Knee surgery allows basketball enthusiast to return to the court

Preston Fulmer, a microbiologist, underwent surgery for a torn ACL.
A HEAD START on the Future

College savings accounts awarded to first babies born at new Inova Women’s Hospital

If current trends continue, in 10 years the average cost of four years of college at public universities will be $150,000. Recognizing this rapid increase in the cost of tuition, Virginia now offers 529 college savings plans, which provide a way for people to save money for education tax-free.

To get the word out about the usefulness of these accounts, Inova has partnered with the Virginia529 College Savings Plan, or VA529, to raise awareness about the importance of starting early to save for your child’s education — even at birth. As a promotion to celebrate the opening of the new Inova Women’s Hospital, VA529 donated $2,016 to each of three college savings accounts for the first babies born at the new hospital for the months of January, February and March 2016.

“It’s a great program not just because three families get $2,016 to start their college savings accounts, but also because it brings awareness to lots of parents,” says Patricia Schmehl, Vice President of Inova and Administrator of Inova Women’s Hospital. “I think learning early on that there are opportunities available to you so you can start to prepare [for your child’s education] is great. We need to get that information to all parents.”

In addition to the three donated accounts, VA529 will be providing literature at Inova Women’s Hospital for all families with newborns to encourage other parents to start saving as well. Scott Ridgely, Director of Marketing and Communications for VA529, hopes this will encourage more families to plan for the future as early as possible.

“A lot of parents have not heard of 529 plans and there are a lot of misconceptions about them,” he says. “Many people hope that their child will get a scholarship and they won’t have a need for the account, but in reality the money can be taken out at any time or it can be transferred to another family member. And it’s tax-free, as long as you use it for education expenses! You can even use it for yourself for continuing adult education, getting a nursing certificate or graduate school. One of the taglines we have is: ‘It’s never too late and it’s never too early to get started.’”

SMART SAVING
For more information about the Virginia529 College Savings Plan, visit virginia529.com or call 1.888.567.0540.
HEALTHY Hearts
Upcoming StarKid 5K to benefit Inova Children’s Heart Program

Come one, come all, to the 10th Annual StarKid 5K and Family Fun Run! It will be held on Sunday, June 5, 2016, at the Fairfax Corner Shopping Center. The fun-filled morning will include running, moon bounces, face painting, music and more. Kids, strollers and four-legged friends are welcome to participate.

HERE IS THE SCHEDULE:
8 a.m. - Family Fun Run Start
8:30 a.m. - 5K Race Start
9:30 a.m. - Awards and Prizes

The StarKid 5K benefits the world-class Inova Children’s Heart Program, providing lifesaving care in a child-friendly environment close to home at Inova Children’s Hospital. This program is nationally recognized and one of the largest, most successful programs in the mid-Atlantic region. It provides specialized care to children of all ages from Northern Virginia, Washington, DC, Maryland, and beyond.

The goal of the 10th Annual StarKid 5K and Family Fun Run is to raise $125,000. Proceeds from this event make a tremendous impact on Inova’s patients. In the past, these funds have been used to purchase equipment, send staff to educational conferences, assist with patient education and much more. To register, visit inova.org/5K.

KNOW Your Baby
Genomics test determines medication reactions

Inova Women’s Hospital is one of the first hospitals in the nation to offer an optional state-of-the-art test for newborns that can help determine how they may react to certain medications. Known as MediMap™, this pharmacogenomics, or PGx, test informs doctors about a child’s genetic makeup, which can help doctors make decisions about the kinds of medications they later use to treat the child.

“MediMap looks at specific changes in genes that have to do with how our body processes certain medications,” says Benjamin Solomon, MD, Chief, Division of Medical Genomics, Inova Translational Medicine Institute. “If we know ahead of time how a person will respond to a medication, we may be able to avoid side effects or using medications or doses that won’t work well.”

The test, which relies on a painless cheek swab from the baby, will look at genetic changes in the child’s DNA that may influence his or her response to certain medications. The test covers some, but not all prescription medications. The types of medications covered include anti-cancer agents, and psychiatric, cardiovascular, pain and immunologic drugs. Parents receive a report and letter that explains the results that they can keep. The results are guides for a lifetime.

“MediMap is an early example of Inova’s strong belief in personalized medicine,” says Dr. Solomon. “This includes genomics because by understanding more about patients’ genes, it will help us take better care of them.”

MAPPING IT OUT
For more information about MediMap™ testing at Inova, visit inova.org/MediMap or call 1.844.Genome.4u (1.844.436.6634).
Staying on the leading edge of medicine is important to the doctors and staff at Inova Fairfax Medical Campus. It has led to the establishment of the new Inova Center for Thrombosis Research and Drug Development, which is under the direction of Paul A. Gurbel, MD. The center will conduct phase I through phase IV studies involving the early development of new medications, including “first-in-human” clinical trials.

Inova Fairfax Hospital’s Center for Thrombosis Research and Drug Development is focused on studies of emerging therapies for cardiovascular disease. In fact, Dr. Gurbel and his team have been instrumental in doing early research on many drugs. Some of these drugs are now commercially available to treat cardiovascular disease. One major drug is ticagrelor (or its brand-name equivalent, Brilinta), which is now widely used for treating patients after heart attack.

Having a role in the research of state-of-the-art treatments positions Inova as a leader in cardiovascular medicine. “We will be the first to study new therapies that could translate down the road to major benefits for patients with heart disease,” says Dr. Gurbel, Director of Interventional Cardiology and Cardiovascular Medicine Research at Inova. “This puts us clearly on the cutting edge of research and treatment.”

And while he is happy with Inova’s current place in the world of cardiovascular medicine, Dr. Gurbel expects the center will continue to grow. “Inova is a national leader, but it is also an international leader,” he says. “We want to attract new and bright minds worldwide who want to come to Inova to learn from our work and contribute to our research program. “What we hope to do is establish Inova as a major center for investigations funded by the National Institutes of Health and private industry of novel therapies in the early phases of development,” he adds. “We also want to expand into other specialties, such as therapies for lung disease, cancer, neurology and others. We want to use this center as a platform to build all aspects of research within Inova Health System.”

New center to conduct research on drugs for cardiovascular disease

On-Site Observation

One aspect that makes the Center for Thrombosis Research and Drug Development unique is its ability to provide prolonged patient housing that is required for specific investigations. Inova’s center has inpatient rooms to accommodate the requirements of the most rigorous investigations. It is common for various studies to have different housing requirements. Having a center with housing means Inova can take on a broad spectrum of studies, whether they are 24 hours in duration or require weeks of patient observation.
Pulmonary embolism (PE) is a common condition in the United States, with roughly 600,000 cases each year. PE is a vascular emergency, and about one-third of patients who have a PE will die from it. However, if it is recognized and treated early, most patients thrive.

PE occurs when a blood clot — frequently coming from the patient’s leg and caused by deep vein thrombosis — travels through the arteries to the lungs. The clot may prevent the heart from pumping blood into the lungs. As the heart pumps harder and harder against the blockage, it may fail and cause serious damage or even death. PE can occur in healthy patients or those with disorders of blood clotting, many of whom have no symptoms.

A team of doctors at Inova Fairfax Hospital has created a better solution for diagnosing, evaluating and treating pulmonary embolism cases. Key to this new process is the new Inova Pulmonary Embolism Response Team, or I-PERT, which began operating on March 1.

I-PERT is a team of Inova medical experts from different disciplines who can respond quickly and around-the-clock to evaluate and treat pulmonary embolism patients. “We have brought together experts from pulmonary medicine, medical critical care services, cardiology, cardiothoracic surgery and interventional radiology, and we evaluate these patients together as a team,” says Alain T. Drooz, MD, of Vascular and Interventional Radiology at Inova Heart and Vascular Institute. “We’ve all studied PE from different educational perspectives and we mesh our knowledge together to determine how to treat patients. This is particularly helpful in very ill patients or in those in whom medical knowledge is evolving rapidly.”

While most PE patients respond well to standard treatments such as anticoagulant medicines, I-PERT is important for those who cannot take blood thinners or in whom the PE is producing a very high risk of death. For those patients, quick evaluation and treatment is critical, and that is why I-PERT team members are on call at all times. “We are literally a SWAT team for pulmonary embolism intervention,” says Dr. Drooz.

### The I-PERT Process

1. The doctor determines if the patient meets the criteria for I-PERT activation using an algorithm provided by I-PERT.
2. If I-PERT is activated, the patient will be evaluated and the team members will confer about the case, and issue recommendations.
3. I-PERT will communicate with the referring physician, patient and family members.
4. I-PERT will follow the patient while in the hospital and beyond. A small percentage of patients may need additional treatment while in the hospital.

### Pulmonary Embolism Mechanism

The pulmonary artery shown here is obstructed by the embolus. Places most likely for thrombus formation are the hip, thigh and leg.
When work, family and social commitments fill the calendar, squeezing in a daily workout can be tough. Enter the “weekend warrior,” the 30-to-50-something sports enthusiast who packs seven days of moderate exercise into a few days of high-intensity workouts. While any amount of exercise is beneficial, strenuous exertion following long periods of inactivity can result in injuries to the joints and ligaments.

“If someone is playing a potentially vigorous sport like football, basketball, baseball or softball and they do it on the weekend but don’t do much during the week, they are more likely to get injured,” says Mark Theiss, MD, Chairman of the Department of Orthopedic Surgery at Inova Fairfax Medical Campus. “Problems can occur if they don’t normally do gym, cardio and weight workouts during the week to maintain strength, fitness and flexibility.”

ON YOUR TEAM

The most common types of injuries weekend warriors face include joint and ligament problems affecting the knees, shoulders, ankles and fingers. Typically, injuries are a result of chronic overuse, extreme exertion or accidents. Throwing a ball can affect the shoulder or elbow, while running track or marathon training can lead to injuries of the foot, knee or ankle, says orthopedic surgeon Robert Najarian, MD, a sports medicine specialist at Inova Fairfax Medical Campus and a team physician for the Washington Nationals.

“There are those unlucky times, though, where we can sustain acute injuries like anterior cruciate ligament (ACL) tears, shoulder dislocations and tears to the meniscus,” he adds.

Fortunately, the Inova Sports Medicine team is highly qualified to care for injured sports enthusiasts. For athletes

Knee surgery allows basketball enthusiast to return to the court

Preston Fulmer is playing basketball again after undergoing surgery for a torn ACL.
Knee surgery allows basketball enthusiast to return to the court

Build on Your Strengths

Being active is an important part of staying healthy. To avoid being sidelined by an injury, Inova offers Sports Injury Testing (SIT) to help you understand your strengths and weaknesses and optimize your performance.

The tests include:

1. A recording of your sports history of prior injury and sports participation.
3. A single leg squat and hamstring flexibility assessment.

Conducted by the Inova Physical Therapy Centers’ Sportsmetrics Training Program, certified physical therapists are able to use the information from your SIT test to customize training to your unique needs and track your progress as a way to improve your athletic performance and lower your chance of injury.

To schedule a Sports Injury Test, call 1.877.604.6682.

Injury Prevention

Taking proper steps prior to exercising may prevent some injuries. “The best thing is choosing low-impact exercise, maintaining a healthy weight and maintaining healthy limits on how much exercise you do,” says Robert Najarian, MD, orthopedic surgeon.

He recommends warming up prior to exercise, stretching, preparing yourself before you start a new sport, knowing your limits and knowing when to stop to prevent overuse injuries.

Of course, not all injuries are preventable. “There are instances where no matter how well-trained you are or how in shape you may be, bad luck can occur and you sustain an injury,” he says.

If you are experiencing pain or have concerns about injury, call your doctor for a consultation.

Quick Rebound

While some weekend athletes suffer from sprains or strains by pushing themselves past their limit, others get injured by accident. That’s what happened two years ago to Navy microbiologist Preston Fulmer when he was playing basketball after work with some of his buddies. An amateur sports enthusiast, Preston, 36, played basketball two times a week and participated in crossfit classes, jogged and went on hikes. But one day during a pickup game on the court, his career as an amateur athlete came to a sudden halt.

“I landed funny and I knew something was wrong pretty quickly,” says Preston. “It was just a freak thing.”

The painful landing resulted in a torn ACL in his right knee. A friend referred him to Dr. Najarian, and Preston knew he was in good hands. “Dr. Najarian is great. He definitely knows what he’s doing and he has a sports medicine background,” says Preston.

After assessing Preston’s knee, Dr. Najarian ordered an MRI to assess the damage. Based on the test results, he told Preston that if he wanted to continue to play basketball, he would need to have his ACL reconstructed. For Preston, his love of the game overrode any surgery concerns and he chose to have a minimally invasive outpatient procedure.

Shortly after the procedure, he was walking with the help of crutches, and within two weeks he was able to walk without assistance. Dr. Najarian recommended physical therapy, so Preston attended sessions at Dr. Najarian’s Arlington office for two months, within walking distance of his home.

These days, Preston is back to playing basketball and running and hiking on weekends.

“I don’t have any pain or any range-of-motion issues. It’s like nothing ever happened,” he says. “I don’t have any limitations.”

The Inova Sports Medicine Program also provides physical therapy, athletic training and nutrition counseling to promote healing in patients who have experienced sports injuries.

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Inova is a not-for-profit healthcare system located in Northern Virginia in the Washington, DC, metropolitan area, serving over 2 million people with over 1,700 licensed beds. It consists of five hospitals including the area’s only Level 1 Trauma Center and Level 4 Neonatal Intensive Care Unit. Inova encompasses many health services including the internationally recognized Inova Heart and Vascular Institute (IHVI), Inova Translational Medicine Institute (ITMI), Inova Neuroscience Institute, Inova Schar Cancer Institute (ISCI) and Inova Children’s Hospital. Inova’s mission is to improve the health of the diverse community it serves through excellence in patient care, education and research. More information about Inova is at inova.org.

If you do not wish to receive future mailings from Inova, please contact us at 1.855.My.Inova (1.855.694.6682) or inova.org/unsubscribe.

### WELCOME, NEW PROVIDERS!

Here are new healthcare professionals who have joined the Inova Fairfax Medical Campus staff in recent months:

<table>
<thead>
<tr>
<th>NAME</th>
<th>DEPARTMENT</th>
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<tbody>
<tr>
<td>Neda Ahmadi, MD</td>
<td>Surgery/Otolaryngology</td>
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<tr>
<td>Mary Anne Alexander, MD</td>
<td>Internal Medicine</td>
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<tr>
<td>Chandrika Balgobin, DO</td>
<td>Psychiatry</td>
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<tr>
<td>Ealena Callender, MD</td>
<td>Obstetrics/Gynecology</td>
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<td>Kimberly Campbell-Arendell, MD</td>
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<tr>
<td>Thomas Chang, MD</td>
<td>Physical Medicine/Rehab</td>
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<tr>
<td>Kelly Chewning, MD</td>
<td>Internal Medicine</td>
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<tr>
<td>Mehul A. Desai, MD</td>
<td>Critical Care</td>
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<tr>
<td>Katherine Deye, MD</td>
<td>Pediatrics/General</td>
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<td>Annie Do, MD</td>
<td>Obstetrics/Gynecology</td>
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<td>Stuart Goodman, MD</td>
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<td>Audrey Grant, MD</td>
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<td>Jennifer Han, MD</td>
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<td>Ibrahim Haron, DDS</td>
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<td>Michael Hauser, MD</td>
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<td>Susan Hollander, MD</td>
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<td>Krishna P. Madiraju, MD</td>
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<td>Keshav Magge, MD</td>
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<td>Rhonda McMillian, MD</td>
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<td>Seema Navalkar, MD</td>
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<td>Sasha Ramirez, DO</td>
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<td>Jean-Gilles Tchabo, MD</td>
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<tr>
<td>James Wade, MD</td>
<td>Hematology/Oncology</td>
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<tr>
<td>Jamie Zakkak, MD</td>
<td>Pediatrics/General</td>
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