

STEADMAN PHILIPPON RESEARCH INSTITUTE

SPRIMEN

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INSIDE

3 Institute Insite:

A Message from CEO Dan Drawbaugh

5 Research Update:

Development of Hip Robotics Research

6 Steadman Philippon Update:

Dr. Marc Philippon Educates Top Surgeons from Around the World

7 | Steadman Philippon Update:

SPRI Wins Major International Research Award

8 | Sports and Wellness:

Cycle Smart This Summer

9 Education:

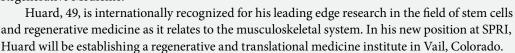
Steadman Philippon Fellow Dr. Sanjeev Bhatia

Dr. Johnny Huard Named Chief Scientific Officer of Steadman Philippon Research Institute

Highly acclaimed leader in the field of stem cell research joins SPRI

Johnny Huard, Ph.D., former director of the Stem Cell Research Center at the University of Pittsburgh, has been named chief scientific officer of the Steadman Philippon Research Institute and director of SPRI's Center for Regenerative Sports Medicine.

At Pittsburgh, Dr. Huard also served as vice chair for Musculoskeletal Cellular Therapeutics in the Department of Orthopaedic Surgery and deputy director of Cellular Therapeutics Research at the McGowan Institute for Regenerative Medicine.



Huard has spent the past 19 years at the University of Pittsburgh. As the Henry J. Mankin Professor in the Department of Orthopaedic Surgery, he has extensive knowledge in the areas of gene therapy, tissue engineering, and regenerative medicine applications based on the use of adult stem cells.

In addition to significant international recognition in the form of major awards received from organizations in the field of orthopaedic medicine, Huard has received generous grants and other forms of financial support, including funding from The National Institutes of Health, the

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Huard, a native of Quebec, Canada, first joined the University of Pittsburgh (UP) faculty in 1996 as an assistant professor. He strengthened his focus on regenerative medicine in 2001 when he was named the deputy director of Cellular Therapeutic Research for the McGowan Institute for Regenerative Medicine at UP. Huard became a full-time professor in 2004 and added the title of vice chair of Musculoskeletal Cellular Therapeutics in the Department of Orthopaedic Surgery. Three years later, he was also named the director of the Stem Cell Research Center at UP. Huard earned his B.S. degree in biology from Rimouski University U.Q. A. R., Quebec, Canada, in 1988. He received his M.S. degree in neurobiology from Laval University in Quebec in 1991 and was awarded his Ph.D. in neurobiology from Laval in 1993.





On May 1, The Steadman Philippon Research Institute welcomed Dr. Johnny Huard as Chief Scientific Officer and Director of SPRI's Center for Regenerative Sports Medicine.

Dr. Huard's team left to right include: Dr. Sudheer Ravuri, Jeff Green, Lab Technician, Gary Peterson, VP of Strategic Initiatives, Dr. Johnny Huard, Jen Rogus, Executive Assistant, Jim Cummins, Program Manager - Research, and Andi Liebowitz, Lab Technician.

Frequently Asked Questions

What Is Regenerative Medicine?

Regenerative medicine is a branch of translational research in tissue engineering and molecular biology that deals with the "process of replacing, engineering, or regenerating human cells, tissues or organs to restore or establish normal function."

What Is Translational Research?

Translational research applies findings from basic science to enhance human health and well-being.

How Will Regenerative Medicine Make a Difference?

Many conventional medical treatments address the symptoms, not the underlying cause of chronic diseases, such as those caused by musculoskeletal disorders. The result is a healthcare system burdened by costly treatments for an aging population.

Regenerative medicine is uniquely capable of addressing the root cause of the disease, with the intention of curing or significantly altering its course. Regenerative medicine can help facilitate a sustainable healthcare system as well as longer, healthier and more productive lives.

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Department of Defense, and the Muscular Dystrophy Association, as well as other private and public foundations.

"The opportunity to accelerate our pioneering advances in regenerative sports medicine and stem cell research with Dr. Huard as our chief scientific officer is enormous," said Dr. Marc Philippon, managing partner of The Steadman Clinic and co-chairman of SPRI. "In the future, our team of physicians and researchers envision every person having the opportunity to harvest his or her own stem cells and then re-inject them into the body to help delay various aging processes such as osteoporosis or osteoarthritis, or to speed up recovery from injury or illness."

"Dr. Huard's work in regenerative medicine has been recognized world-wide and his research and contributions in this area of study will represent another important milestone in our efforts to keep people active," said Dan Drawbaugh, CEO of The Steadman Clinic and SPRI.

"In his new role, Dr. Huard will focus on regenerative medicine and lead the conversion of his research into orthopaedic treatments at The Steadman Clinic. The ability to collaborate with The Steadman Clinic will mean that Dr. Huard can test his premise that transplanting autologous stem cells will help delay the degeneration of joints."

"Dr. Steadman, who was finding ways to treat sports injuries through regenerative methods 25 years ago, laid the groundwork for those that followed him – including Dr. Philippon, who has made tremendous advances in the field of hip surgery," said Huard. "We have the opportunity to discover ways to further delay joint replacements and help patients at The Steadman Clinic recover faster and stronger. I'm grateful for all of the work that Dr. Steadman, Dr. Philippon, and their team have done over the years and look forward to working with them."

If musculoskeletal disease is slowed or if injuries are successfully repaired and rehabilitated, people can remain active longer, reducing the risk of conditions associated with inactivity, including cardiovascular disease, high blood pressure, obesity, diabetes, osteoporosis, certain cancers, and depression. The efforts of SPRI and The Steadman Clinic to keep people active have already resulted – and will continue to result — in significant savings in healthcare costs over a person's lifetime.

INSTITUTE INSIGHT

A Message from CEO **Dan Drawbaugh**

It is an incredible honor to lead and serve The Steadman Clinic and the Steadman Philippon Research Institute as chief executive officer.

My first visit to The Steadman Clinic (TSC) and the Steadman Philippon Research Institute (SPRI) affirmed my understanding that these two organizations are both synergistic and very innovative. During my visit I further learned about the groundbreaking achievements of Dr. Steadman, Dr. Philippon, their physician colleagues and the entire team that laid the foundation for what the organizations are today.

As we all recognize, Dr. Steadman is a pioneer in the field of orthopaedic sports medicine. He used regenerative medicine for joint preservation at least a decade before the term "regenerative medicine" was even coined. Some of Dr. Steadman's most notable achievements include the development of several unique surgical joint preservation techniques for the knee, including: Microfracture, Healing Response, and "The Package" for arthritic knees.

In 1988, Dr. Steadman founded the Steadman Philippon Research Institute. SPRI has since become a world leader in evidence-based orthopaedic research. The Institute works in conjunction with The Steadman Clinic to track outcomes of each patient seen at The Steadman Clinic. SPRI's database now stores data on nearly 30,000 patients from all over the world.

The doctors at The Steadman Clinic are leading experts in orthopaedic and sports-related injuries whose experience and research have led to important achievements in the field. A few such advancements include: Dr. Millett's advanced arthroscopic shoulder surgery (Comprehensive Arthroscopic Management), Dr. LaPrade's unique surgical procedure to repair damaged MCL ligaments and Dr. Marc Philippon's joint preservation techniques, including anatomic-based labral repair and labral reconstruction.

I've been fortunate to know Dr. Marc Philippon as a colleague for many years. His commitment to patientcentered care and his focus on evidence-based medicine is at the forefront of his thinking. Imagine yourself as a patient who comes to The Steadman Clinic for treatment.



Dan Drawbaugh

You will have access to innovative procedures that, if appropriate, can be clinically applied directly to your case. This bench-to-bedside approach is virtually unique to TSC/SPRI, combining, as it does, evidence-based research translated into clinical treatment.

As I step into my new role at The Steadman Clinic and the Steadman Philippon Research Institute, I would like to share some background on myself.

WHO AM I?

I grew up in between Chambersburg and Gettysburg, Pennsylvania. The area is beautiful with rolling hills, orchards, state parks and farms. Chambersburg is known for its role during the American Civil War, its peaches and the home of Jean Stapleton (Archie Bunker's wife Edith). Gettysburg, as you are aware, is known for the Battle of Gettysburg in 1863, one of the largest and decisive battles during the American Civil War.

After graduating from Temple University with degrees in biomedical and electrical engineering technology I began my professional career. In a short amount of time, my career in biomedical engineering began to advance and in 1983 I moved to Pittsburgh as the director of biomedical engineering at Shadyside Hospital (later to (continued on page 4)

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merge with the University of Pittsburgh Medical Center - UPMC). During this time I completed my master's degree at Duquesne University in Pittsburgh. My career advanced and in addition to biomedical engineering I became responsible for information technology as the chief information officer. Fast forward 31 years later, UPMC is the largest integrated health care delivery system in Pennsylvania at \$11 billion in annual revenues, 65,000 employees, 3,600 employed physicians and one of the leading nonprofit medical centers in the country.

I have served on a number of boards, including Oracle Advisory Board, IBM Advisory Board, and those of IBM Health Care & Life Systems, Verizon Wireless and Genco Logistics.

WHAT'S NEXT?

An aging baby boomer population highlights the need for better ways to treat musculoskeletal diseases, injuries and congenital conditions. Many conventional medical treatments address only the symptoms of musculoskeletal disorders. Regenerative medicine is uniquely capable of attacking the root cause of the disease by helping the body use its own mechanisms to heal itself.



More than two decades of pioneering work by the talented team of physicians, researchers, scientists, administrators, board members and partners at The Steadman Clinic and the Steadman Philippon Research Institute has positioned us as a world leader in the next frontier of medicine: regenerative sports medicine.

The Steadman Philippon Research Institute Center for Regenerative Sports Medicine (CRSM) will focus solely on regenerative sports medicine. SPRI already has the components of Translational and Regenerative Medicine Research, BioMedical Engineering, Outcomes-Based Research, Imaging Research, Education and a world renowned Orthopaedic Fellowship program. The Center will include a new facility to house these departments, as well as surgical skills and biomechanical labs.

On May 1, the Steadman Philippon Research Institute welcomed Dr. Johnny Huard as chief scientific officer and director of SPRI's CRSM. Formerly with the University of Pittsburgh Medical Center, Dr. Huard is internationally recognized for his leading edge research in the field of stem cell research and regenerative medicine, among other specialties, as it relates to the musculoskeletal system. In his new position at SPRI, Dr. Huard will be establishing a regenerative and translational medicine institute in partnership with the University of Texas Health Science Center at Houston (UT Health). This important collaboration will offer researchers and scientists a well-equipped laboratory for basic science at both SPRI and UT Health as well as the ability to begin translating that research into practical orthopaedic treatments at The Steadman Clinic.

The key to the success of SPRI's Center for Regenerative Sports Medicine is having researchers, clinicians, SPRI's vast patient database, and state-of-the-art technology working synergistically. A culture has been established that gives us unprecedented opportunities for the future. We need to prioritize innovation and grow upon our organization's dedication to patient-centered care and evidence-based medicine.

The research mission at SPRI is to keep people of all ages physically active through orthopaedic research and education in the areas of arthritis, healing, rehabilitation and injury prevention. This mission is what drives each of us at the Steadman Philippon Research Institute and The Steadman Clinic. I look forward to working with each of you as we start this new phase of our journey together.

Dan Drawbaugh

RESEARCH UPDATE

Development of Hip Robotics Research

The Department of BioMedical Engineering (BME) at the Steadman Philippon Research Institute (SPRI) continues to strive and establish the leading edge of orthopaedic research. The Department has a proven track record of high quality publications, awards, and presentations in all areas of orthopaedic research. Robotics research, one of the most specialized methodologies of the Department of BME, continues to be a key component to the department's success and international reputation.

The robotic equipment at SPRI is extremely useful to researchers and provides a means to investigate and answer research questions through a testing medium capable of reproducing the natural movement of joints. Until now, the field of orthopaedic research has been in need of a validated robotic testing system for the hip joint. The importance of a validated robot system cannot be overstated and is necessary as the foundation for all subsequent robotics research of the hip joint. As such, the Department of BME engineers have recently completed a thorough validation of SPRI's robot for hip joint testing.

Drs. Philippon and LaPrade of The Steadman Clinic are particularly proud of this accomplishment and excited for the research opportunities that are now available with the development and validation of the robotic system for hip joint testing. In particular, the hip joint is naturally complex and previously required various simplifications for research. For example, because of its ball-and-socket nature, the hip is naturally capable of complex, multidirectional movement; however, previous research experiments were constrained by testing equipment to only analyze one motion or a limited range of motion of the hip joint.

In contrast, a robotic system possesses the necessary flexibility to reproduce the multidirectional movement capability of the hip joint. Furthermore, robotic systems provide excellent accuracy and repeatability for biomechanical testing and are therefore a very capable and trusted tool for orthopaedic research.

The excitement and promise of groundbreaking hip robotics research has not suppressed a strong commitment to other joints. Notably, the knee has been and continues to be studied in detail and with prestigious external recognition. In 2014, the BME team received the American Orthopaedic Society for Sports Medicine





KUKA KR60 Robot

(AOSSM) Excellence in Research Award for robotics research of posterior cruciate ligament (PCL) reconstruction procedures.

Robotics research within the Department of BME continues to support the mission at SPRI of keeping people of all ages physically active through orthopaedic research and education. The development of a validated robotic system for hip research is certain to advance our understanding and ability to treat a very important and complex joint and ultimately lead to improved surgical procedures for hip pathology and improved patient outcomes.

STEADMAN PHILIPPON UPDATE

Dr. Marc Philippon Educates Top Surgeons from Around the World

Annual Vail hip symposium focused on hip preservation

Once a year, the Vail Valley becomes the center of the universe for hip surgeons.



Dr. Marc Philippon addresses more than 200 surgeons and medical professionals from around the globe at the Vail Hip Arthroscopy Symposium.

Now in its 10th year, the annual Vail Hip Arthroscopy Symposium arrived in January this year, attracting roughly 200 surgeons and medical professionals from around the globe to the Vail Valley.

Hosted by Dr. Marc Philippon, the symposium's lectures took place January 15-17 in Vail.

Orthopaedic surgeons and faculty from four different continents gathered to hear presentations from 21 of the world leaders in hip arthroscopy and to learn the latest techniques associated with arthroscopic hip surgery.

The purpose of the symposium was to provide a forum where top leaders in the field can exchange thoughts. Young doctors who want to learn can see and hear that exchange, and take it back home to provide a better experience for their patients.

Course work included extensive lectures, hands-on cadaveric training, and case discussions about the hottest topics in hip arthroscopy, including controversies and difficult cases. Also included was a live broadcast of a surgical procedure by Dr. Philippon. All of these sessions were designed for the experienced surgeons looking to enhance their knowledge of reconstructive hip arthroscopy and preservation techniques.

The symposium is a result of a partnership between the Steadman Philippon Research Institute and Smith & Nephew, a global medical technology company dedicated to helping improve people's lives through advanced products developed for orthopaedic surgery, wound management, and sports medicine.

Steadman Honored with National Sports Physician Award

Dr. Richard Steadman has been recognized for his contributions to sports medicine by the American Physical Therapy Association (APTA). Dr. Steadman received the Jack C. Hughston Sports Physician Award from the APTA's Sports Physical Therapy Section at a February 6th meeting in Indianapolis. Dr. Hughston, who is widely recognized as one of the fathers of sports medicine, died in 2004.

"Dr. Steadman's selection for this prestigious award was based on his many contributions to the sports physical therapy community," said Dr. Barbara Sanders, chair of the award committee of the APTA's Sports Physical Therapy Section.

APTA is an individual membership professional organization representing more than 85,000 member physical therapists, physical therapist assistants, and students.

The American Journal of Sports Medicine Reports on SPRI Shoulder Research

"Two-Year Outcomes After Arthroscopic Rotator Cuff Repair in Recreational Athletes Older Than 70" was published April 1 in *The American Journal of Sports Medicine (AJSM). AJSM* is considered the 'New York Times' of orthopaedic journals. The study was led by SPRI's Peter Millett, M.D., M.Sc., and co-authored by Sanjeev Bhatis, M.D., Joshua Greenspoon, B.Sc., Marilee Horan, M.P.H. and Ryan Warth, M.D. Marilee Horan is the coordinator of upper extremity research at SPRI's Center for Outcomes-Based Orthopaedic Research.

The research showed that older patients benefit from arthroscopic rotator repair surgery, arthroscopic rotator repair eliminates pain, the procedure effectively restores function, and older patients can and do return to sports after rotator cuff repair.

SPRI Wins Major International Research Award

The International Society of Arthroscopy, Knee Surgery and Orthopaedic Sports Medicine (ISAKOS) has selected an SPRI research paper as the 2015 ISAKOS Achilles Sports Medicine Research Award winner. The study, titled "Biomechanical Consequences of a Nonanatomic Posterior Medial Meniscus Root Repair After a Root Tear," will be presented at the 10th Biennial ISAKOS Congress, June 8, in Lyon, France.

This research was inspired and directed by SPRI's Robert F. LaPrade, M.D., Ph.D. Authors include Chris LaPrade, B.A., Abdul Foad, M.D., Sean Smith, M.Sc., Travis Turnbull, Ph.D., Grant Dornan, M.Sc., Lars Engebretsen, M.D., Ph.D., Coen Wijdicks, Ph.D., and Robert LaPrade, M.D., Ph.D.

"We are excited for this major achievement and the international recognition of SPRI's excellent research," said Travis Turnbull, Ph.D., deputy director and senior engineer /scientist, Department of BioMedical Engineering.

The prestigious Achilles Orthopaedic Sports Medicine Research Award was created to recognize the researchers who have performed the most outstanding clinical or laboratory research in the field of sports medicine, such as in the care and prevention of injuries.

Distinguished Alumnus!

Congratulations to Dr. Richard Steadman!

On April 30 in Vail, Colorado, Dr. Steadman was presented with the Texas A&M University Distinguished Alumnus Award for his groundbreaking contributions to orthopaedic sports medicine. Dr. Steadman received his undergraduate degree from Texas A&M in 1959. During his time as an Aggie, he played football for head coach Bear Bryant.

The Distinguished Alumnus Award is the highest honor bestowed upon a former student of Texas A&M University, awarded since 1962 to fewer than 250 of Texas A&M's 425,000 former students. Presented jointly by the university and The Association of Former Students, this award recognizes Aggies who have achieved excellence in their chosen professions and made meaningful contributions to Texas A&M University and their local communities.



Dr. Steadman receiving his alma mater's highest alumni honor, Texas A&M Distinguished Alumnus.

SPORTS AND WELLNESS

Cycle Smart This Summer

Bike safety tips orthopaedic surgeons say you should always remember

Reprinted by permission of the American Academy of Orthopaedic Surgeons

More than 80 million Americans enjoy cycling because it is an environmentally efficient way to travel, a great form of exercise, and a fun recreational activity for families to enjoy.

According to 2013 statistics from the Consumer Product Safety Commission (CPSC), more than 1.3 million people were treated in hospitals, emergency rooms and doctors' offices for bicycle-related injuries.

EXPERT ADVICE

"A helmet is your friend while cycling, so always wear one," said Alex Jahangir, M.D., an orthopaedic trauma surgeon from Nashville, Tenn., and American Academy of Orthopaedic Surgeons (AAOS) spokesperson. "The other important factor is getting professionally sized for a bike. This is especially essential for growing kids who may have outgrown their bikes. Having an appropriately sized bike helps the rider to have better control while riding, thus reducing the risk for falls and other accidents."

In 2012, bruises and minor cuts were the leading types of injuries involving bicycles, followed by fractures, then lacerations and strains and sprains. However, serious injuries, including concussions or death, can occur.

Orthopaedic surgeons treat, but would rather prevent injuries. The AAOS offers this list of cycling safety tips:

ROAD SAFETY RULES:

» Follow rules of the road. Familiarize yourself with all of the bicycle rules of the road in your city or state. Follow traffic signs and lights.
Signal your turns, or your intentions, so

w Ride defensively. Ride in the direction of traffic and be aware of all surroundings. Be careful when riding next to parked cars to avoid hitting an opening door.

» Avoid distracted cycling. Do not listen to music with head phones, talk on your phone, text, or do anything else that can obstruct your hearing and/or vision while riding.

- **» Never underestimate road conditions.** Be cautious of uneven or slippery surfaces.
- **» Take extra precautions while bicycling at night.** Wear bright fluorescent colors; make sure to have rear reflectors. Both a working taillight and headlight should be visible from at least 500 feet away.

CHECK EQUIPMENT

- » Always wear a helmet approved by the American National Standards Institute (ANSI).
 - Studies have shown that wearing a bicycle helmet can reduce head injuries.
 - Make sure it fits snugly but comfortably and does not obstruct vision.
 - It should have a chin strap and buckles that stay securely fastened.
 - If you are involved in a crash and notice that your helmet is cracked, take the following actions
 - Discard the helmet and obtain a new one.
 - Be monitored for signs of concussion.
- » Service your bicycle. Check your bicycle's mechanical components on a regular basis (brakes, tires, gears, etc.), just like you would for a car. If your bike is not in good condition, do not ride it.
- **» Use proper gear.** Avoid loose clothing and wear appropriate footwear. Never wear flip flops.
 - Wear padded gloves.
 - Use appropriately padded cycling shorts for longer rides. If you commute on your bike, carry your belongings in a proper bag with close-fitting straps.
 - Wear sunscreen when appropriate.

OTHER RIDER TIPS

- » Pace yourself. Cycling can be vigorous exercise. Make sure you are fit enough to participate before you start pedaling. See your doctor before you begin any exercise program.
- » Change riding positions. Slight variations in your position can reduce stress on pressure points on your body and avoid overstressing muscles.
- **» Watch your fuel level.** Be sure to carry water and food on longer rides. Drink a full water bottle each hour on the bike
- » Medical ID bracelets. Consider wearing a medical ID bracelet. This is useful if the rider is unable to provide basic information to first responders.
- **» Supervise younger riders at all times.** It is recommended that younger children ride only in enclosed areas.
- » Never operate a bicycle while impaired. To read this article online, go to: http://newsroom.aaos.org/media-resources/news/cycle-smart-this-summer.htm

EDUCATION

Dr. Sanjeev Bhatia: Solid Foundation Leads to Career Achievements and Steadman Philippon Fellowship

By Jim Brown

The building blocks that led to Dr. Sanjeev Bhatia's success as an orthopaedic surgeon and an appointment as a Steadman Philippon Fellow began to take shape very early in his life.

Dr. Bhatia's father is a mechanical engineer, his mother is a family medicine physician, and his sister is a radiation oncologist.

"It was a pretty math/science heavy family," says Dr. Bhatia. "I got to see the value of helping people and how gratifying it is, and also observed attributes involved in being a good doctor. My family was very supportive of my interest in medicine and surgery."

The second building block was his interest in sports. "I've always been interested in sports. In my teens, I was a long jumper and triple jumper, and a centerfielder in baseball. Those experiences, plus the recreational sports I enjoyed, are at least partially responsible for attracting me to this field."

His interest in medicine continued to develop in high school because of sports injuries he sustained. He was curious about how structural problems of the musculo-skeletal system translate into functional problems that result in diminished athletic performance. [What teenage high school student isn't?]

EXPANDING HIS UNIVERSE

A summer program at Brown University in Rhode Island required a research project. "Mine was anterior cruciate ligament reconstruction. I started reading about techniques for reconstruction and remember thinking this was about the coolest thing in the world."

At the University of Wisconsin-Madison, he graduated Phi Beta Kappa with a major in biology and minor in business. Between college and medical school, he enrolled in the London School of Economics for a course on theory and practice of human rights. "I wanted to see different aspects of human rights and interact with talented people not in my field," he explains.

Dr. Bhatia attended medical school at Northwestern University and was particularly attracted to the study of anatomy and different aspects of the musculoskeletal



Dr. Sanjeev Bhatia

system. He completed his residency at Rush University Medical Center in Chicago. As chief resident, he was co-editor of a monthly column in *Orthopaedics Today*. Now he is a scientific reviewer for *The American Journal of Sports Medicine*.

Clearly on a career path that centered on musculoskeletal conditions, he moved closer to becoming a surgeon. "The gratifying thing about surgery is being able to help improve someone's life very quickly and in a fixed amount of time. That's very different from other fields of medicine. Being a surgeon seemed to be a perfect blend of my interest in the musculoskeletal system, surgery, and desire to help people."

(continued on page 10)

(continued from page 9)

GIANTS OF MEDICINE

Dr. Bhatia first became aware of The Steadman Clinic from watching ESPN. "I noticed the number of elite athletes who received high level treatment there and later became more aware of a very unique health care clinic and research institute. On a ski trip to Vail, I saw The Clinic and SPRI for the first time and got a sense of the mystique surrounding both.

"I met doctors who had done their fellowships at SPRI and saw how impressive they were. I've always admired leaders like Dr. Steadman and Dr. Philippon for the things they brought to the field of orthopaedic sports medicine. Later, I learned that the faculty included Dr. Millett, Dr. Hackett, Dr. LaPrade, and Dr. Clanton, as well as other physicians and scientists. Having all of these giants of medicine in one location made me realize that I couldn't find a better place to train."

MENTORSHIPS

"Once I got here, the thing that impressed me immediately was how welcoming and friendly the faculty and staff are," says Dr. Bhatia. "I've had a lot of great mentors, but being able to work with and get to know these high-profile members of the orthopaedic community on a personal level is something I never expected. They have really helped me, and their mentorship is something I will draw on for the rest of my career."

THE MACHINE SHOP

"Another first impression was a tour of the Department of BioMedical Engineering. Travis Turnbull showed me around, and one of the most interesting areas I saw was the machine shop. Dr. Turnbull is a mechanical engineer with a passion for orthopaedic research. When someone has an idea, he is able to design and fabricate an instrument to allow testing right here.

"Other fellowship programs don't have that, and it's just one of the reasons why so much high-impact research comes out of SPRI. The Institute has the ability to adapt and be nimble. It's another reason for SPRI's success."

THE STEADMAN PHILIPPON CULTURE

Dr. Bhatia has also observed a level of service in the doctor-patient relationship that Dr. Steadman instilled as a culture more than two decades ago.

"Every patient who comes to The Clinic becomes part of the Steadman Philippon family. It's apparent the first time you meet them, and it continues after they leave. The doctors here spend lots of time with each patient, answer any question, and are on call at all hours of the day and night. This kind of interaction improves outcomes by involving patients in the decision making process."

PRESENTATIONS, PUBLICATIONS

Dr. Bhatia and his cohorts benefit from the opportunities to present SPRI research and have it published in the world's leading professional journals. He will have had 10-15 national and international presentations and publications during his year in Vail. His main study focuses on meniscal preservation and aims to develop a new way to repair radial meniscus tears, a commonly seen tear type that was previously deemed irreparable.

JOINT PRESERVATION

"The most satisfying aspect of my time here has been learning more about the emphasis on joint preservation," says Dr. Bhatia. "The goal 15-20 years ago in orthopaedics was to relieve pain. Patients, especially those in the 20- to 40-year-old age group who had debilitating joint conditions, were either written off by other doctors, had to live with their damaged joints, or had total joint replacement at an early age. Now we know that there are interventions that can preserve joints instead of replacing them."

NEW FRONTIERS

Dr. Bhatia will be in Vail long enough to benefit from the development of SPRI's new Center for Regenerative Sports Medicine. "SPRI is on the verge of cutting edge changes that have the potential to change the face of how orthopaedic health care is delivered."

In Dr. Bhatia's next position, he will direct a new joint preservation initiative at the Cincinnati Sports Medicine & Orthopaedic Center. He and his wife, Avanti, who is a speech-language pathologist, will move to Ohio in August.

He thanks SPRI's supporters for their contributions. "Their generosity has been an instrumental part in making this the most amazing and outstanding year of my training."

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LIFE CHANGES

Life changes over time, so it's important to remember that after creating your will it's a good idea to review it from time to time. As your life circumstances change, you want your will to reflect your current situation and desires.

Your Will is a Fluid Document

Think of your will as a document that flows and changes with the changing priorities of your life. Too often, when people write their will, they put it in a safe

deposit box and don't think of it again.

However, as time passes, it may turn out that what your preferences were at one time do not fit your desires or the needs of your estate years later. Listed below are a few life events that signal a good time to review and update your will:

- » New children have come into your family babies, adoptions, remarriages and you want to appropriately include them in your estate,
- » You want to change the named guardians for your children,
 » Your children are all adults now,
- » You got divorced and/or have remarried and you need to update who is a beneficiary in your plans,
- » Heirs you named in your will are now deceased,

- » Your estate value has greatly increased or lost value,
- » You have acquired a significant asset, such as an inheritance,
- » You moved to a different state and different laws may apply,
- » You want to include special causes that made a difference in your life.

It's Easier than You Think

If one or more of these life changing events have happened since your will was created, you can either rewrite your will in its entirety or create a "codicil," or amendment, to your will. Changing your original will requires similar formalities as were necessary when it was first created. A codicil, however, usually just involves writing the specific changes you want to make, signing, dating and having witnesses sign the document. It's important to work with an experienced estate planning attorney for matters concerning your will or a codicil as state laws have individual requirements.

It's a good idea to review your will every three to five years or after significant life events. If you are writing or reviewing your will and want to include the Steadman Philippon Research Institute, we thank you. John McMurtry, director of development, at mcmurtry@sprivail.org, (970) 479-5781, will be happy to help you or your attorney with language that ensures your bequest will be clearly understood and honored.



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Steadman Philippon Research Institute is a tax-exempt 501 (c) (3) charitable organization dedicated to keeping people active.

The Steadman Philippon Research Institute is dedicated to keeping people of all ages physically active through orthopaedic research and education in the areas of arthritis, healing, rehabilitation, and injury prevention.

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Wendy Whelan: Focused from the Start, Uncommonly Energetic, Ever-Changing

Dr. Robert LaPrade Recognized by Patients and Peers as "a Doctor's Doctor," "the Ultimate Surgeon," and a "True Clinician-Scientist"

Dr. Peter Millett's Study Shows that Arthroscopic Rotator Cuff Repair is Effective in Older Athletes

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