The Living Well With Limb Loss Magazine

A Baker's Dozen

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Relationships Get Out There

Bill Dupes, Editor-in-Chief

Becoming an amputee can be a very lonely experience.

Chances are, when you lost your limb, you were the only amputee you knew.

Some amputees may perceive their body change as something to be ashamed of. They may project their negative feelings against the world, even their friends and family. They shut themselves off from existing and potential relationships to insulate themselves against the anticipated pain of rejection.

After the loss of a limb, you're forced to deal with changes in function, sensation and body image. But the more you focus on what's missing – not just the limb, but the things you could do before – the more likely that you will become depressed and angry, and that your sense of isolation will increase. Our connection to others has a profound impact on our quality of life. People who feel alone are more likely to experience depression and even physical disease than those who have a sense of connection.

But it doesn't have to be this way.

Nothing is more important to your emotional health than surrounding yourself with people who can support you, normalize your experience, or show you, by example, that life does not end with the loss of a limb. The more you are surrounded by positive relationships, the more your quality of life will improve.

For some, it's hard to admit needing help or to even imagine receiving help. For others, identifying with a group of people with missing limbs brings up conflicting feelings. Whatever your fears may be, rest assured that you are *not* alone.

Just getting out of the house is a giant step that will have a long-term impact on your life and those around you. Granted, the idea of stepping outside the door, beyond your comfort zone, to find supportive relationships may seem scary. But you've got to take that first step. And consider that step as a small victory. In fact, life as an amputee is a *series* of small victories. Like washing dishes, cooking a meal, traveling in a plane or taking a trip to Disney World. Celebrate and enjoy each and every one.



BE AN INFORMED READER

Editorial content (articles, news items, columns, editorials, etc.) in *inMotion* often contain healthcare information. As an informed reader, you should never make a decision about managing or treating your condition without consulting your own clinicians: They know you best.

Sometimes, in our interviews with people who are amputees, the person being interviewed will say something about his or her personal experience that may not be entirely consistent with standard practice. In these cases, we print what the person said because we think it gives readers insight into that individual's experience that we believe will resonate with others. But: We urge you to always check with your medical team before changing your own healthcare regimen.

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I'mPOSSIBLE

Since she was a little girl, Carrie Davis knew she was unique. Born without her left arm, she often wondered "Why me?" She longed to be known for her contributions, not what she was missing.

A prosthetic wearer since she was nine months old and long-time Hanger Clinic patient, today Carrie is the face and personality of Amputee Empowerment Partners, the leading peer-to-peer support network for those living with limb loss or difference. Carrie finds the answer to "Why me?" through helping others.

In 740+ clinics throughout the U.S., Hanger Clinic delivers orthotic and prosthetic solutions to help more than 1,000,000 patients like Carrie turn their hopes and dreams into reality, break down barriers and move their lives forward.

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The Amputee Coalition recognizes the following National Sponsors for their valuable support.







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A Publication of the Amputee Coalition

InMotion magazine publishes unbiased journalism that seeks to "empower and motivate" living well and thriving with limb loss. The magazine targets amputees and their families and is provided free electronically to all friends of the Amputee Coalition and in hard copy to all subscribers. Each issue covers health, well-being, exercise, life issues and advocacy for amputees and their families. Stories showcase amputees living and thriving with limb loss and profile Amputee Coalition programs and services.

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Relationships and Advocacy Efforts

by Dan Ignaszewski

Relationships are the building block to any advocacy effort. The saying "It's not *what* you know but *who* you know" is never more evident than when you're dealing with public policy, elected officials and government regulations.

The Amputee Coalition continues to work with elected officials at the state and federal level, as well as regulators and government agencies, to provide a voice for the limb loss community. With that being said, we need your help in building more relationships so that we can have even greater impact on public policy.

How can individuals make a difference?

With the help of local advocates in Pennsylvania, the Amputee Coalition was able to build a relationship with Representative Charlie Dent (R-PA). After meeting with individuals in 2008, Representative Dent began to support the Insurance Fairness for Amputees Act. After the original lead Republican sponsor in the House retired in 2010, and with the help of advocates in Pennsylvania, we were successfully able to gain his support to become the lead Republican sponsor in the House.

We're continuing to work with Representative Dent's office to reintroduce the bill this year, but we always look to make sure the Insurance Fairness for Amputees Act receives bipartisan support, and last year, the original lead Democratic sponsor in the House retired.

That's where you come in! Do you want to get involved with advocacy efforts? Do you want to make a difference and help ensure people with limb loss aren't subject to arbitrary caps and restrictions on prosthetic and custom orthotic devices in their insurance plans?

If the answer is yes, then we're urging you to help by contacting your members of Congress and building a relationship with them. If your elected officials don't hear from you on issues that are important to you, they won't understand what the Insurance Fairness for Amputees Act is or why they should care.

The Insurance Fairness for Amputees Act represents a very common-sense piece of legislation that would simply ensure that, if an insurance company covers prosthetic and custom orthotic devices, individuals receive adequate and affordable devices that meet their needs for the insurance premiums they pay.

Go to Facebook.com/AmputeeUSA to join the Amputee Coalition and receive our email updates.

Go to amputee-coalition.org and find out how you can get involved and make a difference for your community today. While the Amputee Coalition regularly meets with and has good relationships with several elected officials and government agencies, there is nothing better than a constituent or group of constituents talking to their leaders about issues that are important to them.

Relationships are key to advancing and ultimately passing legislation.

The more elected officials that have a relationship with the limb loss community and who know about the importance of the Insurance Fairness for Amputees Act, the better chance the Amputee Coalition has to work with you and your representatives to advance the Insurance Fairness for Amputees Act and other public policy initiatives.

So what can you do to get started?

- Make sure you sign up to join the Amputee Coalition and receive our email updates and join the Amputee Coalition's Facebook page (Facebook.com/ AmputeeUSA). This is often the most effective way for us to get out a message about how to get involved.
- 3. Keep an eye on when your elected officials will be back at home in your district. They often hold town hall meetings that you can attend to talk to them and their staff about how important this and other issues are to you.

- 2. Don't be afraid to call, email or write your elected officials! If you're in a support group, start a letter-writing campaign in your next meeting. If you want help with talking points, or would like to use the Amputee Coalition's sample letter and call scripts, you can find them in the Grassroots Advocacy section of our Web site (amputee-coalition.org).
- 4. Meet with staff in local district offices. Go talk to the staff members in your representative's local district offices and they will relay the issues that are important to you to their colleagues in Washington, D.C.

5. If you live close to Washington, D.C. or if you're ever coming for a visit and would like to set up a meeting with your elected official with the Amputee Coalition, we'd be happy to help! Often, we might be able to attend the meetings with you or provide guidance and resources for your meetings.

In 2016, the Amputee Coalition is looking to hold a "Hill Day," where we will invite as many people with limb loss as possible to come and meet with their elected officials during a one-day event!



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OLDER AMERICANS MONTH acl.gov/NewsRoom/Observances/oam

STROKE AWARENESS MONTH stroke.org

TRAUMA AWARENESS MONTH nationaltraumainstitute.org

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Limb Loss Education Day Washington, D.C. amputee-coalition.org

6-12

National Nurses Week nursingworld.org

9

San Antonio Tour de Cure San Antonio, Texas diabetes.org

10 - 16

National Women's Health Week womenshealth.gov/nwhw

27

National Senior Health & Fitness Day fitnessday.com

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0

First Climb Clinic Maple Shade, New Jersey opafonline.org

First Volley Clinic Cherry Hill, New Jersey opafonline.org

> Coming up in the July/August issue of inMotion... Navigating the Medical Field



MEN'S HEALTH MONTH menshealthmonth.org

NATIONAL FIREWORKS SAFETY MONTH fireworkssafety.org

NATIONAL SAFETY MONTH nsc.org/Pages/JuneisNationalSafety Month.aspx

VISION RESEARCH MONTH preventblindness.org

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Wheelchair Tennis Clinic Rock Hill, South Carolina opafonline.org

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National Cancer Survivors Day ncsdf.org

Silicon Valley Tour de Cure Palo Alto, California diabetes.org

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Wheelchair Tennis Clinic Wilmington, North Carolina opafonline.org

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Wheelchair Tennis Clinic Raleigh, North Carolina opafonline.org

15 – 21 National Men's Health Week menshealthmonth.org/week

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First Swing Golf Clinic Denver, Colorado opafonline.org

First Volley Clinic Denver, Colorado opafonline.org

Fort Worth Tour de Cure Fort Worth, Texas diabetes.org

Note: Dates listed for events are subject to change. Check Amputee Coalition online calendar and listed Web sites for current information.



Do You Have Phantom Limb Pain?

If so, you might be eligible for a research study that aims to decrease and/or resolve phantom limb pain in people with an upper or lower limb amputation.

The purpose of this research study is to determine if putting local anesthetic (numbing medication) through one or two tiny tube(s) placed next to the nerve(s) that go to an amputated limb will decrease and/or resolve phantom limb and stump pain. The procedure, device and infusion are all FDA approved and have been used for over 20 years to decrease pain immediately after surgery.

Participants will receive \$100 following each catheter insertion plus \$50/day during the 6-day infusion(s), up to a maximum of \$800/subject.

This study is being conducted at the University of California (**San Diego**, California); Cleveland Clinic (**Cleveland**, Ohio); Walter Reed Army National Military Medical Center (**Bethesda**, Maryland); Palo Alto Veterans Affairs Medical Center (**Palo Alto**, California); and, Naval Medical Center (**San Diego**, California.)

For more information, please call or email Anya Morgan, MA (858) 242-6017 | acmorgan@ucsd.edu





WHO IS YOUR AMPUTEE HERO?

A TURNING POINT

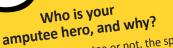
By Linda Taft

The Vietnam War had no impact on my life in the '60s. Running a home and raising three children filled my waking hours. Yet, in the background, I heard echoes of horror, destruction and death, and young men's lives forever shattered. How could I know that one such life would enter mine 20 years later and change it in unthinkable ways?

The war took both of John's

legs, the sight in his right eye and a good portion of his hearing. It gave him souvenirs of shrapnel, brain damage, intestinal destruction, high blood pressure and PTSD. In spite of all these challenges, John maintained a sense of humor, a positive sense of self, pride in his country, love for his family and friends and a love for me that knew no bounds.

Our lives became entwined in a way that was so subtle, I failed to see it at first. I was at the



Whether they're an amputee or not, the special person who inspires you to live well with limb loss can be a relative, a friend or someone you've never met. We invite you to send us an article (350 words or less) for consideration to be included in *inMotion* (editor@amputee-coalition.org).



crossroads; my marriage and life as I knew it was over. Fear had become my companion, my future nonexistent. John's marriage, too, had taken a downward spiral several years earlier; it was at this point that we happened to be at the same place at the same time.

AWESOME...

A war that tore people's lives apart brought John and me together. The examples he set in the way that he accepted things and adjusted to change were the lessons I needed

to learn. I became fascinated with his ability to unravel the simple from the complex. His desire to love me unconditionally created my roots to spiritual freedom.

Most people couldn't understand why I would want to spend my life with this man; in so many superficial ways, my life would become more difficult. Wanting to spend the latter part of my life catering to a bilateral amputee eluded me as well. After three attempts to break it off, I realized that wanting John in my life was not about what I *couldn't* do, but more about what I *could* do.

Besides his courage, I saw a man who woke each day to a new battle of determination to live a normal life. Although he has been gone for more than 10 years, he continues to fill me with passion for him and for life. John's friendship, trust and love have set me free. John is, and always will be, my hero.



How to Deal With

by Pete Seaman, CP, CTP

Please direct comments or questions to: jpseaman@aol.com.

If you use a prosthesis, you're probably also applying some type of liner over your residual limb before putting it into your socket. Wearing a gel liner for a few hours, let alone an entire day, can cause your residual limb to sweat, especially during the summer months. Due to the nature of their construction, gel liners do not "breathe," and they tend to keep your limb warm and moist. Excessive moisture can cause issues with the health of your residual limb and potentially your safety, if not properly managed, as your prosthetic suspension may become compromised.

So what can you do to lessen the degree to which your limb sweats or to manage the build-up of sweat inside your liner? There are four basic options:

- Remove and dry the inside of your liner
- Wear a type of stocking under your liner to help absorb perspiration
- Apply an extra-strength antiperspirant to your limb
- Undergo targeted low-dose Botox injections in your residual limb.

Sweat Removal

On warm days or days when you are active and perspiring more than usual, you may occasionally need to find the time and place where you can remove your prosthesis and liner. After wiping your residual limb and the inside of your liner dry with a towel, you can put your dry liner and prosthesis back on and get on with what you were doing. Negatives: This is only a temporary remedy, and it is an inconvenient process to have to go through, but if you plan ahead and dress appropriately, it should not take more than a few minutes to accomplish.

Wear Stockings Under Your Liner

Multiple companies manufacture "specialized" stockings that can be worn under your liner to help absorb some or all of the sweat that builds up. These socks can be pulled onto your dry residual limb before donning your liner and prosthesis. They need to fit so that they are not loose on your limb and they need to be the proper length. Some amputees wear socks shorter than their liners so that some of their residual limb is still in direct contact with the inside of the liner. Others wear the sock long enough so it can be rolled down over the outside of the liner to act as a wick and to help hold it in place. Negatives: The presence of a sock between your residual limb and the inside of the liner can reduce the adhesion of the liner to your residual limb, thus compromising prosthetic suspension, which can be hazardous.

Apply Extra-Strength Antiperspirant

There are several types of antiperspirant products available that can be applied directly to your residual limb, from natural crystal alum to other over-the-counter roll-on or spray products. It is sometimes recommended that these products be applied in the evening so that they have time to absorb into your skin. Negatives: These products may not work for everyone and you might develop some skin irritation by using them, but it never hurts to try after consulting your physician.

Low-Dose Botox Injections

This alternative should be considered as a last resort to the three noninvasive options listed above. Botox injections, if deemed appropriate, are administered by a qualified physician. You would need to determine if these types of injections would be covered by your medical insurance provider. Negatives: As with the antiperspirant applications, there is no guarantee that these injections directly into your residual limb will be effective. You could also incur significant out-of-pocket expenditures if they are not covered by your insurer. However, if you have a serious sweating problem and no other options have helped, this is one you might want to investigate.

As a prosthesis user, at some point, you will most likely have to deal with an excessively sweaty residual limb. Understand that you have some options and you should be willing to experiment to see if any of the ones outlined above work for you. upper-limb perspectives

How Amputees Do It in the Kitchen

By Cheryl Douglass

Cooking a good meal can be easy, even for someone with two myoelectric hands. All it takes is adopting a "what the hell" attitude, keeping a sense of humor, and following a few simple techniques.

In my e-book, *The Bionic Chef*, I write about a series of techniques and strategies that are specifically designed to help upper-limb amputees who love to cook. These are techniques that save time and energy in the kitchen so you can do more with less.

The "what the hell" attitude has got me past many a broken egg. Egg goo has messed up countertops, stoves and even my shoe. Garlic cloves may fly and pepper grinders may drop, scattering tiny black peppercorns all over the floor. But kitchen accidents like these should not stop anyone with prosthetic hands from cooking a meal.

"Dry to Wet"

A technique I call "dry to wet" has served me well, and saves time. By chopping ingredients in a certain order, I can prepare a meal using only one cutting board. I clear the cutting board after peeling or chopping each ingredient, but not in the usual way of wiping the board clean with a towel or sponge, a task that is difficult to do without wrists. Instead, I use a pastry brush to sweep aside the residue. I start with dry produce like zucchini, eggplant or garlic first and then move on to more juicy items such as onions, leeks or

shallots. After that, I cut wetter pieces of produce such as tomatoes or oranges. Chopping up oily ingredients like sun-dried tomatoes or olives comes next. If I need to dry off the board at some point, I use a paper towel. Cutting or pounding meat on the board is always the last step, to avoid contaminating vegetables, herbs, or other ingredients.



Chopping

As a quadrilateral amputee, I find that chopping is a challenge not only for my upper limbs, but for my lower ones too. Learning to chop again requires a whole new technique for wielding a knife, but also involves regaining the strength and stamina to stand for extended periods of time. When I started out, my legs would hurt if I stood for more than 10 minutes. Gradually, I could stand for longer and longer periods of time and eventually finish an entire dish unassisted.



The Bionic Chef: Cooking With or Without Hands can be downloaded to Kindle, iPad, smartphone, laptop or similar device at Amazon.com. All proceeds go to Amputee Coalition and National Rehabilitation Hospital in Washington, D.C.



Grab with right

But it took me several more years to develop a way to hold the knife effectively. At first, I approached things as though I still had working hands. It took me a while to realize that, although my myoelectric hands work, they operate differently from the hands I used to have.

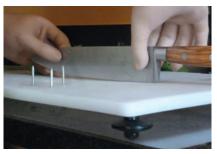
After trying out various methods, I realized that chopping was all about angles – holding the knife so the



Grab with left

blade is perpendicular to the cutting board. With this in mind, I was able to develop a method of chopping that works for me.

The pictures above show how to pick up a knife, hopefully without cutting the glove that covers the artificial hand. I pick up the knife with my right hand on the wooden handle. Then I grab the tip of the blade with my left hand. Now I can move my



Grab with both hands

right hand to the wide end of the blade. With both hands holding the blade perpendicular to the cutting board, I am ready to chop. I lift the whole knife up and thrust it down onto on the cutting board and chop my vegetables in repeated fashion. This technique gets the job done while making that familiar chopping sound that you hear on the cooking videos!

Quick and Easy Chickpea Salad

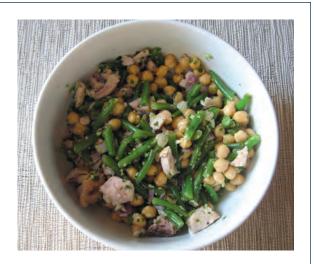
This recipe from my e-book is both simple to make and delicious. The hardest part is opening the can of chickpeas (also known as garbanzo beans). I use my indispensable electric can opener and buy only the 15-ounce cans of chickpeas because they are easier to handle.

The ingredients can be tweaked in numerous ways. Try swapping out the lemon juice for lime juice, use feta cheese instead of Parmesan, and/or mix in some chopped fresh cilantro, red onion or shallot.

- 1/2 cup grated Parmesan
- 2-3 garlic cloves, pressed or chopped
- 2 tablespoons chopped fresh Italian parsley (1/4 bunch)
- 3 tablespoons chopped fresh basil (12 large basil leaves)
- 2 tablespoons fresh lemon juice (about one lemon)
- 1 tablespoon olive oil
- 1 15-ounce can chickpeas (garbanzo beans), rinsed and drained
- Coarse salt to taste

Grate the Parmesan. To save time, use a food processor or buy pre-grated Parmesan. Set aside. I grate cheese first so I don't have to rinse the bowl.

Mince the garlic in the food processor. Add the parsley and basil and pulse three to five times to chop coarsely; set aside in medium sized mixing bowl.



Squeeze lemon, and pour juice and olive oil into mixture.

Add the drained chickpeas and Parmesan into mixture. Toss. Season to taste with coarse salt and pepper.

Chickpea salad can be made the day before. Cover and refrigerate. Can be served chilled or at room temperature.



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The Study

A major new study shows that Medicare pays more over the long term in most cases when Medicare patients are not provided with replacement lower limbs.

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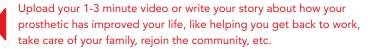
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Have Ticket, Will Travel

By Elizabeth Bokfi

For many of you, travel may have been a regularly occurring event in your life before your amputation. Whether you're an upper- or lower-limb amputee, you now have to consider mode of travel, destination and accessibility. With the Amputee Coalition National Conference in Tucson, Arizona fast approaching, planning ahead and being informed will leave you prepared and confident as you embark on your adventure.



By Air

Airline procedures have changed drastically since 9/11. With Transportation Security Administration (TSA) security tighter than ever, rules governing permissible items aboard aircraft can be overwhelming. Each airline has a section on its Web site devoted to passengers with disabilities, with information regarding mobility devices and luggage. Passengers entering the U.S. need a valid passport and will be required to pass through security and customs and immigration procedures. Preparedness with proper personal documentation and packing sensibly should allow for smooth sailing.

Know your rights. As an amputee, you may be wearing your prosthesis or using a wheelchair or assistive devices such as canes and crutches to aid your mobility. Traveling to and within the U.S., air travelers have rights to accommodations.

In some cases, service dogs are permitted in passenger cabins, provided they're deemed necessary to perform functions to assist their owner, and are required to remain either under the seat or on the passenger's floor area.

Mobility devices are permitted in passenger areas if you're seated in them and will be transferring to a seat. But be prepared; know the size of your mobility aid – some are too large to pass through boarding or cargo doors. Most airlines provide this information on their Web site. If possible, use a collapsible wheelchair, or take advantage of the airline's chairs. Passing through screening. You'll

be required to pass through security screening as a regular passenger, provided you're able to stand and raise your arms for the duration of five to seven seconds. You may be asked to remove your shoes, or even your prosthesis, to be passed through X-ray. You have the right to ask for a private area for prosthetic removal. TSA staff *don't* have the right to ask questions about your disability, nor the right to disassemble your prosthesis if it may affect its function. Additional information may be found at AirConsumer.dot.gov/rules. Always leave plenty of time to pass through screening procedures.

It's all in the bag. Baggage size specifications are the same for most airlines, but may differ in *how* the size is calculated. Canadian flights measure baggage length x width x height, then by weight. American travelers observe *combined* dimensions that equal a specific number: for example, 22" long x 14" wide x 9" high = 45.

If you're traveling with extra prosthetic devices and accessories, it's a good idea to pack those items in your carry-on luggage, should your checked baggage not arrive at your destination. Ideally, if you can pack all belongings and prosthetic needs into one carry-on bag, it saves a lot of walking/wheeling to the baggage claim area. If you plan to use handicap accommodations, most airlines ask you to call 24 hours ahead to request assistance.

By Rail & Bus

For those who prefer rail travel, the main rail line servicing Canada is VIA Rail, with Amtrak being the connecting rail line to the continental U.S. There are some instances where connection between Canada and the U.S. requires a route serviced by bus. Greyhound Lines and Thruway (Amtrak) are partnered to link passengers between cities throughout the U.S. and Canada, with smaller independent lines connecting smaller communities.

Accessibility matters. Both VIA Rail and Amtrak have accessible services for passengers in mobility devices. Each rail line has its own policies on size restrictions, which class of car the device may board, and whether you may remain in the mobility device or must transfer to a seat during the trip.

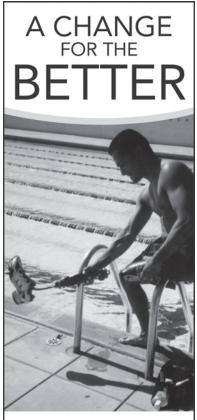
VIA Rail, for example, provides a site diagram of its accessible rail cars, illustrating the location of mobility device space, tie-downs, accessible washrooms, luggage towers and spaces for service animals. Amtrak outlines platform assistance procedures for boarding and detraining, including mobility device size and weight specs.

Greyhound has size and weight restrictions on mobility devices. Both Greyhound and Thruway accessible buses are equipped with lifts and tie-downs. You should notify the bus line 48 hours ahead of departure if a lift-equipped bus is needed.

Trains and buses are <mark>ins</mark>pe<mark>cte</mark>d.

Entering the U.S. by rail or bus doesn't exempt passengers from customs procedures. Customs officers examine all checked and carry-on luggage. Also, your ticket must be purchased before 8:30 am on the day of entry for your name to appear on VIA Rail's submitted passenger list to U.S. Customs and Immigration.

The Internet provides an abundance of travel resources, ranging from government document requirements to YouTube packing hacks tutorials. Whether a first-timer or seasoned traveler, planning well in advance of your trip goes a long way to ensuring a hassle-free travel experience.



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After the Jeep Rolled Over

By Leif Nelson, DPT, ATP, CSCS

Peter Connell was 17 when he joined the U.S. Army in 1966; at age 19, he was leading his company's fitness training, including five-mile runs and routine calisthenics. During this time, while serving on active duty stateside at Fort Knox, Kentucky, Connell's Jeep rolled over and "mangled" his right leg. After multiple surgeries, and initial speculation that his right leg would be spared, gangrene led to an amputation above the right knee just a month later in the summer of 1969.

Since then Connell, a Boston native, has found himself intertwined in many significant relationships. These relationships came in many shapes and sizes, including medical professionals, fellow veterans, other civilians with disabilities, the "space cowboys" on TV's *Star Trek*, and importantly, those of the romantic nature, which were the most difficult to imagine at the time of his injury.

Dr. John M. Harris III, an orthopedic surgeon at VA Boston Healthcare System, has known Connell since 1976. Dr. Harris, also a veteran, joined the military as Connell did in 1966, and served four years as a submarine medical officer. Dr. Harris has been a constant in Connell's care and describes Connell as one of the most "enthusiastic" veterans he has cared for. Connell is an "individual that has only been limited by the available technology; he is intrinsically motivated to be active and to maximize his function." Connell was the first to use a microprocessor knee at the VA Boston Healthcare System and continues to live at the far end of the spectrum, taking advantage of today's available technology. Veterans like Connell have kept Harris as a cornerstone of VA Boston Healthcare System's amputation care team.

Embracing technology for Connell has also spilled over into his personal life. At age 19, Connell was nervous about how his limb loss would affect his future love life. He recalls being told that "some women won't want anything to Connell "3-tracks," using two outriggers as a volunteer adaptive ski instructor



Interdisciplinary Team: Connell (center) demonstrates step-over-step stair negotiation to (from left) Dr. Kun Yan, prosthetist Ian Gray, Randi Woodrow, Dr. John Harris III, and prosthetist Eric Lydon

do with it, some just won't care, and others will go bananas over it." Connell found that this advice rang true. Once married, now divorced and dating, he found his girlfriend through an online matchmaking service. He says that "technology makes everything easier," and after years of meeting potential partners through chance encounters and friendly introductions, Connell, now 65, feels technology has facilitated a path that he couldn't have found with traditional dating.

Randi Woodrow, VA Boston Healthcare System physical therapist and amputation rehabilitation coordinator, appreciates Connell's ability to discuss personal issues like intimacy with other veterans he encounters as a volunteer in their peer visitor program. He has been an indispensable member of the interdisciplinary team across all three campuses of the VA Boston Healthcare System. Woodrow says, "He is able to reach other veterans with amputations and offers an opportunity to open up on an interpersonal level. This, in turn, allows our team to better serve veterans in all aspects of their lives."

Connell states that his aim has always been to stay active.

He and his surgeons credit surviving his injury to his commitment to physical wellness. Living with limb loss in the 1970s, Connell recalls "there were very few opportunities for individuals with physical impairments to be active." Learning to again ride a bike and to swim were challenges that he had to overcome alone. He trained in martial arts, but was told to "go to the back of the class and try to keep up." The pivotal moment that eventually led to Connell helping others excel was a 1970s public service announcement that showed a skier with transfemoral (above-knee) limb loss "3-tracking" on just one ski down a mountain. Connell called the number on the television screen and ventured to the mountainside. There he found himself surrounded by others with amputations, spinal cord injuries and visual impairments. "We were all on the mountain just to have fun and be active," Connell explains. "It was the first time I felt included. I didn't have to go to the back of the class; it was refreshing."

Woodrow first met Connell years later at the National Disabled Veterans Winter Sports Clinic in Colorado, where he was volunteering as an adaptive ski instructor. Woodrow describes Connell today: "He walks the talk. He is that guy. He keeps himself healthy, and educates others to know they have control of their own body." There is no question that relationships with others have put Connell on the course he is today, living an active life helping others to live long and



Connell learns to surf at "Waves for the Brave," a VA Boston Healthcare Systems adaptive surf camp



prosper. 💫

A Baker's Dozen:

How a Team of 12 and a Good Dog Have Made a Great Life

By Carolyn Cosmos

The Filbrun family (left to right): Alex, 16; Dylan, 16; Micah, 7; Danielle, 13; Havyn, 2; Jade, 8; Harlen (dad); Jemma, 8; Kristy (mom); Wyatt, 8; Taylor, 18; Cody, 5



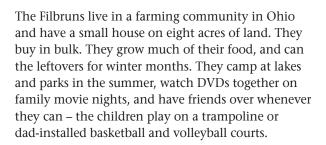
The green T-shirts say it all: "DISABILITY IS NOT INABILITY!" A string of smiling children, little stick figures, and a dog with three paws, underline the letters. And on the back? "Team Filbrun."

The mom who designed the T-shirts is almost as passionate about that motto as she is about her 10 kids, seven of whom are adopted and most of whom have special needs.

"It speaks the truth," Kristy Filbrun says, adding, "I hate the word 'disability.' Differently abled is not 'DIS-abled'! Everyone has things they can't do, including me. Nobody is totally abled."

Dad Harlan Filbrun, a former supervisor of large landscaping projects and installations, now works on even larger ones, bridges, and road repair work. Kristy is a former health aide, a useful trade for a mom who may need to schedule multiple medical appointments in one swoop and do therapy follow-ups.





They also host an annual "Family Fun Day" for those with foster or adopted children. The sharing is important, Kristy observes – as she knows quite well. She and her husband, who both come from large families, have provided, over the years, foster care for 19 children.

The Filbrun children's challenges run the gamut – psychological trauma, hearing loss, early-life infections, brain injury, limb difference and speech delays. Their family's adoptions are from both the United States and from abroad.

"Our adopted children are 'overcomers,'" Kristy says. "It means they have had loss, pain and brokenness in one form or many. They are survivors. Resilient. Willing to try and trust again. Heroes. Our biological children are heroes too. They have reached out with open arms and open hearts to accept whomever God has placed in our family."

The children's capacity for tolerance includes coping with little ones going from one home to another,





perhaps a foster infant born addicted to drugs — "They cry and cry and cry" – or a frightened child who's lashing out.

"I hear, 'It's OK, mommy. I know they didn't mean it and don't know better. We'll teach them different.'" Additionally, growing up in a multi-hued and variously abled group, the Filbrun children "accept anyone of any race and any special needs."

Daughter Taylor, 18, who is entering college as a sophomore thanks to advanced work, has grown up seeing her siblings take on their difficult challenges. That, she says, is "very much an inspiration."

Taylor points to Jemma, 8, who had bilateral above-knee amputations in 2012. "She'll have a day where her legs are hurting and she can't wear prosthetics, but she'll still run around [on her residual limbs] – she's pretty quick! – and play and be happy." Like everyone around her, Jemma pitches in on chores geared for each age – such as helping in the garden, playing with a sibling, or setting the table.

I think, 'If they can do that, I can do anything!'" Taylor says.

That's part of the plan: According to Harlen, a key challenge is treating all their children "like anyone else" and encouraging independence, "as much as they can handle. If they need help, we're there for them." The combination creates confidence, he says.

Another part of the plan is doing things together – thus "Team Filbrun" on the T- shirts. At mealtime, "We try to eat together as a family. I think it's important," Kristy comments.

So dad will come home from his day job and plunge in, "changing diapers, cleaning and cooking and all my older kids know how to cook," Kristy says, with 16-year-old Alex an "excellent baker and griller." Dylan, 16 and a football player, is also a "cleanup champ," one who, along with Danielle, 13, can keep "the little ones" entertained.

That could include the newest Filbrun daughter, Havyn, 18 months, a thriving toddler, formerly malnourished, who had a medically expedited adoption. Or it could include Cody, 5, who "loves with his whole heart" and has a new service dog with a missing paw, Rana, to help him, Jemma and Wyatt.

"I hate the word 'disability.' Differently abled is not 'DIS-abled'! Everyone has things they can't do, including me. Nobody is totally abled," says Kristy Filbrun.

Making the Dolphin Tale Movies

Filmed in part at the Clearwater Marine Aquarium, the two *Dolphin Tale* movies are based on actual events. Actor Morgan Freeman played "Dr. Cameron McCarthy" who invented a prosthetic tail for Winter, the young dolphin who lost hers to a Florida crab trap. The McCarthy character was based on prosthetists Kevin Carroll and Dan Strzempka. Here's a look behind the scenes.

You and Dan Strzempka were consultants to the *Dolphin Tale* movies. Were you there for the filming?

Carroll: "Absolutely! We were on the set with Morgan Freeman for both films and were very honored he would portray us. When they needed props, Dan made them. We were surprised how inclusive they were, chatting with us, making jokes – good actors doing it for the right reasons: They didn't expect it to bring in a lot of money. And the kids in the movie were wonderful, very much grounded."

Was the real Winter in the films?

Carroll: "99 percent was filmed live with the real Winter. The rest, no. The scenes where Winter was thrashing about and rejecting the prosthetic tail ? That did not happen. They put that in to make it more dramatic, and used a mechanical dolphin."

> Winter the dolphin with her prosthetic tail made by Hanger Clinic's Kevin Carroll and Dan Strzempka. WintersGel, which was developed out of research to fit Winter with her prosthetic tail, is now also benefiting human patients nationwide.

> > •

So what *did* happen?

Carroll: "We worked with her over a period of months. We would touch her with larger and larger pieces of socket liner material to desensitize her. But when thermal imaging showed "hot spots" where the material was restrictive, our fear was it would break down her skin. That's when we got together with a scientist friend to create WintersGel.

So once we had the socket portion, we had to come up with a tail! At first it was very small so she wouldn't see it, see the look of it, and we gradually made bigger and bigger models, 19 in all, and eventually she accepted it.

Now kids are flocking from all over the world to see this dolphin and whisper to it, sometimes with me sitting there watching the miraculous moments. It's amazing." This team of 12, however, doesn't live in a Pollyanna valley: The children "are normal in that they grumble or argue from time to time," Kristy says. And the two adults have considered carefully in expanding their family: Do they have the personal and financial resources to care for a particular child? How might it affect their existing kids?

"We were foster parents first, and all those years prepared us" for a large family, Kristy explains. Fostering special needs children was part of it. She shares a story about a younger Taylor who was asked if it was too hard for her to see foster siblings come and go: "Even though it's hard, it's better to love them" than not, Taylor said.

Taylor was consulted because this is a group that makes decisions together.

Thus, when a decision was brewing to adopt Jemma and Wyatt from China at the same time, it was a family affair. Harlen says, "The children wanted to grow our family, and unselfishly said they would give up their space" for it.

"When Jemma's face popped up on my computer screen, my kids clamored, 'We have to adopt her!'" Kristy says. Jemma and Wyatt were both born with lower-limb differences that later called for amputations. So soon Jade, 5, thinking Jemma might need her help, began carrying little brother Micah around for practice. (Micah prefers football with his brothers.)

Jade and Taylor accompanied their parents to China to help out. Jade encouraged Jemma, then 5 but still in diapers, to "go potty, go potty," modeled how to splash in tub suds, and sat on Harlen's lap to show he was a safe person.

Jemma and Wyatt had their 2012 amputations together in the same hospital so they could support each other – a course of action taken after Kristy and Harlen consulted orthopedic experts in Ohio and Philadelphia.



(Left to right): Cody, Kristy, Jemma and Wyatt meet Kevin Carroll, who consulted and was depicted in one of their favorite movies, Dolphin Tale

And the two children recently visited the Filbruns' prosthetic clinic in Dayton to check in with Hanger prosthetist Carrie Melton. Wyatt, now 4, "is in a good prosthetic system," Kristy says, noting he'd outgrown it and needed new sockets.

But she had concerns about 8-year-old Jemma's prosthetic legs and her stability and balance: "She falls a lot."

At the time, Kevin Carroll, vice-president of prosthetics for Hanger Clinic nationwide, was making teaching and consulting rounds in Ohio and met with the Filbruns. A Florida-based researcher and inventor with many honors and an Irish brogue, he is best known for working with prosthetist Dan Strzempka to create an artificial tail for an injured dolphin.

This dramatic event was depicted in the popular *Dolphin Tale* movies starring Morgan Freeman. Not only are the *Dolphin Tale* movies a staple of the Filbrun's Family Movie Night – "The children love them" – Jemma had a picture of Winter laminated on her socket. So it was a momentous meeting.

"Carrie and I came up with solutions for Jemma," Kevin says, sympathetic to Kristy's concerns. Solutions include a different knee, a different socket and changed proportions in Jemma's artificial legs. Although her current socket liner is the famed WintersGel, "I think we'll try something a little different there as well," he says.

Jemma is also getting stubbies (short prosthetic legs without knees). Kristy wants Jemma to have them for camping and walking on gravel. Jemma will also get children's running blades as part of a research project.

Meanwhile, Wyatt, so intense "we call him our fire and ice," can't wait to get his new sockets and energy-returning foot – because he wants to "run super fast," he says – and, at age 4, play football with the family's big kids.

That's the I-can-do-it spirit that Kristy and Harlen want to see in their kids. Harlen explains he'd like them all to grow up to be courageous, with giving hearts, to become good citizens and good parents.

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Five Years Later: **A Sense of Hope in Haiti**



Pope Francis receives a Zaryen jersey from Wilfrid Macena and teammates as Robert Gailey and Supreme Knight of the Knights of Columbus Carl Anderson look on.



Three young men who exemplify the hope and healing that have been achieved against great odds since Haiti's 2010 earthquake attended a Vatican conference on January 10, 2015 to mark five years since the tragic earthquake. Accompanying them were Robert Gailey, PhD, PT, Jason Miller, MPT, and Adam Finnieston, CPO, who for the past five years have served the people of Haiti in their recovery.

The conference in Rome was called by Pope Francis to focus on the humanitarian catastrophe and its ongoing impact, and will affirm the Church's closeness to the Haitian people. The meeting, organized by the Pontifical Commission for Latin America and the Pontifical Council "Cor Unum," included a presentation by Knights of Columbus Supreme Knight Carl Anderson.

> "The work of the dedicated medical staff and the unbreakable spirit of these Haitian young people, in circumstances most of us can't imagine, are truly

inspiring," Anderson says. "After the earthquake, thousands of children and young people underwent emergency amputations in order to survive, and we are pleased to have been able to help many reclaim their lives despite terrible challenges."

Before attending the Vatican conference on Saturday, January 10, the Haitian delegation offered a demonstration of amputee soccer at a Knights of Columbus soccer field in Rome. Wilfrid Macena, Mackenson Pierre and Sandy J.L. Louiseme were aided by the program, a partnership that offered free prosthetics and rehabilitation to every child who lost a limb in the earthquake. The three athletes presented Pope Francis with a team jersey and soccer ball signed by the entire team.

All three of the young men lost a leg in the earthquake that devastated Haiti on January 12, 2010. They received prosthetic limbs through "Healing Haiti's Children," an extensive program sponsored by the Knights of Columbus in collaboration with the University of Miami-affiliated Project Medishare. Robert Gailey, PhD, PT, Department of Physical Therapy, University of Miami Miller School of Medicine, who initiated and has coordinated all aspects of Project Medishare's rehabilitation and prosthetics program in Haiti since the earthquake, attended the conference along with the Director of Rehabilitation, Jason Miller, MPT, CWS, and Director of Prosthetics Adam Finnieston, CPO. Over the past five years, the Project Medishare rehabilitation team has provided rehabilitation for 25,000 patients and fabricated over 2,000 O&P devices.

Healing Haiti's Children has been a wonderful partnership that continues today. Project Medishare provides medical expertise and treatment while the Knights of Columbus have funded over \$1.7 million, which effectively provided an estimated \$12 million worth of aid by U.S. standards. Össur Americas, another critical partner, established the Össur International Prosthetics and Orthotics Laboratory within a few months after the earthquake, and has provided O&P supplies over the years.

The ultimate goal was to create a sustainable program by hiring local Haitians to do much of the fabrication and rehabilitation work. Adam Finnieston, CPO, Extreme Prosthetics Miami, Florida, has worked with several prosthetists to educate local Haitians to become prosthetic technicians. Finnieston says, "The people of Haiti at first received care from so many people; unfortunately, many of the prosthetic programs that were available after the earthquake have disappeared. As the number of patients increases and the funding decreases, it is becoming harder to care for everyone."

At the same time, Jason Miller, MPT, CWS, who has lived in Port-au-Prince for the past five years, introduced in-patient, out-patient and specialized rehabilitation focused on the needs of the Haitian people receiving care at Hospital Bernard Mevs in Port-au-Prince. Today, the hospital's rehabilitation team and O&P lab are staffed completely by Haitian rehabilitation and O&P technicians. Although visiting prosthetists and physical therapists continue to volunteer at the hospital for weeklong tours, the local technicians provide the daily care for the Haitian patients. To date, almost 1,000 children have received O&P care in the program, and thousands have received various types of rehabilitation care.

Since the earthquake five years ago, Robert Gailey, PhD, PT, who has coordinated the program's funding, states, "the Knight of Columbus' Healing Haiti's Children program at Project Medishare's Hospital Bernard Mevs has been an



St. Peter's Square, Vatican City, moments after their audience with Pope Francis; Robert Gailey, Wilfrid Macena, Mackenson Pierre, Sandy J.L. Louiseme, Jason Miller and Adam Finnieston.



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Team Zaryen plays in an exhibition at the Knights of Columbus soccer field in Rome with St. Peter's Cathedral in the background.

overwhelming success by any measure. With 2,000 O&P devices fabricated and 25,000 patients receiving rehabilitation treatment from our programs, every patient has been treated to the highest standards possible in a country where rehabilitation virtually did not exist prior to the earthquake. Our patients have been discharged with an increased ability to face the difficulties that remain in their lives and in their country."

The amazing story of the program and the children it has served was captured in Unbreakable: A Story of Hope and *Healing in Haiti*, a documentary produced by the Knights. Winner of the Most Inspirational Documentary Award at the DocMiami International Film Festival in 2014, the film also follows the story of the formation of Team Zaryen (tarantula), an amputee soccer team composed of amputee athletes from Port-au-Prince and neighboring villages. The team was named after the resilient spider, known for becoming even more determined after losing a leg.

Jason Miller, MPT, CWS, describes the team's mission: "Integral to our mission to change the face and perception of disability in Haiti, Team Zaryen has lead the way, becoming the most recognizable soccer team in all of Haiti. Prior to the earthquake, most Haitians believed that with the loss of limb or any disability a person was unable to work, attend school or participate



For more information, please feel free to contact: projectmedishare.org

Project Medishare/Healing Haiti's Children Program Summary to Date

- Treated over 250,000 patients with surgery, in-patient and out-patient care
- Rehabilitation continues to provide over 3,500 treatments per month at the hospital
- Provided 325 prosthetic limbs for children with limb loss
- Provided 510 orthotic braces for children
- Provided 600 adult lower-limb prosthetics
- Provided 615 adult orthotics
- Has sent over 395 physical therapists and 25 orthotists/prosthetists
- Hired 6 full-time Haitian O&P and rehabilitation technicians
- Hired 2 full-time PTs and 1 full-time CPO
- Monthly: 25-30 new prosthetic or secondary repair and replacement cases
- Annual average: Over 200 O&P cases, with an additional 1,250 repair and replacement cases.

in society." Likewise, Team Zayren has changed that perception by demonstrating their athletic abilities; they have become role models for the nation of Haiti. Thanks to support from the Challenged Athletes Foundation, Team Zaryen has given the country, able-bodied and disabled alike, a sense of hope. Many of the members of Zaryen played on the Haitian National Amputee Football Team that made it to the quarterfinals at the 2014 World Cup in Mexico this past November.

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Navigating the Magic Kingdom as an Amputee

The steamboat's loudspeakers hum *"A dream is a wish your heart makes"* as our boat docks at the Magic Kingdom, and Cinderella's castle glitters in the morning sunlight. Yet, at first glance, it feels like a formidable adventure for a bilateral amputee like me, wondering how I will manage the crowds, the long lines and my ability to navigate the rides.

As it turns out, Disney World not only makes it easy for people with disabilities, including amputees, to enjoy the park but gives us some perks that can considerably enhance its enjoyment. However, to save time and minimize any anxiety about visiting the Magic Kingdom, it helps to know the ropes in advance.

It's not a cheap date to visit Mickey and Minnie Mouse on their home turf. The day's entrance fee to the park is \$98 plus a \$17 parking fee if you're driving. After passing the parking-fee gate, I followed the blue line, which guided my car to the Disability Parking area, a designated spot that is closer to the main entrance than the multitude of more distant parking lots.

Disney World provides courtesy wheelchairs from the parking area to the front gate.

Beyond that, however, there is a \$17 fee for a rented wheelchair or a \$50 fee for a seated motor scooter for those unable to manage the extensive walking. As a fairly mobile amputee, I chose to use my hiking poles and, when fatigued, sit at one of the many benches available while navigating my way from Tomorrowland to Adventureland.

The \$98 admission provides a plastic entry card that admits one to all rides and needs to be swiped at the gate of each ride. It also includes three "Fast Passes," plus a fourth that can be added at various kiosks around the park, but only after the first three have been used. However, the three Fast Pass choices for your desired rides need to be selected early on at the entrance to the park or, even better, much earlier if you own an iPhone. This way, in advance of your arrival, you can go to My Disney Experience (disneyworld.disney.go.com/plan/my-disneyexperience), continue on to the Disney Fastpass+ app and click onto MyMagic+, which will grant three Fast Pass experiences and confirm their boarding times at the park each day for each admission.

For all visitors, the Fast Passes provide some relief from waiting in the invariably long lines at the regular entrance to each ride. Such favorites as "It's a Small, Small World" in Fantasyland or the "Jungle Cruise" in Adventureland may involve a 45-minute wait.

> Upon entering the park, my first step was to stop at City Hall, located on the left as one enters Main Street, U.S.A. There, I requested a Disability Service Pass with my photo,

By Peter Purdy

good for the day for me and my wife. This pass enabled us to approach any ride's entrance and either be admitted directly to the Fast Pass entrance or, more often, to be signed up for the ride and asked to return in 20 to 30 minutes to gain entrance to the Fast Pass lane. Hence, between the Disability Pass and the four "free" Fast Pass entrance opportunities, there was ample opportunity to enjoy a full day of rides with minimal periods of standing on my prostheses.

Wheelchair users reported that multiple rides were able to accommodate their situation. For some rides, they needed to



transfer. For other attractions, they could simply roll their chair into the space

provided. Equally helpful for wheelchair users is the fact that water fountains and toilets are well-placed throughout the park and easily accessible.



At the end of the day as I boarded the monorail to return to the parking lot, my limbs were tired but I felt exhilarated. I had successfully managed all the rides I desired, walked through much of the park and enjoyed the afternoon parade, complete with all of the Disney characters. Looks like Disney's Epcot Center may be my next challenge when I return. Disney World not only makes it easy for people with disabilities, including amputees, to enjoy the park but gives us some perks that can considerably enhance its enjoyment.

Genium Knee Research Findings

Background

A clinical research study was conducted at the University of South Florida (USF) to compare two prosthetic knees: the C-Leg and the Genium systems. Both of these knee systems are microprocessor mechanisms manufactured by Ottobock. These two knee systems use multiple sensors to detect changes in walking, like when the user is in stance phase versus swing phase. A microprocessor unit (computer) makes changes to the knee's mechanics almost instantaneously to adjust the knee to offer the user a more responsive, adaptable and safer knee. However, neither of these two knees create forces to propel the user.

The Genium is a newer system, designed with additional sensors to permit the automation of features formerly activated manually in the C-Leg, such as the ability to climb stairs step-over-step, to activate a stance stability feature to freeze the knee during longer periods of standing, and to release the knee when sitting, which allows the user to reposition their leg easily. Additionally, the new sensors reportedly keep the knee angle more consistent when walking and allow the user to walk backwards safely.

A preliminary study was conducted and completed prior to the USF study. All 11 volunteers were young (average 37 years) high-functioning walkers, had lost their leg to trauma and used the C-Leg prior to participating in the study. Briefly, most subjects were able to walk upstairs using a typical, reciprocating, step-over-step pattern when using the Genium system. Additionally, use of the Genium knee resulted in a more consistent knee flexion angle while walking, regardless of walking speed. The purpose of the USF study was to compare the functional differences between the Genium and C-Leg systems to confirm findings of the preliminary study. Additionally, researchers sought to expand upon the preliminary findings to see if there were other differences that could be measured, based on volunteer reports and functional measures.

Study Methods

A certified, licensed prosthetist conducted all fittings and a qualified physical therapist trained all participants. All volunteers enrolled in the study had at least a year of experience with a C-Leg and had to currently be using a C-Leg. Volunteers were randomly assigned to either continue using the C-Leg or have their knee switched to a Genium. All volunteers received the same study foot and had their original socket and components properly aligned. Volunteers were provided training with both knees and given time to familiarize themselves with them.

Once volunteers were trained and familiar with the knees, they were tested. After the first test, they had their knee switched to the other system. Then, they were trained with the second system, familiarized with the knee and tested again on the other knee system.

Tests for walking (flat ground, ramps, stairs, uneven terrain), balance and household activities were included, in addition to surveys about function, satisfaction and preference.

Results and Discussion

Training results: Following training, 14 of 20 participants demonstrated some ability to climb stairs step-over-step. This task is not appropriate for everyone; it is advised to discuss your goals and abilities with your provider before

By M. Jason Highsmith, PT, DPT, PhD, CP, FAAOP, and Jason T. Kahle, MSMS, CPO, FAAOP



Figure 1. The Genium knee has sensors that detect when weight is shifting backwards and on the toe; preventing the knee from buckling and subsequent potential for falls.

Figure 2. The Genium can sense when the user wants to keep weight shifted to the prosthetic side, and prevents the knee from bending to increase stance stability.

Figure 3. The Genium knee disengages resistance when seated and in non-weight bearing so the leg can comfortably be positioned to allow for ease in transitional movements.

attempting a physically demanding task such as reciprocal stair walking. Of those who were able to walk up stairs reciprocally after training, all reported being pleased with the new stair-stepping pattern. Further, many commented that





the practice improved their ability to cross obstacles. Additionally, during ramp training the majority of subjects stated that when training to use the Genium knee for ramp ascent, less pressure was experienced near the front of their hip.

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Balance tests: The Genium tends to improve rearward-directed control during balance testing. The C-Leg significantly improves control over the prosthetic forefoot. During short to medium distances, the Genium sustains walking speed improvements realized by the C-Leg, but at potentially decreased levels of perceived exertion.

Knee movement during

walking: Compared to the C-Leg, use of the Genium knee during walking on flat ground, uphill and downhill resulted in increased knee flexion when the leg is swinging and when the prosthetic foot is on the ground compared to the C-Leg.

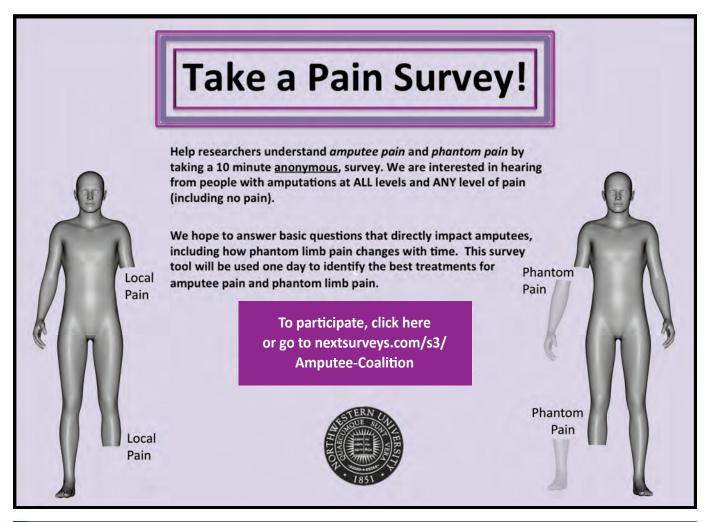
Prosthetic use survey: Genium use resulted in improvements in several

scales, including: Perceived Response, Social Burden, Utility and Well-Being. Genium also improved scores on individual survey items related to improved standing comfort, satisfaction with walking ability, and improved walking in tight spaces, hills and slippery surfaces. Simply stated, subjects liked the features better than the C-Leg.

Conclusion

So far, results of using the Genium knee system have demonstrated improvements in walking upstairs and backwards. Additionally, the Genium knee flexes in a range more like the anatomic knee at multiple speeds on flat ground, uphill and downhill. Finally, when using the Genium compared with the C-Leg, users report improvements in many aspects of their lives, including socially, in well-being and in mobility domains, which is consistent with the laboratory measures. The findings of this study, which are similar to the preliminary study, are in agreement. Additional data are being finalized for publication. Microprocessor knee technology is likely to not be appropriate in all cases, and not everyone in the study achieved the same outcomes. The results reported represent the group average, so results do vary. It is advised that you discuss your goals with your own healthcare team so that they can best help you achieve them. 💫

The views expressed in this article are not the opinion of the U.S. Department of Veterans Affairs.







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Women

by Laurel Krasne

On a perfect weekend in Chicago, I participated in my first amputee golf tournament. What compelled me to golf a weekend tourney when I hadn't swung a club in years? Put simply, I had some things to prove to myself: that I had strength (whiffing a ball again and again is no task for the weak), stamina (nine-shot max per hole, 36 holes over two days = 324 swings!), determination (I seriously contemplated not returning for the second day), and drive for improvement (I finally found a workable swing midway through the last round). Now that the feeling is back in my right arm, I'm here to thank the men and women of this tournament for their unwavering hospitality, the advice they gave, and better yet, the advice they held back. And I want to encourage women amputees - like myself - to get out there and tear up the course!

Addressing the Ball and My Nerves

I was sure my very first shot off the first tee would be a good one. With a 10-year hiatus, I wouldn't be haunted by the myriad steps one needs to remember before every swing. I hit that ball firmly, in the air and forward. It was downhill from there. Select the right club, address the ball, look at your destination, get in your stance, grip properly, keep your head down, etc. It all came back to me, as did 'whiffing' (swinging and missing) the ball.

> My golf partners were amazingly patient and encouraging. This is one of the reasons why amputee tournaments are so wonderful, especially for newbies: the "we're all in this together for the fun"

Can Tear Up the Course,

attitude. I did, however, know proper etiquette. For the first 18 holes, after a few shots and whiffs, I picked up my ball to keep some semblance of pace (and to get some practice on the green: with a nine-shot maximum – and whiffs count as shots – I'd rarely get there if I didn't pick up my ball and *take* it there).

Turns out I'm not too bad on the green. I dropped my ball far from the hole so I'd get good practice shots. I liked the strategy involved in figuring out the speed and trajectory of the shot I'd need to make. Mostly, it wasn't pretty, but I can really see how practice would make me so much better. I looked forward to putting. Unfortunately, it was followed by teeing off again on the next hole. Ugh!

Finally, we finished 18 holes. It was the longest five hours of my life. But it was a beautiful, sunny day. The gentlemen I golfed with were seasoned golfers, fun and full of stories to share. They encouraged me, and importantly, almost always knew where my ball was hiding (mostly in the rough or near trees). The group dinner was a wonderful way to end the day: new people to meet; conversation over dinner; a grand welcome to all, especially the new members; and a group photo to commemorate the event.

Day Two: All Over Again

I actually considered not coming back. Facing another day of whiffing and carrying my ball to the green wasn't much motivation to return, plus, my right arm was a bit stiff. But I was determined to find a golf swing that worked for me. And stop whiffing!

Again, I was teamed with some great guys. These gentlemen were experienced golfers, friends from years of playing in this tournament, and reminders to me to always bring my sense of humor to the course.

They made me take every shot. "That's how you'll learn," they supportively insisted. That lasted a couple of holes, after which they made me pick up my ball and drop it closer to or simply on the green.

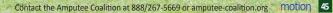
Whoo Hoo! I Found My Swing!

I continued struggling to find that swing that's eluded me since I first took up the sport. One of the tourney volunteers was kind enough to work with me. Around the ninth hole, I found a swing that worked. What a difference it makes when you actually hit the ball and it goes up and forward!

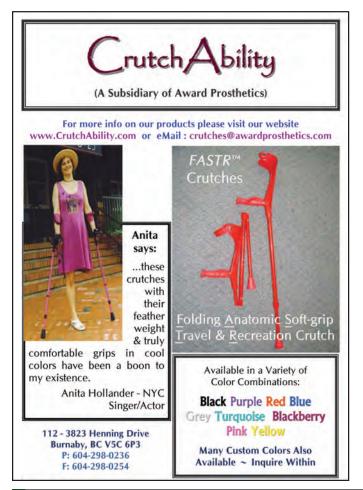
Here's Your Chance, Ladies

Here's why women need to come out and participate in an amputee tournament: to experience the simple pleasure of making contact with a golf ball and send it flying in the air. The "smack" you hear is inspirational. And addictive. Although this tournament is based on friendly competition, it's truly a sport where you play against yourself. Whether golfing with a friend or a stranger, you'll always be welcome. A nice way to spend a morning or afternoon.

So, come on, ladies. Why should men have all the fun? See you out on the links! Fore!









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