A Team Effort
OrthoVirginia Sports Medicine Specialists Return Elite Athletes to Competition see page 6
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I’m pleased to present the fall 2015 edition of OrthoVirginia Magazine. In this issue, you’ll read about the people who benefit from the most advanced orthopedic services in Virginia: an ultra-marathoner back in the race after a knee bursectomy, a young and active business owner who opted to have both knees replaced at the same time, a college volleyball star who returned to the court after Tommy John surgery, and an entire team of elite soccer players who will play Division 1 college soccer next year thanks to expert care from our sports medicine specialists.

Fall is football season and that means high school, college and professional players are back on the gridiron. Read the many ways in which OrthoVirginia physicians support these athletes both on and off the field. We also mark our fourth year as the Official Orthopedic and Physical Therapy Partner of the Washington Redskins.

As we approach the first anniversary of the merger between Commonwealth Orthopedics and OrthoVirginia, I’m pleased to report our combined practice is thriving. We are the region’s leading provider of expert orthopedic and therapy services, with more than 80 physicians, 21 offices and 14 physical therapy locations throughout Northern Virginia and greater Richmond.

Our newly updated website features everything you need to know about our practice. It includes a comprehensive listing of our office locations and physicians, information about our services and a complete overview of our specialties. There’s also a patient portal and dedicated pages where patients can request a non-urgent appointment or pay a bill. Take a look at www.orthovirginia.com.

Ben Kittredge, MD
President, OrthoVirginia North
Ultra-Marathoner Returns to the Race
Knee Bursectomy Relieves Chronic Pain

Emmett is a self-proclaimed exercise fanatic. On any given day, you’ll find him running, biking, swimming or weight training in the gym. He regularly competes in marathons, ultra-marathons, trail running, cycling, triathlons and IRONMAN® events.

With all this activity, the 48-year-old from Reston is no stranger to the orthopedic surgeon’s office. Overuse injuries are a part of his life. When he does get hurt, OrthoVirginia is his first call for help. And Keith Lawhorn, MD, is his surgeon of choice. Over the years, Dr. Lawhorn has repaired a torn meniscus in Emmett’s knee, and treated a hamstring strain, tibial stress fracture and bone bruise.

Several years ago, Emmett developed pain and swelling in his left knee. Dr. Lawhorn diagnosed bursitis – an inflammation of the fluid-filled sac that covers and cushions the bony prominences in the front of the knee. The condition results from injury or overuse, such as excessive training or athletic competition. Pain and swelling can sometimes lead to an obvious lump when too much fluid collects under the skin.

Bursitis is most commonly treated symptomatically, says Dr. Lawhorn, whose areas of specialization include arthroscopic knee surgery. “Ice, rest and anti-inflammatory medications can help, as can avoidance of pressure on the front of the knee,” he explains. “Modality therapy such as ultrasound
may also be beneficial in select cases.” If the bursitis does not resolve with conservative management, corticosteroid injections may be helpful. If they fail, surgery may be necessary to remove the inflamed bursa and resolve the pain.

Despite temporary relief from the non-operative measures mentioned above, Emmett’s pain persisted and limited his ability to train and compete. He ultimately underwent a bursectomy at OrthoVirginia’s Outpatient Surgery Center in Herndon. Dr. Lawhorn made several small incisions over the top of the knee to expose and excise the bursa. Since the bursa is in front of the kneecap, the knee joint was not impacted.

Emmett was up and walking immediately after his surgery. He returned to his IT job at Cisco the next day. “The entire process was so quick and easy it almost felt like drive-through surgery,” he says. “Walking right away was the best way to get me on the road to recovery.”

Through the years, he’s referred many people to Dr. Lawhorn and always appreciates his candid assessment. “As with any weekend warrior who gets injured, my first question is ‘Can I train through this?’ or ‘When can I return to my training schedule?’” he says. “Dr. Lawhorn is an athlete himself, so he understands and supports my goals. He’s completely open with me, telling me when to stop, offering cross-training suggestions or helping me through the injury.”

Emmett, who has run in the New York Marathon and countless other ultra-marathons and triathlons, is happy to be pain free and back to his high level of performance. He competed in the 2015 Marine Corps Marathon in Washington, DC, in October, and plans to do another IRONMAN and more ultra-running events next year. “Exercise is my life,” he says. “Dr. Lawhorn and everyone at OrthoVirginia have kept me doing what I love to do.”

Keith Lawhorn, MD, graduated with a BA in Chemistry from the University of Virginia and continued his education at the University of Virginia School of Medicine, where he earned his medical degree. He completed a general surgery internship and orthopaedic residency at the Medical College of Virginia. Dr. Lawhorn served on active duty in the U.S. Air Force for eight years, reaching the rank of Lt. Colonel.

For full biographies and a complete directory of the physicians at OrthoVirginia who perform these and other procedures visit our website at orthovirginia.com.
When Julia broke her finger playing soccer, she turned to the orthopedic specialists who had treated her previous sports-related injuries: the sports medicine experts at OrthoVirginia. Although she didn’t know it at the time, the 17-year-old midfielder was part of a trend. She and 10 of her teammates from the elite soccer club FC Virginia sought care at OrthoVirginia for various sprains, strains, ACL injuries, fractures and contusions suffered on the soccer field. All returned to the team healthy and, in some cases, stronger than when they left it. And each of these talented young women is going on to play Division I soccer in college next year. (see sidebar, page 7)

“At OrthoVirginia, our sports medicine specialists have years of experience caring for elite athletes at the high school, college and professional level,” says surgeon David Novak, who

A Team Effort
OrthoVirginia Sports Medicine Specialists Return Elite Athletes to Competition
Members of the elite FC Virginia team will all be playing Division I soccer next fall.

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<tr>
<th>FC Virginia Player</th>
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<td>Alana</td>
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<td>Ashley</td>
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<td>Emily</td>
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<td>Julia</td>
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<td>Kayla</td>
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<td>Alexandra (Lexi)</td>
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<td>Lindsay</td>
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<td>Margaret (Maggie)</td>
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<td>Sierra (SiSi)</td>
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“Many of our physicians are not only fellowship-trained, but also hold a Certificate of Added Qualification – known as a CAQ – in sports medicine. The type of sub-specialized care we provide gets these high-level players back to their sports as quickly and safely as possible.”

— David J. Novak, MD

Now a senior at Stonebridge High School in Ashburn, Julia will graduate early and head to Florida State University to play soccer in the spring. She and her teammates are always happy with the care they receive at OrthoVirginia. “We recommend them for every injury we get – especially ACL tears,” she says. “Everybody has come back really good.”

Julia’s teammate, Lauren, agrees. She’s been to OrthoVirginia multiple times for injuries including an MCL tear in her knee, a broken wrist and ankle sprains. Her go-to physician is Christopher Annunziata, MD. He’s repaired her MCL, treated her broken wrist, and referred her for rehabilitation with an OrthoVirginia physical therapist. “I love him and I wouldn’t go to anyone else,” she says. “As captain of the team, my role is to be a leader and set an example for my teammates to always get better, always improve. The care I get from Dr. Annunziata and OrthoVirginia helps me get back out there and do that.” Lauren will play as a defender at the University of Florida next year.

FC Virginia is part of the Elite Clubs National League (ECNL), which was founded to enhance the development of top female soccer players in the United States. FC Virginia president and owner Terry Foley started his Northern Virginia-based club as an elite girl’s program in 2006 and recently added a boy’s program. He’s worked with OrthoVirginia for years, and says all of his players have great care and a great experience.”

They treated defender Lexi for a sprained ankle. “Many of our physicians are not only fellowship-trained, but also hold a Certificate of Added Qualification – known as a CAQ – in sports medicine. The type of sub-specialized care we provide gets these high-level players back to their sports as quickly and safely as possible.”

After she fractured her finger, Julia initially consulted OrthoVirginia surgeon George Aguiar, MD, who had performed surgery to fix a broken metatarsal bone in her foot three years ago. Dr. Aguiar referred her to Peter Thomas, MD, an OrthoVirginia hand and upper extremity specialist. When time and therapy failed to improve Julia’s injury, Dr. Thomas performed scar removal and contracture release to restore range of motion. “Integral to this process was the attention of our certified hand therapists, who are among the best in the business,” he says. “Julia’s therapist, Karen, maximized her outcomes with diligent attention to progressive motion.”
come back healthy and stronger and ready to play. We’re fortunate to have access to this excellent resource of high-level sports medicine care and rehabilitation because most of our athletes are looking to play Division I college or professionally on a national team.”

Some FC Virginia players also compete at the international level. Forward Emily, who will play at the University of North Carolina in 2017, is part of the U.S. U-18 Women’s National Team, which aims to qualify for women’s World Cup competition. Emily received care from OrthoVirginia surgeon Mark Madden, MD, for a broken collarbone.

Elite athletes have a strong desire to return safely to their sport as soon as possible, says Dr. Aguiar, who has managed simple to complex injuries in players from high school and professional teams for many years. “High-level athletes usually work well with timelines in order to mentally prepare for a successful return to sports. Setting concrete goals is important for them in recovering from injuries. Close monitoring of their progress is paramount.”

Dr. Aguiar notes that orthopedic care is always highly individualized. He performed arthroscopic surgery to reconstruct the knees of two FC Virginia players after each sustained a season-ending ACL tear. Midfielder Lindsay returned to the soccer field last season and will play next year at the University of Florida. Forward SiSi, whose ACL procedure was 18 months ago, is back in action and will play for Liberty University in 2016.

In addition to sports medicine subspecialists, OrthoVirginia provides the full spectrum of services to return athletes to peak form. “We offer a multi-disciplinary approach including therapy, athletic training and various aids to allow an earlier return to sport,” Dr. Thomas says. “Players and coaches turn to us for our excellent operative and non-operative outcomes, and a dedication to seeing our care through to a complete return to function.”

As for the athletes themselves? They are grateful to have such an amazing team of caregivers close by. FC Virginia captain Lauren sums up the sentiment of her fellow players: “We’ve all put so much into soccer – training and time and travel and money. Having this great care that gets us healthy and 100% back in the game means the world to us.”

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George Aguiar, MD, graduated with a BS in Biology from Georgetown University, and then continued his education at the Georgetown University School of Medicine where he earned his medical degree and was named to Alpha Omega Alpha. Dr. Aguiar completed his surgical internship and orthopaedic residency at Georgetown University Medical Center. www.georgeaguiarmd.com

David J. Novak, MD earned a BA in Economics from the University of Pennsylvania and received his medical degree from Georgetown University. He remained at Georgetown University Medical Center to complete a residency in orthopaedic surgery. He then completed advanced fellowship training in sports medicine and arthroscopy at the Southern California Orthopedic Institute in Van Nuys, California. www.davidnovakmd.com

Peter R. Thomas, MD, earned a BA in Biology from Johns Hopkins University and a Masters in Applied Molecular Biology from the University of Maryland. Dr. Thomas received his medical degree from the Pennsylvania State University School of Medicine. He went on to an orthopaedic surgery residency at Union Memorial Hospital in Baltimore, where he also completed a fellowship in hand surgery at the hospital’s Curtis National Hand Center. His training includes visiting fellow in the Medical Device Fellowship Program at the Food and Drug Administration’s Center for Devices and Radiologic Health.

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TOP LEFT: Dr. David Novak and Jami Fano, PA, pose with FC Virginia teammates who were OrthoVirginia patients who overcame injuries and will now play Division I soccer next year. (left to right): Lauren, Lexi, Bri, and Maggie (kneeling).

TOP RIGHT: Drs. Peter Thomas (left) and George Aguiar helped Michelle, Lindsay, Julia and SiSi (left to right) get back on the soccer field after ACL and finger surgeries.

RIGHT: Dr. Keith Lawhorn with two of his patients, Emma (left) and Meaghan, who came back to the game after knee and ankle injuries.
After a vigorous weightlifting workout at the gym, Michael was moving heavy furniture when he heard a loud snap. His left arm hung loose at his side and his biceps muscle contracted all the way into his shoulder. Nauseous and in shock, the 46-year-old went to the emergency room where an X-ray showed he had ruptured his distal biceps tendon, the long, cord-like structure that connects the biceps muscle to the forearm.

The ER physician sent Michael home in a sling and recommended he consult Daniel Thompson, MD, an OrthoVirginia surgeon whose areas of specialization include sports medicine. Three days later, Michael was in Dr. Thompson’s office.

“Michael was a young, active patient with a classic distal biceps rupture,” Dr. Thompson explains. “These injuries are especially common in men between the ages of 40 and 70, and occur with an awkward lifting motion precipitated by muscle fatigue. The injury causes some mild loss of elbow flexion strength, but much more noticeable loss of supination strength – the ability to twist the palm upward.” There’s also a Popeye-like bulge in the upper arm above the elbow when the muscle is flexed.

Dr. Thompson recommended that Michael have a distal biceps repair. This is often the advice for younger, more active patients because it leads to better cosmetic function and strength. In Michael’s case, Dr. Thompson re-attached the torn biceps tendon to the radius, the bone just below the elbow. He drilled a hole in the bone and used both a dissolvable screw and a small metal button to secure the tendon into the hole. The outpatient procedure took about one hour and Michael went home the same day.

His recovery progressed rapidly. He wore a sling home from the hospital and slept in it the first night. But the next day, Dr. Thompson told him to take the sling off. The sooner the arm was moving, the better. This newer protocol, which promotes faster range of motion and recovery, is possible due to the strength of the repair.

“Fixation techniques have markedly improved to the point that rapid mobilization of the arm is standard, as opposed to long periods of immobility and restriction,” explains Mark Hartley, MD, an OrthoVirginia surgeon whose areas of specialization include the shoulder. “Patients must avoid heavy lifting or vigorous exercise for the first six to 12 weeks, but otherwise return to normal activities and exercise relatively quickly.”

Michael was back at work just four days after his surgery and did not need any physical therapy. He straightened his arm while he slept and let it dangle by his side when he walked, which helped with flexibility and length. For the first six weeks, he couldn’t lift anything heavier than a coffee cup. He also couldn’t bend his arm without help. “I’d pick up a French fry with my left arm and use my other arm to bend it until I got that French fry to my mouth. It helped maintain my range of motion. I was really motivated to get that French fry,” he jokes.

After a month, he could bike again. Within two months, he was lifting three-pound weights. He’s gradually increased his training and now lifts 45-pound weights. “Michael was a great candidate for the improved function offered with surgical treatment of this type of injury,” says Dr. Thompson, who notes that surgery and recovery are very good with a motivated patient.

Michael credits Dr. Thompson’s positive attitude for the excellent outcome. “He’s an athlete himself so he understands what exercise means to me and how important it is for me to get back to it,” he says. “His confidence is infectious.”

Mark C. Hartley, MD, earned a BA from Princeton University and an MS from Georgetown University. He received a medical degree from Georgetown University School of Medicine and stayed on at Georgetown to complete both his surgical internship and orthopaedic residency. Dr. Hartley served as Chief of the Total Joint Replacement Service at Eisenhower Army Medical Center. www.markhartleymd.com

Daniel E. Thompson, MD, earned a BS in Biomechanical Engineering from Stanford University and then earned his medical degree from the University of Mississippi School of Medicine. He completed both his general surgery internship and orthopaedic residency at Georgetown University Medical Center. www.danielthompsonmd.com

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Two for the Road
Simultaneous Bilateral Knee Replacement Benefits Select Patients

Years of running had left Chris with almost no cartilage in his right knee. As his pain worsened, the 52-year-old electrical contractor from Ashburn tried every non-operative remedy he could think of to avoid surgery – rest, over-the-counter medications, physical therapy and cortisone injections. But the pain always returned.

Finally, he reached the breaking point. “I couldn’t ignore the pain any longer,” he says. “It impacted my daily life significantly. I walked with a limp; I couldn’t be as active as I wanted to be. When I’d go on hikes with my family, I’d spend most of the time sitting on a bench.”

Chris was ready to consider knee replacement. And he knew where to turn: OrthoVirginia surgeon Thomas Klein, MD. Dr. Klein had performed ACL reconstruction on Chris’s wife and Chris had been seeing him ever since for his knee pain. By the time he made the decision to have a knee replacement, he was surprised to learn that his left knee was nearly as bad as his right. Dr. Klein suggested that he have both knees replaced at the same time.

Although many people ask for simultaneous bilateral knee replacement, only a portion actually qualify for the procedure. “A patient must be highly motivated, in good health, with a positive attitude to meet the challenges of surgery and rehabilitation,” Dr. Klein says. “Patients such as Chris, with long-standing severe arthritis in both knees, who literally ‘don’t have a leg to stand on,’ are often the best candidates for bilateral replacement because they’ve already shown they can tolerate a high level of pain.”

Another indication to do both knees at the same time is if the patient has flexion contractures in the knees, a condition in which the joints do not straighten fully. “If you do knee replacement on one knee and there is a flexion contracture in the other knee, the knee replacement has a high risk of developing a flexion contracture as well,” explains OrthoVirginia surgeon David Romness, MD. “Replacing both knees simultaneously reduces that risk.”

After simultaneous knee replacements, Chris bikes from his home in Ashburn to his office in Reston.
Physical health is also a consideration. “Patients who undergo bilateral knee replacement must be in good health,” says OrthoVirginia surgeon Thomas Martinelli, MD. “A chronic condition such as hypertension, diabetes or obesity doesn’t necessary rule out the procedure. But if more than one of these conditions is present, the risk factors are too high.”

Chris knew the challenges he faced, but he also understood the advantages of having both knees replaced in a single surgical episode – the biggest being one rehabilitation period rather than two separate recoveries. He began physical therapy about a month before surgery to strengthen the muscles around his knees and, two days before Christmas, Dr. Klein performed the bilateral replacement. Chris was up and walking that evening and achieved his goal to be home with his family the following night, Christmas Eve. He began his post-op physical therapy the day after Christmas, gradu ally adding range of motion and strength. Within a week, he was able to return to work part-time at his electrical business. And within two months, he was back to doing all the things he hadn’t been able to do for so many years without pain – riding a bike, using the elliptical trainer, hiking in the woods and playing golf.

The recovery went smoothly for Chris, but Dr. Klein cautions that the first few weeks following a bilateral knee replacement are especially challenging for even the most motivated of patients. “It’s important that people have a strong support system at home, which is necessary in the first days and weeks after surgery,” he says. “Chris was surrounded by a young, active and positive family. Having that support makes a huge difference.”

Thomas J. Klein, MD, earned a BA in biology from Washington and Jefferson College before going on to graduate from medical school at Georgetown University School of Medicine. He completed his surgical internship in Danville, Pennsylvania, and did an orthopaedic surgery residency at Georgetown University Medical Center. www.thomaskleinmd.com

Thomas A. Martinelli, MD, graduated cum laude with a BS in Biology from Rensselaer Polytechnic Institute in Troy, New York. Dr. Martinelli earned his medical degree from Georgetown University School of Medicine in Washington, DC, attending on a Navy HPSP Scholarship. He then completed a six year residency in orthopaedic surgery at Georgetown University Medical Center.

David W. Romness, MD, graduated with a BS from the University of Richmond and earned his medical degree from Eastern Virginia Medical School. He then completed his surgical and orthopaedic training at the Mayo Clinic in Rochester, Minnesota. Dr. Romness is the Medical Director of the Joint Replacement Center at Virginia Hospital Center. www.davidromnessmd.com

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The Growing Prevalence of Tommy John Surgery

UCL Reconstruction is Not Just for Pitchers Anymore

For Alyson, it was déjà vu all over again. The 20-year-old George Mason University (GMU) volleyball player was going for a ball when a teammate cut it off, played it, and fell onto Alyson’s outstretched arm. The force of the fall injured the ulnar collateral ligament (UCL) in her elbow – the ligament that holds the upper and lower arm bones together. Just 10 months earlier, Alyson had suffered the same, though milder, injury in the same circumstances. Rehabilitation let her return to volleyball, but this time, she knew it was much worse. “The pain was so intense I thought I might have broken my arm,” she recalls. After X-rays showed that nothing was broken, Alyson consulted OrthoVirginia surgeon Frank Pettrone, MD, GMU’s long-time head team physician. He ordered an MRI, which confirmed a complete tear of her UCL. And he gave her some surprising news: she would need Tommy John surgery to repair the ligament.

Most people associate Tommy John surgery with baseball. And indeed, the vast majority of athletes who undergo the procedure are pitchers. It was named for Major League Baseball pitcher Tommy John, who was first to have the operation in 1974. During Tommy John surgery, the surgeon takes a healthy tendon from elsewhere in the body (the forearm or sometimes the leg) to replace the torn UCL. The healthy tendon is threaded through holes drilled into the bone above and below the elbow. The technique is one of the major advancements in sports medicine in the last quarter century and typically yields excellent results. Following his procedure, John went on to win another 164 baseball games with the Dodgers and the Yankees.

But Tommy John surgery is not just for pitchers anymore. Today, it’s increasingly common among a wide range of young athletes, including wrestlers, javelin throwers and volleyball players like Alyson. “We see the need for Tommy John surgery among younger and younger athletes in a variety of sports,” says Dr. Pettrone. “Not only professional and college athletes, but high school and even middle school players. Overuse injuries are one factor driving this trend. Also many younger athletes have the impression if they have the UCL reconstructed it will be stronger and safer.”

Not all UCL injuries require surgery. Most are treated with conservative measures such as rest, ice and over-the-counter pain medications. Physical therapy to strengthen surrounding muscles is also effective. However, athletes such as Alyson who sustain a severe injury or want to resume strenuous overhead or throwing activities benefit from having the procedure as soon as possible after the injury.

Three days after her diagnosis, Alyson underwent outpatient surgery to repair her UCL. She spent the first two weeks in a splint and sling, followed by a month in a brace to allow a controlled range of motion for the elbow. “The first six weeks after surgery were miserable,” says Alyson. “I couldn’t move or do anything for myself. I couldn’t even put on my own shoes.”

As Dr. Pettrone notes, rehabbing from UCL surgery is a difficult and challenging process. “This is typically a very slow rehabilitation. It takes time for the new ligament to stabilize,” he says. “Rehabilitation begins with controlled range of motion in a splint for six weeks, then progressive strengthening for...
six months or more. Most of these athletes come back within a year. Pitchers start incremental throwing as part of their return.” Once they rejoin the rotation, pitchers are typically put on a pitch limit to protect the repair and prevent re-injury.

Alyson began physical therapy six weeks post-surgery, focusing first on restoring grip strength to her hand. She continued to increase her mobility until the brace was finally unlocked and she was able to work toward full range of motion. With a goal to play in all of her spring tournaments, she accelerated the rehab process and returned to the volleyball court just seven months after her surgery. But she found herself babying her injury, which affected her overall game. Then she tore the anterior cruciate ligament (ACL) in her knee. “That’s what it took to get over my elbow,” she says. “I played my entire senior year at GMU with a torn ACL. I wore a knee brace, I didn’t jump and I used my arm a lot. My teammates provided tremendous secondary support.” When the season was over, she had surgery to repair her ACL.

Now living in New Jersey and working for a large pharmaceutical company, Alyson has retired from competitive volleyball. She still plays for fun in recreational leagues. She credits Dr. Pettrone with providing the support she needed to undergo surgery, attack her rehabilitation head on, and return to the volleyball court quickly and safely. And she has some words of advice for her fellow athletes. “With an injury like this, it’s not the physical pain that’s discouraging, it’s the mental side of it,” she says. “It’s hard not being with the team and being so dependent on other people to do even the simplest things for you. And when you hear it’s a six- to eight-month recovery – it seems like an eternity. But once you come to terms with it mentally and switch your mindset, those months fly by.”

Frank A. Pettrone, MD, earned a BA from Brown University and a medical degree from Georgetown University. Dr. Pettrone completed both his internship and residency program at Georgetown University Medical Center. Then, before joining Commonwealth Orthopaedics, he served a tour in the United States Navy as an orthopaedic surgeon.

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OrthoVirginia and the Redskins: Improving Health On and Off the Field

OrthoVirginia is proud to mark its fourth year as the Official Orthopedic and Physical Therapy Partner of the Washington Redskins. Our expert physicians and physical therapists (PTs) work with the team to promote community health and wellness initiatives and make Redskins fans the healthiest in the NFL. Physicians and PTs lend their talents to community events, too, including fitness classes, injury-prevention seminars, a mini-football combine for kids and a youth football event at Redskins Park.

OrthoVirginia and the Redskins share a long and proud history. For many years, OrthoVirginia’s surgeons have served as Redskins team physicians, providing orthopedic expertise to keep players in top condition.
OrthoVirginia Welcomes New Physicians

Amy E. Henning, DO, pediatrics and pediatric sports medicine. Growing up in Columbia, Missouri, Dr. Henning wanted to be a doctor like her grandfather. Her interest in pediatric sports medicine began at age 14 when a dislocated shoulder prevented her from returning to gymnastics, a sport she loved. “Practicing orthopedics gives me the opportunity to treat young patients who are hurt, make them better, and get them back to doing the things they want to do,” she says. Dr. Henning spent 12 years in the U.S. Navy as a general practitioner aboard the aircraft carrier USS George Washington, and as a general orthopedic surgeon caring for military families at Walter Reed National Medical Center and Guantanamo Bay, Cuba. Outside of work she enjoys travel, golf and spending time with her husband and son.

Candice P. Holden, MD, pediatrics and pediatric sports medicine. When she broke her leg ice skating at the age of 5, Dr. Holden set her future career in motion. “I liked the orthopedic surgeon so much, I decided that’s what I wanted to do,” she says. Dr. Holden chose to specialize in pediatric orthopedics because she always felt a special rapport with children. As a former college gymnast, she understands high-level sports and young people’s desire to excel in them. During her medical training, she took a break from academics to serve on medical missions in Latin America, providing pediatric care to young patients in Costa Rica, and caring for families in Mexico and Peru. An avid athlete, Dr. Holden enjoys golf and skiing and enthusiastically supports her two sons’ many sports activities.

William R. Mook, MD, sports medicine and general orthopedics. Dr. Mook grew up fascinated with science and anatomy. In a letter to his future self written in high school, he accurately predicted his forthcoming career as an orthopedic surgeon. His year-round involvement in athletics made sports medicine a perfect fit. During his fellowship at the Steadman Philippon Research Institute in Vail, Colorado, Dr. Mook served as traveling physician for the U.S. Ski and Snowboard teams. Getting people back to what they love drives his passion for orthopedics. “The tangible outcome that orthopedic surgery provides to my patients is highly rewarding,” he says. Returning to Northern Virginia is a homecoming for Dr. Mook, who was raised in Sterling. Outside of work, his many interests include basketball, softball, hiking and fly-fishing. He and his wife recently welcomed their second child.

To see complete biographies of these new physicians, go to orthovirginia.com

OrthoVirginia: A Commitment to Excellence

It’s been nearly a year since Commonwealth Orthopedics joined forces with OrthoVirginia in Richmond to create the largest orthopedic specialty group in Virginia. Now known as OrthoVirginia, the combined practice offers the community a larger and stronger network of orthopedic specialists, and a broader array of services and offices spread over a wide geographic area. Together, we provide comprehensive, high quality, cost-effective care to patients, and promote medical excellence in the community.
Strong hands are a must for Jenni, a physical therapist (PT) who worked at OrthoVirginia. When she injured her thumb while playing with her son, Jeremiah, she initially thought it was a sprain. But the pain and weakness worsened, so she consulted her OrthoVirginia colleague, Certified Hand Therapist Katie Canestrano, for advice. Katie recommended that Jenni have an X-ray to be sure nothing was seriously wrong.

Jenni took the X-ray to Alexander Croog, MD, an OrthoVirginia hand and upper extremity specialist, who didn't like the look of the alignment and ordered an MRI. The test revealed that Jenni had torn the ligament that connects the bones at the base of the thumb, a condition known as skier’s thumb. “The name arose because a simple fall on an outstretched hand will not tear the ligament, but having a ski pole in the palm of the hand creates a force strong enough to stress and tear it,” Dr. Croog explains. Any injury in which the thumb is abnormally bent backward or to the side can cause the condition. “Sliding head first during baseball, getting hit while throwing a football, or any racquet or stick sport are commonly reported mechanisms,” he says.

Symptoms include pain, bruising and tender swelling on the inside base of the thumb, at the web space between the thumb and index finger. People may also experience pain and weakness when gripping or pinching something. “It’s important to seek prompt treatment for these types of injuries to prevent problems down the road,” says Daniel Laino, MD, a hand and upper extremity specialist at OrthoVirginia. “Untreated ligament tears can lead to chronic pain and instability, diminished hand function and early onset arthritis.”

As Dr. Croog notes, the preferred treatment for this type of injury has changed over the years. “Historically, immobilizing the thumb in a cast for four to six weeks was the recommended treatment, and this can still work if the ligament injury is very minor,”
he says. “However, in the majority of cases, surgery to fix the ligament is favored since it has excellent results.”

Jenni underwent a routine procedure that took less than an hour at OrthoVirginia’s Outpatient Surgery Center in Herndon. Dr. Croog reattached the ligament and put in an anchor screw to hold it in place as it healed.

Jenni spent a week in a soft splint and four weeks in a cast. She then embarked on eight weeks of hand therapy with Katie Canestrano to regain strength and stability. They worked on mobilization, passive range of motion, active assistive range of motion and other strength-building techniques. In addition, Katie made a temporary splint so Jenni could perform her PT job safely without stressing the ligament too much.

“Therapy for ligament injuries is highly specialized,” Katie says. “There’s a delicate balance between controlled stress to strengthen the healing tissues, and proper positioning and rest to protect the repair. Too much motion can cause the repair to rupture; too little and scar adhesions develop and the ligament won’t function properly.”

Following her surgery, casting and therapy, Jenni was back 100%. She now lives and works in Colorado, but she’ll never forget her colleagues back at OrthoVirginia who took such good care of her. “The whole process was very smooth,” she says. “It was easy to go from the doctor’s office to the surgical suite to physical therapy with no loss of time on any steps. Everyone who touched me in one way or another brought expertise, which made me feel confident in the plan of care.”

Alexander S. Croog, MD, earned a BA in Psychology from Harvard University before studying medicine at the University of Virginia School of Medicine. There, he was named to the Alpha Omega Alpha honor society. Dr. Croog completed his residency in orthopaedic surgery at New York University/Hospital for Joint Diseases in New York City under the leadership of Dr. Joseph Zuckerman.

Daniel K. Laino MD, Dr. Laino received his medical degree from The Ohio State University College of Medicine, graduating magna cum laude. He completed an orthopedic residency at the New York Hospital for Joint Diseases in New York City, and went on to a fellowship in hand, upper extremity and microvascular surgery at Duke University Medical Center. Dr. Laino’s many outside interests include running, golf and reading mystery novels. He and his wife, Catherine live in Reston with their golden retriever, Cooper.

For full biographies and a complete directory of the physicians at OrthoVirginia who perform these and other procedures visit our website at orthovirginia.com.
Imagine having a hip replacement and coming home the same day, returning to work within a few days and driving within a week. We’re headed in that direction, says OrthoVirginia physician Gordon Avery, MD. “Advancements in the surgical approach, anesthetic technique, and rapid rehabilitation protocols have already significantly decreased hospital stays and recovery time following elective total hip replacement. The trend is to move things along faster and, in the foreseeable future, hip replacement may become an outpatient procedure.”

The idea that patients could have a major operation like total hip replacement surgery and leave the hospital within a few hours would have been unimaginable a generation ago. But the standard of care has improved so dramatically in recent years that long hospital stays, long incisions and severe longstanding pain are no longer part of today’s modern procedures.

Notable developments include:

- **Improved surgical techniques.** Most hip replacement surgeries are minimally invasive, with numerous benefits to the patient. These include smaller incisions, less tissue trauma, and less bleeding and post-operative pain. As a result, patients leave the hospital sooner, rehab faster, and return to work and activities within weeks rather than months.

- **Improved implant placement and design.** Technical innovations include computer-assisted surgery, which uses pre-operative templates and intra-operative navigational guides for placement and positioning of the prosthesis; and customized, patient-specific implants that result in a more exact fit and better wear resistance over time.

- **More effective pain management.** OrthoVirginia surgeons use a new local anesthetic called Exparel® to dramatically reduce post-operative pain. The drug is injected into the wound site while the patient is still under sedation and lasts up to 72 hours.

- **Early mobilization.** Most hip replacement patients are up and walking immediately following surgery, which speeds recovery and return of function. Research indicates that early ambulation also decreases the incidence of known complications such as deep vein thrombosis and pulmonary embolism.

- **Shorter hospital stays.** As recently as a decade ago, total hip replacement patients spent four or five days in the hospital. Now, they spend just one or two. "The trend nationally is to get people home quicker and many OrthoVirginia patients go home the next day," Dr. Avery says. "In addition, the vast majority of our patients go directly home without having to use a rehabilitation fa-
Studies show patients do much better this way.” Shorter hospital stays also increase patient satisfaction.

One such happy customer is Elizabeth, who had both hips replaced earlier this year. The 69-year-old from Oakton suffered from long-standing pain in her right hip that continued to worsen despite her attempts to control it. “I tried everything, from physical therapy to cortisone injections, but I just couldn’t get rid of the pain,” she says.

Elizabeth consulted Dr. Avery at OrthoVirginia, where an X-ray revealed bone-on-bone arthritis. Several weeks later, he replaced Elizabeth's right hip. She was up and walking that same evening and went home just 48 hours later. The following day, a physical therapist came to her house to begin rehabilitation. She increased her activity incrementally over the next few weeks until she was walking unassisted.

Soon, however, Elizabeth noticed a problem. Her left hip had started to hurt and she was limping. “I didn’t go through surgery on my right hip to limp!” she says. She returned to Dr. Avery who confirmed the diagnosis of arthritis on her left side, and scheduled a second hip replacement surgery for June. This time, she recovered even faster. She stayed in the hospital just one night and advanced quickly in her home therapy. When she returned for her first post-op visit, Dr. Avery praised her progress and mobility.

Now pain free, with two new hips, Elizabeth has returned to the activity she most loves: walking the back roads of her Oakton neighborhood. She also rides an exercise bike and uses the treadmill. For anyone uncertain about hip replacement, she offers this advice: “The recovery is so fast and easy – why live with the pain? I had the surgery and I’m so glad. Now I’m done.”

Gordon L. Avery, MD, earned his undergraduate degree from Ithaca College, before going on to receive his medical degree from The University of New York at Buffalo, College of Medicine. He then moved to Washington, DC, and completed his internship and orthopaedic residency at Georgetown University Medical Center where he concluded his formal medical training as Chief Resident.

For full biographies and a complete directory of the physicians at OrthoVirginia who perform these and other procedures visit our website at orthovirginia.com.
OrthoVirginia’s specialists provide sports medicine services to 22 high school teams, George Mason University, NVCC and the Washington Redskins. Physicians work in partnership with athletic trainers to develop pre-season conditioning and injury-prevention programs; ensure that athletes are in top shape as they begin the season; and provide immediate medical care on the sidelines during football games. In addition, they carefully supervise athletes as they return to the playing field after an injury.

“Our surgeons are experts in the latest sports medicine practices and techniques, and offer every orthopedic subspecialty to keep these elite athletes ready to play,” says John McConnell, MD, who served for many years as team physician for the Redskins and is now team doctor for Annandale High School. “Athletes and trainers turn to us not only for medical care, but also for rehabilitation and physiatry services.”

Some OrthoVirginia physicians have long-standing relationships with local teams; others are new to the role. Anthony Avery, MD, is the new team physician for JEB Stuart High School in Falls Church. He works closely with the school’s athletic trainer to maximize care and treat the everyday sprains, twists, bumps and bruises that keep athletes away from their sport.

Involvement with local teams gives Dr. Avery and his OrthoVirginia colleagues a sense of civic pride and community connection. “Many of us grew up here and have been part of this community our entire lives,” he says. “It’s a chance to give back and support the community that supports us.”

John Reynolds, Athletic Training Program Administrator for Fairfax County Public Schools, says OrthoVirginia physicians provide invaluable support. “They’re a medical source for high quality orthopedic care and services, an information source for our athletic trainers, and a referral source for students and families. They also volunteer at our annual pre-participation exam program, evaluating individual orthopedic concerns and ensuring the event runs smoothly.”

The physicians are always available to offer their perspective, bounce around ideas or simply share what they know. “When a young player walks in with something that doesn’t make sense, we can pick up the phone, call an expert and ask, ‘What do you think?’ It’s tremendously helpful to have such a great resource at our fingertips,” Reynolds says.

Dr. Avery is the team physician for JEB Stuart High School.
Anthony L. Avery, MD, received a BS in Chemistry from Villanova University and earned his medical degree from Georgetown University School of Medicine. He then completed five years of orthopaedic surgery training including clinical training at Monmouth Medical Center, The Children’s Hospital of Philadelphia and Morristown Memorial Hospital. Dr. Avery went on to Brown University to complete a fellowship in sports medicine and arthroscopy. www.anthonyaverymd.com

John P. McConnell, MD, earned a BS in Chemistry from Georgetown University and received his medical degree from Georgetown University Medical School. He then completed a general surgery internship at Northshore University Hospital in Long Island, New York, and returned to Washington to do an orthopaedic surgery residency at Georgetown University Medical Center.

John Reynolds MS, ATC, VATL graduated with a BS in Athletic Training/Exercise Science from Ithaca College, an MS in Athletic Training from Indiana State University and then earned a MS in Exceptional Student Education from NOVA Southeastern University. He spent 16 years as an athletic trainer at George C. Marshall High School prior to becoming the Athletic Training Program Administrator for Fairfax County Public Schools in 2013. In this role, John works closely with the school divisions 50 athletic trainers, local school administrators and central office officials to promote effective, comprehensive care for over 28,000 student athletic participants annually.

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At OrthoVirginia, we’re the official orthopedic and physical therapy partner and team orthopedists for the Washington Redskins. We’re team physicians for the George Mason University Patriots and 21 area high schools. And we’re here to get anyone with a sports injury right back in the game. OrthoVirginia. Getting you back to your life.
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