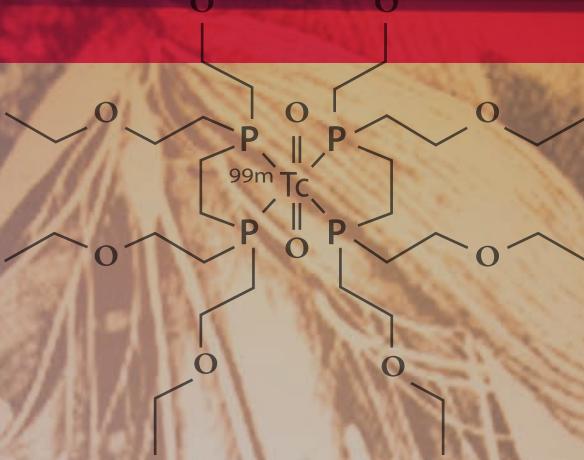
1916: First bachelor's degree program in nursing is created in collaboration with the University of Cincinnati College of Nursing.

1960: UC College of Medicine faculty member Albert Sabin, MD, develops first oral polio vaccine, which is administered to 20,000 people on April 24. It is approved for use in the United States in the late 1960s and is credited for saving millions of people globally from paralytic polio and death.

1984: The Greater Cincinnati/Northern Kentucky Stroke Team, based at UC Health-University Hospital and the University of Cincinnati, is founded as the first multi-disciplinary stroke team in the United States.

2001: The U.S. Air Force selects University Hospital, because of its reputation for scientific research and providing the highest level of patient care in an academic/urban Level-1 trauma center, as one of three national military-civilian training centers. To date, the Center for Sustainment of Trauma and Readiness Skills (C-STARS) has trained more than 700 military medics since its first class in 2002. The program is a collaborative effort of University Hospital, the UC College of Medicine and UC Surgeons.

2012: Nearing the start of its third century, the institution's name is changed again, to University of Cincinnati Medical Center. Through the years, the hospital has had many names: Commercial Hospital and Lunatic Asylum (1823), Commercial Hospital of Cincinnati (1869), Cincinnati General Hospital (1910) and University Hospital (1982). The evolving name reflects an academic practice with UC College of Medicine faculty, residents and medical students in an environment of state-of-the-art research.



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The Facts About Mesh Warnings and Urinary Incontinence

UC Medical Center Physicians Among First to Be Board-Certified in Pelvic Floor Dysfunction

Just the words alone—urinary incontinence (UI), can make people feel uncomfortable. Discussing the loss of bladder control with a doctor can be a struggle for both men and women.

The misperception that nothing can be done about incontinence—that it's part of the aging process—prevents many from seeking beneficial treatment. In reality, urinary incontinence isn't a disease, it's a symptom often caused by everyday habits, underlying medical conditions or physical problems such as various types of pelvic organ prolapse (POP).

To make matters more complicated and confusing, in recent years the Food and Drug Administration has issued warnings concerning thousands of problems stemming from transvaginal mesh implanted to solve POP issues.

However, urogynecologists want women to understand that UI can be safely treated with a variety of procedures not involving transvaginal mesh or other surgeries.

"It is important to stress that UI is not something a women has to live with, regardless of her age or other medical conditions," says Ayman Mahdy, MD, who specializes in pelvic floor issues at the University of Cincinnati Medical Center.

"With the current availability of minimally invasive options for treatment, UI is a curable disease most of the time. Only 10 percent of women who have UI actually need surgery."

Still many urologists find a stigma persists.

"Sadly, many women with leakage suffer for years before they muster the courage to talk to me about it," says Mary South, MD, urogynecologist at UC Medical Center. "Some think it's a normal part of aging. And some are just flat-out embarrassed. But I tell patients you don't need to live your life looking for the nearest bathroom."



Ayman Mahdy, MD



Aparna Shah, MD



Mary South, MD

South is one of the first physicians in the country to become board-certified in female pelvic medicine and reconstructive surgery. Joining her in one of the newest recognized subspecialties is Aparna Shah, MD. This unique subspecialty is growing across the country and focuses on pelvic floor dysfunction, with the first board certifications issued last June.

As for those mesh warnings, South says they appear to be "yesterday's news." She says the specific devices and kits that have caused problems and prompted thousands of lawsuits have been voluntarily withdrawn from the market. Those that are now used are of a much more sophisticated design.

South's message to women worried about the mesh warnings is,

"Not every person with UI needs prolapse surgery and not every person who has surgery needs mesh. There are a lot of options that are not scary."

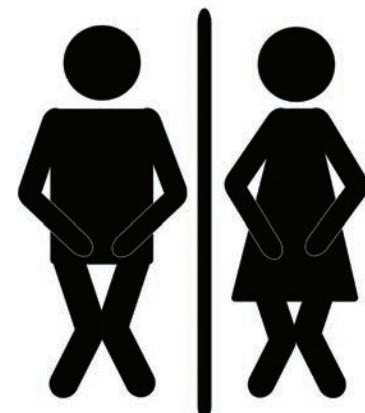
South and Mahdy urge women with UI to be evaluated by a specialist and to understand that mesh is only one of a number of choices.

"Treatment may include medications, behavioral changes, pelvic floor muscle exercise, bladder and urethral injectables, neurostimulators, bladder sling or some other more sophisticated surgeries," Mahdy says. "If there is associated POP, this can be addressed at the same time as well."

South stresses that urinary incontinence itself might not be caused by POP. Issues that can contribute to leakage include urinary tract infections, medication reactions, overactive bladder or simply too many diet sodas.

She notes studies have found that women with the condition can have an impaired body image, particularly with partners.

"When women receive treatment, their quality of life improves," South says. "Women should know there are now urogynecologists out there who do nothing but take care of this."



To learn more or schedule an appointment with a urologist or urogynecologist please call (513) 475-8787 or visit UCHealth.com/urology.

Mapping the Prostate

Technology at UC Medical Center Brings New Certainty in Prostate Cancer Detection

Advanced MRI technology, developed and clinically tested at the University of Cincinnati Medical Center, is taking the guesswork out of detecting and treating prostate cancers and whether or not they are aggressive.

The imaging technology, which can lead to quicker detection and intervention, has been developed by Sadhna Verma, MD, radiologist at UC Medical Center.

Verma works with what's called multi-parametric MRI scans, which create a more accurate picture of suspicious areas in the prostate. The MRI technology can replace or supplement the current standard of care using a blind biopsy, essentially randomly sampling prostate tissue.

"(Dr. Verma's) technique makes a biopsy more accurate. It lets us target the areas that are suspicious, rather than doing a random biopsy year after year," says James Donovan, MD, urologist at UC Medical Center. "For someone with continued elevated PSA levels, we can get some answers."

Verma's groundbreaking work has focused on a couple of imaging fronts, innovatively using equipment and software that has become available only in the last several years. First, she uses images of different parameters, not just traditional anatomical views. For example, the MRI may scan at the cellular level looking at metabolism, kinetic modeling or diffusion, that is, how water moves in and out of cells (in cancer cells, water tends to not have as much movement).



James Donovan, MD, and Sadhna Verma, MD

"Prostate cancer is unusual because there can be several different kinds within the same area. Some are more aggressive and others aren't," Verma says. "I end up using all these different parameters, since I don't know which will be the best for any one person."

Secondly, Verma has worked on a more efficient and accurate way for physicians to conduct a biopsy known as a fusion target biopsy. It aligns an MRI with ultrasound images overlaid with the help of a GPS navigation system that then directs the physician to the area to be biopsied.

Donovan adds, "It's like following a Google map of the prostate to the suspect area."

"We are the only ones in the area that have this technology. Not many in the country are doing this," Verma says.

"It eliminates the need for a blind biopsy, which never scans 100 percent of the gland. This is a more efficient way for physicians and is much better for patients who previously had to undergo a blind biopsy, which could involve them being stuck with a needle 12 or more times."

Verma's team has also been involved in a couple of landmark studies concerning the advanced MRI technology. A 2010 paper showed how diffusion can tell if some prostate cancers are more aggressive than others. And her clinical trial prior to Food and Drug Administration approval of the MRI-guided biopsy has helped write the guidelines used worldwide.

The bottom line, according to Donovan, is the MRI-guided biopsies give doctors and their patients options to discuss.

"MRI is an excellent tool to give us an image of the whole prostate," he says. "Where there is nonaggressive cancer, more and more patients and their doctors are choosing to undergo active surveillance with a close monitoring of PSA. At the end of a year a repeat MRI can see if there have been any changes. It can replace that knee jerk reaction to go directly to surgery or other treatment that may not be needed."

UC Medical Center grew awareness for men's health in "Movember."



This November, we celebrated men's health with answers – answers to some of the most common prostate questions we hear as urologists at UC Health.

To learn more about prostate cancer, visit UCHealth.com/prostate.

#CincyStache



Growing Awareness for Prostate Cancer

Inside Health Care is a quarterly magazine published by University of Cincinnati Medical Center to provide accurate and timely health information. It is offered as a health education tool featuring news and stories centered around academic-based, discovery-driven health care—it is not a substitute for consultation with a personal physician. UC Medical Center is located at 234 Goodman Street, Cincinnati, OH 45219. For more information, call (513) 584-1000 or visit UCHealth.com. You can also like us on Facebook at Facebook.com/uchealthcincinnati or follow us on Twitter @UC_Health.

UC Health Air Care Wins Top Medical Transport Award

Since 1984 it has been a familiar sight in Greater Cincinnati to spot the helicopters transporting critical patients to the University of Cincinnati Medical Center. In fact, more than 1,000 patients are carried each year by the UC Health Air Care & Mobile Care team (ACMC).

The ACMC commitment to excellence has been nationally recognized as Program of the Year by the Association of Air Medical Services.

"There is no higher distinction in the world of critical care transport medicine," says Teri Grau, ACMC director. "It is the pinnacle of recognition from our colleagues in the industry."

The award recognizes ACMC's superior patient care and the program was cited for excelling in areas of leadership, innovation, customer service, safety standards and community outreach.

"Each time an Air Care & Mobile Care crew transports a patient by ground or air, they are providing the latest in evidence-based care, with a paramount commitment to safety," says Lee Ann Liska, president and CEO of UC Medical Center.

ACMC was one of the first transport programs in the country to be accredited in four levels: rotor wing, ground critical care, ground advanced life support and ground basic life support.

The program has added a third helicopter and is looking to expand its base farther south to serve a wider region. ACMC comprises 140 medical transport specialists.



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free health screenings and
upcoming events, visit:**



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