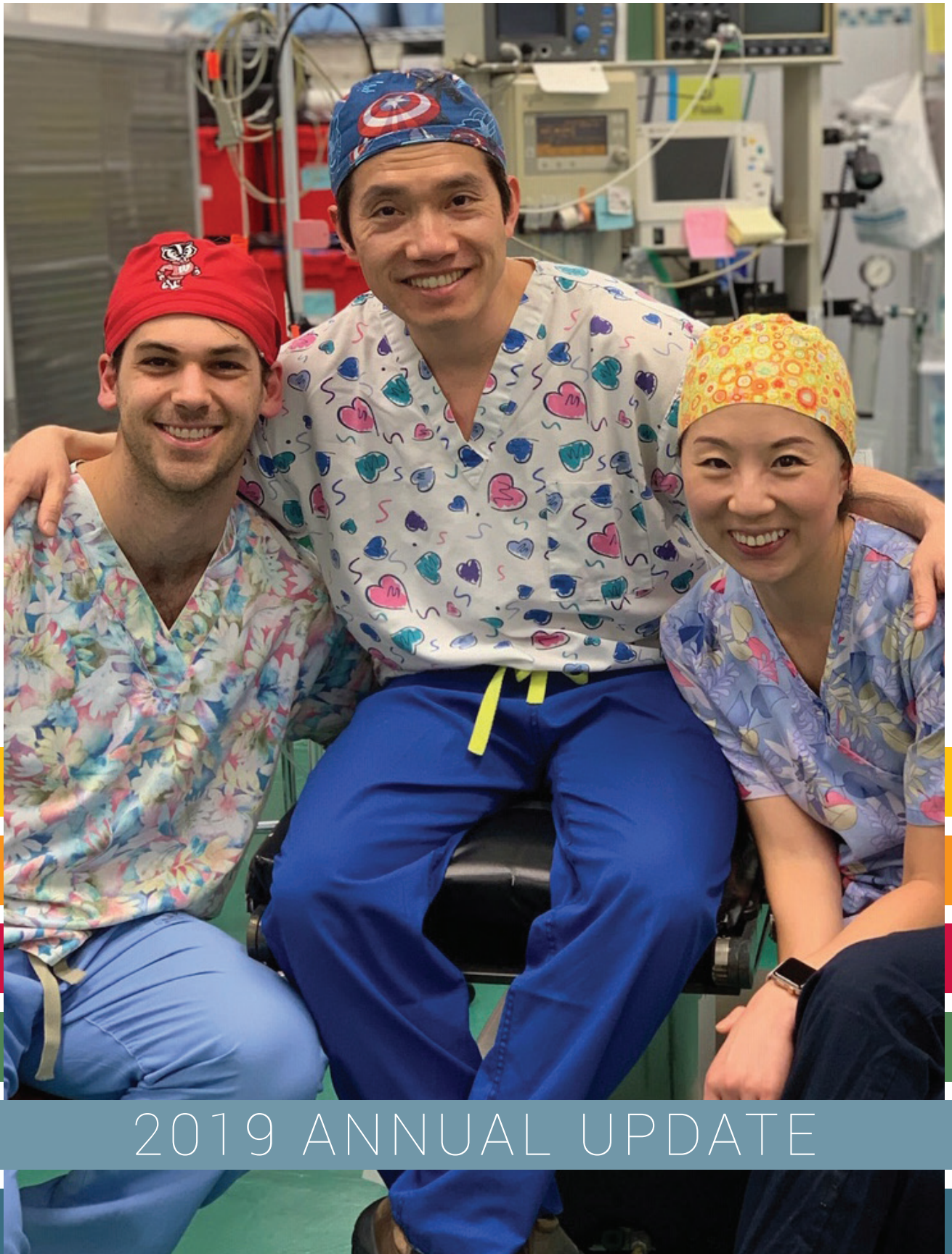




Department of Surgery  
UNIVERSITY OF WISCONSIN  
SCHOOL OF MEDICINE AND PUBLIC HEALTH



2019 ANNUAL UPDATE



# NOTE FROM OUR CHAIR



## Greetings from the University of Wisconsin Department of Surgery

The stories you'll read here are about many aspects of surgery and surgical science, all over the world, and all sharing one common theme: **the unceasing drive to move surgery forward.**

The pursuits of our surgeons, our patients, and their families are truly inspiring. Whether by raising funds for research, giving back after an organ transplant journey, or providing care across the world, our community inspires us every day with their commitment to improving lives.

We couldn't achieve excellence in education, research, and care without your help. Your support for research will help change and even save patients' lives. Your contributions also help educate the next generation of outstanding surgeons, so they may provide excellent care for generations to come. Your gifts make a real difference.

We are so grateful for each and every one of you. Every day, our remarkable patients and supporters inspire us to pursue excellence in all that we do. With your support, we will continue **forward together.**

**Rebecca M. Minter, MD, FACS**

*A.R. Curreri Distinguished Chair*

UW Department of Surgery

**Front cover:** Pediatric surgeon, Dr. Hau Le, and residents, Dr. Kevin Janek and Dr. Keon Young Park, traveled to Honduras to evaluate and operate on children with inguinal and umbilical hernias.



# AT A GLANCE: 2019



## Crochet prodigy gets hooked on surgery

When we heard international crocheting prodigy Jonah Larson was interested in a career in surgery, we knew we had to invite him to Madison. Eleven-year-old Jonah and his family joined us for a day of exploring surgery, including working with our faculty in the simulation center and practicing microsurgery. Jonah shared his gifts with us by teaching several of our surgeons how to crochet.

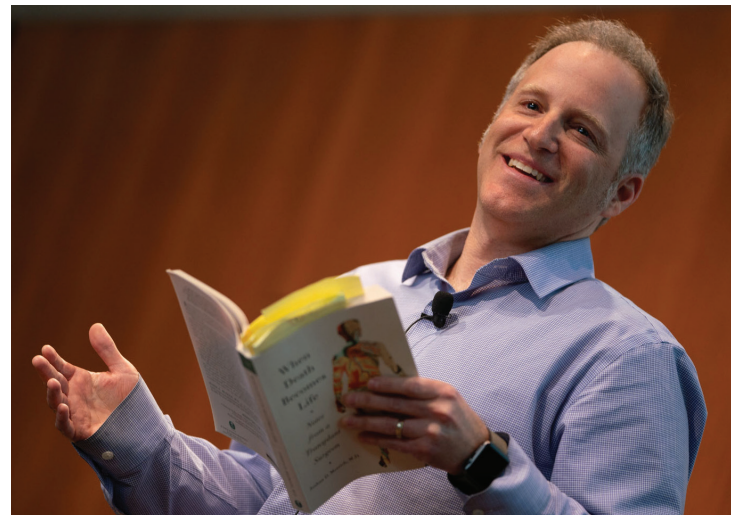
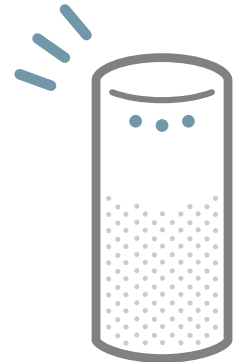
## Moving surgery education forward with **Entrustable Professional Activities**

Our surgery education faculty and researchers are part of a national trial of a new method of evaluating surgeons in training. In the trial, residents are being evaluated in the Entrustable Professional Activity (EPA) framework. The EPA framework aims to understand what skills are needed for a resident to become “entrusted”—able to independently take on—discrete and core activities of the profession of Surgery. Participating in this trial is an exciting opportunity to improve surgical training.



## Using **smart speakers** to help cancer patients

A team of our surgical oncology advanced practice providers are testing a program that will help cancer patients before and after surgery with internet-enabled “smart” speakers in their homes. The project, which is supported by a gift from donor Martha Manning, helps patients, their caregivers, and families develop a more goal-directed and positive approach to a cancer diagnosis. The device includes custom-programmed reminders, educational materials, and information about preparing for and recovering from surgery.



## When Death Becomes **Life** brings the stories of organ transplantation to the world

Transplant surgeon **Dr. Joshua Mezrich** published his popular nonfiction book *When Death Becomes Life: Notes from a Transplant Surgeon* this year, which he describes as “part-memoir, part-history of transplant, and part-patient stories.” Published by HarperCollins, the book brings readers into the operating room and into the lives of patients, donors, families, and surgeons.



Mike Oglesby dances with his daughter, Shannon Huber, at her wedding in 2015.

## Hawkeyes and Badgers unite to fight pancreatic cancer

Though it's rare to find an Iowa Hawkeye who will show love for the Wisconsin Badgers, the **"Faj Squad"** is ready to give up the black and gold for a little Badger red and white when it comes to supporting pancreatic cancer research.

"Faj" is what Brittany Oglesby and Shannon Huber affectionately called their dad, Mike Oglesby. Mike was diagnosed with pancreatic cancer on November 6, 2015 and was given 16 months to live. He sought treatment in Iowa and lived long enough to see Shannon get married, but the cancer was far more aggressive than predicted.

In just two months, Mike was gone. He was 52 years old.

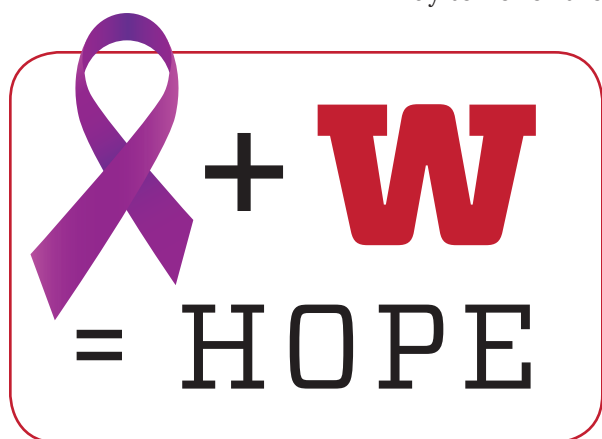
Mike's siblings, Diane Rambousek and Thomas Oglesby, channeled their grief by finding a way to honor their brother's memory. "It was such a whirlwind, I didn't even know what

to do," Diane says. "My grief took over, and I said – 'we have to do something.' We knew Mike wouldn't want us just sitting around. We had to prevent this from happening to someone else."

Serving as her brother's patient advocate opened her eyes to the realities of pancreatic cancer. So "doing something" meant raising awareness and raising funds for research.

Within weeks of Mike's death, his daughters came up with the idea for the Faj Squad 5K, and three and half months later, the family launched the Michael W. Oglesby Foundation. The first Faj Squad 5K had 350

participants and 50 virtual walkers, with the momentum continuing each year.



It was important to the family that funds stay local to provide support to individuals battling pancreatic cancer and to raise awareness in their community. After Tom heard Dr. Noelle LoConte speak about pancreatic cancer and the pancreas cancer task force at a Rotary Club meeting in Madison, they were also inspired to direct funds to UW-Madison to support pancreatic cancer research.


“We felt that the people at UW were as passionate as we are about the pancreas,” says Diane. “We need to find a screening tool and we need to find better treatments, and Madison has the team of doctors who work with pancreatic cancer patients and do research. And even though the survival rates stink, maybe this place can give you more time.”

Funds raised from the Faj Squad 5K support surgeon-scientists like **Dr. Sean Ronnekleiv-Kelly**, whose research studies how environmental sensor proteins affect pancreatic cancer. He is particularly interested in circadian clock proteins which regulate circadian rhythms – what we might call our “internal clock.”

Dr. Ronnekleiv-Kelly explores how circadian disruptions, such as irregular sleep patterns or irregular food intake, affect pancreatic cancer progression in a mouse model.

“Our natural circadian cycle has been quite disrupted, particularly among groups such as night shift workers,” he says. “Since circadian rhythms control up to 40% of gene expression in various organs, circadian disruption can significantly contribute to human pathology.” For instance, there is substantial evidence associating circadian disruption with obesity and diabetes, which are pancreatic cancer risk factors.

“Less than 10% of patients are alive at 5 years from diagnosis, and it’s soul-crushing to tell someone who has gone through treatment that their prognosis isn’t good,” says Dr. Ronnekleiv-Kelly. “We have to do better for people like Mike. I am extremely grateful to the Oglesby family and the Faj Squad for their generous support and for their passion to help combat this devastating disease.”

On football Saturdays, clear lines will be drawn, but when it comes to pancreatic cancer research, Diane says, “Even though we’re Hawkeyes, we’ve become very attached to the Badgers.” 



## HELPING OUR PATIENTS THROUGH MULTI-DISCIPLINARY PANCREAS CANCER CARE

Cancer is complex, and so is its treatment. We want to help patients navigate their journey from diagnosis to survivorship, which is why we’re using a multidisciplinary approach to cancer care, including in our pancreatic cancer program. Here are some of the ways we’re evolving to help our patients focus on healing:

### Nurse navigation

Our incredible pancreatic cancer nurse navigator will be a guide from the moment of diagnosis and referral. They will help to answer questions, coordinate care, and will serve as a resource throughout the treatment course.

### Patient and family session

Patients and their families will have an opportunity during their visit to meet with others who have traveled this pancreatic cancer journey before them. This patient and caregiver session offers an opportunity to meet others who have lived through this experience and to learn about support that will be available to them during treatment.

### Cancer genetics

New guidelines recommend a genetics evaluation for every pancreatic cancer patient, and our counselors are an amazing resource for our patients.

### Multi-disciplinary care

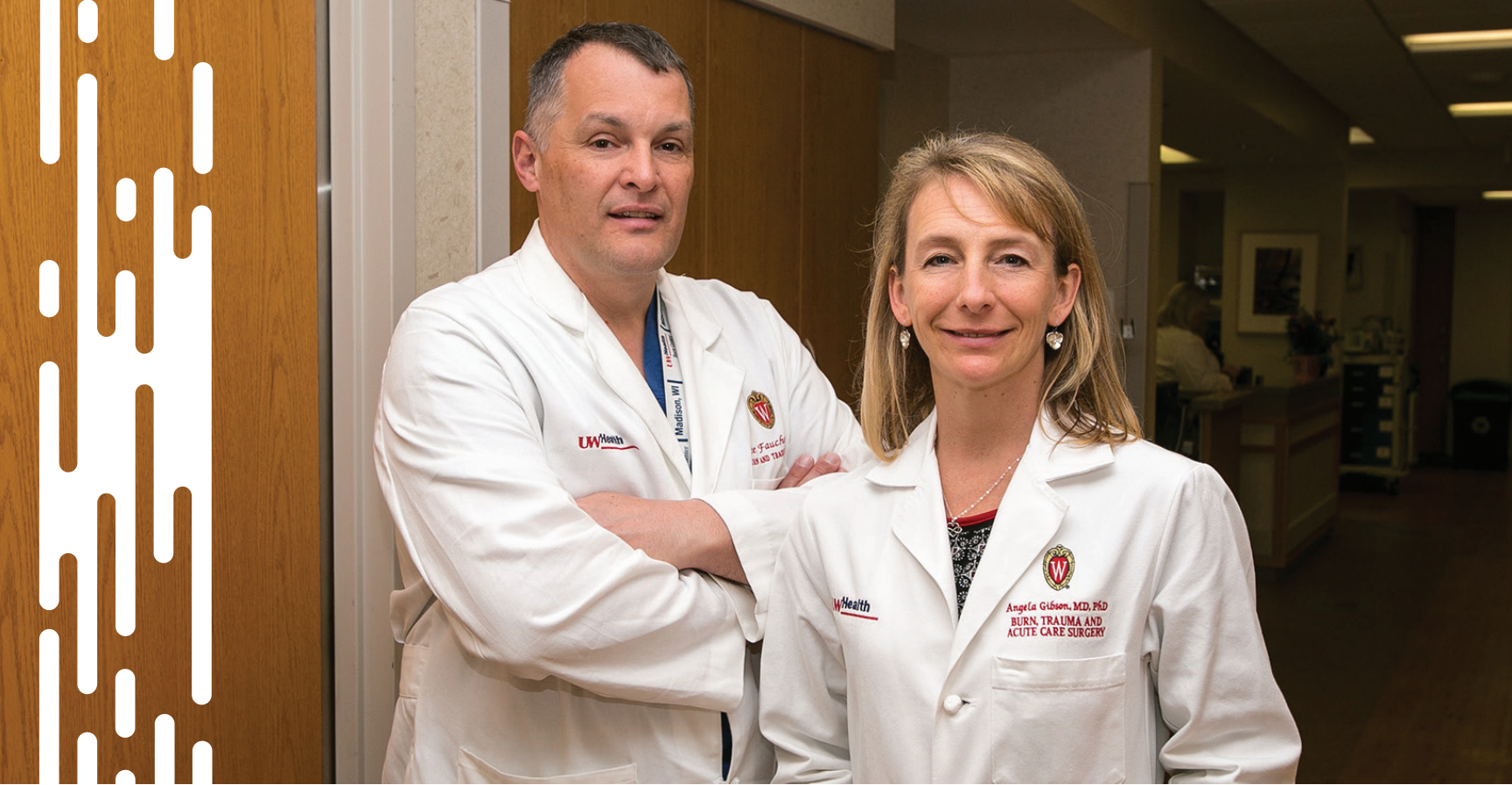
Our cancer team partners with a variety of specialties to provide the highest quality care possible, including gastroenterology, medical oncology, radiology, radiation oncology, interventional radiology, surgical oncology, nutrition, and cancer nursing.

### Patient task force

The Pancreatic Cancer Task Force is comprised of patients, family, friends, community leaders and supporters to raise awareness of pancreas cancer and research funds. They help us constantly improve the patient experience.







Dr. Lee Faucher (left) and Dr. Angela Gibson provide world-class burn and wound healing services to help patients heal.

## A tragic fire prompts career shift to **surgeon-scientist**

Five months after finishing nursing school, Angela Gibson reported to UW Hospital's burn unit for a shift that changed her career and her life. A Madison Metro bus had been set afire when a mentally ill man experiencing a hallucination poured gasoline on a couple and lit a match. The fire badly injured four passengers and the bus driver. **Dr. Gibson**, who was a nurse at the time, spent months caring for the burn victims, two of whom had burns on 90 to almost 100 percent of their bodies. The healing process involved excruciatingly painful wound treatments, an almost year-long stay for most of the victims, and the near death of the most severely burned man.

The experience was intense for all and forged emotional connections between Dr. Gibson and her patients. Dr. Gibson also became enthralled by the skin's capacity for regeneration and wanted to understand more about how burns and burn victims heal. She began talking about pursuing advanced training to become a nurse practitioner or physician assistant. When Dr. Michael Schurr, then co-director of the burn unit, overheard her, he said, "Why not just go to med school?" That question prompted Dr. Gibson to pursue a medical degree, surgical residency, and a PhD at the University of Wisconsin.

Now, twenty years after that tragic bus fire, Dr. Gibson is a surgeon-scientist investigating skin graft surgeries as well as studying better ways to repair burned skin.

One of the most traumatic aspects of treating burns is that severe burns require surgery, and the removal of skin from a “donor site” on the patient’s own body for a skin graft to another area causes another wound as well as great pain.

Dr. Gibson wants to prevent the need for those skin grafts and the wounds and pain they create.

“I think we often remove too much [tissue],”

Dr. Gibson said. “If we could take less ... and let the wound heal in on its own, the patient

wouldn’t need to suffer an additional whole wound [for the donor site].” To that end, she is studying skin samples in her lab that are removed from burn patients. She wants to determine if enough healthy cells remain in apparently dead tissue to justify leaving it on the body.

Dr. Gibson is also collaborating with a company which develops skin substitutes that can treat burns and other wounds; one substitute is called StrataGraft™; another is tilapia skin.

Ultimately, the powerful healing capacity of the body following a burn is something Dr. Gibson wants to use to its full capacity.

The tragic bus fire in 1998 and the strength exhibited by the burn survivors injured in it profoundly changed Dr. Angela Gibson’s life. Now that she’s seen the healing powers of the body up-close, she won’t stop searching until she discovers all she can about the healing powers of science and surgery.



## University Hospital is one of only 12 hospitals in the country to hold three care designations:

- 1) Verified Burn Center (for children and adults)
- 2) Level I Trauma Center for adult patients
- 3) Level I Trauma Center for pediatric patients

**We are the only hospital in Wisconsin to provide this level of care in one facility.**

## How you can help the UW Burn Center thrive:

### Retain and Attract Faculty to Ensure our Future

Investing in our people is key to our success. Our goal is to retain our best faculty and recruit extraordinary faculty members. One way to achieve this is by creating endowed chairs and professorships.

### Research

For more than 20 years, our researchers have been working to find new skin substitutes to heal burns. We are committed to being among the first to offer groundbreaking treatments to patients.

### Staff Education

Burn care is unique. Specialized care requires specialized training, often only offered out of state. We hope to send as many staff as possible to an annual conference at a cost of \$30,000 annually.

### Program Support – Child Life Specialists

A Child Life Specialist uses distraction techniques for patients undergoing painful dressing changes. They help patients and families cope with the fear and anxiety associated with hospitalization.

- UW is 1 of only 3 centers in the nation that provide Child Life services 24/7.
- To be verified, all pediatric burn centers must have a Child Life Specialist.
- UW Health’s Child Life Program is ENTIRELY funded by philanthropic dollars.



Learn how you can support the UW Burn and Wound Center by visiting:

**[www.uwhealth.org/burn](http://www.uwhealth.org/burn)**







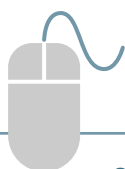
The UW Health Transplant Program helped Stacey Berkman, pictured here with her husband, Lawyer Twillie, get back to the life she loved.

## Joining the **transplant family** at University of Wisconsin

Stacey Berkman has seen the inside of more medical facilities than many physicians. When she became gravely ill in 2015 due to complications from Type 1 diabetes, she traveled from medical center to medical center in search of the right transplant program. Finally, she arrived at the UW Health Transplant Program and felt like she had found a place where the staff could help her. She received the gift of life with a combined pancreas/kidney transplant on September 18, 2016.

**“The UW Health Transplant Program gave me a second chance at life,” says Stacey.**

Diagnosed at age 9 with type I diabetes, Stacey, now 34 and living in Connecticut, experienced many complications – including retinopathy, but she was very good about taking care of herself. When she was in her late 20s, her nephrologist told her she was in the beginning stages of kidney failure and should watch her numbers closely. But, busy preparing for her wedding in May 2015, she didn’t notice that she was becoming more ill. By September 2015, her doctor said it was time to undergo evaluation for a kidney transplant. That was when her ordeal began.



Stay up to date with the latest from our transplant team by signing up for our newsletter at:

**[www.uwhealth.org/transplantupdate](http://www.uwhealth.org/transplantupdate)**





# FORWARD

A friend of the family suggested she look into the possibility of a combined pancreas/kidney transplant. Though her endocrinologist wasn't in favor of it, she and her parents did their own research and, while she underwent dialysis treatments, they began looking for the right facility to perform a combined transplant. It wasn't easy: Some of the facilities they found didn't perform pancreas transplants, others used outdated methods, and still others didn't feel right to Stacey. At her seventh transplant evaluation, she met a doctor who had completed his transplant fellowship with our faculty at the University of Wisconsin, and he advised her that she would receive a transplant quicker in Madison than she would at his facility.

Stacey received a second chance at life when she received a pancreas-kidney transplant from UW Health. Our team of world-class transplant surgeons are part of the collaborative team at the UW Health Transplant Program. Each year, we do more pancreas transplants than any other program in the nation.

At the UW Health Transplant Program, Stacey felt very comfortable with all the doctors and nurses.

"Other programs had turned me into a nervous wreck," she says, "but the team I met in Madison reassured me and lowered my anxiety level." After one false alarm (she received a call, but then learned that the organs that had been procured were not viable for transplant), she finally received her long-awaited gift of life.

Now, Stacey is adjusting to life without diabetes – although she ruefully admits that she still tests her blood sugar.

In the time since her transplant, Stacey's family became philanthropic donors to the UW Health Transplant Program and spread the word to as many people as possible. "The staff at UW Health saved my life," says Stacey, "and I want people to know that. I was given this gift of life and I want to do right by my organ donor."



We're committed to finding cures and new treatment options for patients with conditions requiring organ transplantation. Our faculty are at the forefront of transplant research, studying topics like these:

- **Improving organ preservation**

David Al-Adra, MD, PhD and Anthony D'Alessandro, MD

- **Using mouse models to study human immune systems and diseases**

Matthew Brown, PhD

- **Identifying donor and recipient characteristics that define immunological risk**

Luis Hidalgo, PhD

- **Studying how brain death affects organs**

Luis Fernandez, MD

- **Improving how transplanted kidneys function with anti-inflammatory treatment**

David Foley, MD

- **Kidney transplantation without long-term immunosuppression**

Dixon Kaufman, MD, PhD

- **Understanding the host microbiome and how it affects transplantation**

Joshua Mezrich, MD

- **Using stem cells for the treatment of diabetes**

Jon Odorico, MD

- **Increasing organ supply through xenotransplantation**

Robert Redfield III, MD

- **Treating diabetes with gene therapy**

Hans Sollinger, MD, PhD



## Bringing surgery **to the world**



**Five billion.** That's the number of people in the world who have no access to basic surgical care according to the Lancet Commission Report on Global Surgery. Historically, the Western medical community tried to address this disparity with mission work: flying in, delivering care, then departing. Recently, however, the limitations of this model have become clear. While mission work provides important patient care, it doesn't address the root causes of the lack of local surgical care.

In an effort to create long-lasting change, a new model of global surgery focuses on building local surgical capacity and sustainability. Several of our faculty are leaders in this movement, and we're proud to engage in initiatives to expand global surgical access.

Success requires integrating surgical services across all levels of care. It's key that procedures are safe, affordable, and accessible, and that they are driven by local providers.

"The most important thing about global surgery is that it has to be sustainable," endocrine surgeon and global surgery researcher **Dr. Kristin Long** said. "It's not a sustainable thing for US surgeons to come, do some surgery, and then leave. What's feasible is to educate the local providers, and make sure that they can perform this surgery safely."

A key component is developing collaborative relationships with local partners. In partnerships across the world, our faculty have built strong local connections. We provide training and support, helping organizations grow so they can meet demand. Not only does this model teach local providers, but it also is an important learning opportunity for US trainees.

"I've learned just as much from the local providers," said endocrine surgery fellowship graduate Dr. Alexandra McDow, describing her experience teaching in Kenya.

Many of our faculty participate in global surgery initiatives. Pictured above, Dr. Kristin Long operated in Palestine in 2017, where she partnered with Palestine Children's Relief Fund to perform thyroid surgeries.



For trainees, operating in unfamiliar environments is a valuable experience. Not only does this prepare them for future global surgery service, but it also prepares those training for careers in rural surgery in the US, where they may face a similar lack of equipment, or encounter diseases that might be treated by a specialist in a more populated area.

“We don’t always have the luxury of practicing in environments where we have every piece of equipment or tool that we would like to have,” said Dr. Long. “Having the ability for our trainees to learn to deliver quality care in low resource settings benefits the patients they help to treat while abroad, as well as the patients they will treat in the US in under-resourced environments.”


## Capacity building in Ethiopia

**Dr. Girma Tefera** is the Medical Director for Operation Giving Back, a program of the American College of Surgeons. He is leading a new pilot program, where 13 surgical departments are establishing a surgical training hub at Hawassa University in Ethiopia. This program creates a year-round presence of US surgeons to deliver higher quality surgical education, increase the number of local trainees, and reduce duplicative efforts.

“The potential impact of this surgical training collaborative hub is extraordinary,” Dr. Tefera said.

The pilot program concluded in July 2019. As part of the pilot, Dr. Long and fellow faculty member **Dr. Angela Ingraham** traveled to Hawassa for a two-week rotation to assess local needs. For the next phase, each university will complete a month-long rotation. In May 2020, Dr. Long and Dr. Ingraham will return with 1-2 general surgery residents.

We are proud to partner with programs like these to help bring surgery to the world.

“Most of us who do this would love to work ourselves out of a job, because if the local surgeons are capable of doing these surgeries, they don’t need us, and that’s the ultimate long-term goal,” said Dr. Long. 

# GOING GLOBAL



Our faculty and trainees travel internationally to help increase surgery access in communities across the world. Here are a few of the places we traveled to in the last year.

## Honduras

Two of our teams traveled to hospitals in Honduras to deliver surgical care. Otolaryngology faculty member Dr. Scott Chalet and resident Dr. Chad Ennis provided surgical care of the ear, nose and throat, and fit patients for hearing aids with a local otolaryngologist partner. Pediatric surgery faculty member Dr. Hau Le and residents Dr. Kevin Janek and Dr. Keon Young Park (pictured on cover) evaluated and operated on children with inguinal and umbilical hernias.

## Egypt

A team of plastic surgery faculty traveled to Egypt to explore possible sites for a future plastic surgery global residency rotation.

## Ethiopia

Many of our faculty and residents attended rotations in Ethiopia as part of our partnership with Addis Adaba University. We also grew our partnership with Hawassa University as part of the American College of Surgeons partnership.

## Vietnam

Plastic surgery faculty member Dr. Samuel Poore and resident Dr. Jackie Israel traveled to Hanoi, Vietnam with the group Reconstructive International Cooperative Exchange to provide safe surgical care with an emphasis on surgical education specific to craniofacial surgery, hand surgery, microsurgical reconstruction of the extremities and face, and peripheral nerve surgery.

# MOVING SURGERY FORWARD

## **Support** the University of Wisconsin Department of Surgery

Increasingly, alumni and friends are creating legacies at the University of Wisconsin Department of Surgery through planned gifts. Gift planning integrates charitable giving into a donor's overall financial, tax, and estate planning to maximize benefits for both the donor and for the Department of Surgery. Examples of planned gifts include bequests, life-income gifts, gifts of real estate, and gifts of retirement plan assets. Planned gifts make significant funding available to us each year, providing crucial support for our teaching, research, and education missions.

**At some point our doctors became part of our story.  
They were there from the beginning to the end.**

**—Mary Ann McKenzie**

If you have any questions about making a financial contribution, a planned gift or establishing a named fund for the Department of Surgery, please contact:



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