

TABLE OF CONTENTS

Message from the Executive Vice President for Medical Affairs and Dean	3
Michigan Medicine Overview	
Michigan Medicine FY18 Timeline	6
Increasing Value in Patient Care	7
CAR-T therapy	8
New survival flight jet	10
West Ann Arbor opening	12
Training the Best Leaders of Tomorrow	13
Clinical simulation center opening	14
LCME accreditation	15
Changing views of doctors: Chris Connolly	16
Discovery through Research	18
OPEN – opioid crisis	19
OPEN – opioid crisis	
	20

Executive Officers of Michigan Medicine

Marschall S. Runge, M.D., Ph.D., dean, University of Michigan Medical School; executive vice president for medical affairs, U-M; CEO, Michigan Medicine

Carol R. Bradford, M.D., executive vice dean for academic affairs, U-M Medical School; chief academic officer, Michigan Medicine

Steve L. Kunkel, Ph.D., senior associate dean for research, U-M Medical School; interim chief scientific officer, Michigan Medicine

David A. Spahlinger, M.D., executive vice dean for clinical affairs, U-M Medical School; president, U-M Health System

Regents of the University of Michigan:

Michael J. Behm Mark J. Bernstein Shauna Ryder Diggs Denise Ilitch Andrea Fischer Newman Andrew C. Richner Ron Weiser Katherine E. White Mark S. Schlissel (ex officio)

© 2019, The Regents of the University of Michigan A Nondiscriminatory, Affirmative Action Employer

MESSAGE FROM EXECUTIVE VICE PRESIDENT FOR MEDICAL AFFAIRS AND DEAN

This past year, Michigan Medicine has continued advancing health care through delivering high caliber patient care, education and research. We're very excited to be on a journey to expand our footprint and presence in Michigan, and provide greater access to patients and communities across the state. Through expansion of our own facilities and partnerships with other health care providers, we are increasing the specialty care available in local and surrounding regions.

Our medical school continues to evolve, with ongoing assessments of our curriculum to ensure we are providing the most well-rounded and robust educational experience for our students. This summer we began the process for renewed accreditation, and we continue to evaluate our admission criteria and how we select the best and brightest medical students.

Our discovery and translational research continues to thrive, supported by not only government funding and but significant philanthropic gifts that have the power to transform the scope and pace of our scientific initiatives. We strive to tackle some of the most difficult health care problems, like opioid addiction and cancer.

The stories we share reflect just a small dose of the incredible health care related activities occurring at Michigan Medicine, every day. I invite you to learn more about this past year's highlights and just a few of the people who shape this unique and very special place.

Marschall S. Runge, M.D., Ph.D.



MICHIGAN MEDICINE OVERVIEW



MISSION STATEMENT:

WE ADVANCE HEALTH TO SERVE MICHIGAN AND THE WORLD.

KEY FACTS

1,000	Licensed beds Medical and Surgical	26,000	Employees
3	Hospitals	48,793	Discharges
40	Outpatient facilities	300K	Patient days
5,000	Nurses	104K	ER/urgent care visits
1,199	Residents in training	2.1M	Outpatient clinic visits
105	Specialties	54K	Surgeries
708	Medical students	4,400	Babies Delivered

RESEARCH ACTIVITIES

235 New inventions

57 Patents Awarded

112 New option and license agreements with industry

7 New startup companies

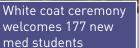
MICHIGAN MEDICINE OVERVIEW (CONTINUED)

MICHIGAN MEDICINE HOSPITALS, CLINICS AND AFFILIATIONS LOCATIONS



4 · MICHIGAN MEDICINE



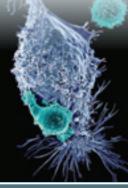




Named one of "10 Best Hospitals to Work For" by indeed.com



C.S. Mott designated Level 1 Children's Surgery Center by American College of



U-M Medical School ranked #15 in research and #7 in primary care by U.S. News & World Repor



Michigan Medicine earns grade "A" fron Leapfrog group for nospital safety



1edical School

July 2017

Sept 2017

Feb. 2018

Mar 2018

April 2018

May 2018

Aug 2017

Nov. 2017

May 2018

June 2018

Mar 2018

Mar 2018

Hospital ranked #6 News & World Repo



West Ann Arbor clinic





Match Day for 162 medical students



\$150M gift transforms and renames Rogel ancer Center



amed top employe





INCREASING VALUE IN PATIENT CARE

PATIENT CARE

CAR-T CLINICAL TRIALS YIELD NEW CANCER THERAPY

Maryam Rasheed was just 7 years old when the cancer she had battled a year earlier returned with a vengeance, and treatment could no longer stop it.

The heartbreaking news came after several rounds of chemotherapy, radiation and a bone marrow transplant from her 4-year-old brother, Rashid, in the battle against acute lymphoblastic leukemia.

Maryam's doctors in Detroit referred the Macomb Township family to University of Michigan C.S. Mott Children's Hospital for one last chance at finding a cure.

"I told them we will try anything," her mother, Asmaa Rasheed, remembers.



At that time, Mott was among a handful of sites in the country participating in a clinical trial testing an innovative approach to immunotherapy, or cancer treatments that harness a patient's own immune cells to treat disease. Maryam enrolled in the study to try the therapy. About 100 days later, a bone marrow test brought stunning news: She was cancer-free.

After the Food and Drug
Administration officially approved
the therapy that helped Maryam,
CAR T-cell therapy became the first
gene therapy for leukemia to reach
the market. Mott is the only certified
treatment center in Michigan and
one of a select few in the country to
offer it.

The FDA's stamp of approval is largely based on a multisite study, which included Mott, and tracked outcomes of 50 patients who received CAR T-cell therapy in 2015-2016. Forty-one (82 percent) of patients went into remission, with 60 percent of patients surviving leukemia-free for at least six months after therapy. The outcomes are striking because all patients had leukemia that had relapsed or was resistant to other forms of therapy before the CAR T infusion.

"This is a dawn of a new and exciting era in cancer therapy," says Gregory Yanik, M.D., clinical director of the Pediatric Blood and Marrow Transplantation Program at Mott.

"This new treatment has the potential to change the face of cancer therapy for years to come, not just in childhood acute lymphoblastic leukemia but in other cancers as well. This allows us to turn patients' own cells into a powerful weapon to fight the disease — a weapon that does not rely on chemotherapy but takes a whole

new approach to attacking childhood leukemia."

41

(82%)
PATIENTS
WENT INTO
REMISSION

PATIENT

STUDY

CAR-T CLINICAL TRIALS YIELD NEW CANCER THERAPY (CONTINUED)

What is CAR T-cell therapy?

CAR T-cell therapy involves extracting millions of a patient's own T-cells, a pivotal, disease-fighting white blood cell. The T-cells are turbocharged through bioengineering techniques that reprogram them to kill cancer cells. The technique essentially transforms the patient's cells into what scientists call "a living drug."

In the clinical trial, T-cells were programmed to attack a protein (called CD19) found on the surface of a common type of acute lymphoblastic leukemia. The T-cells are given to patients through an intravenous infusion that takes less than 30 minutes. One dose of the drug can destroy up to 100,000 cancer cells.

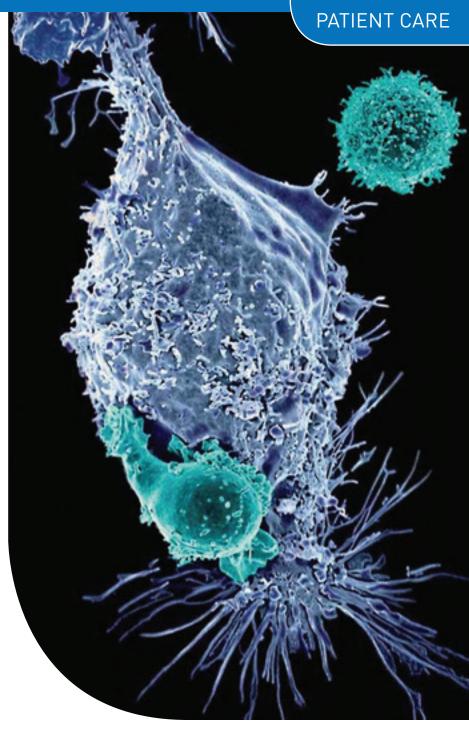
Doctors are quick to note that while some patients had good responses to CAR T-cell therapy, those effects have sometimes been short-lived, and the treatment can be life-threatening. Side effects can include high fevers, increased blood pressure, rapid pulse and decreased blood flow to internal organs that require stays in the Intensive Care Unit.

Remission and regular life

Maryam, who is entering fourth grade this fall at Shawnee Elementary School, has been in remission for more than two years. Every few weeks, she receives infusions of IVIG (intravenous immunoglobulin), which involve purified plasma pooled from thousands of blood donors and give her antibodies to fight off germs. Patients on the therapy rely on these infusions to stay healthy, because the T-cell treatment not only kills leukemic B-cells but also healthy ones that protect against infections.

After losing her hair three times, spending long periods wearing face masks, falling behind in school because of treatment and spending months at a time hospitalized, Maryam is finally experiencing regular kid life, her mom says. She enjoys the beach, family vacations and hanging out with friends.

"It was like a dream," Rasheed says. "We know there are no guarantees the cancer won't come back, but this treatment is the only reason she's here now."



8 · MICHIGAN MEDICINE

ANNUAL REPORT 2017-2018 · 9

PATIENT CARE

SURVIVAL FLIGHT EXPANDS ITS WINGS

Survival Flight, the critical care transport program, has added a new Bombardier Learjet 75 fixed-wing aircraft to its existing fleet of three rotor-wing aircrafts to serve even more critically-injured patients and improve organ procurement services.

The Survival Flight team members specifically designed the jet's interior for the acutely ill and injured patient populations they treat.

"There is nothing our nurses that designed this interior haven't thought of," said Denise Landis, clinical director of Survival Flight.

The aircraft is mainly used for pre-planned trips, including organ procurement and patients that need to be picked up from distances the rotor-wing aircrafts cannot reach.

"This jet will allow our organ procurement teams to fly as far as Las Vegas and back to Ann Arbor within a 12-hour shift," Landis said. "Before, we would not be able to make it to such a far distance in one shift."

The Learjet 75 will replace the program's Cessna Citation Encore jet, which was acquired in 2001.

INCREASING VALUE IN PATIENT CARE

"Our former aircraft was a corporate interior and while it served us well for the past 17 years, we are constantly looking toward improving our ability to care for patients," Landis said. "This jet has been in process for over a year. It started out with a committee with all of the stakeholders that fly in the aircraft coming together and deciding what is needed to better serve our patients."

THE JET'S INTERIOR
IS DESIGNED FOR
THE ACUTELY ILL AND
INJURED PATIENTS.



SURVIVAL FLIGHT EXPANDS ITS WINGS (CONTINUED)

INCREASING VALUE IN PATIENT CARE

Improved features of the jet include:

- A wider door access point to the interior patient cabin
- A wider interior cabin with the ability to care for many different patient populations
- The ability to carry liquid oxygen and heavy equipment on board
- Additional seating for two organ procurement teams
- Shorter take-off and faster climb rate to a top speed of 464 knots (534 mph)

The beauty is we have options to do what's best for our patients and our staff," Landis said. "We're excited to be able to go further, faster and be dedicated to the diverse patients we transport."

OPENING ACT: WEST ANN ARBOR

In Fall 2017, Michigan Medicine opened the doors of a brand new clinic. West Ann Arbor Health Center-Parkland Plaza.

The facility, which has more than 75,000 square feet of space and will eventually host dozens of ambulatory care specialties, is an important step in helping the organization expand its reach in the community.

"Many of our patients were looking for an alternative to coming to the academic medical center to receive care," said Mirta Casiano, who serves as the clerical lead on the second floor of Parkland Plaza.

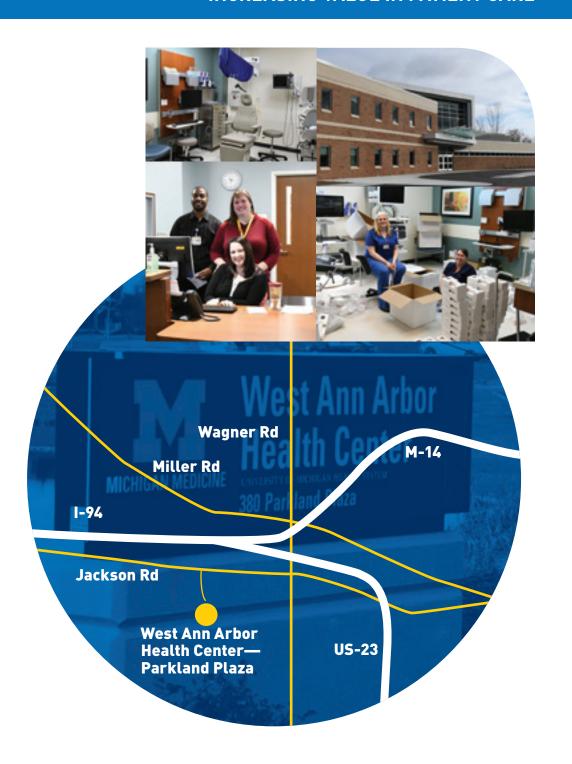
"The new center gives them a more convenient option, while helping to alleviate congestion on the main medical campus. It truly fits our mission of touching more lives around the region and improving the experience for all of our patients and families."

One of the main draws of the facility is its radiology unit, which will provide general imaging, CT scans, ultrasounds and mammography to patients. While all primary care and some specialty care areas open today, more services will be rolled out over the next few months.

"This is a complete health center," said Caitlin Gibbons, the clinic lead on the facility's first floor, home to mostly primary care physicians. There is also an orthopaedic presence, ADTU and infusion areas that Givens will lead on the first floor.

Many of Parkland Plaza's employees have moved over from the main medical campus or other Michigan Medicine clinics.

"The organization is reinvesting in the community and its employees," Gibbons said. "Many of our faculty and staff have been given a unique opportunity to take the next steps in our career here at Parkland Plaza. We are all so excited to be a part of this team."



TRAINING THE BEST LEADERS OF TOMORROW

EDUCATION

12 · MICHIGAN MEDICINE

ANNUAL REPORT 2017-2018 · 13

HANDS ON TRAINING: CLINICAL SIMULATION CENTER

U-M has officially opened a second Clinical Simulation Center location, more than doubling the number of physicians, nurses and students who will be able to practice their skills in a state-of-the-art learning environment.

The new 7,500 square foot space, located in Med Sci II, allows current and future health care professionals a chance to prepare for real-world scenarios and rehearse new medical procedures in a high-impact and low-risk clinical setting.

The simulation center, which is accredited by the American College of Surgeons as a Comprehensive Education Institute, is equipped with a host of hi-fidelity adult, child and obstetric manikins with lifelike capabilities. They are designed to cry, blink, talk and breathe, have full heart and lung sounds,

EKG tracings and respond to a host of medical interventions.

In addition to computer-based simulation modules that guide learners through practice exams, there are five inpatient rooms that replicate rooms in University Hospital, C.S. Mott Children's Hospital and Von Voigtlander Women's Hospital. Everything is operated from an adjacent control room where staff members control the manikin and the environment in the room. Various manikins provide opportunities to practice and perfect different skills, from chest compressions and defibrillation to assisting with birthing an actual manikin baby.

James Cooke, executive director of the Clinical Simulation Center and assistant professor of learning health sciences and of family medicine, is a staunch champion of simulation training.

"Investing in the expansion of the Clinical Simulation Center shows our commitment to ensuring that the next generation of health care leaders, scholars and practitioners are fully prepared for the future challenges in national and global health care," he said.

"This exciting venture will help us maintain our status as one of the top academic medical centers in the

country."

Cooke said two of the most significant benefits of simulation are the opportunity for interdisciplinary teams to practice together and the regular feedback it affords learners.

"Debriefing allows learners to reflect on and discuss their medical decisions and allows expert facilitators to guide teams to improve communication, efficiency and overall performance. Intentional and well-designed practice leads to better outcomes," Cooke said.

PREPARING FOR REACCREDITATION

Beginning in June 2017, the U-M Medical School educational community will participate in an institutional self-study for 18 months as part of the Liaison Committee on Medical Education (LCME) reaccreditation process.

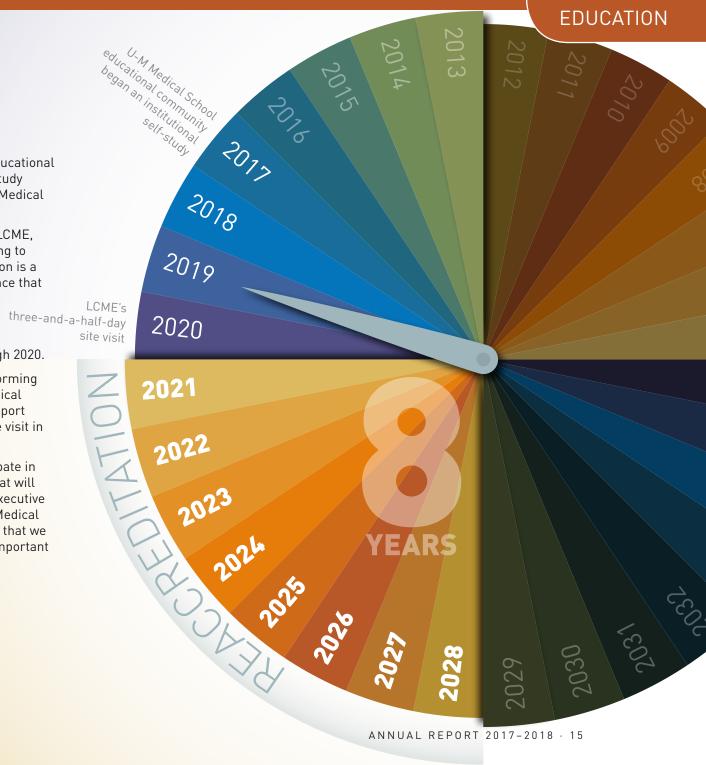
U-M is seeking an eight-year reaccreditation from LCME, which evaluates medical education programs leading to the M.D. degree in the U.S. and Canada. Accreditation is a voluntary, peer-reviewed process of quality assurance that determines whether an institution's program meets established standards.

The school completed a similar self-study in 2012, earning accreditation for the maximum term through 2020.

A self-study task force and seven committees are forming now and soon will begin reviewing the school's medical education program. Their work will inform a self-report package ahead of LCME's three-and-a-half-day site visit in early 2020.

"I encourage all faculty, staff and learners to participate in this process, which will provide valuable insights that will better position us for a successful site visit," said Executive Vice President for Medical Affairs and Dean of the Medical School Marschall S. Runge, M.D., Ph.D. "It's critical that we have broad engagement and support for this very important effort."







EDUCATION

LEADING THE WAY: CHANGING MEDICINE'S VIEW OF DOCTORS

Like any mother who suddenly finds herself in a hospital waiting room. Helen Connolly was uneasy.

It was Feb. 28, 2007, and her younger son, Chris, who had just turned 15, had been taken to the Northwestern Memorial Hospital emergency room in Chicago — there had been an accident during his water polo practice.

"The nurse came out," Helen said, "and said, 'I'm sorry to tell you, but your son is quadriplegic.'"

Events seemed to blur — the family, including Helen, her husband Dennis and Chris' brother, also named Dennis, were taken to Chris, and found him lying on a hospital bed, unable to

move.



Eleven years later, Chris is in an exam room at the U-M Medical School. A doctor, with a clipboard, watches from the corner as Chris approaches a patient on the table.

"Please lift your left arm," Chris said, peering at the skin along her outstretched limb a little self-consciously. It's a routine dermatological exam — or a reasonable facsimile of one — except there's nothing routine about it.

Chris is still a quadriplegic, having regained limited motion in his arms and legs only through unrelenting physical therapy. He

is also a successful M2 who navigated an undergraduate education and master's program in biology at Stanford and the rigors of applying to medical school. And that's just the academics. He eases his wheelchair back and smiles at the patient. "Everything looks good."

The dramatic change in roles Chris Connolly has experienced range from critically-injured patient to budding doctor, with countless steps in between. It also represents the growing movement to rethink rules that have long prevented most people with disabilities from entering the

medical profession. Disability experts estimate that he is one of only four or five medical students in the nation with his level of physical disability. The societal shift he represents aims not only to reinvent medical school standards and correct a profession that has largely exempted itself from inclusion of the disabled, but to change the way everyone thinks about doctors.

TRAINING THE BEST LEADERS OF TOMORROW

School-bound

Chris is a disciplined optimist, both by nature and of necessity, a person focused on his life's forward motion. Today he describes his accident by saying, "That was one day in my life. There have been a lot of days since then, some of them less interesting."

When it came time to apply for college, Chris' high school counselor looked at his work and test scores and suggested that he apply to schools such as Stanford.

He wrote his college essay about the intense struggle to move his legs again — comparing it to scenes from "Star Wars." Chris, and Helen, were headed to college at Stanford. There, Chris flourished, working in a disabled-student group and nailing his academics, finishing with a bachelor's and a master's degree in 2016.

Medical school seemed like a logical next step. "I think being exposed to people in medicine for such a long period of time," he said, "made me realize they're not infinitely smarter than me. They've had a lot of training, and they are obviously smart, but given the academic nature of a lot of their work, I thought I could do it."

He sent in applications, realizing that the barriers to entry were higher than any he had faced before.

Specifically, Chris knew that he would need to be able to meet a set of physical criteria, called technical standards, which medical schools traditionally require of all applicants. Though the standards differ from school to school, they often include things such as the ability to lift a patient or perform CPR, and were designed around the notion that a medical education produces graduates who are able to pursue any medical specialty.

LEADING THE WAY: CHANGING MEDICINE'S VIEW OF DOCTORS (CONTINUED)

Rethinking standards

"The standards haven't changed, basically, since 1973," said disability expert Lisa Meeks, who published a paper in March for the Association of American Medical Colleges, which assessed access for disabled medical students. "What we haven't kept up with is technology. Now ... for the most part we can problem solve and find solutions."

TRAINING THE BEST LEADERS OF TOMORROW

Her research came about at a time when the medical profession has been grappling with the reality that they had practically exempted themselves from including people who are physically disabled among their ranks. And failing to admit disabled students to medical schools has played a big part in the lack of doctors with disabilities.

Re-evaluating the standards, Meeks pointed out, doesn't mean lowering them. One bias that students with disabilities have to face is the notion that exceptions have been made for them. In fact, such students must still find ways to satisfy the basic requirements set forth by medical schools — but new standards allow them latitude in how those goals are achieved.

To that end, Chris began practicing techniques for clinical tasks such as taking blood pressure or using a stethoscope as soon as he applied to medical schools. "I wanted to be able to show people that I was going to make sure technical standards wouldn't be a problem."

When he discovered that he consistently dropped his stethoscope, he took a lesson from a childhood spent tinkering in the garage with his dad, got a few basic parts from Home Depot and made a handle that helps him keep his grip. U-M has now patented a 3D-printed version of that handle as a solution that can help other doctors.

Chris, meanwhile, is exploring fields like medical genetics and envisioning the life he might one day have. The family's plan is that Chris will be prepared for a successful professional life that will allow him to manage on his own or hire an assistant when needed.

"I think I can do most things now," he said. "I probably won't be much worse off than any other clueless 30-year-old. My parents have done a lot for me, and so I want to be able to take care of them one day."



16 · MICHIGAN MEDICINE ANNUAL REPORT 2017-2018 · 17

AN OPEN LOOK AT THE OPIOID CRISIS

The opioid crisis across the U.S. has reached staggering proportions, causing more than 134 deaths per day.

"Opioid-related deaths and opioid morbidity is a known public health problem that only continues to get worse. It affects individuals in every state and every situation, both rural and urban said Chad Brummett, M.D., associate professor of anesthesiology and co-director of the Michigan Opioid Prescribing Engagement Network (OPEN), a Michigan Medicine collaborative that aims to tackle the opioid epidemic.

Brummett is joined in his leadership by Jennifer Waljee, M.D., M.P.H., M.S., and Michael Englesbe, M.D.

A 'new way of thinking'

According to Brummett, as the opioid crisis began to take hold across the country, the majority of work to stem the issue was Thus, in 2016, Michigan-OPEN was born. The initiative now includes a program manager, three statisticians, research coordinators, community engagement specialists, an implementation team, a regulatory specialist, a data manager, administrative support, postdoctoral fellows, graduate students and undergraduates from across U-M.

Multi-pronged approach

The first action the OPEN team did was to look closely at individuals who were not using opioids.

"It may seem like an oxymoron to do that, but for most people, the first exposure to opioids is through acute care, surgery or dental work," Brummett said. "And 80 percent of the people who become addicted are not taking opioids prior to that care."

Much of OPEN's work to this point has focused on exposure through surgery — and how patients can be guided safely through such procedures.

"Becoming a new chronic opioid user is the most common complication following a surgery," Waljee said. "Yet we have found that there is no correlation between patient satisfaction and the number of pills prescribed to treat pain symptoms."

The team is now gathering data from a statewide surgical collaborative in order to create prescription guidelines for 100 of the most common surgeries, and the recommendations will be updated 2-3 times each year based on new data.

"These new guidelines will limit the number of opioids being released into the community, while still attending to the postoperative pain needs of patients," Waljee said. "And that makes it less likely that a patient, family member or friend will become addicted."



18 · MICHIGAN MEDICINE

RESEARCH

DISCOVERY THROUGH RESEARCH

RESEARCH

IT TAKES A VILLAGE: RAISING THE CHAD CARR PEDIATRIC BRAIN TUMOR CENTER

WE WANT TO
SEE A DAY
WHEN NO
FAMILY WILL
EVER HAVE
TO SUFFER
THIS KIND OF
HEARTBREAK.

—Tammi Carr,

Chad's Mom



An incurable brain tumor took Chad Carr's life when he was just 5 years old, but now his name will be synonymous with research to fight the lethal pediatric brain cancer.

DISCOVERY THROUGH RESEARCH

Multiple donors have committed \$30 million to establish the Chad Carr Pediatric Brain Tumor Center at U-M, an initiative to advance research and treatment for children with brain cancer.

Chad, a grandson of former U-M football coach Lloyd Carr, died in 2015, 14 months after being diagnosed with diffuse intrinsic pontine glioma (DIPG), among the most aggressive and lethal types of brain tumors.

The joint announcement by Michigan Medicine and The ChadTough Foundation was made at the foundation's annual Champions for Change Gala on Saturday, May 19.

"We want to see a day when no family will ever have to suffer this kind of heartbreak," said Chad's mom, Tammi Carr. "We believe that the work happening in Chad's name at the U-M Chad Carr Pediatric Brain Tumor Center will change the future for other children. This is Chad's legacy."

Thousands of supporters from across the country came together to raise the \$30 million needed to establish and name the center in Chad Carr's memory. U-M Regent Ron Weiser and Eileen Weiser made lead gifts, along with generous donations from Wayne and Shelly Jones and the Jones Family Foundation, the Glick family and Alro Steel, The ChadTough Foundation, William and Sharon Stein, Frank and Barbara Westover, and David and Joan Evans.

IT TAKES A VILLAGE: RAISING THE CHAD CARR PEDIATRIC BRAIN TUMOR CENTER (CONTINUED)

DISCOVERY THROUGH RESEARCH

Brain tumors are the leading cause of death from childhood cancer, and the most dreaded type is DIPG — which stems from the region of the brain that controls vital functions such as breathing and heart rate. Research proves that chemotherapy, radiotherapy and surgery, which together have been the foundation for cancer therapy advances during the last two decades, are not effective against DIPG. More than 90 percent of children diagnosed with DIPG die within 18 months of diagnosis.

"The Chad Carr Pediatric Brain Tumor Center will leverage the breadth and depth of expertise across the university to fuel innovative research and deliver new therapies for children with brain cancer," said Marschall Runge, M.D., Ph.D., executive vice president for medical affairs, dean of the U-M Medical School and CEO of Michigan Medicine.

"This incredible collaboration brings together a renowned team of doctors and scientists at Michigan who will pool knowledge and break traditional boundaries to drive advances in research and treatment for pediatric brain cancer."





Above: Carl Koschmann, M.D. Left: Sriram Vennetti, M.D.



20 · MICHIGAN MEDICINE ANNUAL REPORT 2017-2018 · 21

A TRANSFORMATIVE GIFT: NAMING THE ROGEL CANCER CENTER



Richard and Susan Rogel are on a mission to boost innovative cancer research and develop the next generation of cancer pioneers — and they are pledging \$150 million to the U-M Comprehensive Cancer Center to realize that vision.

The gift is the largest ever to Michigan Medicine and one of the largest in the university's history.

This transformational gift will enable Michigan Medicine to draw on its collaborative research culture to drive cancer care forward. It will help attract and support outstanding cancer researchers from around the world, including the most promising fellows and trainees, making U-M a premier center fostering the development of new leaders in cancer research and care.

The Board of Regents approved a new name — the U-M Rogel Cancer Center — in honor of the Rogels' many years of giving and service. With their latest gift, the Rogels are now the second largest individual donors to the university.

The couple has a personal motivation to invest in cancer research. Richard Rogel, a U-M alum, lost his father to pancreatic cancer. Both of Susan Rogel's parents died of cancer long ago and her 50-year-old daughter, Ilene, died five years ago from an aggressive form of lung cancer.

With few treatments available to help llene, "it made us want to do more to help with the fight against cancer," said Richard Rogel. "It's as simple as that. The problems we face in health care today are phenomenally complex. We need different minds looking at the same problem in different ways."

"[U-M has] the advantage of 97 graduate departments rated in the top 10 in the country," Rogel added. "Putting all this brain power and excitement together is going to help us find a cure for cancer. It will make people's lives better."

	FY18	FY17
Operating Revenue	\$4,732,814.00	\$4,515,614.00
Operating Expenses	\$4,853,783.00	\$4,471,152.00
Non-Operating Income	\$84,469.00	\$92,488.00
Cash Flow Margin	6.00%	9.60%



PATIENT CARE EDUCATION RESEARCH