

KEEPS OTHERS IN THE SPOTLIGHT

call myself a "root causer." I am always trying to find the root cause behind a symptom or problem. After stumbling upon a Facebook ad for reducing cellulite, (social media algorithms are scary) I discovered fascia. I'd never heard of this connective tissue before and had no idea that it permeates every organ, ligament and muscle in the body—it's everywhere. Usually on anatomical diagrams the fascia is cut through and removed so only the muscles, ligaments, tendons and organs are visible. However, it's fascia that keeps all of these things in place, intact and connected to the human skeleton.

Known as the "Cinderella Tissue" for its under-the-radar anatomical significance, fascia has been called the "most ignored of all tissues in the body," by Thomas Meyers, anatomy expert and author of the book, "Anatomy Trains." It's been studied by the likes of Leonardo da Vinci and Andrew Taylor Still, the 19th century founder of osteopathic medicine, yet I'd never heard of it. Wanting to know more about this tissue that has been compared to the white fuzz inside an orange, I decided to find a TTUHSC expert on the subject.

That's how I met Larry Munger Jr.

BY KARA BISHOP | PHOTOS BY NEAL HINKLE ILLUSTRATIONS BY AMBER ALLEN

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Munger, PhD, ATC, assistant professor in the School of Health Professions Athletic Training Program, was not exactly what I expected. I've been told I'm a bit of a "barn burner," so I get surprised when I meet someone who is more methodical and quiet. And, after I fell into a chair in his office and said it was really stupid to wear high heels that day, I don't think he expected me, either. Though opposite personalities, I immediately picked up on one thing we had in common. Munger is also a "root-causer."

"I injured my back in high school playing basketball in Kansas City," he said. "I had scholarship offers to play college basketball and attempted to play at a junior college, but my back just kept bothering me. And we didn't have athletic trainers back then at my school. Athletic training in high schools and colleges just wasn't as prevalent. I still think I gave up too soon, but I just didn't have anyone to guide me though the journey to recovery to keep me on the court."

It bothered him. Not having the answer to something, that meant everything at the time, haunts him. I began picturing him in my head as a teenager who wasn't able to live out his dream.

As Close to the Sport As Possible

In an effort to stay close to sports, even though he could no longer play, Munger enrolled in the athletic training program at the University of Kansas in 1993. It was in this realm of athletic training that Munger discovered fascia.

"There's a lot of manual therapy that goes on in sports medicine, and it was while studying manual therapy that I learned about the Graston technique," he said. "I decided to become trained in this method. It uses instruments for soft tissue mobilization that help you detect fascial adhesions or distortions and then correct them. This is an entire approach. You examine, treat and prescribe exercises to facilitate healing of injured tissues."

The "entire approach" piqued my interest. Munger went on to say that fascia isn't one component of a whole. It is the whole. It's an entire connective tissue system, which might be why David Graston manufactured six stainless steel instruments for the process after he suffered an injury. (Munger admits they look a little scary upon initial inspection and told me they're fascinatingly called Graston instruments one through six.)

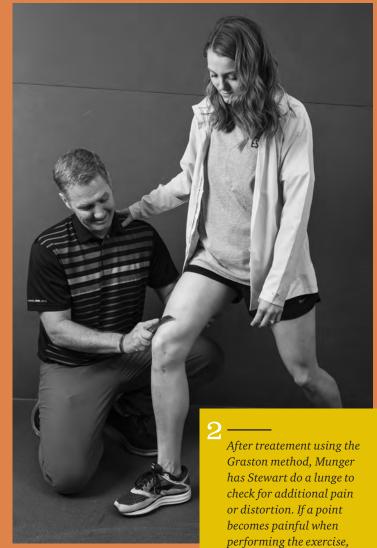
It's not difficult to understand why Munger chose this technique. David Graston suffered a knee injury in 1987 while water skiing and was frustrated by the lack of rehabilitation progress following surgery and therapy. Coming from a background in machinery, he created these instruments to treat his knee, and they worked. Munger now teaches the technique to his students and guides them through the certification process to become providers. He also treats high school and college athletes using this method.



GRASTON TECHNIQUE

Athlete Channing Stewart tore her ACL twice, so Larry Munger, PhD, ATC, uses the Graston Technique, which is a method used to break up scar tissue and smooth out fascial adhesions and/or distortions using the Graston tools.







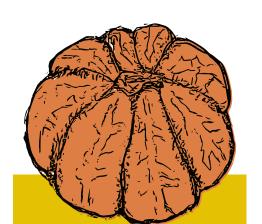




In this method, points of densification in the connective tissue (fascia) are found and rubbed out with either a knuckle or elbow. This method can complement the Graston technique or be used as stand-alone treatment.



Munger loosens up tight fascia with a Graston tool.



Perks of the Training

"I tore my ACL twice while playing volleyball at Lubbock Christian University," said Channing Stewart, a student in the School of Health Professions Doctor of Physical Therapy program and whose rehabilitation was conducted by Munger. "Larry did an amazing job rehabbing me, and my entire injury and rehabilitation experience has inspired me to become a physical therapist. My quality of life has been brought back to where it was before my injury, and I'm so grateful for that."

Munger also studies and specializes in fascial manipulation, which he has used to treat Stewart, as well as his wife, who he deems, "his best customer!"

"My wife (Katie) has had three cesarean sections, and she's a strength coach for the Texas Tech (University) soccer and volleyball teams, so she often has pain," he added. "It's good practice for me to try some of these techniques on her, and there's nobody more honest than your wife about what's working and what isn't."

It benefits Katie, too.

"I'm trying to keep up with 18-year-old girls, and it takes a toll on my body," she said. "And every time he does (fascial manipulation), I feel better. It's pretty amazing actually."

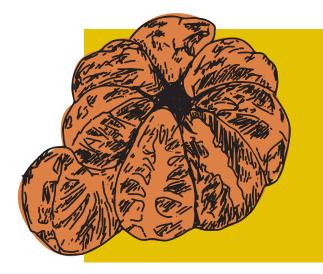
Fascial manipulation involves a manual therapy technique focused on treating musculoskeletal dysfunction, at specific points when muscular fascia no longer slides, stretches or adapts correctly during movement.

"It's (fascial manipulation approach) based off the movement pulls, which are identified points of convergence of the vectoral and muscular forces that act on a body during precise movements," Munger said. "That's where we get the densification within the tissue. Where the fluid between the muscles (ground substance and hyaluronic acid) gets more viscous all through the external cellular matrix. In fascial manipulation, we're identifying those 'points' of densification, and we're using either our knuckle, elbow or fingertips on those points to create localized heat by friction—trying to warm up the fluid to make it less viscous, restoring glide to the points again, and then the body will hopefully balance itself."

Munger has aspirations of becoming a fascial therapist eventually, but insists he needs more practice and training first.

"Keeping an athlete on the court or field is a big deal," he said. "I want to make sure I am my absolute best, so that I can help athletes fulfill their "KEEPING AN ATHLETE ON THE COURT OR FIELD IS A BIG DEAL. I WANT TO MAKE SURE I AM MY ABSOLUTE BEST, SO THAT I CAN HELP ATHLETES KEEP FULFILLING THEIR DREAMS. I HAVE TO KNOW WHY THESE TECHNIQUES WORK FOR ME TO USE THEM, AND I CONTINUALLY REITERATE THIS TO MY STUDENTS WHEN I'M TEACHING THEM. KNOW WHY SOMETHING WORKS."

dreams. I have to know why these techniques work for me to use them, and I continually reiterate this to my students when I'm teaching them. Know why something works. Don't just do it because others have done it or because you read some advertisement or watched some YouTube video about it—really do your research. You're helping athletes pursue their dreams and that needs to be taken seriously."



THE TEENAGER WHO DIDN'T GET HIS DREAM IS MANIFESTED IN A NEW DREAM: TO KEEP OTHERS LIVING THEIRS.

The Teacher

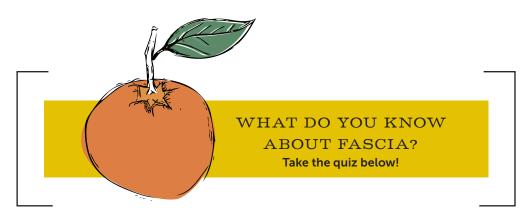
You can see Munger's serious intention when you walk in his office. Books upon books of fascia research from world-renowned experts are stacked everywhere, along with posters and illustrations. According to his wife, he's been a questioner of everything since she's known him. Always needing to know why something does what it claims to do or why it doesn't do something. The teenager who didn't get his dream is manifested in a new dream: to keep others living theirs. And that's not just limited to student athletes. He brings this into the classroom for his athletic training students and anyone interested in learning. I know because I basically became one of them for an hour. He taught me using several interesting techniques, at one point, even stretching like a doghis words, not mine.

"Have you ever seen a dog when it wakes up?" he asked. "What's the first thing a dog or cat does after a nap? They stretchhhhh. They're preparing their bodies for movement, like this." We both start stretching at this point. "Why do we not prepare for movement just like the animals? We expect to just jump up and go; our body, and more importantly our fascia, has to compensate for that. We come home after a day of work where we sat at the computer for six to eight straight hours and wonder why our neck and shoulders are killing us. Some people say that sitting is the new smoking, but the actual 'cigarette' is more likely the lack of movement. So, when you schedule a meeting with someone at work, why not make it a 'walking' meeting? Move instead of sitting down in someone's office."

He's gotten pretty animated at this point, and I can tell he's in his teaching element.

"Let's talk about the kangaroo," he added. "The kangaroo doesn't jump high because its muscles are that strong; the kangaroo can jump that high because its elastic tissue is that strong and reactive. Put your palm on your leg and start tapping your leg with your middle finger as hard as you can. Go ahead—do it (I wasn't following instructions). See how you get tired after a while? It puts a lot of strain on your muscles and you are not producing that much force. Now take your other hand and pick up your middle finger and let it spring back down onto your leg. See how much more force you're able to put down on your leg without as much effort? The elastic tissue produces more power than the muscle."

While Munger isn't a basketball star, he dedicates his research and career to ensuring other student athletes get their shot at stardom with a root-cause approach that he wasn't able to take advantage of. And, as he appropriately, albeit jokingly, said, "Fascia is fascinating."



1. Define "fascia"

- a. Slang for "fascinating" i.e. "That's so fascia."
- b. Connective tissue
- c. Name of famous celebrity's baby
- d. Face acne
- 2. True or false: fascia can form distortions and/or adhesions.
- 3. Where is fascia located in human anatomy?
 - a. Feet
 - b. Head/brain
 - c. Organs
 - d. All of the above
- 4. Which method is associated with fascia treatment?
 - a. Graston Technique
 - b. Meditation
 - c. Playing sports
 - d. Sleeping
- **5. True or false:** Each Graston instrument is named after a renowned physical therapist.
- 6. Which of the following famous people studied fascia?
 - a. Wolfgang Mozart
 - b. Michelangelo
 - c. Leonardo da Vinci
 - d. Socrates
- 7. True or false: Kangaroos jump high because of strong muscles.
- 8. Which treatment technique involves stretching, pulling and rubbing out densification points?
 - a. Graston Technique
 - b. Yoga
 - c. Foam rolling
 - d. Fascial Manipulation