

MU Medicine

University of Missouri School of Medicine / Summer 2017



Serving **THE UNDERSERVED**

**MEDZOU CLINIC PUTS PATIENT-BASED LEARNING
INTO ACTION WHILE BENEFITING THE COMMUNITY**

LETTER FROM THE DEAN



We've just completed another successful year at the MU School of Medicine, and as faculty and students embark upon summer jobs, research and enjoy some well-deserved time off, it is an ideal time for reflection.

There is certainly much for us to be proud of this year. Ninety-eight percent of the 2017 class received a residency program match, of which 38 percent will remain in Missouri. The United States Medical Licensing Examination (USMLE) Step 1 score

for first-time takers at MU is 241, the highest in school history. In addition, this July we will dedicate the new Patient-Centered Care Learning Center.

The tremendous impact we have on our local and global community is another source of pride. This publication succinctly documents these activities, whether we're conducting innovative research that may one day help patients with cardiovascular disease ("Research Briefs"), honoring patients who've played a critical role in a student's education ("Teaching Gratitude") or providing job-shadowing opportunities to minority students ("Medical Preview").

One excellent example of our positive impact on the community is MedZou, a free, student-run health clinic. MedZou is a wonderful testament to the culture and spirit of our school. Many students and faculty give so freely of themselves to provide care for those in need.

This and so much more is defining the MU School of Medicine, and I am enthusiastic for our future. If you haven't already, I encourage you to follow us on Facebook and Twitter to keep up on all of our news, activities and accomplishments.

I look forward to seeing many of you during Physicians Alumni Weekend in November.

Patrick Delafontaine, MD
*Hugh E. and Sarah D. Stephenson Dean
University of Missouri School of Medicine
Professor of Medicine and Medical
Pharmacology and Physiology*

MU Medicine

MISSION STATEMENT

MU Medicine is published twice yearly to highlight accomplishments of the MU School of Medicine's community of researchers, clinicians, students and alumni.

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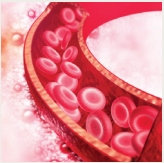


ON THE COVER:
MedZou Clinic first opened its doors in 2008 to address the growing need for affordable health care among mid-Missouri's uninsured residents. The clinic has since grown into an essential part of the community, as well as the medical school education.

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NEW DRUG COULD HELP PREVENT ARTERY DISEASE IN HIGH-RISK PATIENTS



WILLIAM FAY, MD

In a recent study, MU researchers found that a protein inhibitor drug reduced coronary artery blockages in mice. The researchers hope this finding can one day be translated to prevent heart attack, stroke and other diseases caused by these blockages.

William Fay, MD, the J.W. and Lois Winifred Stafford Distinguished Chair in Diabetes and Cardiovascular Research at the MU School of Medicine, was the

principal investigator of the study. Fay's research team studied plasminogen activator inhibitor-1, or PAI-1, a naturally occurring protein within blood vessels that controls cell migration. The team also examined PAI-039, also known as tiplaxtinin, an investigational drug not yet used to treat humans.

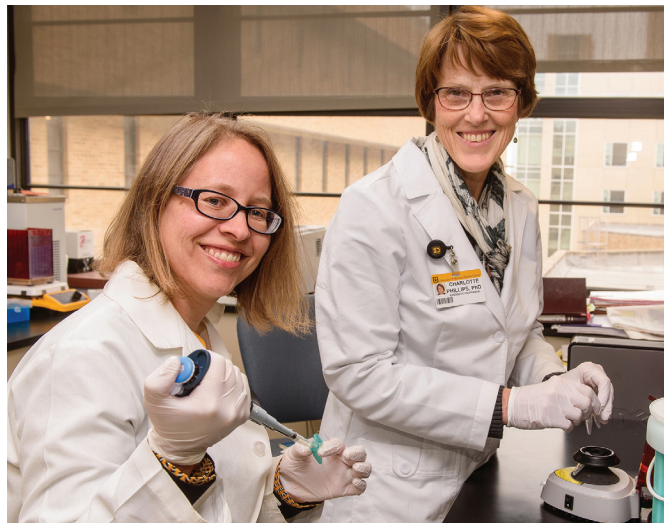
The researchers found that PAI-039 inhibited the migration of cultured human coronary artery smooth muscle cells and prevented the development of blockages in arteries and bypass grafts in mice.

"We found that PAI-039 decreased blockage formation by about 50 percent, which is a powerful effect in the models we used," Fay said. "In addition to reducing vascular blockages, inhibiting PAI-1 also produces a blood-thinning effect that prevents the blood clots that trigger most heart attacks and strokes."

Fay hopes that if future studies are successful, PAI-039 or similar drugs could be used to prevent blockages in arteries and bypass grafts in humans.

"I don't think there will be any one 'magic pill' that prevents arterial diseases, especially for those with other high-risk conditions," Fay said. "However, perhaps someday a PAI-1 inhibitor can be used in combination with other approaches such as proper diet and exercise, aspirin and cholesterol medications to prevent blood vessel blockages and reduce heart attack and stroke risk."

The study was funded by the National Institutes of Health (HL57346 and JL095951) and a Department of Veterans Affairs Merit Review Award (CARA-007-12S).



LAURA SCHULZ, PHD, AND CHARLOTTE PHILLIPS, PHD

STUDY OF MICE SHOWS PROTEIN IN WOMB PLAYS LIFELONG ROLE IN BONE HEALTH

Osteogenesis imperfecta, also known as brittle bone disease, is a genetic disorder that causes bones to break easily. Researchers at the MU School of Medicine have shown that limiting a specific maternal protein in pregnant mice with osteogenesis imperfecta resulted in offspring with stronger, denser bones. The finding may one day provide a new therapeutic approach to treating brittle bone disease.

"We know from previous research that the prenatal environment can have a lasting effect on cardiovascular and metabolic health into adulthood," said Charlotte Phillips, PhD, associate professor of biochemistry and child health at the MU School of Medicine and a senior co-investigator of the study. "We studied whether bone health of mice could be improved by optimizing the environment within the womb."

In the study, Phillips and her team decreased the levels of maternal myostatin, a protein that limits muscle growth, to see if this would increase bone strength in offspring with osteogenesis imperfecta. As a result, the researchers identified the female as responsible for offspring bone health. The team also confirmed that female mice deficient in myostatin had offspring with stronger bones.

"This finding shows that the environment within the womb affected bone development in mice not only at birth but into adulthood," Phillips said.

The research team believes their work could change the way osteogenesis imperfecta is understood and treated in the future. However, more research is needed.

Laura Schulz, PhD, associate professor of obstetrics, gynecology and women's health at the MU School of Medicine, was also a senior co-investigator of the study.

The study was supported by the National Institutes of Health (AR055907), a National Space and Biomedical Research Institute Postdoctoral Fellowship (NCC 9-58), a Leda J. Sears Trust Foundation Grant, a University of Missouri Life Sciences Fellowship and the University of Missouri Interdisciplinary Intercampus Research Program.



DEBRA PARKER-OLIVER, PHD

CARING FOR THE CAREGIVER

More than 34 million people in the United States care for terminally ill loved ones, but few resources are available to help them navigate the challenges they encounter. A study at the MU School of Medicine found that almost one-quarter of caregivers were depressed, and nearly one-third experienced anxiety.

"While some sadness and worry are expected components of caring for a dying family member or loved one, clinical depression and anxiety shouldn't be," said Debra Parker-Oliver, PhD, professor in the Department of Family and Community Medicine at the MU School of Medicine and lead researcher of the study.

Parker-Oliver and her colleagues conducted depression and anxiety assessments with 395 family caregivers. The researchers found that 23 percent of caregivers were moderately or severely depressed, and 33 percent of caregivers had moderate or severe anxiety. In addition, Parker-Oliver identified several risk factors associated with depression and anxiety among caregivers.

"We found that younger caregivers were more likely to be depressed or anxious," Parker-Oliver said. "We also found that caregivers who are married and caring for a family member with a diagnosis other than cancer, such as Alzheimer's disease, had higher levels of depression."

According to Parker-Oliver, simple assessments are not used because health providers do not view family caregivers as their patients.

"It's fair to say [health care providers] have two patients: the caregiver and the person who is terminally ill," Parker-Oliver said.

According to Parker-Oliver, the assessment tools for depression and anxiety are widely affordable and have the potential for improved clinical outcomes for family caregivers in need of additional support.

The study was funded by the National Institute of Nursing Research and the National Cancer Institute.

NEW APPROACH MAY BE KEY TO IMPROVING U.S. POPULATION HEALTH

The life expectancy of U.S. citizens is significantly shorter when compared to other high-income countries. Now, researchers at the MU School of Medicine are suggesting that an innovative systems-thinking approach to population health could improve the country's current health disadvantage.

A national systems-thinking approach considers how components within a larger structure operate and interact and how to optimize the design, implementation and evaluation of that system. This



JULIE KAPP, PHD

approach can be applied to various health concerns, including obesity, infant mortality and disparities in elder care, as long as the ultimate goal is improving quality and quantity of life. Julie Kapp, PhD, an associate professor in the Department of Health Management and Informatics at the MU School of Medicine and principal investigator of the study, used the Malcolm Baldrige Framework for Performance Excellence as a model of which to apply systems thinking to population health improvement.

Kapp said this approach could be implemented by creating an evidence-based national reporting dashboard and offering incentives to health care organizations that agree to use a shared measuring system. She also recommended that community-based nonprofit organizations be required to use shared outcomes-focused metrics when applying for federal funds and accreditation.

Kapp's recommendations are conceptual and intended to provide a theoretical framework for implementing a systems-thinking approach to U.S. population health. Applying the Baldrige Framework in this way would be innovative and transformative, Kapp said. She emphasized the importance of implementing a systems approach in the U.S.



CHANDRASEKAR BYSANI, DVM, PHD

LIMITING PROTEIN REDUCES POST-HEART ATTACK INJURY IN MICE

In a new study, researchers at the University of Missouri School of Medicine have identified a protein that can be targeted to decrease post-heart attack injury and prevent heart failure in a mouse model.

"Treating a heart attack involves opening a blocked coronary artery," said Chandrasekar Bysani, DVM, PhD, Margaret Proctor Mulligan Endowed Professor of Medicine at the MU School of Medicine and principal investigator of the study. "However, the natural inflammatory process that results from opening the blockage also causes short- and long-term damage to the heart. Our study found a way to minimize this inflammation by reducing levels of a protein called TRAF3IP2."

Using ultrasound technology, Bysani's research team delivered a protein inhibitor directly to the hearts of mice to decrease production of TRAF3IP2. The mice that received the new gene therapy experienced a 72 percent decrease in heart damage compared to the control group.

"Our study verified that TRAF3IP2 is a critical protein responsible for controlling the damage caused by opening blocked coronary arteries," Bysani said. "Additionally, we found that inhibiting this protein not only reduced immediate post-heart attack inflammation, but also resulted in long-term protection against heart failure."

This study was supported by the United States Department of Veterans Affairs Office of Research and Development-Biomedical Laboratory Research and Development (ORD-BLRD) Service Award I01-BX002255. The study also received support from the Intramural Research Program of the National Institutes of Health/NIAID.

READ MORE about the innovative research at the School of Medicine at medicine.missouri.edu.





Serving the Underserved

MedZou Clinic provides students a unique learning opportunity while benefiting mid-Missouri

“MedZou has become an essential part of the culture at the MU School of Medicine. It’s one of the reasons why I chose to come to Mizzou.”

— **Colbey Ricklefs**, first-year medical student and director of volunteer services

Patient-based learning is a core component of the MU School of Medicine curriculum. This method encourages students to work through real-life patient cases in actual clinical settings. For many students, MedZou Clinic provides a valuable patient-based learning opportunity. For mid-Missouri’s uninsured, the clinic provides vital — sometimes life-saving — access to health care.

Established in 2008, MedZou is a faculty-sponsored medical clinic staffed by medical student volunteers. Every Monday and Thursday evening, the clinic opens its doors to patients without medical insurance who have been screened by Family Health Center (FHC), another local health clinic that serves underserved populations.

At each clinic, first- and second-year medical students are paired with third- and fourth-year students. These “teams” visit with a patient, devise an action plan and review the plan with the resident or attending physician. Once approved, the team will then share the plan with the patient.

Although Thursdays are dedicated to general clinic or primary care appointments, Mondays offer specialty clinics in one of four areas: dermatology, diabetes, musculoskeletal care and neurology.

“What’s interesting about our specialty clinics is that we have the opportunity to do procedures, which is rare for free, student-run clinics,” says Maxon Thoman, a first-year medical student and director of specialty services at MedZou. “For example, in our dermatology clinics, we’re able to do shaved biopsies, and look at lesions and precancerous cells. At our musculoskeletal clinic, we’re able to provide lidocaine and steroid injections to patients with joint problems.”

Another hallmark of the MedZou Clinic is its multidisciplinary team of volunteers. Students from a variety of health science fields — including nursing, pharmacy, mental health and social work — are represented, and the wide knowledge base leads to better care and education for the patient.

“A patient may need to go on insulin, and they may have never given themselves a shot before,” Thoman says. “That’s where our pharmacy team can come in handy. They ensure that the patient is administering the drug correctly and that they understand their dosing.”



▲ First-year medical student Andrew Guilloite and fourth-year medical student Stephanie Peace visit with patient Nita Patel of Columbia to discuss her health history and primary concerns. Medical students at the free clinic typically see 15 patients a night.

MORE THAN URGENT CARE

One of the challenges of treating an underserved population is the management of chronic conditions. Often when patients visit an urgent care center, they see a different doctor every time.

“Usually at urgent care-style clinics, a physician will see a patient only one time,” says Chris Lee, a first-year medical student and director of business and administration at MedZou. “While this type of care has its purpose, follow-up visits are often needed for our uninsured patients, especially those with a chronic condition.”

To accommodate this need, MedZou Clinic developed a case management system, through which complicated, chronically ill patients are assigned to a student for an entire year.

“Whenever the patient comes in, they’re seeing the same case management student, who knows their story and can make that visit much more efficient and consistent,” says Erik Lindbloom, MD, MSPH, associate professor in the MU Department of Family and Community Medicine. Lindbloom also serves as a faculty advisor for the MedZou Clinic, along with Debra Howenstine, MD, and Natalie Long, MD, from the same department.

That kind of continuous, personalized care is rare among student-run, free clinics.

“It’s just not something you see very often,” Lee says. “Most of these clinics are just urgent cares.”

REAL-WORLD CLASSROOM

The one-on-one patient interactions in a real-world setting undoubtedly play a role in the educational experience of many MU medical students.

“By the time students get to their clinical years, largely because of MedZou, they’re better prepared in general for what they’re going to be dealing with in a clinical setting,” Lindbloom says. “Because they’ve had more patient encounters, they’re more comfortable in their patient interactions, as well as collaborating with other disciplines in health care.”

With 98 percent medical student involvement, this unique educational opportunity is not lost on students. As Colbey Ricklefs, first-year medical student and director of volunteer services, explains, volunteering at MedZou Clinic has become an integral part of the medical school journey at MU.

“I heard so much about MedZou as an undergrad, so when I started as a medical student, I knew it was something that I wanted to be a part of,” Ricklefs says. “MedZou has become an essential part of the culture at the MU School of Medicine. It’s one of the reasons why I chose to come to Mizzou.”

‘ULTIMATE SAFETY NET’

Although the impact on student education is clear, so, too, is MedZou’s impact on the mid-Missouri community.

“This is the ultimate safety net,” Lindbloom says. “If you go to another clinic in town, there will still be a copay. For some, that can still create barriers to access. There’s clearly a need in Columbia and mid-Missouri in general.”

This need became clear to Sam McMillen, first-year medical student and director of patient advocacy and referrals, when he and a team of MedZou volunteers visited a local homeless shelter as part of an outreach clinic.

“We were surprised by how long it had been since some of these individuals had last seen a doctor — years in some cases,” McMillen says. “If we hadn’t walked through the door, several major illnesses would have gone undiagnosed or unaddressed.”

Seeing students and faculty from a wide range of backgrounds come together to provide quality care to underserved populations is not just educational for many MedZou volunteers. For some, it’s proved inspirational.

“To me, everyone deserves and has the right to the best possible medical expertise,” Thoman says. “The fact that we have so many people willing to give of themselves to ensure that that happens is really, really gratifying.”

“We were surprised by how long it had been since some of these individuals had last seen a doctor.”

— **Sam McMillen**, first-year medical student and director of patient advocacy and referrals

+ ABOUT THE CLINIC



+ LOCATION:
105 East Ash Street, Columbia

SERVICES INCLUDE:

- General clinic (*primary care and preventive medical care*)
- Specialty clinics
 - Dermatology
 - Diabetes
 - Musculoskeletal
 - Neurology
- Onsite visits to local homeless shelters and social services
- Free medications under \$20 from Mizzou Pharmacy
- Patient advocacy and medical care coordination

+ 2017 Chancellor’s Excellence Award
recipient for Best Large Organization

+ BY THE NUMBERS (2016)

- **642** patient visits
- **352 volunteers** from all education levels and a variety of degree programs:
 - Journalism
 - Medical
 - Nursing
 - Pharmacy
 - Public Health
 - Social Work
- **98%** medical student involvement
- On average, students volunteer **10-20 hours** a week at the clinic



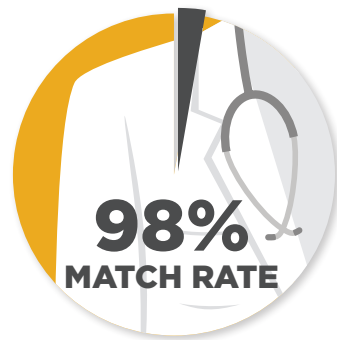
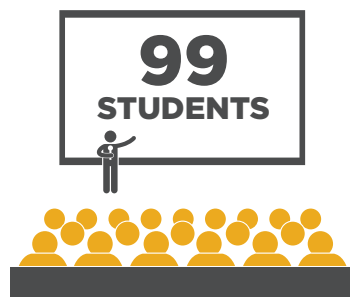
TO SUPPORT MedZou, visit mizzougivedirect.missouri.edu or call Yvonne Miller at 573-882-6100.



RESIDENCY REVEAL

Match Day is one of the most anticipated and exciting days for thousands of fourth-year medical students nationwide. It's the day they find out where they will spend the next several years as physicians, training in their chosen specialties.

HERE'S A LOOK AT MATCH DAY, BY THE NUMBERS:



25%
WILL STAY
AT MU



38%
WILL REMAIN
IN MISSOURI



32%
WILL GO INTO
A HIGH-NEED
PRIMARY CARE
FIELD

SEE ALL THE EXCITEMENT from Match Day at [youtube.com/MUHealthCare](https://www.youtube.com/MUHealthCare).



Medical students share their Match Day results. From left, Meryl Brune will train in psychiatry at Barnes-Jewish Hospital St. Louis; Patricia Yang will train in emergency medicine at Barnes-Jewish Hospital in St. Louis; Theresa Long will train in ophthalmology at the University of Utah Affiliated Hospitals; Kaitlyn July will train in otolaryngology at the University of Kentucky Medical Center in Lexington.



During Match Day, MU School of Medicine students and their families converge in Acuff Gallery to open sealed letters and learn their residency match.



Medical students Son Vo (left) and Sara Tepe (right) learn their residency destination. Vo will train in radiology at Virginia Commonwealth University in Richmond. Tepe will train in internal medicine at University of Missouri Health Care in Columbia.

2017 COMMENCEMENT CEREMONY

The University of Missouri School of Medicine celebrated graduation on Saturday, May 13, in Jesse Auditorium.



Two of this year's medical school graduates, Gabriella Stamper and Calvin Lewis, earned one of the university's most prestigious degrees through the school's MD-PhD program. Physician-scientists who complete an MD-PhD program are uniquely qualified to conduct, lead and train others in bench-to-bedside research. Stamper will train in psychiatry at the University of Washington Affiliated Hospitals in Seattle. Lewis plans to pursue a career in cancer research and has an interest in radiation oncology.



Graduates selected Stephanie Peace, MD '17, to deliver the student welcome. Peace will train in obstetrics and gynecology at the University of Wisconsin Hospital and Clinics in Madison.



The Class of 2017 chose Greg Cejas, MD '17, to close the graduation ceremony. Cejas will train in psychiatry at Barnes-Jewish Hospital in St. Louis.



MEDICAL PREVIEW

For minority undergraduate students, shadowing experience shines light on medical school and beyond



▲ As part of Minorities in Medicine Outreach Week, Allie Starks, a junior biology major, job shadows associate professor Nicholas Golda, MD. Starks is a first-generation college student and dreams of going to medical school.

The MU School of Medicine opened its doors to undergraduate students as part of Minorities in Medicine Outreach Week in January 2017. Thirty-eight undergraduate minority MU students shadowed MU medical students in the classroom and MU Health Care physicians in clinical settings.

“Creating easy opportunities for undergraduate students to shadow medical students and physicians can help them make more informed decisions as they consider careers in health care and

medicine,” said Rebecca Ringling, a third-year medical student at the MU School of Medicine and coordinator of the event. “Minorities in Medicine Outreach Week is just one of many ways we can open doors for prospective minority medical students.”

“It’s allowing students who may not have the tools to reach out, don’t know how to reach out, are shy to reach out, to be able to be given that opportunity.”

— **Allie Starks**, junior biology major and Minorities in Medicine Outreach Week participant

For the undergraduate students who participated, this experience provided unique insight into the daily activities associated with working in the health care industry.

“I got to see real patients and hear real stories ... I don’t think I could have gotten that [opportunity] through anything else,” said James Ball, sophomore psychology major.

The week culminated with a luncheon and networking event where students interacted with alumni, faculty and students.

Minorities in Medicine Outreach Week is organized each year by MU medical students who are members of the Student National Medical Association (SNMA). The SNMA supports current and future medical students who are members of underrepresented minority groups. The organization works to address the needs of underserved communities and to increase the number of clinically excellent, culturally competent and socially conscious physicians.

See more of James and Allie’s medical shadowing experience. Visit [youtube.com/MUHealthCare](https://www.youtube.com/MUHealthCare).



GLOBAL INSIGHT



Student group brings Nicaraguan medical students to campus

Two second-year medical students from Nicaragua participated in an exchange program at the MU School of Medicine, thanks to Students Interested in Global Health (SIGHT), a student-run interest group that prepares future physicians for careers that incorporate the best practices of effective global health care.

Nicaraguan medical students Ana Delgadillo and Roger Pineda Gart spent nine days in Missouri, where they visited inpatient internal medicine, outpatient child health and the MU Family Medicine-Fayette Clinic. They also toured the MU campus and visited Jefferson City.

“The entire exchange was organized by our medical students,” said Alyssa Ovaatt, a fourth-year medical student and co-president of SIGHT. “We initiated this program and developed the relationships in Nicaragua over the course of several years. Our team raised money to help Ana and Roger cover travel costs. MU medical students even hosted them in their apartments.”

This visit marks the second time SIGHT has hosted Nicaraguan medical students on campus. One of the 2016 participants, Ana María Alvizúa Pravia, gleaned skills during her SIGHT trip that are making her a better physician.

“I’m already using knowledge that I gained from my trip, especially what I learned in the hospital and in the clinics,” Pravia said. “Personally, it has helped me to relate better to patients and, above all, to thank them for allowing me to learn and practice medicine.”

Rene Romig, third-year medical student and coordinator of the 2017 Exchange Program, believes both the MU community and the Nicaraguan medical students benefited from the experience.

“This exchange not only fosters cross-cultural interaction but also builds excitement and interest in global health among our student body,” Romig said. “I hope that the exchange continues to grow and provides a valuable experience for students with a strong interest in global health.”



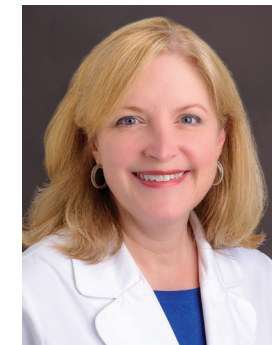
▲ Nicaraguan medical students Ana Delgadillo and Roger Pineda Gart visited the School of Medicine as part of an exchange program through Students Interested in Global Health (SIGHT). SIGHT is a student-run interest group that focuses on global health care.

“I’ll never forget visiting a rural health care clinic in Nicaragua and then having the opportunity to show two international students our student-run free clinic in Columbia, Missouri, less than a year later.”

— **Rene Romig**, third-year medical student and coordinator of the 2017 Exchange Program, who traveled to Nicaragua as a first-year medical student.

FACULTY SPOTLIGHT

MU School of Medicine faculty members make their mark on campus every day, and many more are making a difference in the health care community. Below is a quick glance of some recent accomplishments.



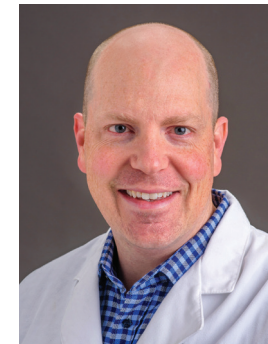
KAREN EDISON, MD, was recently elected to the American Dermatological Society. She joins more than 19,000 practicing dermatologists in the United States and abroad who promote excellence in patient care through education, research and advocacy.



RICHELLE KOOPMAN, MD, an associate professor of family and community medicine, has been elected president of the Annals of Family Medicine board of directors. The Annals of Family Medicine is a peer-reviewed research journal dedicated to scientists, practitioners, policymakers and the patients and communities they serve.

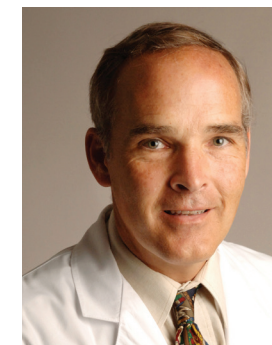
MATTHEW SMITH, MD,

outpatient medical director of the Missouri Orthopaedic Institute and associate professor of orthopaedic surgery, has been appointed an associate member of the Society of American Shoulder and Elbow Surgeons, an educational body of orthopaedic surgeons specializing in shoulder and elbow surgery.



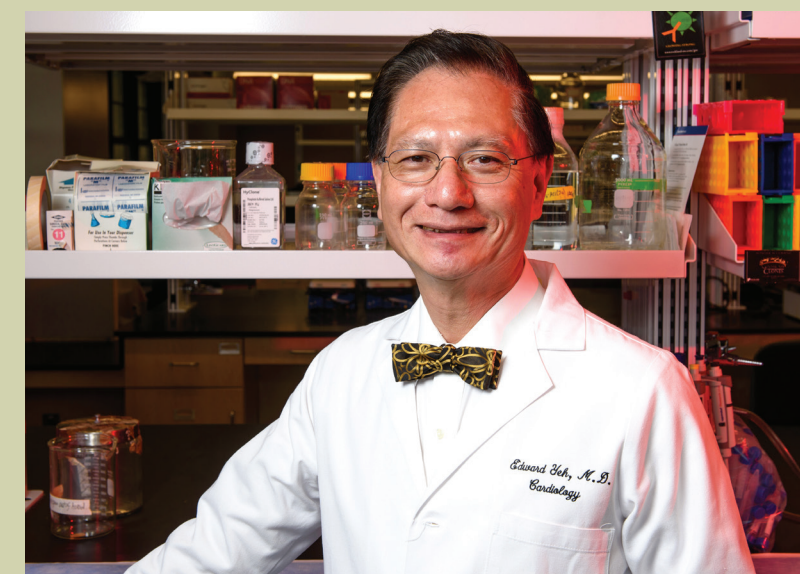
JAMES SOWERS, MD, FACP,

director of the Division of Endocrinology, Diabetes and Metabolism, has been awarded the Samuel Eichold II Memorial Award for Contributions in Diabetes from the American College of Physicians. The award recognizes Sower’s research investigating the deadly link between diabetes and cardiovascular disease.

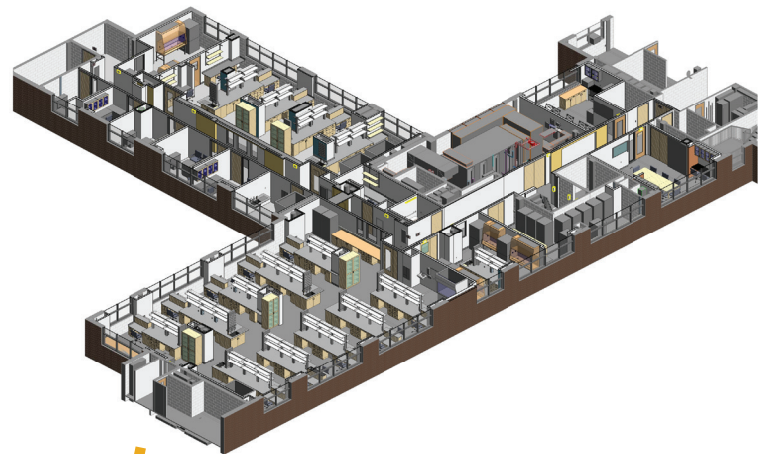


JAMES STANNARD, MD, medical director of the Missouri Orthopaedic Institute and chair of the Department of Orthopaedic Surgery, has been appointed president of AO North America, an organization dedicated to the advancement of patient care in North America.

To honor his pioneering efforts in the field of onco-cardiology, leaders from The University of Texas MD Anderson Cancer Center created the **EDWARD T.H. YEH, MD**, Lectureship in Onco-Cardiology. Yeh is chair of the MU Department of Medicine.



EDWARD T.H. YEH, MD



CENTER FOR PRECISION MEDICINE

The 10,200 square feet of renovated laboratory space, located on the 7th floor of the medical school, can accommodate up to 60 researchers and further strengthens the medical school's commitment to research.



NEPHROLOGY HOSTS NATIONAL DIALYSIS CONFERENCE

More than 1,700 attendees from the United States and countries around the world attended the 37th Annual Dialysis Conference this March in Long Beach, California. Presented by the MU Division of Nephrology, the event is the world's largest multidisciplinary conference on dialysis.

Ramesh Khanna, MD, professor of medicine and the Karl D. Nolph, MD, Chair of Nephrology, served as the conference chair. Patrick Delafontaine, MD, Hugh E. and Sarah D. Stephenson Dean, addressed the symposium and welcomed guests during the plenary session.

MAJOR MILESTONE

On May 19, the MU School of Medicine celebrated the successful first year of the Springfield Clinical Campus. When the campus opened last summer, it marked the first major milestone to expand the medical school class size from 96 to 128 students.



OPEN FOR DISCOVERY



1



2

1. Lobby of the new Thompson Laboratory for Regenerative Orthopaedics. The facility, which is housed on the fourth floor of the new addition to the Missouri Orthopaedic Institute, held a grand-opening ceremony on April 7.

2. Researchers at the new lab will pursue discoveries and advances to help people with joint replacements resume activities sooner and to lower cost and improve access to health care. A \$3 million gift from the Thompson Foundation, created by William and Nancy Thompson, made the lab possible.

SPRINGFIELD CONNECTIONS



▲ President Choi discusses the importance of industry partnerships with investors in the Springfield Business Development Corp. at the Springfield Area Chamber of Commerce.

On April 19, UM System President Mun Choi made his first outreach visit to Springfield, Missouri, to meet with various stakeholder groups, discuss collaboration and partnership opportunities and share his broad vision for the university.

His visit included meetings with representatives of Mercy Hospital Springfield and CoxHealth, a tour of MU Extension's Greene County Extension Council office and a presentation to the Springfield Business Development Corp. at the Springfield Area Chamber of Commerce.

Choi's trip highlights Mizzou's growing connections in southwest Missouri, the cornerstone of which is the MU School of Medicine Springfield Clinical Campus. After developing partnerships with CoxHealth and Mercy, the second medical school campus opened in June 2016 to alleviate Missouri's critical physician shortage. The additional campus, along with the new Patient-Centered Care Learning Center in Columbia, will allow the medical school to provide more than 300 additional physicians for Missouri. Currently, there are 56 medical students in the Springfield pipeline.



▲ President Choi (far right) began the morning with MU alumni, administrative staff from the MU School of Medicine Springfield Clinical Campus, as well as present and former members of the University of Missouri Board of Curators.

A HANDS-ON, PERFECT DELIVERY

Her water had broken, and the baby was coming. This newborn would be a first child for the mom-to-be, who was nearing the end of her labor. That evening, a healthy baby girl was born, and third-year medical student Kelsey Clary delivered her.

Clary experienced her first hands-on delivery at CoxHealth during her clinical rotations at the new MU School of Medicine Springfield Clinical Campus. Her patients, Mom Kelsey Batesel and her daughter, Harper, of Hartville, Missouri, are both doing well.

"It's wonderful to have real experiences," says Clary, who's grateful to be learning from patients in person instead of on paper. "The patients in Springfield are very willing to work with us. Most are very happy to talk to students."

That first delivery, Clary says, is an experience she'll remember forever. And it's just one of many experiences to come in her clinical training.



▲ From left to right: Kelsey Batesel, Kelsey Clary, Harper Batesel (now 7 months old), and Matt Batesel.



CLASS NOTES

'60s CHARLES LUETJE, MD '67, received the Award of Merit from the American Otological Society in April 2016 in Chicago. The award is given annually and is the highest honor bestowed by the society. The award recognizes Dr. Luetje's dedication to patients, leadership in the society and early work in cochlear implantation in deaf adults and children. He also received the Patrick E. Brookhouser, MD, Award of Excellence from the American Laryngological, Rhinological and Otological Society, January 2017 in New Orleans. A Jackson, Missouri, native, Dr. Luetje retired from active practice in otology and neurotology in Kansas City in 2009 and from volunteer cochlear implant surgery in 2014. He and his wife Sandy look forward to his 50-year class reunion in the fall of 2017.

'70s RUSSELL HALL, MD '70, has received the 2017 Lifetime Achievement Award from the Medical Dermatological Society. Dr. Hall is J. Lamar Callaway Chair and Professor of Dermatology at Duke University in Durham, North Carolina.

'80s THOMAS PRESSLY, MD RES '88, received the Paulding Phelps Award from the American College of Rheumatology. The award recognizes outstanding service to patients, community and the practice of medicine. Dr. Pressly is an adult rheumatologist with Willis Knighton Medical Center in Shreveport, Louisiana. In 1992, he began volunteering his services as a rheumatologist at Shriners Hospital for Children. In 1993 he and his wife, Tracy, established a non-profit organization, Children and Arthritis.

'10s CHADWICK BYLE, MD '15, has been selected as chief resident in the family medicine residency program at the University of Missouri-Kansas City School of Medicine.



▲ Third-year medical student Nathan Beckett (left) honors his 5-month-old legacy teacher, Asher Collins, along with parents Sarah and Chris, during the luncheon.

TEACHING GRATITUDE

Medical Students Recognize Patients as Teachers through MU's Legacy Teachers™ Program

The School of Medicine celebrated the important role that patients and their families play in the education of medical students at the 12th annual Legacy Teachers™ luncheon. The Legacy Teachers™ program, which culminates with a luncheon each year, offers third-year medical students the opportunity to honor patients as one of their greatest teachers. At the 12th annual Legacy Teachers™ luncheon, 32 third-year students honored 15 of these special teachers. Nathan Beckett, a third-year medical student from Columbia, Missouri, said his legacy teacher helped define his role as a health care provider since they first met during his child health clerkship at MU Women's and Children's Hospital in Columbia. "My legacy teacher taught me that listening is fundamental to the art of patient care," Beckett said. "The patient taught me that taking a personal interest in him and his family helped me stay open-minded, well-prepared, grateful, and considerate of the context of their lives."



60TH ANNUAL MEDICAL ALUMNI AWARDS CEREMONY HOSTED IN COLUMBIA

The University of Missouri School of Medicine and Medical Alumni Organization presented awards to graduates and supporters at the MU Reynolds Alumni Center on Friday, April 21, 2017.

CITATION OF MERIT
Kenneth Burman, MD '70

HONORARY MEDICAL ALUMNI
Dongsheng Duan, PhD
Ronald Korthuis, PhD
Stefan Sarafianos, PhD

DISTINGUISHED SERVICE
Max Heeb, MD BS Med '51
Debra Koivunen, MD Res '84
Bridget McCandless, MD '92

OUTSTANDING YOUNG PHYSICIAN
Betty Hinderks Davis, MD '99
Amy Krambeck, MD '02
Greg Mundis, MD '03

The MU Medical Alumni Organization welcomes the newest members of the MU Medical Alumni Board of Governors, who will serve three-year terms in the organization.

JARON ASHER, MD '97, psychiatrist, St. Louis, Missouri

HOLLY BONDURANT, MD '93, pediatrician, Columbia, Missouri

KIMBERLY HENLEY, MD '05, emergency medicine physician, Springfield, Missouri

ROBERT MCDONALD, MD '88, otolaryngologist, Jefferson City, Missouri

SARAH MCELROY, MD '97, family medicine physician, White City, Oregon

ROBERT MESTER, MD '08, anesthesiologist, Charleston, South Carolina

SHARI THOMPSON, MD '95, family medicine physician, Marshall, Missouri

KIM TEMPLETON, MD '88, orthopaedic surgeon, Kansas City, Missouri



▲ From top left: MU Medical Alumni President Judee Bland, Kenneth Burman, School of Medicine Dean Patrick Delafontaine, Greg Mundis, Bridget McCandless, Max Heeb, Betty Hinderks Davis, Alumni Affairs Dean Ted Groshong, Amy Krambeck, Debra Koivunen, Dongsheng Duan and Stefan Sarafianos.

SEE HIGHLIGHTS from the ceremony, including reactions from the award recipients, at [youtube.com/MUHealthCare](https://www.youtube.com/MUHealthCare).

IN MEMORIAM

CHARLES BLACKWELL, MD BS MED '54, longtime radiologist in Columbia, died March 15, 2017, in Columbia, Missouri. Blackwell was a former chief of what was then the Department of Radiology and Nuclear Medicine at Ellis Fischel Cancer Hospital. He was also a senior scientist in radiology for the Cancer Research Center where he was the mammographer for the Breast Cancer Detection Demonstration Project from 1974-1980.

STEPHEN BUCHOK, MD RES '90, an anesthesiologist, died Nov. 21, 2016, in Lubbock, Texas.

LYNETTE FEENEY-BURNS, PHD, MU professor emeritus of Ophthalmology and pioneer for women in ophthalmology research, died July 23, 2016, in Santa Rosa, California.

CHARLES CHEEK, MD '61, longtime Columbia ophthalmologist, died Jan. 6, 2017, in Columbia, Missouri.

JOHN CASEBOLT, MD '58, a career physician with Mutual of Omaha, died Feb. 2, 2017, in Lincoln, Nebraska.

DONALD COHAGAN, MD '60, a family medicine physician who practiced in Bentonville, Arkansas, for more than 45 years, died March 16, 2017.

RUTH COMENS, MD '48, an anesthesiologist with Deaconess Hospital for more than 40 years, died Feb. 26, 2017, in St. Louis, Missouri.

FRANK DWYER, MD BS MED '42, a Kansas City dermatologist, died Feb. 22, 2017, in Port Washington, New York.

KENNETH FLANDERMAYER, MD '66, a physician with a distinguished military and private practice career, died March 9, 2017, in Albuquerque, New Mexico. Flandermeyer also authored the popular acne treatment book, "Clear Skin," which sold over 100,000 copies after being published in 1979.

PHIL HARRISON, MD '77, a gastroenterologist in Joplin, Missouri, died April 10, 2017.

JAMES JAMESON, MD '48, an orthopaedic surgeon, died Nov. 6, 2016, in Springfield, Missouri.

RICHARD KLEIN, MD '67, an orthopaedic surgeon, died Dec. 15, 2016, in Cambridge, Idaho.

GENE HOOVER LEROUX, MD '60, a well-known "country doctor" to area residents in Doniphan, Missouri, died March 25, 2017.

CHARLES MANLEY, MD '58, a pediatric neurologist and researcher, died Nov. 21, 2017, in St. Louis.

ELLIOTT MEYERDING, MD RES '82, a surgeon, died Jan. 19, 2017, in Medford, Oregon.

BYRON MILGRAM, MD '67, a psychiatrist and lifelong Kansas City resident, died Jan. 11, 2017, in Leawood, Kansas.

DANIEL PLAUTZ, MD '77, a psychiatrist, died Nov. 25, 2016, in Columbia.

PAUL ROESLER, MD '46, a longtime radiologist and consultant to the Olympic Training Center in Colorado Springs, Colorado, died Feb. 21, 2017.

ROLAND SPRINGGATE, MD '57, the first board-certified rheumatologist in western Michigan, died Feb. 4, 2017, in Kalamazoo, Michigan.

LAWRENCE STUERMAN, MD '62, a family medicine physician, died Dec. 1, 2016, in O'Fallon, Missouri.

MARK TENDAI, MD '63, an obstetrician/gynecologist in Springfield, Missouri, died Jan. 5, 2017.

EARL "MAX" VANSANDT, MD '63, an orthopaedic surgeon who practiced in Bellvue, Washington, died Dec. 19, 2016, in Kansas City.

MARTHA (LUSSER) WARICHER, MD '70, a pediatric neurologist who graduated summa cum laude in her medical school class, died Oct. 9, 2016, in Allentown, Pennsylvania.



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M I Z Z O U

60th Annual

PHYSICIANS ALUMNI WEEKEND



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NOV. 3 - 4, 2017

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Alumni from all classes are welcome to attend the annual Physicians Alumni Weekend.

- Tour the new medical education building
- Participate in CME sessions
- Socialize at the annual alumni dinner
- Watch the MU vs. Florida football game



QUESTIONS? Please call **(573) 882-5021**,
email mumedalumni@health.missouri.edu
or visit medicine.missouri.edu/alumni.



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