Dr. Scott Lephart isn’t the type to chitchat about his 6-handicap, especially during the middle of a workday. He’s a lifelong academic, and his distaste for idleness gives off a certain gruff, militaristic vibe. Which makes sense, because if you ask Lephart what he does for a living, he’ll tell you that as director of the Neuromuscular Research Lab at the University of Pittsburgh Medical Center (UPMC) Center for Sports Medicine, he spends most of his time operating two human-performance and injury-prevention laboratories for the U.S. Army and U.S. Naval Special Operations. If after digesting those titles you have the nerve to ask for details, the doctor will reply, simply, “That’s classified.”

What isn’t classified is that the U.S. Department of Defense recently put Lephart in charge of $4.8 million in funding to develop injury-prevention training programs specific to the motions of combat. When Special Operators are injured, the cost of their lost time, rehabilitation and compensation gets expensive. The UPMC lab equipment can quantify the velocities and motion patterns of any movement, so in addition to the military work, Lephart and his associates have created injury-prevention and training programs for several sports, including baseball, football, basketball and swimming.

“In every activity, links exist between physical weaknesses and mechanical flaws,” says Lephart. “Identifying and strengthening specific muscles not only improves performance, it preempts injury. We will uncover these links for our soldiers.”

With the military being Lephart’s priority, golfers are lucky he has a soft spot for the game. In 2000, UPMC set out to become the leading institute...
**THE APPLICATION**

Of the muscles responsible for creating power in the swing, none separates elite players from average golfers more than the hip abductors.

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**HOW TO GAIN HIP STRENGTH**

The following exercise is a simple way to strengthen your hip abductors.

1. Standing on one foot with your hands on your hips, slowly move your elevated leg from side to side in front of you.
2. Do 10 times, and hold each full-stretch position. Then switch legs to work the other abductor.
3. For a more strenuous workout, attach resistant tubing to the ankle you’re moving.

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**TECH UPDATE**

**TIRED OF LOOKING FOR BALLS?**

The Ballfinder Scout is a handheld device that uses digital imaging to find golf balls. It works with any standard ball and weighs about as much as a cell phone. To find a ball, you wave the Scout from side to side in the general area until the LCD screen indicates a hit. It can spot a ball from 35 feet with only three dimples visible, but it picks up other bright-colored objects such as paper and Styrofoam. $215, sandersongolf.com.

For more on innovators and technology, click golfdigest.com/tech.