Dr. Hugh Stephenson: Instrumental in developing four-year medical school at Mizzou

Dr. Hugh E. Stephenson Jr., who died July 26, 2012, was credited with helping to establish the four-year medical school at the University of Missouri.

7 hours ago • BY MICHAEL D. SORKIN —

**Dr. Hugh Stephenson, who died Thursday (July 26, 2012), helped turn the School of Medicine at the University of Missouri at Columbia into a full, four-year institution.**

During the 1950s, he successfully lobbied the Legislature to build a medical school to replace one that provided only two years of training. Students had to transfer to a four-year medical program to finish their degrees.

Dr. Stephenson was a popular professor and the first full-time surgery faculty member at the medical school. In 1958, he performed the university's first open-heart surgery.

The university also credits him for designing the "crash cart"— the Mobile Cardiac Resuscitation Unit — as well as being one of the first surgeons to implant an automatic cardiac defibrillator for shocking the heart after it goes into arrest.

Dr. Hugh Edward Stephenson Jr. died at his family’s summer home in Rehoboth Beach, Del. He was 90 and also had a home in Columbia.
He had been treated for at least 10 years for complications of Parkinson's disease, a family friend said Monday.

Before Dr. Stephenson, university officials had been trying since the early 1930s to build a four-year medical school. There was never enough money during the Depression or World War II.

Dr. Stephenson was from a prominent family in Columbia, where his father was a dentist. He earned his undergraduate degree at Mizzou and studied for two years at the medical school.

Then, he was accepted at the Washington University School of Medicine, which had just three or four slots a year for third- and fourth-year students from Mizzou.

After graduating, Dr. Stephenson served as an Army radiologist in Italy. He was on the faculty at New York University Post Graduate Medical School and was chief surgical resident at Bellevue Hospital there.

While still in New York, he learned of another effort to turn Mizzou into a full-fledged medical school. He began writing legislators and making trips back home.

He testified twice before the Legislature. His message was that Missouri needed a complete medical school to help restock its physicians after World War II. He also said rural parts of the state were short on doctors.

The university, in its obituary, said Dr. Stephenson "guided the state through a cantankerous debate over where to build its new medical school and teaching hospital" while "powerful opponents lobbied for building in a bigger city."

Dr. Stephenson and Mizzou won the day. With some $13 million in state money, the university launched its new medical degree in 1955. The new teaching hospital and medical school opened the following year.

The medical school now graduates about 100 physicians a year.

Dr. Stephenson was a general professor of surgery until 1994.

In 1996, university officials said, Gov. Mel Carnahan appointed him as the first faculty member to serve on the university's board of curators. He served until 2001 and was board president during his last two years.

Dr. Stephenson was past chairman of the committee that accredits medical schools in the United States.

He played football at Mizzou and wrote a book in 1982 about drop kicking called "The Kicks That Count." President Ronald Reagan met with him to discuss their mutual love of the game.
In addition to teaching surgery, Dr. Stephenson taught a class in first-aid for first-year medical students.

He thought that was something doctors needed to know, explained Dr. Ted Groshong, associate dean for alumni affairs.

Groshong spent his first time in an operating room watching Dr. Stephenson perform gallbladder surgery on a woman.

"I contaminated his gloves three times in the first 15 minutes," Groshong recalled. "And he never raised his voice. He was absolutely the nicest man."

Services for Dr. Stephenson will be at 11 a.m. Aug. 11 at the First Baptist Church in Columbia.

Among the survivors are his wife, Sally Stephenson of Columbia; a daughter, Ann Stephenson Cameron of Edmond, Okla.; a son, Hugh Stephenson III of Columbia; and two grandchildren.
Panel Advises Against Routine Treadmill Stress Tests

Every year, hundreds of thousands of older Americans get on a treadmill in a doctor’s office and walk or jog as an electrocardiogram monitors their heart function. But a growing number of medical authorities would like to make routine screening using the procedure, known as the treadmill or exercise stress test, largely a thing of the past.

On Monday an expert government panel, the United States Preventive Services Task Force, joined the call by recommending against routine testing with electrocardiograms, or EKGs, in people who have no known risk factors or symptoms of heart disease, like shortness of breath or chest pains.

The recommendations, published online in Annals of Internal Medicine, made the test the latest addition to an expanding list of once routine screening tools that have fallen out of favor. Earlier this year, the task force advised against regular screening with the prostate specific antigen, or P.S.A., blood test, long considered the gold standard for early detection of prostate cancer. The panel has also come out against measures like annual Pap smears for many women and regular mammograms for women in their 40s.

For people at higher risk of heart disease, the panel found there was “insufficient evidence” to determine the benefits and harms of screening with the EKG test — either at rest or during exercise — and advised that it be considered case by case basis. In those instances, said Dr. Michael L. LeFevre, a vice chairman of the task force and a professor of family and community medicine at the University of Missouri, patients should discuss with their doctors their medical histories and circumstances — including age, blood pressure and cholesterol levels, and lifestyle — to determine whether an EKG test might make sense.

The usefulness of the stress test has been questioned for some time, and in April, a group of nine medical specialty boards included it on its list of 45 common tests and procedures that doctors should perform less often. Their reasoning, like that of the task force, was that problems associated with the test can outweigh its benefit in many people, perhaps even leading to unnecessary harm.

“In my own practice I’ve seen people who thought they shouldn’t be exercising anymore because someone put them on a treadmill and got an abnormal test result when in fact there was nothing
wrong with them,” said Dr. LeFevre. “People get a false positive and can end up having a reaction to the subsequent angiogram or having something bad happen. Those things do happen.”

An underlying point of the new recommendations is that the emphasis should no longer be on screening people without symptoms, but on keeping coronary artery disease from developing in the first place, said Dr. LeFevre. “We need to control blood pressure and cholesterol and get people to stop smoking and start exercising,” he said.

Treadmill stress tests are relatively quick and cheap compared with more invasive tests, and some doctors believe they can identify people with narrowed arteries that put them at risk of having a first heart attack. But studies have shown that the cause of such heart attacks is usually the sudden rupturing of plaque, something the test is unable to predict. And when used on people who are at low risk for heart disease, false positive results can lead to unnecessary anxiety and more costly procedures, like a coronary angiogram.

Dr. Todd D. Miller, a cardiologist at the Mayo Clinic in Rochester, Minn., who has studied the test’s effectiveness, said there were plenty of anecdotal reports about the treadmill stress test uncovering undiagnosed cases of heart disease, but no prospective studies bearing that out. Nonetheless, he predicted the test would remain widely used, at least in the near term.

“It takes a long time to see recommendations implemented in practice, and some of these old habits die hard,” he said. “If some major health insurer says, ‘We aren’t paying for that anymore,’ then it generally gets done less. But if it’s just a formal medical organization putting out a recommendation, that usually has much less impact than payment issues.”
A team of researchers from the University of Bristol, Natural History Museum of London, the University of Missouri and Ohio University has discovered the eating habits of *Diplodocus* using a three-dimensional model of the dinosaur’s skull. The eating habits of the herbivore have been uncertain since its discovery more than 130 years ago. Understanding these behaviors could help scientists better understand extinct and modern ecosystems and what it takes to feed these giant herbivores, as well as today’s living animals.

*Diplodocus* was a giant, herbivorous sauropod dinosaur from the Jurassic period, which was around 150 million years ago. The dinosaur, which was more than 170 feet long and weighed more than 12 tons, was the longest animal ever to walk the planet. Its neck was about 20 feet in length.

"Since *Diplodocus* was such a huge animal, its eating habits and behavior have always been a question in the paleontology community," said Casey Holliday, an assistant professor of pathology and anatomical sciences at MU. "With the 3D model of the skull, we were able to simulate three eating scenarios using a computer-based analysis to determine the stresses that the skull would experience in each situation."

Using data from a CT scan, the team of researchers designed a three-dimensional model of the 2.5-foot-long *Diplodocus*’ skull and tested it using finite element analysis (FEA). FEA, which is commonly used to aid in mechanical engineering and design, revealed the stresses on the dinosaur skull from three different eating behaviors: a normal bite, "branch stripping" and "bark stripping."

"Originally, some scientists in the early 1900s thought that *Diplodocus* would strip bark off of trees using its jaws to close down on the bark," Holliday said. "However, we found that this process places a lot of stress and strain on the dinosaur’s teeth and skull, which could result in bone damage or breaking of teeth. The model and the scans showed that branch stripping, which is when the dinosaur would place its mouth on a branch and pull all the leaves off the branch, placed little to or no stress on the teeth and skull."

While the feeding habits of the *Diplodocus* have largely been resolved, the behaviors of other extinct animals also could be tested using FEA.
“Sauropod dinosaurs, like Diplodocus, were so weird and different from living animals that there is no animal we can compare them with,” said Mark Young, a doctoral student at the University of Bristol and lead author on the research. “This makes understanding their feeding ecology very difficult. That’s why biomechanically modeling is so important to our understanding of long-extinct animals.”

Holliday thinks that findings from the Diplodocus feeding habits can help determine the ways extinct animals live, but he also said that understanding large, extinct animals will continue to help scientists’ understanding of large animals today.

“Sauropods tell us about the evolution of gigantism, or giant body size, because they enable us to understand how much range or space giant animals really need to get around, and how much food they need to survive,” Holliday said. “The findings on sauropods also help us understand today’s giant herbivores, such as elephants and giraffes, and how they interact with their environments.”

The study’s authors included Paul Barrett, merit researcher at The Natural History Museum in London; Emily Rayfield, senior lecturer at University of Bristol; and Lawrence Witmer, professor of anatomy at Ohio University. The study was published in Naturwissenschaften, a natural sciences journal.
Girls' Math Skills May Fall Short Of Boys' Because Of Male Impulsiveness

From an early age, boys tend to take a more impulsive approach to math problems in the classroom, which might help them get ahead of girls in the long-run, suggests the latest study to touch on the gender gap in math.

The research claims girls may tend to favor a slow and accurate approach — often computing an answer by counting — while boys may take a faster, but more error-prone tack, calling out an answer from memory. The difference in strategies seems to benefit girls early in elementary school but swings in favor of boys by middle school.

"In our study, we found that boys were more likely to call out answers than girls, even though they were less accurate early in school," Drew Bailey, who led the study, said in a statement. "Over time, though, this practice at remembering answers may have allowed boys to surpass girls in accuracy."

The University of Missouri study followed 300 students from first grade to sixth grade. During those first two years, the boys called out more answers in class than the girls but also had more wrong answers. Girls were more often right, but answered fewer questions and responded more slowly, according to the university. By sixth grade, the boys were still answering more problems than the girls and were also getting more correct.

Several recent studies have argued that gender differences in math performance have more to do with culture than aptitude. Research published last year found that certain countries — generally ones with more gender equality, better teachers and fewer students living in poverty — showed a smaller gap between males and females in math and some had no gap at all.

Other research has pointed to inherent gender biases in the classroom. One such study found that high school math teachers tended to rate girls' math abilities lower than those of male students, even when the girls' grades and test scores were comparable to boys.

Gender issues aside, the researchers of the Missouri study — which was published in the Journal of Experimental Child Psychology — had some advice for parents based on the findings. "Parents can give their children an advantage by making them comfortable with numbers and basic math before they start grade school, so that the children will have fewer trepidations about calling out answers," David Geary, a co-author of the study, said in a statement.
Therapy dogs, volunteers bring joy to Rusk Rehabilitation Center patients

BY Emma Kessinger

COLUMBIA — Her first husband and son died in an accident. Her second husband had physical problems resulting from his work as a mechanic.

Those experiences have a lot to do with why Mary Cockrell volunteers with her trained therapy dogs at Rusk Rehabilitation Center.

Therapy dog volunteers have visited Rusk almost every Thursday for the past 15 years. The program is highly appreciated not only by the patients, but also by the staff who see the effect pet therapy has on patients.

"Sometimes pets can change a person completely," said Trista Marple, a marketing liaison for Rusk.

Volunteers at Rusk vary from week to week. On a recent Thursday, Carol Schreiber came to the center with her dog, Abby; Cockrell brought her Jack Russell Terrier, Emmy Lu; and Karen Muff brought her Brussels Griffon, Rudy, for the first time.

The first stop for the three volunteers and their dogs was the therapy gym. Patients are given a therapy schedule each morning — sometimes including time in the gym, Marple explained.

As the dogs wander through the room, they jump up on benches and greet the patients with wagging tails. It's the highlight of many people's day, Marple said.

Emmy Lu is known by name to the nurses in the gym. She is a veteran therapy dog with a total of 682 visits to schools, hospitals, nursing homes and other places.

After their visit to the gym, the volunteers walked down the halls of Rusk's three wings with their dogs trotting at their sides.

"Hello, would you like a visit from the therapy dogs?" Cockrell asks each time before she enters a room.
One patient, 5-year-old Kyah Jones, laughed as Rudy stood on his hind legs. Kyah's mother and father smiled and took pictures.

DeMyris Oliver, 4, was in a room down the hall from Kyah. All three dogs jumped up on his bed for the visit. DeMyris beamed with the dogs around him and petted Rudy's coarse fur. DeMyris stuck his tongue out and panted, imitating the brown Brussels Griffon.

"Sometimes (patients) will come out in the hall to make sure we don’t forget them," Cockrell said, laughing.

For Cockrell, what's most rewarding is seeing the progress patients make at Rusk. She thinks the dogs play a minor role in that.

Research shows that when a person interacts in a positive way with a dog, hormones are released in the brain by both the dog and human. Patients relax and feel more optimistic, helping them respond better to therapy, said Rebecca Johnson, professor and director of MU's Research Center for Human-Animal Interaction.

A dog's unconditional love and acceptance also makes patients feel more at ease, Johnson said.

Therapy dogs must go through training in order to be certified by Therapy Dogs International. Training includes 15 steps that expose potential therapy dogs to situations they may encounter in their work. The training is rigorous and includes acclimating the dog to the sight and sound of medical equipment, being petted with feet when hands can't be used and not picking up food or pills from the floor.

In Cockrell's view, a therapy dog must be willing to visit with anyone and be calm and obedient, while also being able to gauge people and their feelings.

"These dogs really have a mission," said Ann Gafke, who owns Teacher's Pet, a dog obedience school that offers therapy dog training and obedience classes.

Many people get interested in training their dogs to become therapy dogs after attending Gafke’s obedience classes, which was how Cockrell first got interested.

Cockrell's first therapy dog, Gracie, is a German Shepherd and Rottweiler mix. The dog was left on the driveway of her rural home years ago. Because of Gracie's calm demeanor, Cockrell believed she would be a good candidate for becoming a therapy dog. She was right — Gracie has been a therapy dog for eight years.

Cockrell has three other dogs: Toby and Emmy Lu, who are certified therapy dogs, and Reuben, who is in training.

They're all rewarded with the love and appreciation they get from the patients at Rusk. But — dogs being dogs — they're also fond of the tangible rewards.
That's why their steps quicken at the end of their work day as they near the front desk at Rusk, where receptionist Glenda Sapp is known to stash dog treats.

"They have to work first," Sapp said, smiling as she gave the dogs a few treats each.
The high rate of teachers cycling in and out of schools is detrimental to the education profession and worse for students, decades of policy and research asserts. But a new report from an influential advocacy group makes the case for treating teacher turnover differently.

The study, called "The Irreplaceables," took several years for TNTP (formerly The New Teacher Project) to produce, and asserted that a high rate of teachers moving in and out of the profession isn't necessarily bad.

"The whole basis of federal education policy since the '60s has been the idea that if kids got greater access to opportunity, they would do better, so the main focus of policy should be increasing that sort of equity, access to teachers," TNTP president Tim Daly said in an interview.

Rather, TNTP asserted, a high turnover rate among teachers who are "so successful they are nearly impossible to replace" -- the "irreplaceables" -- is the real problem. "Our analysis suggests that the problem is not the loss of too many teachers, but the loss of the wrong teachers," Daly wrote in an e-mail introducing the report.

Using teacher performance data and surveys in four school districts and a group of charter schools, TNTP found that improving schools without doing a better job at retaining "irreplaceables" is nearly impossible, and that poor retention policies "degrade" the teaching profession by not paying special attention to keeping top-performing teachers. It recommended teaching principals to better hold onto "irreplaceables" and to "counsel out" low performers, and revamping policies around teacher management, such as tenure and seniority. TNTP also recommended dismissing teachers "who cannot teach as well as the average first-year teacher."

TNTP works to place teaching fellows in school districts across the country. The group was carved out of Wendy Kopp's Teach for America and founded by former Washington, D.C., schools chief Michelle Rhee.

The report is bound to affect policy, given TNTP's track record -- and its splashy release Monday with the National Education Association, D.C. schools chief Kaya Henderson, and U.S. Secretary of Education Arne Duncan. "TNTP's report documents in painful detail that school leaders are doing far too little to nurture, retain, and reward great teachers -- and not nearly
enough to identify and assist struggling teachers," Duncan said in a statement. And many cite
TNTP's 2009 Widget Effect report, which revealed the underutilization of teacher evaluations, as
a driver of the Obama administration's Race to the Top Competition.

But the report's definition of "irreplaceables" is fuzzy, and varies across the school districts that
were surveyed. Matthew Di Carlo, writing on the blog of the Albert Shanker Institute, which is
affiliated with the American Federation of Teachers, said the "irreplaceables," as defined by the
report, are better described as "probably above average."

The politics around the report spotlight the making of education advocacy research. In the
report's acknowledgements, TNTP thanked the Bill & Melinda Gates Foundation, the Laura and
John Arnold Foundation and the Walton Family Foundation, among others, for support. These
organizations pay to push policies known as education reform that make it easier to fire teachers
based on students' low standardized test scores -- and reams of research to support that
conclusion.

"There's been a massive investment in research to support the reform theory," said Craig Jerald,
an independent education consultant who has done research for both Gates and teachers' unions.
This research, along with reform advocacy, has forced teachers' unions to express, for the first
time, concern with the low performers among their ranks. While the distinction isn't that clear
cut, in general, the reformers and unions have different ways of approaching these low
performers. Unions stress improving them through professional development. Reformers,
including the authors of the TNTP report, want to get them out of the classroom faster. "People
who support the development side haven't supported much quantitative research," Jerald said.

Jerald said he expects the report's claim that most low-performing teachers don't improve to be
its most controversial. "It'll force people who disagree with that to go out there and do some
research," he said. "I can't think of any quantitative research that disputes that."

TNTP researchers used value-added measurements -- a widely used metric that is supposed to
 teas out teachers' effects on students' standardized tests -- based on only one year of teacher
performance in some cases. The single-year metric is known to be unreliable. "Using multiple
years of classroom observations for teachers will reduce sorting bias in value-added
estimates," wrote Cory Koedel, a University of Missouri economist known for his expertise
on value-added, in a 2009 report. "This result raises concerns about using single-year
measures of teacher value-added to evaluate teacher effectiveness."

Koedel, however, served on the advisory board of experts that helped guide the TNTP paper. He
said his concerns about using such measures have been mostly assuaged by a 2011 Harvard
study that found that a teacher's single-year value-added measures modestly affect students'
earnings later in life. Differences in identifying "irreplaceables" between districts, he said, are
"something to be thoughtful about," but don't affect the report's qualitative conclusions. "There's
all kinds of studies in academic literature in terms of teacher turnover, a generic thing," Koedel
said. "The thing is we want good teachers to stay and bad teachers to leave."
Randi Weingarten, president of the American Federation of Teachers, called the report "puzzling."

"On the one hand it makes the point of the importance of keeping good teachers and what's needed to do that," Weingarten said in a statement. "On the other, it assumes that someone can magically become a good teacher and that school leadership means simply firing bad teachers. What is missing is the work that needs to be done to create continuous development and support systems to help all teachers become great teachers."
Hot ticket: St. Charles County Fair draws well despite heat

By Brian Flinchpaugh | bflinchpaugh@yourjournal.com | Posted: Monday, July 30, 2012 5:46 pm | (O) comments.

Stephanie Behlmann and "Max" were winners at this year's St. Charles County Fair, although in Max's case, the honor was a bit dubious as far as his future was concerned.

Behlmann, 18, was named the fair queen, and Max, her "meat" chicken, was awarded a blue ribbon as the top chicken in his category in the poultry judging at the fair, which ran July 24-28 in Wentzville's Rotary Park.

Market chickens and livestock are auctioned off, with the proceeds going to the 4-H club members who raised them. Those animals can end up as chicken salad, hamburger or the key ingredient of a BLT sandwich.

But Max and Erma, a blue-ribbon winner in an adjacent cage, didn't seem likely to go the same route at their counterparts at Chick-fil-A. Behlmann and Madeline Bauer, 13, who raised Erma, said both probably would be going home.

"Remember Barbara," said Bauer, a 4-H member from St. Paul.

Barbara was a grand champion market chicken at last year's fair that Bauer raised from a tiny chick. She was auctioned off for more than $500 but didn't end up roasted, grilled or fried. 4-H members often can keep their birds.

"Barbara is still alive," Bauer said, although she's even fatter than her 5-pound weight last year and has taken up a new hobby. "She's starting to lay eggs. That's really unusual for a meat chicken," Bauer said.

Such is the drama during poultry judging at the fair, where young people learn something about the responsibility of raising and caring for an animal, and Max and Erma and their ilk keep a low profile.
Pigeons, pheasants, rabbits, goats, heifers, sheep, ducks, geese and hogs also were judged. Home economics projects and other activities such as photography also competed for ribbons.

This year, triple-digit temperatures added to the drama and threatened to stress animals and fairgoers alike. Given the 100-degree days, however, organizers said things went well, particularly when it came to turnout.

"It pretty much totally surprised us with the weather we had," said Ed Siesennop, fair board president. "Everyone seemed to have cabin fever and wanted to get outside. We had a really good crowd on Saturday."

Siesennop estimated on Monday that the fair may have drawn 25,000 to 30,000 people, which is better than usual. Gate receipts still were being tallied, but the fair appears to have had a good year, he said.

Along with animal displays, the fair included carnival rides, musical acts, a magician and ventriloquist, jugglers and a magic show. Bull riding, tractor pulls and a demolition derby also were featured, and fairgoers could compete in a number of contests, including a pig scramble, frog and turtle races, sack races, tug of war, and a kids' fishing derby.

In the exhibition hall, fairgoers could view "Remembering Our Fallen," a photo memorial to Missouri veterans who died in the war on terror since 9/11.

Siesennop said the board might consider adding more parking and bleachers and making among improvements. "We may have to bite the bullet as far as more entertainment," he said.

Hot temperatures prompted precautions for animals and humans. Paramedics were on site to handle cases of heat exhaustion. Poultry and rabbits often don't do well in the heat, and competitors were allowed to take their animals home if they were in danger, Siesennop said.

But the animals fared well, he said.

"The biggest challenge with these heavy meat birds is having moving fans — fans work pretty well until about 100 degrees Fahrenheit," said Jesse Lyons, a poultry specialist with University of Missouri Extension and one of two fair poultry judges. "Beyond that, it's tender loving care, a little bit of ice, and going through and making sure they have fresh, cool water."

Lyons and Tony Perryman, a poultry official with the Missouri Department of Agriculture, were the judges who spent much of a hot Wednesday morning picking up, poking and squeezing more than 100 entries ranging from meat and egg-laying chickens, to geese and turkeys, strutting roosters, docile guinea fowl and quail.

Fair organizers say poultry entries are increasing every year. "It's going up. We have to buy new cages every year, and it's not to replace them, it's adding," said Jennifer Stilwell, who was tallying results as the judges moved from cage to cage.
Stilwell said entrants are still mostly youth from rural areas, but she helps kids who live in nearby subdivisions who want to raise a chicken.

Perryman said raising a chicken doesn't require as much room as a calf or a pig. "Parents don't have to worry about their kids going out to take care of a calf and getting hurt," Perryman said. "Chickens, for the most part, aren't going to hurt them."

Emily Alterson, 9, might disagree. Her brother Andrew's big black rooster, a "Jersey Giant," was peeved at her one day.

"I was carrying a bucket of corn out for the chickens. He wanted a lot of it," Emily said. "He jumped up on me and got me with the spur on his leg, and he clawed me a bunch and I dropped the corn and ran. We had to put him in a cage."

The rooster, who doesn't have a name, was a fair grand champion last year, but poor tail feathers cost him in this year's competition, Andrew said. The rooster stood up in his cage and crowed occasionally. "Tomorrow his name will be dinner, right?" the children's mother, Laura Alterson, said half-joking.

Even though some birds are pets, most share the fate of their counterparts. Farm life carries with it the realization that animals are raised for food, Laura Alterson said.

Alterson and other parents and relatives watching their children compete last week said those lessons about farm life can still be taught in an increasingly urbanized county.

Terri Bauer, who was at the fair with her daughter Madeline and her animals, said areas outside of Wentzville including St. Paul, Flint Hill, and Josephville still had nearby farms and homes on 3- to 5-acre lots. "It still has a small-town feel to it," Bauer said.