



A seasonal publication for friends of the Mayfield Clinic & Spine Institute

## Think like a 'spine athlete' to keep your back in gear

When a back goes bad, many treatments can be considered. "Cash for clunkers" isn't one of them.

"You only have one spine, and you're going to get through life with that spine," says William Tobler, M.D., a Mayfield neurosurgeon. "It's not as if you can bring your spine into the auto repair shop, get new parts, and go on with the same driving habits."

Surprisingly, most of us don't give much thought to the spine – an engineering wonder of disk-buffered vertebrae that allows us to twist, bend, and lift. "For most people the spine is an invisible component of their lives – until it goes bad," Dr. Tobler says. "But once it goes bad, it's a lifestyle-changer."

Whether you are undergoing treatment for a back problem, are facing surgery, or are fortunate enough to have a healthy back, now is the time to start thinking like a "spine athlete," Dr. Tobler says. "Just as a professional athlete trains constantly,

spine athletes benefit by becoming disciplined with regard to their conditioning and healthy living." Healthful habits can help some patients avoid surgery altogether. For those who do require surgery, healthy living can maximize the chances of a good outcome – defined as the relief or resolution of your symptoms.

"Patients who are obese have higher rates of surgical-related pulmonary problems, breathing issues, and blood clots," Dr. Tobler notes. "Surgical procedures also can take longer because there is more tissue to invade and close. Patients with diabetes, which is often related to poor diet, have an increased risk of infection."

Smoking is also problematic, especially for patients who are undergoing fusion. "We know that smoking interferes with the fusion process and the biological process of healing," Dr. Tobler says. "Patients who continue to smoke can jeopardize the success of the surgery."

Bottom line: Be an active participant and manager in the care of your spine. Think like a spine athlete to help keep your back in optimum gear.

For more information about spine care, visit us at [www.mayfieldclinic.com](http://www.mayfieldclinic.com), or call Evelyn at 513.569.5354 to request a free copy of "Healthy Backs."



## On the rebound

Amber Gray, a 19-year-old forward on the University of Tennessee women's basketball team, is looking forward to playing basketball again, thanks to life-saving surgical care provided by Mario Zuccarello, M.D., a Mayfield Clinic neurosurgeon and Interim Chairman of the University of Cincinnati Department of Neurosurgery. Amber was undergoing rotator cuff surgery on July 2 in Knoxville, Tenn., when an undiagnosed brain aneurysm began to rupture. Amber was flown to Cincinnati's University Hospital, where Dr. Zuccarello opened her skull and clipped the aneurysm during a complex, 12 ½-hour operation. Amber continued her recovery at Drake Center and was discharged on August 11.



Photo of Amber Gray by Saul Young/Knoxville News Sentinel

# Findings...

## Mayfield's commitment to evidence-based medicine

The Mayfield Clinic is committed to the practice of evidence-based medicine. That means the healthcare we provide is backed up by sound science. We use proven treatments that are the safest and most effective for each individual patient. When

answers aren't clear-cut, or when solutions are unavailable, we try to find them by engaging in laboratory and clinical studies. Mayfield neurosurgeons are co-investigators in more than 15 ongoing clinical trials, many of which involve other institutions. All of these trials are carefully planned with patients' safety and well-being in mind, and all are approved by a formal review board at the University of Cincinnati College of Medicine. Here is a sampling of our recent efforts to gather evidence about what works best for our patients.



repositionable  
stereotactic mask

### **What we found:**

Stereotactic radiosurgery for metastatic brain tumors can be accomplished safely and effectively without immobilizing a patient's head with an invasive head frame.

### **Where it was published:**

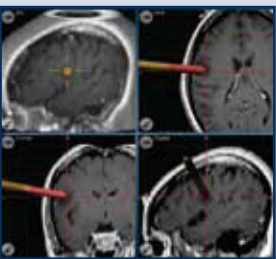
International Journal of Radiation Oncology, Biology, and Physics

### **Who led Mayfield's research efforts:**

Ronald Warnick, M.D., Chairman of the

Mayfield Clinic and Director of the UC Brain Tumor Center

**Why the finding is important:** "Since the beginnings of radiosurgery, and up until now at most radiosurgery centers, patients have been immobilized with a rigid head frame that is bolted to the skull," Dr. Warnick says. "A special mask that eliminates the need for the head frame is much more comfortable for patients. In addition, it enables us to treat patients who have a large number of metastases, because we can now treat them in multiple sessions without having to re-attach a head frame."



stereotactic needle biopsy

### **What we found:**

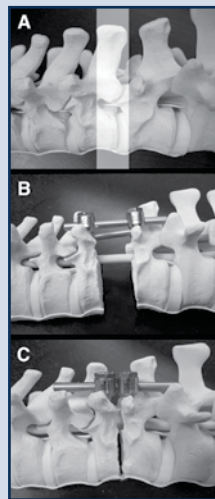
Performing a stereotactic needle biopsy in "eloquent" areas of the brain associated with language or other important functions carries no greater risk than a similar biopsy in a less critical area of the brain.

### **Where it was published:**

Journal of Neurosurgery

**Who led Mayfield's efforts:** Christopher McPherson, M.D., Director of the Division of Surgical Neuro-Oncology at UC

**Why the finding is important:** "Needle biopsies in eloquent areas have generally been acknowledged to be safe, because the needle causes only a small amount of disruption to the brain," Dr. McPherson explains. "But until now, we had not actually documented that biopsies in eloquent areas were as safe as those in non-eloquent areas. Patients who have a tumor in an eloquent area can rest assured that a biopsy will carry no elevated risk."



posterior vertebral  
column subtraction  
osteotomy

### **What we found:**

A new treatment approach developed by our neurosurgeons can be used successfully in treating a complex spinal condition known as tethered cord syndrome.

### **Where it was published:**

Journal of Neurosurgery

### **Who led Mayfield's efforts:**

Charles Kuntz, M.D., Director of the Division of Spine and Peripheral Nerve Surgery at UC

**Why the finding is important:** "Tethered cord syndrome is a rare but potentially devastating condition," Dr. Kuntz says. "Our new approach, called a posterior vertebral column subtraction osteotomy, provides a safe alternative to the traditional detethering procedure, which can carry significant neurological risk."



endovascular coiling

### **What we found:**

The risks associated with treating a recurrent or residual brain aneurysm that was initially treated by endovascular coiling are low.

### **Where it was published:**

Neurosurgery

### **Who led Mayfield's efforts:**

Andrew Ringer, M.D., Director of Endovascular Neurosurgery at UC

**Why the finding is important:** "This quantitative evidence is important to patients and physicians because there is often more than one way to treat a brain aneurysm," Dr. Ringer says. "Having an aneurysm coiled and avoiding a surgical procedure that requires opening the skull can be a very attractive option for patients. On the downside, coiling carries a higher rate of aneurysm recurrence than the standard surgical treatment."

# Physician Spotlight: Andrew Ringer, M.D.

Andrew Ringer, M.D., a neurosurgeon with the Mayfield Clinic and Director of Endovascular Neurosurgery at the University of Cincinnati College of Medicine, is dedicated to treating patients with neurovascular disease and to finding new neurosurgical techniques for the treatment of aneurysms, arteriovenous malformations, carotid artery disease, and stroke.

Since joining Mayfield in 2001, Dr. Ringer has completed more than 1,700 surgical and endovascular cases and has developed a national reputation in endovascular neurosurgery. He has authored or co-authored 24 peer-reviewed journal articles, 16 book chapters, and 13 abstracts. In his role as Associate Professor of Neurosurgery, he has trained 14 medical residents and eight post-graduate fellows.

Dr. Ringer, a graduate of Cornell University and the University of Illinois at Chicago College of Medicine, completed his residency in neurosurgery at the University of Cincinnati and earned a fellowship in endovascular neurosurgery from the State University of New York at Buffalo.

He was among the rising young professionals included in the Cincinnati Business Courier's Forty under 40 Class of 2003 and was included in the "Best Doctors" issue of Cincinnati Magazine in 2007 and 2008. Known as "Andy" to his friends, Dr. Ringer is a Cub Scout den leader who worked as a volunteer in New Orleans following Hurricane Katrina.

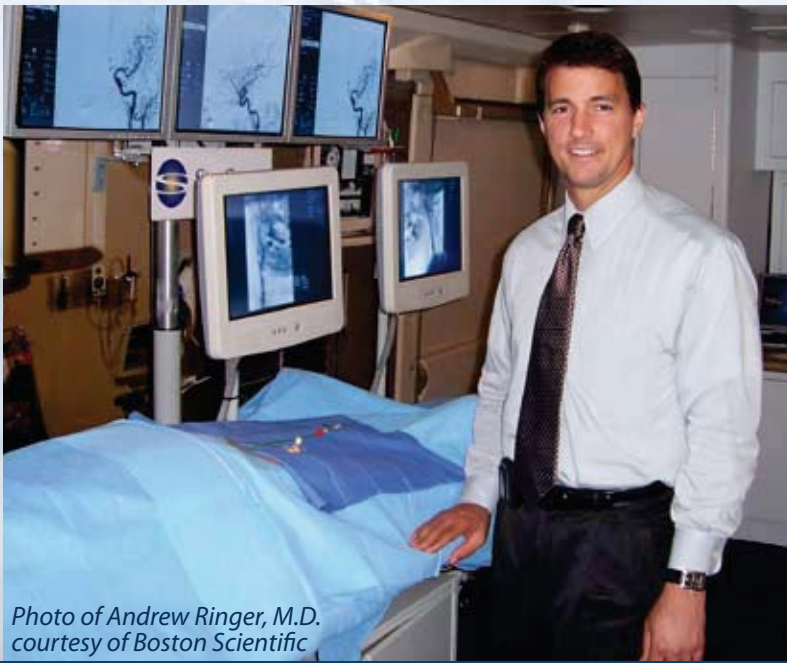


Photo of Andrew Ringer, M.D.  
courtesy of Boston Scientific

## Mayfield CEO honored



Michael Gilligan

Mayfield President & CEO Michael Gilligan was one of 23 finalists honored at the annual Ernst & Young Entrepreneur of the Year awards dinner for the South Central Ohio and Kentucky region on June 24 at the Duke Energy Convention Center. (The region

includes Columbus, Dayton, Cincinnati, and Louisville.) The 23 finalists were selected by an independent judging panel made up of regional business, academic, and community leaders. The annual event, which is celebrated in 135 cities in 50 countries, honors exemplary men and women who have the ability to turn powerful ideas into distinctive products and businesses.

In a supplement to *Smart Business Magazine*, Mr. Gilligan was praised for his entrepreneurial spirit and problem-solving capabilities, which enabled him to transform Mayfield's spine treatment care into the expedited process known as Priority Consult®. The system "moves Mayfield's patients through the treatment process with greater efficiency than at any other time in the company's 70-plus-year history," the magazine said.

## Mayfield's Priority Consult® adopted by 31 programs in U.S.

Priority Consult®, the Mayfield Clinic's expedited review and patient management process, has been adopted by 31 programs around the United States. Clinical providers that are now using this system include 18 hospital-based spine centers, 11 spine-surgery private practices, and two breast-health centers. Several additional centers will be implementing the Priority Consult program this year.

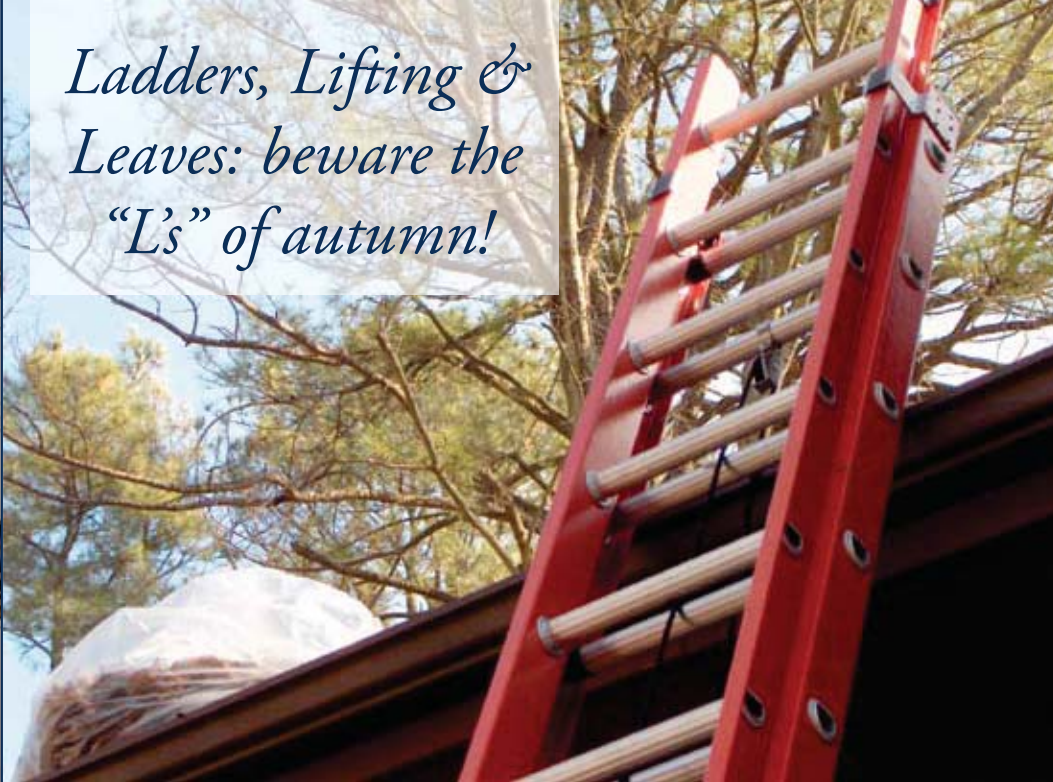
Priority Consult is a system that gets patients moving through the treatment process quickly – usually within a few days – while sparing them the trouble of waiting weeks in line for an appointment. Intake specialists take each patient's medical history and collect diagnostic information and MRI or CT scans for a neurosurgeon. The surgeon carefully reviews each case from his office, then prescribes the appropriate next step. Patients whose problems are likely to resolve quickly are referred to a physical therapist or pain specialist. Those likely to require surgery are given an appointment with the neurosurgeon. Patients urgently in need of care are summoned to the hospital.

*"Priority Consult® gets the right things to  
the patient in the right amount of time."*

*Thomas Saul, M.D.*

"Priority Consult truly benefits the patient," says Mayfield's Thomas Saul, M.D. "It helps patients avoid multiple, unnecessary appointments and gets them the treatment they need quickly." Michael Graham, Director of Priority Consult, LLC, is overseeing the program's development into additional specialties.

*Ladders, Lifting & Leaves: beware the “Ls” of autumn!*



## Celebration of hope

Amanda and Matthew Reed, along with their daughter, Vienne, were among 16 former patients and family members who stopped by Mayfield’s administrative offices on August 29 to say “thank you.” The patients, who had been treated at University Hospital, showed their appreciation in a short video that will be shown to supporters of the University of Cincinnati Neuroscience Institute in October.

The patients had been treated for a variety of neurological conditions, including Parkinson’s disease, epilepsy, brain tumors, and traumatic brain injury.

Matthew Reed was 29 years old when his car crashed into a tree, causing a life-threatening traumatic brain injury. Matthew didn’t open his eyes for three weeks. “He had a 10 percent chance of survival,” Amanda recalls. “I stayed at the hospital for 30 days nonstop.”

Four and a half years later, Matthew still struggles with short-term memory. But he is alive, happy, and helping Amanda rear their very busy 2-year-old.



Matthew, Vienne and Amanda Reed

By Tann Nichols, M.D.

Fall is in the air, and that means chores: raking leaves, cleaning gutters, and the thousand-and-one things on the list before winter arrives in the Tristate.

These thousand-and-one chores can lead to a thousand-and-one injuries, mostly minor but occasionally life-threatening as well. The most common serious injury involves falls from ladders, often while cleaning gutters. Remember these steps for safe ladder use:

- Pick the right tool for the job
- Never stand on the top step of a ladder
- Make sure the ladder is properly placed and stable
- Never lean too far to the side; you will go one way and the ladder will go the other.

People also risk injury by doing too much. Pace yourself and know your

limitations. The entire yard doesn’t need to be raked in one afternoon — the leaves aren’t going anywhere! Use proper lifting techniques when putting away heavy flower pots or furniture for the winter. That means bending at the knees, not the waist, and keeping your back perpendicular to the ground. Also keep in mind that wet leaves are slicker than they look and can cause falls.

If you do strain your back, treatment with ice, a modest amount of rest, and nonsteroidal anti-inflammatory drugs (NSAIDs) will usually take care of the problem. If the pain continues, you may need to see your family physician. Most of these injuries can be treated without referral to a specialist or any invasive procedures.

In summary, don’t get tripped up by the three “Ls” of autumn – *ladders, lifting, and leaves.*



Francis Huttinger, a UC medical student

Francis Huttinger, a second-year student in the UC College of Medicine, spent the summer conducting research with Kenneth Strauss, Ph.D., Director of the Mayfield Neurotrauma Research Lab. As part of Dr. Strauss’s team, Mr. Huttinger explored a new method of treating the highly damaging swelling that follows a traumatic injury to the brain. “A brain injury is not like an arm injury, which has room to expand,” Mr. Huttinger says. “The brain is in a closed space.” Mr. Huttinger, a graduate of Seven Hills School, was funded by a \$2,500 Medical Student Summer Research Fellowship from the American Association of Neurological Surgeons.

# UC Neuroscience Institute marks 10th anniversary

It began with a dream, a vision that Cincinnati could create a national benchmark in neurological care while leading the advance in humanity's understanding of the brain.

John M. Tew, M.D., was a young surgeon when he first imagined a day when more neurological treatments would be available, when diseases could be cured, and when specialists from multiple neuroscience disciplines collaborated within a supportive administrative structure.

Today the University of Cincinnati Neuroscience Institute is celebrating its 10th anniversary as a center of excellence devoted to research, teaching, and neurological care. Since its founding in 1998, the Institute has brought expert treatment and global prestige to Cincinnati.

The Institute treats thousands of patients each year while confronting hundreds of diseases and disorders of the brain and spine. The Institute comprises the Brain Tumor Center, Cerebrovascular Disease and Stroke Center, Epilepsy Center, Functional Neuroscience Center, Gardner Center for Parkinson's Disease and Movement Disorders, Neurotrauma Center, and Waddell Center for Multiple Sclerosis. The Alzheimer's Center is in development.



Mario Zuccarello, M.D.  
photo by Dan Davenport

## Dr. Zuccarello named Interim Chairman

Mario Zuccarello, M.D., a Mayfield Clinic neurosurgeon and internationally recognized cerebrovascular specialist, was named Interim Chairman of the University of Cincinnati Department of Neurosurgery, effective July 1. Dr. Zuccarello is Professor and Director of the Division of Cerebrovascular Neurosurgery at UC. He also serves as Director of the Neurovascular Program for the UC Neuroscience Institute and as a member of the Greater Cincinnati/Northern Kentucky Stroke Team.

He replaces Raj Narayan, M.D., who left in August to become Professor and Chairman of Neurosurgery at the newly created Hofstra University School of Medicine in Hempstead, N. Y.

Dr. Zuccarello is dedicated to clinical research in neurovascular disease and the development of new neurosurgical techniques for the treatment of stroke, cerebral hemorrhage, vasospasm, carotid artery disease, and moyamoya disease. A humble man, he has led a quiet revolution in the prevention and treatment of brain hemorrhages, which rank among the most hazardous conditions of the brain.

## Support groups for our patients

The Mayfield Clinic would like to update our comprehensive online calendar at [mayfieldclinic.com](http://mayfieldclinic.com) to include meetings of support groups for patients who are coping with diseases and disorders of the brain and spine. Please contact us with the name, time, and meeting place of your organization so that we can provide this information to other patients. Contact Christa McAlpin at 513.569.5251 or [cmcalpin@mayfieldclinic.com](mailto:cmcalpin@mayfieldclinic.com).

Our current list of Greater Cincinnati groups or individuals offering support:

- Acoustic Neuroma Support Group: 937.433.6258
- Arnold Chiari Support: [carriebear31@msn.com](mailto:carriebear31@msn.com) or [www.carrieschiariconnection.com](http://www.carrieschiariconnection.com)
- Brain Aneurysm Support Group (Tri-State): 513.558.4043 or [www.tsbaconnex.org](http://www.tsbaconnex.org)
- Brain Injury Support Groups: 513.542.2704 or [poneill@biaoh.org](mailto:poneill@biaoh.org)
- Brain Tumor Support Group (Wellness Community): 513.791.4060 or [bcrawford@cancer-support.org](mailto:bcrawford@cancer-support.org)
- Parkinson's Disease Support Group: 513.948.1100 or 1.800.840.2732 or [info@parkinsonwellness.org](mailto:info@parkinsonwellness.org)
- Spinal Cord Injury Support Group (Brightside): 513.542.2704 or [lcdunnigan@cinci.rr.com](mailto:lcdunnigan@cinci.rr.com)
- Stroke Survivors Support Group: 513.731.3014 or [cwright@zoomtown.com](mailto:cwright@zoomtown.com)
- Trigeminal Neuralgia Support: 513.793.4169.

For more information, please visit [www.mayfieldclinic.com/PG\\_supGroups.htm](http://www.mayfieldclinic.com/PG_supGroups.htm)

The Mayfield Standard

Mayfield on the move – literally and virtually

- The Mayfield Clinic is pleased to announce that Tann Nichols, M.D., is seeing patients at the Clinic's new office in Maysville, Ky.
- In response to patient feedback, Christopher McPherson, M.D., has expanded his hours at Mayfield's Western Hills office. Patients who previously saw Dr. McPherson at the Harrison, Ohio, office can now see him at Western Hills. The Harrison office has been closed.
- You can follow news about Mayfield on Facebook and Twitter. Go to [www.Facebook.com](http://www.Facebook.com) and key in Mayfield Clinic. For short, timely updates via Twitter, please visit [www.Twitter.com/MayfieldClinic/](http://www.Twitter.com/MayfieldClinic/)

Did you know?

Each month Mayfield's Web site, [mayfieldclinic.com](http://mayfieldclinic.com), is visited by more than 40,000 people from more than 200 countries.

Contact Evelyn Ries at 513.569.5354 to receive future issues of this newsletter by e-mail, to request additional copies, or to request no future newsletters.



2009 Midwest Regional Brain Tumor Conference

A free educational event for patients, caregivers, and family members, drew 246 attendees from nine states to the Northern Kentucky Convention Center in Covington on June 20. The conference was presented by the Brain Tumor Center at the UC Neuroscience Institute, in partnership with the National Brain Tumor Society. Topics included advances in treatment, long-term survivorship, rehabilitation, the patient's "bill of rights," and financial resources.

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