



JOINT JOURNAL

VOLUME 30

FALL 2018

AORI Launches Study to Compare Partial and Total Knee Replacement

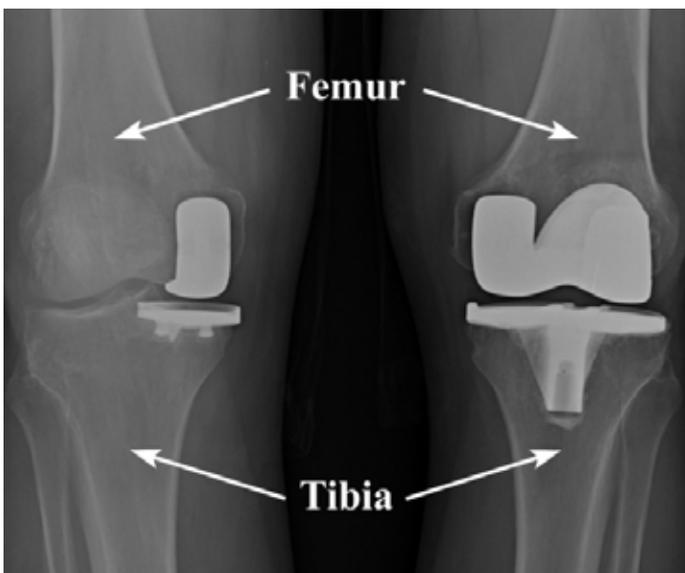
The knee joint has three distinct surfaces where the bones meet (also known as compartments). These include the medial compartment between the tibia and femur on the inside of the knee, the lateral compartment between the tibia and femur on the outside of the knee, and the articulation between the patella (knee cap) and femur on the front of the knee. Arthritis can occur at any of these three surfaces. In fact, up to one-third of patients indicated for knee replacement have been reported to have arthritic changes predominantly affecting only the medial compartment of the knee. In these cases, patients may be candidates for unicompartmental knee replacement, also known as a “partial,” where only one compartment is replaced, or total knee replacement, where all three are replaced. In the US, fewer than 5% of patients currently undergo partials.¹

Among patients with medial tibio-femoral compartment osteoarthritis (the most common site of degeneration), there is a continuing debate about the superiority of partial or total knee replacement with regards to patient satisfaction, the risk of complications, and implant durability. Unfortunately, there is very little high quality research to help patients and their surgeons determine which option is superior for specific individuals.

Total knee replacements similar to modern designs began to be used in the 1970s and many different designs have proven to reliably eliminate pain and improve function. While the first partials were developed around that same time, early designs were associated with varied results, and it was not until the 1980s that implants with consistently good outcomes became available. Reported advantages of partials include preservation of bone, decreased blood loss due to surgery, faster recovery, less post-operative pain,

See AORI Launches Study, page 12

1. Bolognesi MP, Greiner MA, Attarian DE, Watters TS, Wellman SS, Curtis LH, et al. Unicompartmental knee arthroplasty and total knee arthroplasty among Medicare beneficiaries, 2000 to 2009. *J Bone Joint Surg Am.* 2013 Nov 20;95(22):e174.



This x-ray depicts a patient who received a partial knee on one side to replace the medial compartment of their knee, as well as a total knee on the other side.

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Overcoming Incredible Odds

Dave Borowski - Hip Patient

By Renée Burkett

It is hard to imagine talking with Mr. David Borowski when he isn't upbeat and positive. To understand how remarkable this is, one has to go back to the beginning of his life. Dave Borowski was born in Buffalo, New York, on January 22, 1954. He was the third of eight siblings. And that is probably the end of what would be considered a "normal" story about a young boy, or a grown man for that matter. While sleeping in a wicker bassinet when he was only six weeks old, a teething puppy chewed on an electrical wire in his room causing a spark to fly and ignite his bed. In moments, he was engulfed in flames and on fire. Since it was the 1950s, home smoke detectors were not yet available the way they are today. By the time his mother saw the fire and ran to save him, much of his tiny body was severely burned. Doctors did not expect him to survive. Fortunately, his parents did, and it was their hope and faith coupled with young David's strong heart that not only sustained him in the aftermath of that horrific tragedy, but also enabled him to live an exceptional life.

Dave says his first memory was waking up in the hospital after his first surgery when he was eighteen months old. The surgery was to correct a badly deformed foot, so he could put on a shoe. He remembers his father rubbing his painful foot. During the hospital stay, doctors realized David's right hip had not properly developed. "I was likely born with a congenital hip problem known as shallow hip. There was surgery to help correct it



Despite the fire that consumed much of both hands, Dave Borowski learned to ride a bike.

if found during infancy but because of all the trauma from my burns, doctors didn't discover it until that first hospital stay. By then, it was too late for a harness to be worn to stop the dysplasia. Instead, my leg and hip were forced together, and a pin was inserted from my right leg into my hip. I wore a body cast for six months. My dad made a homemade skateboard for me to wheel around on my belly. It was actually a lot of fun! I learned how to stand up on my other leg. After I was able to walk, my right side was bone on bone. The continual grinding shortened my right leg until I had a really bad limp."

Dave's family gave him tremendous support through his childhood years. His mother and father decided to treat him like the rest of their children. They encouraged him to find ways to pick things up and eat, even though he lacked much of his right hand and some fingers on his left. He remembers the first day he learned how to eat ice cream holding a spoon with two hands! From then on, he built upon that success, learning how to play baseball and even the trombone.

Despite the adversity he faced, Dave earned bachelor's and master's degrees in economics and finance.

With assistance from academic scholarships from the State of New York, he earned his bachelor's degree from Canisius College in Buffalo and his master's from SUNY Binghamton, New York. He went on to have a very successful career, first with the United States Commodity Futures Trading Commission in Washington, DC, and then with Freddie Mac until his recent retirement.

By college, Dave's right leg was much shorter than his left. His doctor recommended he have leg-shortening surgery on his left leg. Dave agreed. During that surgery, three inches were removed from his left leg reducing his height from six feet, one inch to five feet, ten inches. Despite the surgery, Dave still experienced excessive pain. "In addition to the scars from the fire, my face was contorted by the constant pain in my hip. Finally, I went to see an orthopaedic surgeon. I said, 'Help!' and he said, 'I can't fix it, but if anyone can it's Charlie Engh!'" That surgeon explained that Dr. Engh had developed hip replacement implants particularly well-suited to younger patients. The doctor reiterated, "Go see him. If anyone can help you, it's him."

Dave Borowski went to see Dr. Engh in September of 1986. He was hopeful that Dr. Charlie, as Dave calls him, would be able to relieve the intense hip pain he endured daily. Dr. Charlie took x-rays and saw the problem, "You have no hip socket," he said, but then assured, "We can fix it!" Dr. Charlie told Dave what he would do. He would make a hip socket where there was none and give him a titanium hip replacement with porous coating to achieve fixation. "I was on-board," Dave says. "I had the surgery in November of 1986 at the age of 32 and went back to work in 90 days! For me that was the beginning of moving like a normal person. Finally, I had no pain!" Dr. Charlie also lengthened Dave's



Dave Borowski fondly recalls that marrying Kerry was the happiest day of his life!

right leg to match the other! "That changed my life," Dave proclaims, "The contortion in my face from hip pain went poof!"

During his hip replacement recovery, Mr. Borowski walked with a cane. One day when he entered the elevator at Freddie Mac where he worked, he noticed a lovely young woman he hadn't seen before. She smiled at his light-hearted banter with others in the elevator. He wanted to compliment her on her pretty blue eyes but didn't have a chance because she exited at the next stop on the third floor. Determined to find her, he visited the third floor later that day where he found the lovely woman and struck up a conversation. His subsequent walks often took him to the third floor where he looked forward to chatting with Kerry. He wanted to ask her out but hesitated because of the cane. Once he no longer needed the cane, he asked her out. She said yes but asked him where his cane was with a hint of disappointment in her voice. When Dave explained he no longer

needed it, Kerry said, "Too bad, you looked so dapper with it!" She went out with him anyway and soon they fell in love.

Having a pain-free hip and restored mobility enabled Dave to pursue weightier matters. He began speaking on behalf of burn survivors. His speeches have taken him in front of many audiences including Congress, the American Burn Association, firefighter graduates, police, national burn camps, and the Consumer Products Safety Commission, to name just a few. Hillary Clinton also invited him to speak about flame-retardant sleepwear several times.

One day, Kerry, who was now Dave's wife, saw an ad for a burn camp and suggested that Dave learn more about it. "I went to the Central Virginia Burn Camp, and when I saw the children there, I knew what to do. Talking with the children, laughing and playing with them just like they were perfectly normal children made a huge impact

Life on the Farm and Exercise to Boot!

Hally Woodbury - Knee and Shoulder Patient

By Renée Burkett

When I call Halliday Woodbury on the phone, her greeting is warm and friendly. She is an articulate lady, energetic and full of stories to tell about her life on the farm, her love for family, horses, tennis, and Zumba. At some point, we talk about her shoulder and knee surgeries too!

Asking Mrs. Woodbury to tell me a little about herself, she says, “Call me Hally,” and goes on, “Well, we, (my husband, Bill, and I) live on a farm and we make hay. We have cattle, chickens, dogs, and horses,” she pauses, “I think that’s all.” It seems she is trying to remember any unaccounted-for animals but in a few seconds, she moves on. “It takes a bit of work. I do the mowing and the weed whacking. I drive the big tractor. I get on and off tractors all day long. When I open the gate, I have to be on the watch for the cattle that would like to get out. I run back and jump on the tractor as quickly as I can.” Then Hally introduces her farm to me, “The name of our farm is Winfall Farm. It is in Catlett, Virginia, about an hour’s drive from Dulles Airport. We love it out here. We’ve got 140 acres,” and then Hally laughs and states, “I’m the head honcho on the farm.”

During her childhood, Hally developed a passion for horses that she maintains to this day. “My father was in the Marine Corps. I lived in various places but a lot at Quantico.” Horse riding was free when Hally was growing up there. “I definitely got the horse-riding



Hally Woodbury and her horse, Willy, jumping after Hally’s knee replacement.

bug there. You had to be 10 years old to take lessons, so I started when I was 10. My first horse show was in 1955!”

As Hally grew up, she loved racing horses too. Steeple chases and timber races were her kind of fun. “In the old days, we would race from one church steeple to the next. Some hunt clubs used those races to make money for the hunt. Ladies timber races are races through fields jumping over solid log fences. It’s dangerous, but it’s a lot of fun!” At this point, Bill, her husband

interjects, “When we got married, Hally said she wanted to try timber racing once more. We were out in Berryville at a timber race. One of the jumps is at the top of a hill so when you jump over it, you’re immediately going down the hill. After that, Hally said, ‘I think I’m done with timber racing!’”

Hally’s favorite job is training and riding horses for the Casanova Hunt and acting as a whipper-in. As an aside, Hally shares, “In my professional career outside of horses and farming,

I was a bank teller.” Hally chuckles at the joke she is going to tell, “The hardest thing about being a bank teller is giving the money back at the end of the day!” She also worked as a payroll clerk for the Hecht company.

As if working full time, being a mother and an avid equestrian weren’t enough, Hally adds, “Bill and I really enjoy building things from scratch. When we were dating, we found a home built in 1741 sitting in a vacant lot. It had been heavily vandalized, but it was on five and a half acres in Vienna, Virginia. We had a vision to restore it to its former glory, plus we got a very good deal on the acreage, so we bought and refurbished it. We lived in it from 1971-1986.”

At this point in the story, Bill fills in, “To explain, when we got married we moved to this condemned house. We lived on the property in a camper



Hally and her best buddy, Willful Willy.



Ever-energetic Hally Woodbury with her granddaughters, Halliday and Pippa.

van with no water, no heat, and no electricity until we got the carriage house livable and then we moved into that. We had to go to a friend’s house to take showers.” Hally quips, “We were young and stupid!” But I can’t help thinking what visionary people Hally and Bill were to see the beauty in an abandoned house and make it their first real home! “You know sometimes you just do things and figure it out as you go along,” Hally declares.

In 1986, they found a new fixer-upper. It was an 1856 farm house on 140 acres. “We closed on the farm on December 23, 1986, and started living there with the horses. People expected us to tear it down, but we just gutted it and rebuilt.” That “fixer-upper” is where Hally and Bill live today.

“We gave 13 acres of our land to our daughter and her family. She has two girls, my two granddaughters. Pippa is eight, and my namesake, Halliday, turned 11 in October. My son-in-law is very strong, so he helps us do things we can’t quite do. It is so great to have them all living so close. I see my granddaughters almost every day.” Hally gives them riding lessons on a pony. “We try to ride every afternoon on the pony with saddle and bridle.”

Hally has been active her entire life. “I loved playing tennis. I used to play several times a week. But, my knees acted up. First the left knee hurt. It had been worked on three different times and the right twice, but there wasn’t anything left. They were totally bone on bone.”

Hally Woodbury

Continued from page 5

Since Hally's father started going to the Anderson Orthopaedic Institute long ago, Hally went there too. "All of those doctors are wonderful! Dr. Bill Hamilton did both of my knees. I was so bow-legged it was unbelievable. It's been the greatest thing! I've been giving people a sales pitch ever since!" Hally gained over an inch of height after knee surgery. "It was the best experience! I was up walking on the third day! I have a long driveway. My goal was to be able to walk it with ease and I can!" As a side note Hally chuckles and says, "Another goal I have is to make Dr. Hamilton smile. He's very serious."

While Hally explains her knees work great for tennis, her shoulders won't let her play. From years of tennis and farm work, Hally's shoulders wore out too. "I wore out my shoulders playing a lot of tennis. On the farm, there's always heavy lifting. Men are supposed to do the heavy lifting, but farm life demands doing what's necessary." Dr. Branch did a rotator cuff repair on her left shoulder in 2009. "That helped a lot!" When her right shoulder became painful in 2013, she saw Dr. Nagda, who is also at Anderson. Hally was initially treated with physical therapy that provided relief for several years. When her pain returned in 2017, she saw Dr. Nagda again. He gave her cortisone shots in her shoulder. Since then she has little pain and good movement. "Mostly, my shoulders feel great, though occasionally I need help lifting my saddle up on my horse. I'm very fortunate, I'm so active on the farm all day. If the shots don't provide relief in the future, Dr. Nagda told me I may be a candidate for a reverse shoulder replacement."



Hally and Bill Woodbury on their 140-acre farm.

"My sister, Hillary, who lives nearby, had her hips replaced by Dr. Hamilton about two months ago." When I ask how Hillary is doing, Hally says, "Great! We take the dogs out walking through the woods Monday, Wednesday and Friday. It takes two hours and 10 minutes to do four miles." Between the two sisters, they have five Labrador Retrievers. "My sister has three Labs and I have two. Among the five dogs, there are two sets of sisters. We are sisters walking sisters!" Hally also works out at the gym with her sister on Tuesdays and Thursdays. Although there's always something to do on the farm, when the work is done, Hally enjoys exercise classes. She loves Zumba at the local

club and the T&T (Tighten and Tone) class. "I'm a sucker for Zumba! I have more fun with it!"

As we get ready to say goodbye, Hally says, "I'm 100% better! I love Dr. Hamilton and the things I can do! Once my knees were replaced, I went water-skiing again. I can still do it! I get on the skis and go once around the lake to show the grandkids I still have it and then I say, 'Get me off of this!' But really, if we had a boat in the water, I'd ski even now!" Marveling, I say to Hally, "You are one ambitious lady!" She replies quite matter-of-factly, "I'm just trying to stay in shape."

Do you have a story you would like to share with the readers of the Joint Journal or a question you would like to ask? Please contact Susan Sensi at (703) 619-4411 or email research@aori.org.

AORI Expands Research Efforts to Include Shoulder Replacements



Dr. Sameer Nagda will work with AORI on shoulder research.



Although not as common as hip or knee replacements, more than 50,000 Americans have shoulder replacement surgery each year. Like the hip, the shoulder is a ball-and-socket joint. There are two types of shoulder replacements. In a standard total shoulder replacement, the head of humerus (the round part of the bone on the left x-ray above) is removed and replaced with a ball that articulates with a plastic cup implanted in the socket of the shoulder blade (center image above). When a patient has substantial rotator cuff damage, a reverse shoulder replacement (right image above) that relies on different muscles to position and move the arm can be used. In a reverse, the ball is fixed to the patient's socket and the plastic cup is implanted in the upper end of the humerus.

As readers of the *Joint Journal* may already know, 2018 marks the 46th anniversary of AORI's founding. In conjunction with our mission to improve the quality of life for joint replacement patients, we are delighted to announce that AORI's research focus is expanding to include shoulders. With decades of experience analyzing the outcome of hip and knee joints, we hope to apply our accumulated expertise to help advance the science related to shoulder implants, by examining components that have been revised as well as those that are donated to AORI via our post-mortem implant retrieval program. If you are not familiar with it, AORI's post-mortem implant retrieval program enables patients to donate their implants and the surrounding tissue for analysis after their passing. As opposed to implants that fail and require revision, post-mortem retrievals are typically well-functioning. Because the surrounding tissue can also be examined in great detail, post-mortem retrievals can be a valuable source of information. Although shoulder replacements are typically subject to less force than lower extremity implants, the bearing surfaces can still wear over time and achieving durable fixation is essential for long-term success.

As AORI develops its shoulder research effort, we will work closely with Dr. Sameer Nagda, a fellowship-trained Anderson Clinic surgeon with expertise in shoulder replacements. We will also seek to cultivate collaborative relationships with other institutions to improve shoulder replacement outcomes in the same way that our prior research has helped improve hip and knee implant performance. As our research efforts evolve, we will look forward to sharing our progress with you in future editions of the *Joint Journal*.

Thanks for Your Support



As we reflect on all the people who make our research possible, everyone at AORI would like to express our sincere gratitude to those who have supported our work.

Each donation we receive enables us to undertake research with the goal of improving the quality of life for joint replacement patients.

Your donations and bequests go towards:

- The scientific assessment of new and existing implant systems
- The evaluation of new surgical procedures
- The development of improved diagnostic methods
- The detection and management of complications
- The overall improvement of joint replacements

If you donated to AORI between November 1, 2017, and October 31, 2018, and are not listed below, we apologize. Please contact Susan Sensi at (703) 619-4411 or email research@aori.org so we can correct our mistake. It is important to us to recognize each of our supporters in the *Joint Journal*.

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Dr. Charles Engh, AORI's former Medical Director who celebrated his 80th birthday in September of 2018, enjoys the warm weather at his home in Florida during a recent visit with his son, Dr. Andy, who serves as AORI's current president.



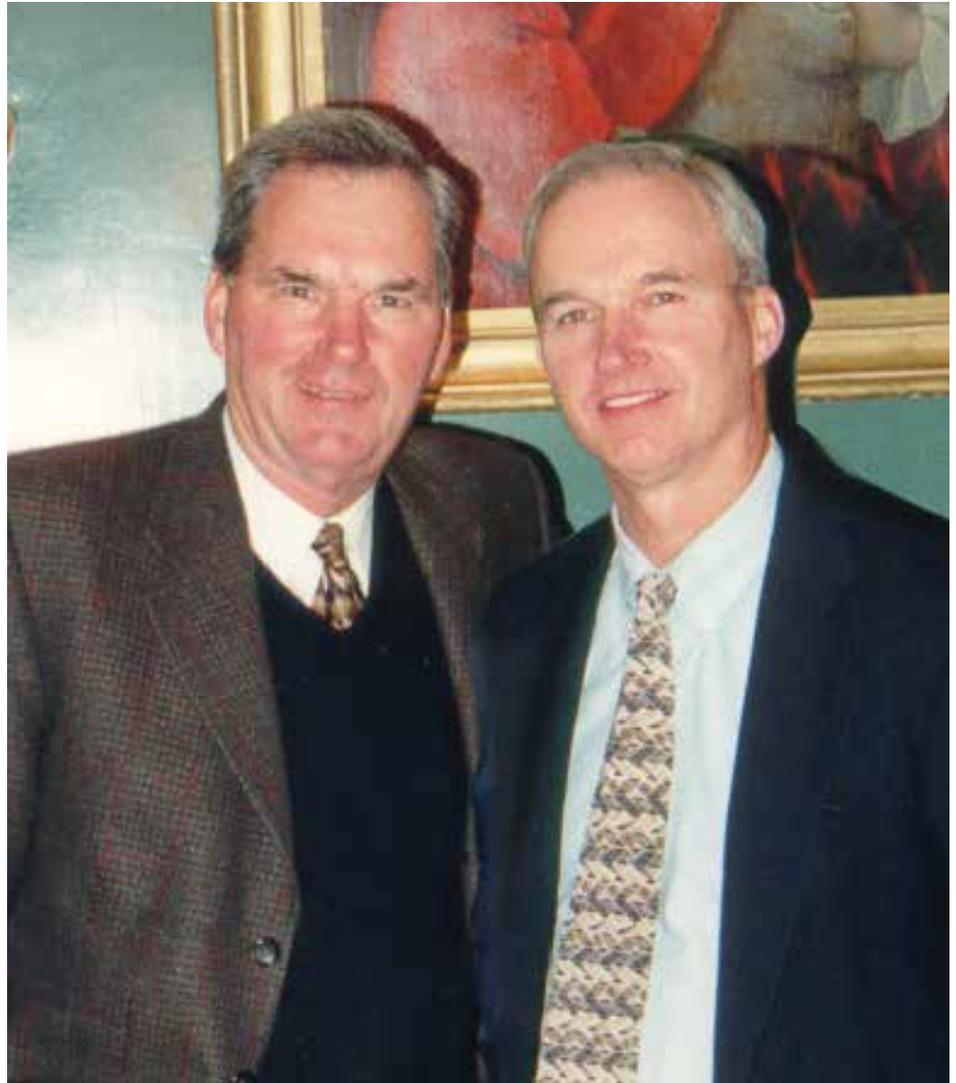
Patricia Larkins kindly included AORI in her estate planning.

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AORI's founders, Dr. Charles (left) and Dr. Jerry (right) spent their professional careers working together at the Anderson Orthopaedic Institute.

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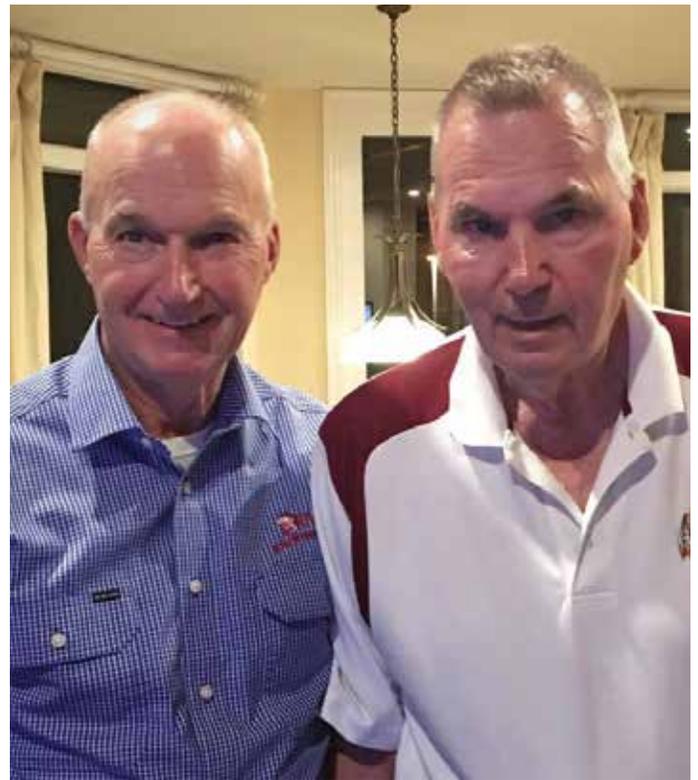
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Dr. Charles introduced his grandson, Charles A. Engh, III, to sailing when he was a young boy. Now grown, his grandson began medical school this fall.



Although the brothers are now retired and live far apart, Dr. Jerry (left) and Dr. Charles (right) still enjoy getting together. This picture was taken in October of 2018.

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100% of your gift is tax deductible.

Fellowship Program Celebrates 35th Anniversary



Dr. Andy Engh presents Dr. Adolph Lombardi with a gift of appreciation for serving as the keynote speaker at the reunion meeting. Dr. Lombardi completed his fellowship in 1987 and has become a prominent leader in the joint replacement community.

Becoming an orthopaedic surgeon involves a rather lengthy education. After four years of college and four years of medical school, doctors complete a five-year residency in orthopaedics. For those who wish to specialize in joint replacement after finishing their residency, a fellowship program with training from experienced surgeons is among the best ways to gain a comprehensive understanding of the field.

Founded in 1983 by Drs. Charles and Jerry Engh, the Anderson Clinic Post-Graduate Medical Education Foundation is a non-profit organization that offers a one-year clinical fellowship in adult joint reconstruction. The fellowship faculty currently has five attending surgeons including Dr. Andy Engh, Dr. Bill Hamilton, Dr. Kevin Fricka, Dr. Nitin Goyal and Dr. Craig McAsey.

During their year of training, the fellows work with each of the attending surgeons to become familiar with the nuances of their surgical techniques and clinical practices. The fellowship curriculum stresses clinical evaluation of primary and revision hip and knee arthroplasty patients, surgical reconstruction, and post-operative management. The primary goal of the program is to provide advanced training in adult joint reconstructive surgery by teaching each fellow to use a variety of contemporary approaches and techniques based on a multifaceted approach to address the unique needs of each patient.

See 35th Anniversary, page 12



Orthopaedic surgeons who have completed a fellowship at the Anderson Orthopaedic Institute pose with Dr. Jerry (center) and the other attendings during the 35th reunion meeting in June 2018.

35th Anniversary Continued from page 11

While completing their training, the fellows also have the opportunity to work on research projects in conjunction with the staff at the Anderson Orthopaedic Research Institute (AORI). Combining the clinical insights of the fellows and the attending surgeons with the engineering and statistical expertise of AORI's staff has enabled many high-quality research studies over the years. With more than 100 orthopaedic surgeons who have completed the fellowship and gone on to their own practices, the implants and surgical techniques pioneered at the Anderson Orthopaedic Institute are now available to patients throughout the United States and around the world.

At the fellowship reunion meeting in June 2018, 44 Anderson fellows gathered for a two-day scientific meeting where they celebrated the 35th anniversary of the program. During the course of the meeting, the fellows shared their clinical and research experiences while renewing friendships forged over many years. The fellows also celebrated the 50th wedding anniversary of Patty and Dr. Jerry Engh. With gratitude for the contributions that the

fellows and attending surgeons make to AORI's research, we join them in wishing Patty and Dr. Jerry many more years of happiness.



Dr. Jerry and Patty Engh share a kiss while celebrating their 50th wedding anniversary during the 2018 Fellowship Reunion.

AORI Launches Study Continued from page 1

lower overall cost, fewer complications, and improved outcomes. Yet there are also concerns regarding the potential for increased revision rates among partial knee patients. As opposed to totals where the entire joint is replaced, partials can require revision if the compartments that were not replaced eventually develop arthritis.

To address these issues among similar patient populations, AORI has launched a prospective, randomized study to compare partials and totals. This study was developed by Dr. Robert (Bob) Sershon, who is currently doing a fellowship at the Anderson Orthopaedic Institute. Dr. Sershon initiated the study during the final year of his orthopaedic residency program at Rush University (Chicago, IL) and patient enrollment will occur at Rush and AORI. To create similar groups, the 112 patients to be enrolled in the study will be randomly assigned to receive a partial or total knee replacement at the time of their surgery. All patients will be followed at regular intervals to evaluate pain, function, and radiographic outcome after their knee replacement. As this study progresses, we look forward to sharing the results with the readers of the *Joint Journal* and the entire orthopaedic community.



Dr. Bob Sershon began his 1-year fellowship at the Anderson Orthopaedic Institute in August of 2018.

Remembering Patricia Larkins (1922 - 2017)

Patricia Quinn Larkins led a full life that included youthful adventure, time devoted to family, and a fulfilling professional career. Born in Bishop, California, in 1922, Pat was the oldest of three children. She spent her early childhood in northern Mexico where her father was an accountant at a copper mine. At the age of 10, she returned to the United States and lived in Santa Monica, California, until 1941, when she began college at Lawrence University, in Appleton, Wisconsin. After her sophomore year, she left college for Tucson, Arizona, with the ambition of learning to fly and joining the Women Airforce Service Pilots. When that program ended, she returned to college at UCLA and completed her bachelor's degree in political science with a minor in Spanish in 1945. Soon after, she traveled to Japan with the American Red Cross, then to Germany with the State Department.

In the early 1950s, Pat went to work at the Naval Ordnance Test Station (NOTS) in China Lake, California. There she met her future husband, Howard Larkins. After marrying him in 1953, she followed his job transfers, moving from Carpinteria, California, to Eau Claire, Wisconsin, to Bloomfield, Connecticut, to Houston, Texas, and finally, in 1967, to Alexandria, Virginia. After devoting a decade to raising her son and daughter, she began a career as a real estate agent in the early 1970s.

Pat continued working as a real estate agent until retiring in 2013 at the age of 91, despite sustaining a femoral neck fracture in 1999 that occurred when she fell while working in her kitchen.

Admitted to the Inova Mount Vernon Hospital, she underwent a bipolar hemiarthroplasty by Dr. Jim McAuley that effectively replaced half of her hip joint. Hip replacement patients typically need an acetabular component implanted to replace worn and damaged cartilage in the socket portion of their joint, but Pat's acetabulum had good cartilage without defects. To minimize the extent of her surgery, a conventional porous-coated stem was implanted in her femur coupled with a metal ball that articulated against her own acetabular cartilage. Although a hemiarthroplasty patient's acetabular cartilage can sometimes erode over time requiring a revision procedure, Pat's bipolar proved to be durable, enabling her to return to her real estate career and maintain her mobility into her 90s.

With a professional career that extended well past typical retirement age, Pat continued working because she was a very social person who enjoyed the interactions with clients, friends, and colleagues that her career afforded. Although she called Alexandria home for 47 years, Pat was an avid traveler over the course of her life, visiting China, Jordan, Egypt, Turkey, Russia, Norway, and Alaska.

Because she deeply valued her independence and mobility, Pat kindly remembered AORI in her estate plans when she passed at the age of 95. With profound gratitude for her generosity, everyone at AORI extends our sincere condolence to Pat's family and friends. Inspired by her legacy, we will continue our research efforts with the goal of providing joint replacement patients a lifetime of pain-free mobility.



Patricia Larkins worked as a real estate agent into her 90s.



Patricia Larkins as she appeared in the yearbook from her college years at Lawrence University.

Dave Borowski

Continued from page 3

on them and me. I've been going to burn camps ever since. I want them to know they aren't victims. They are survivors!"

In 2003, Dave and Kerry started the Flicker of Hope Foundation (www.flickerofhope.org), to support burn survivors. When Dave received his scholarships to college, it changed his whole life. Now, he tries to do the same for others. "Many burn survivors find it difficult to enter into regular society due to disfigurement or other burn-related problems. We want to help them build careers not just get menial jobs. To date, we've given \$250,000 in scholarships to burn survivors for trade school or college." One of the recipients was a young lady named Jennifer who was burned from the waist down while sitting in the kitchen sink when she was a young child. When her mother stepped away to answer the phone, Jennifer turned on the hot water and scalded herself. "Jennifer wanted to be a licensed massage therapist and help others, so we gave her \$5,000 to become fully trained and licensed, with a specialty in myofascial therapy. Not only is she a massage therapist, but she travels all over the country teaching."

When he had his first hip replacement in 1986, polyethylene liner wear after years of use was a common reason for additional surgery. Almost 13 years after his initial hip replacement, Dave had a revision to replace his worn liner. Having undergone several hip surgeries, he subsequently developed hip instability that resulted in multiple hip dislocations. While Dr. Charlie did Dave's original hip replacement and his first two revisions, Dr. Andy Ength took over when his father retired. Most recently, Dr. Andy added a metal locking ring when he revised Dave's hip



Dave shares fun times with kids at a Virginia Burn Camp.

in 2016 to help keep his femoral head from dislocating. "I haven't dislocated since then," Dave declares. "It has given me a whole new freedom!"

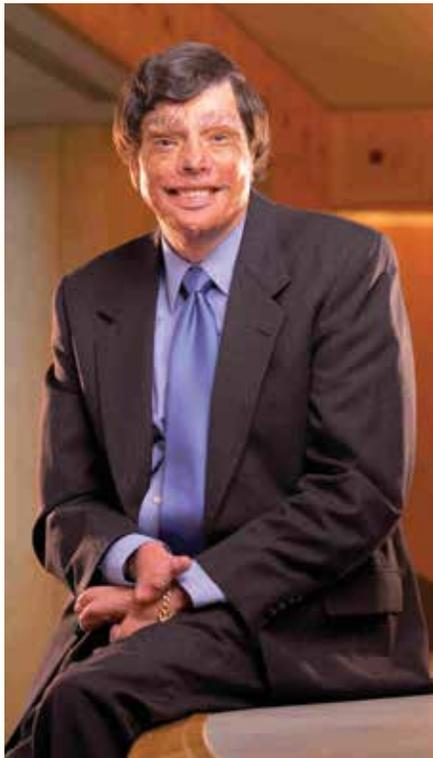
From the beginning of his young life, Dave had to choose between indulging in self-pity as a victim or building confidence and self-esteem from surviving his many ordeals. He chose the latter. "I had a family that accepted me as I was. They gave me independence, respect, and support. From the time I can remember, I was an optimistic extrovert. When kids would stare at me with sideways glances, I was pro-active. I'd walk up to those staring at me to see the "Dave-in-the-box" and break the ice with my smile

and engaging personality. I have tons and tons of friends!

I tell the kids at burn camp, "Everyone gets scars, some on the inside, some on the outside. We can adapt. They may not. Focus on what is important, the individual, not the outside package. You can be a solid contributor to society regardless of what you look like. Put together the right interior! Think about your adversity but refuse to consider failure!" To read more about Dave Borowski's incredible journey, check out his book, *On a Ring and a Prayer, The Remarkable Life of a Burn Survivor* at www.flickerofhope.org or Amazon Books.

Why Dave Borowski Wants to Share His Legacy with AORI

By Renée Burkett



Mr. Dave Borowski is a hip replacement patient and AORI benefactor.

What if your earliest childhood memory was waking up in a hospital bed in pain after foot surgery? If instead of running and playing like other children, you lived in a body cast for six months and skated around on your belly using a homemade skateboard? If you had dozens of reconstructive surgeries during the first few decades of your life to help you use your hands, create facial features, and help you walk, but still limped and had severe pain? How would you feel? And what if one of your legs was several inches shorter than the other

and your hip was unstable because it did not form properly? Wouldn't it be incredible when you finally found an orthopaedic surgeon who knew what to do and did it, and for the first time in your entire life, you had the ability to walk without pain? This is Dave Borowski's experience and the reason he has become an AORI donor.

"There is no question in my mind, the Anderson Orthopaedic Institute saved my life on several occasions," Mr. Borowski emphatically proclaims. "Because of their research and their many updates to technology, I was able to receive surgeries on my hip that have given me greater freedom of movement, less fear of dislocation and pain-free mobility! My face lost the contorted look it had from all the years of intense pain."

Through his estate, Mr. Borowski has generously made provisions to donate funding to support AORI after his passing. He has had a successful career and wants to share the wealth. "We chose AORI as a beneficiary because their research changed my life! Dr. Charlie pioneered the use of extensively porous-coated hip implants and his data helped get them approved by the FDA." When cementless fixation first became available, Dr. Charlie's very thorough research established porous coating using sintered beads as a gold standard for implant fixation.

After all of these years, Dave continues to see Dr. Andy. "He helps

me remain mobile. I want our estate to support their ongoing research, so they can continue to improve and fine-tune the surgical techniques and implant systems that restore pain-free mobility. I feel blessed to partner with them! My life did a 180 degree turn because of what became available to me through Anderson. Their research and development enabled them to get the best stuff in my leg, changing my life in a grand manner! One of the best things I can do is to give back." (For more about Mr. Borowski's life and incredible story, see *Overcoming Incredible Odds, Mr. Dave Borowski - Hip Patient* in this copy of the *Joint Journal*.)

Mr. Borowski and his wife, Kerry, believe AORI is a worthy investment. Dave shares, "There's no question in my mind about my commitment to donate to AORI. I did well. We have no debt. Whatever is left over, I want to share with those who have helped me."

Since AORI has relied on donations to sustain its mobility-restoring research over the past 46 years, everyone at AORI is grateful to Dave and Kerry Borowski for their generosity. If you would like to make a tax-deductible donation to AORI, please go online to www.aori.org and click on the word "Donate" at the top of the page. Or, you can use the attached envelope to send a gift. Every donation goes towards supporting the research that has kept us on the cutting edge of joint replacement science and technology.

JOINT JOURNAL

P.O. Box 7088
Alexandria, Virginia 22307

The Joint Journal is published by Drs. C. Engh, G. Engh, C. Anderson Engh, K. Fricka, W. Hamilton, N. Goyal, and C. McAsey for the friends of the Anderson Orthopaedic Research Institute (AORI). Its contents are not intended as a substitute for medical advice.

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