

A 2001 truck accident put Denny Griggs in a coma, crushed his pancreas and eventually cost him both of his legs. It would have been easy to give up. But with the help of PhysZou, a free clinic run by MU physical therapy students, and the inspiration of a daughter and grandson, Griggs pushes through. He keeps working. Every day,

**DENNY'S WALKING.**

STORY BY ERIK POTTER \*  
PHOTOS BY NICHOLAS BENNER



OLD NAVY  
TRADEMARK

# Denny Griggs sat behind the wheel of a lane-striping truck, tired from an 18-hour day of putting paint to pavement. He was a mile and a half from headquarters and from heading home when a sedan pulled halfway into his lane on Highway 30, south of St. Louis, and stopped.

Griggs had one instant to make a choice: plow into the car or swerve and hope for the best. Maybe it was the thought of his 16-year-old daughter, his only child and biggest pride, that made him react not with asperity but with the self-sacrifice of a father. “I always think there’s a kid in the car,” he says.

Griggs avoided the sedan, but years later you could still see marks on the pavement where he lost control of his truck and flipped it seven times. Griggs was thrown from the vehicle, which rolled over him, breaking every rib, puncturing both lungs and crushing his pancreas. His heart stopped three times on the helicopter flight to Mercy Hospital St. Louis.

Everything healed but his pancreas. Unable to produce insulin, Griggs was left a diabetic.

**Griggs is an affable man** — “I never met a stranger” — with a quick laugh. He spent most of his career in Columbia in sales and delivery for Pepsi, where he considered chatting and charming clients a perk of the job.

After the truck accident, Griggs moved back to Columbia from St. Louis to be near family and focus on healing. But diabetes started a chain reaction in his body. Combined with pre-existing peripheral artery disease, blood flow to his lower body began to deteriorate, hampering his immune system. Small wounds, instead of healing, became bigger, infected wounds, which led to gangrene and amputations.

“It’s just a curse, diabetes is,” says Griggs, 56.

Griggs’ first amputation was in 2009. What he had thought was a bad toenail was actually bone sticking through the skin of his right big toe. “It was terrible,” he says of the pain, yet he tells the story with a grin, as if the protruding bone were a well-scripted punch line.

Hopeful that his inability to heal was confined only to his foot, surgeons performed a below-the-knee (“BK”) amputation.

No problem.

“I could take a BK,” Griggs says. But then the wound from the amputation wouldn’t heal. He fought the infection — and excruciating pain — until 2011 when doctors amputated above the knee. Finally, he was on the mend.

That’s when he accidentally gashed the heel of his other foot with his wheelchair.

It, too, became infected, and doctors believed a second below-the-knee amputation would fare no better than the first. So 11 years after his truck crashed, Griggs became a bilateral (both legs) transfemoral (above the knee) amputee.

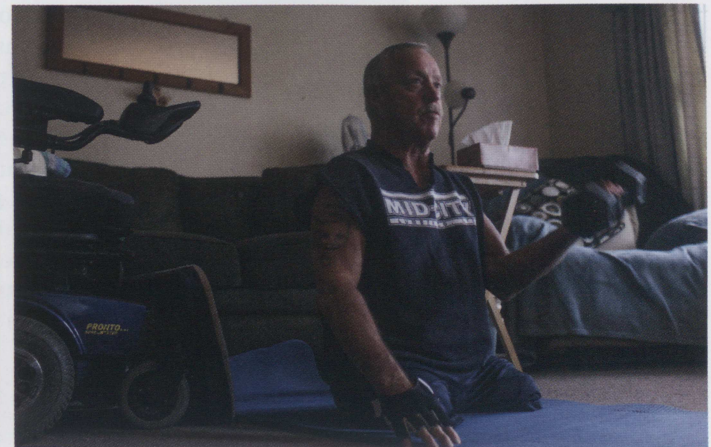
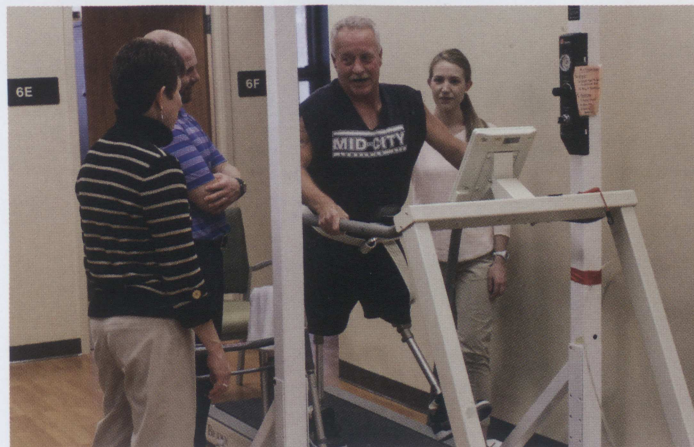
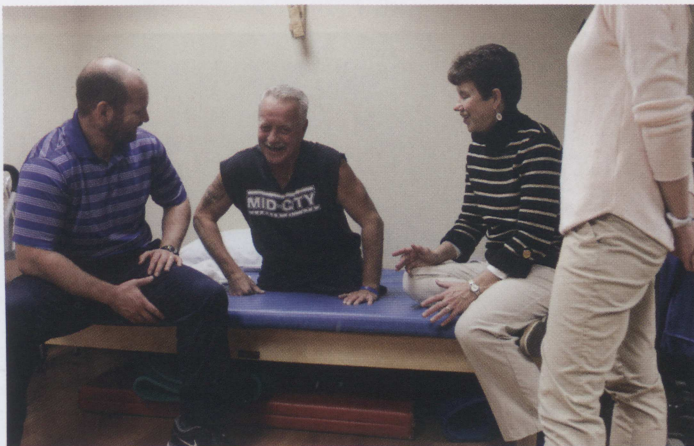
He was tempted to lie down and feel sorry for himself. But shortly before he lost his second leg, his daughter, Melissa “Mel” Griggs Horne, BS HES ’07, told him that she was getting married. Griggs’ mind immediately went to one thing — walking her down the aisle. With one leg gone and a second soon to follow, he had another choice to make: quit or keep fighting.

Griggs almost always wears a smile and speaks in lighthearted tones. But on this subject, his voice drops and his body tenses. “I don’t want to stay in this chair,” he says. “I hate this son of a bitch.”

**At the same time as Griggs’ second surgery**, a group of doctoral physical therapy students at the University of Missouri’s School of Health Professions established a volunteer-based, student-run physical therapy clinic in Clark Hall. Modeled after MedZou, the medical students’ free health clinic, the faculty-supervised PhysZou gives free physical therapy to people who lack insurance; can’t afford their copayments; or who, like Griggs, have exhausted their coverage.

Students provide a needed service to the community and in return gain valuable experience caring for patients. The clinic takes pediatric patients and adult patients with orthopaedic or neurological conditions. Students work in pairs,

← Previous spread:  
Students snap Denny Griggs’ residual leg into a carbon fiber holster attached to a metal leg. In Boone County, 8.6 percent of residents lack health insurance. Others, like Griggs, have exhausted their coverage.



seeing one patient for four weeks before switching to another. In 2013, the clinic was added to the physical therapy curriculum, and student participation became mandatory.

Jeff Krug, MS '08, assistant teaching professor of physical therapy and director of student activities, including PhysZou, says the clinic has helped Mizzou's students make good impressions during their external clinical rotations. Therapists at clinics where first-year students have served have been incredulous, he says, because the comfort level students show when interacting with patients is far above what first-year students normally have.

As well it should be. In the 2013-14 school year alone, meeting Monday and Thursday afternoons, students took 1,700 patient visits. In fall 2014, they moved into a renovated space with accessible bathrooms, laminate flooring (instead of carpet) to reduce tripping and a dedicated family waiting area to be Medicaid compliant if they decide to also accept Medicaid patients.

The program operates on a roughly \$120,000 annual budget and depends on donor support to buy equipment, such as replacing a broken body weight support system that helps neurological pa-

tients rediscover their walking gait. The service the clinic provides on such a shoestring amazes Kaillee Richey, BHS '12, a third-year graduate student from Shelbina, Missouri, who helped treat Griggs. "These people can't get care any other way," she says. "I don't know what they did without us."

Griggs feels the same.

**Doctors referred Griggs to PhysZou** in September 2013 after he had exhausted Medicare's physical therapy allotment at MU's Howard A. Rusk Rehabilitation Center. He arrived at the clinic bent on being ready for his daughter's wedding. He had eight months to prepare. He would need every bit of it.

"Most people who are bilateral transfemoral give up on walking altogether," says Teresa Briedwell, BHS '81, associate teaching professor and associate department chair of physical therapy, who has supervised Griggs' treatment since he came to PhysZou. "Because of the energy demands, they are willing to not walk."

Yet each week, Griggs drove his hand-controlled, two-tone conversion van with shag carpet down from Hallsville, Missouri, to Clark Hall. Job No. 1 was to find the right pair of legs. At first,

↑ Clockwise from top left: Denny Griggs, center, shares a laugh with physical therapy doctoral student Patrick Mengwasser, left, and Associate Teaching Professor Teresa Briedwell. Griggs, escorted by Mengwasser and physical therapy doctoral student Sallie Lindsey, walks around the PhysZou clinic during a weekly session. Daily free-weight exercise keeps Griggs fit between PhysZou appointments. Therapy equipment such as treadmills, parallel bars and body weight support systems helps patients strengthen their muscles.



that used suction to adhere to his “residual” legs. When it worked, it worked great. But that only happened when someone else put his legs on for him. The students worked with him for weeks, but he could never attach the second leg without losing suction on the first. So Griggs switched to a different model, which came with its own problems.

For each leg, he first puts on a stretchy Ace-bandage-like “sock,” over which he pulls a rubber sheath that has what looks like a bolt attached to the end of it. He then slides his leg into a carbon fiber holster attached to a prosthetic, and the bolt clicks into place. But the contours of the carbon fiber holsters had to be altered because they irritated his skin. He tried different thicknesses of socks because his thighs didn't fit snugly into the sheaths. And the rubber sheaths have a tendency to get pulled down off of his residuals, which also hampers the fit.

But Griggs was undeterred. “He worked his butt off, that's for sure,” says Tyler Belt, a third-year student who treated Griggs in spring 2014 during the same rotation as Richey. “He never told us ‘no.’”

To walk on two artificial legs powered only by short residuals is an enormous undertaking. Each step requires an estimated 300 times more ener-

## ‘Never underestimate a patient. If you have the will to do it, you can.’

gy than an able-bodied person. After watching Griggs just put on his two legs, it's easy to believe.

Leg amputations are measured by how much bone is lost, but easily forgotten in that equation is how much muscle — and, thus, leverage — is lost with it. To put on his sock and sheath, Griggs has to lie on his back and essentially do crunches to reach them around his residuals. By the time his legs are on, he's out of breath. With the help of a walker and a couple pauses along the way, he can walk a lap around the hallways, a distance of about 270 feet. When he's done, he pulls off the rubber sheaths and sets them aside. Sweat pools in the bottoms.

Because of those limitations, Griggs will never be a “community ambulator,” Briedwell says. He won't use his prosthetics to shop for groceries or stand in line at the post office. Which is why “most insurances would have cut him off by now,” she says. “But because we're a free clinic, we have the liberty of continuing to see him. And he can teach our students more in an hour than I could in an entire semester.”



Griggs was the first double-amputee Belt had ever worked with. “As high as his amputations were, when he says he'll walk his daughter down the aisle, you might think, ‘Yeah, whatever,’” the Macon, Missouri, native says. But Griggs taught him to “never underestimate a patient. If you have the will to do it, you can.”

For Richey, seeing her professor in action had a big impact on her. And seeing Griggs work so hard for something so personal taught her that goals based only on improving functional limitations — increasing endurance or strength by a certain percentage — miss the mark. “People are much more motivated by emotional factors.”



← After training on a new pair of prosthetic legs for six months, Griggs participated in his only child's wedding, handing her off to her fiancé at the ceremony and dancing with her at the reception to "My Girl" by The Temptations.

**Griggs regularly sent videos** of his progress to his daughter. Each week he'd shuffle a little farther through the carpeted corridors of Clark Hall, lock-armed with Briedwell or a female student, while they sang "Here Comes the Bride."

"I married every one of them," jokes Griggs, who returned to PhysZou in 2014-15 for another year of treatment. "I married Teresa all the time."

When the wedding came in May 2014, he could walk 300 feet, and in the Dallas heat he presented his only child to her waiting groom. "Including me, there wasn't a dry eye in the place," he says.

Later, he was able to stand for pictures and for the father-daughter dance — "My Girl" by The

Temptations.

For Horner, who had moved to Arizona after college and now lives in Texas, it was a chance to feel close to a doting father again. "Knowing he was able to do that," she says, "and it was something that, as a girl, you dream of — not only that he walked me down the aisle, but we also did our first dance, it brought me back to being a daddy's girl."

Griggs' appreciation for the students and professors at PhysZou and what they were able to help him do comes with a seriousness he saves for few other things. "Without them, I probably would have given up," he says. "I would be in this chair the rest of my life. They're heroes." **M**