



Photo: John Kelly

J. Michael Egan

President, Chief Executive Officer
 Steadman Philippon Research Institute
 2006 - 2011

INSTITUTE INSIGHT

**A Legacy of Excellence —
 A Vision for the Future**

"He had the highest level of integrity of anyone I've ever known," says Richard Steadman, M.D., Managing Partner and Founder of The Steadman Clinic and Founder-Chairman of the Steadman Philippon Research Institute.

"Unmatched integrity and leadership," says Marc Philippon, M.D., Managing Partner of The Steadman Clinic and a member of the Steadman Philippon board of directors.

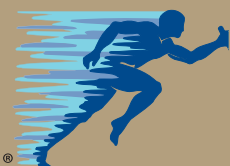
"Excellence, honesty, integrity, and friendship," says Marc Prisant, Executive Vice President, Chief Financial Officer, and Secretary of the Institute.

"High ethics and the ability to thoughtfully thread three needles with a frayed piece of string," says Steven Read, a member of the Steadman Philippon board of directors and co-chairman of Read Investments.

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In Memoriam:

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President and Chief Executive Officer
The Steadman Philippon Research Institute
Vail, Colo.

The Honorable Jack Kemp

Chairman and Founder
Kemp Partners
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Betsy Nagelsen-McCormack

Professional Tennis Player (retired)
Orlando, Fla.

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The man these friends and colleagues are talking about is J. Michael Egan.

Mike served as President and Chief Executive Officer of the Steadman Philippon Research Institute for four and a half years before his untimely death in a tragic cycling accident in June of this year.

"I had known Mike since the early 1980s," Dr. Steadman recalls. "I was always impressed with his knowledge and the way he was able to bring people together in the implementation of projects.

"When my wife, Gay, brought up his name as a potential CEO of the Institute (then the Foundation), I didn't think he would come to Vail," says Dr. Steadman.

"Why don't you ask him?" she replied.

In fact, Mike did come to Vail to speak with Dr. Steadman about the position, and why wouldn't he? In the 1980s,

Mike's company, Concept, was the first corporate donor to the Foundation (now the Institute).

Mike eventually agreed to join the Institute in December 2006, bringing with him 28 years of experience in medical technology, entrepreneurship, and fund raising. He had served as chairman and board member for private and public companies and had held CEO and senior management positions.

Though he had no previous experience running nonprofit organizations, he knew one important thing—it needed to be treated like any other business. Mike quickly put programs and initiatives into motion that would propel the work of the Institute to new levels. But he didn't do this alone. He recognized and ignited the power of the team.

What the Steadman Philippon team and those who generously support the Institute have done together reflects his ability to lead. Here are a few highlights:

- A plan for succession was established and a rebranding of the Foundation implemented, both of which resulted in changing the name to the "Steadman Philippon Research Institute."
- Revenues from all sources, including corporate and public donations, increased by more than 100 percent.
- The Imaging Research Department was established, a director was named, state-of-the-art magnetic resonance imaging was installed, and a corporate partnership was initiated.
- The Biomechanics Research and Surgical

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IRA Charitable Rollover Giving Expires December 31, 2011

Last December, President Obama signed into law the Tax Relief, Unemployment Insurance Reauthorization, and Job Creation Act of 2010, which allowed gifts to be made directly from an IRA to a charity. That opportunity expires December 31, 2011.

The following will supply answers to some of the important questions about IRA rollover gifts as you consider your year-end giving.

Who qualifies? Individuals who are at least age 70½ at the time of the contribution.

How much can be transferred? Each plan owner can contribute up to \$100,000.

What type of retirement accounts qualify for transfers? Transfers must come from traditional IRAs directly to the Institute. Gifts of retirement assets in 401(k) and 403(b) plans do not qualify; however, you can discuss certain steps with your advisor for making gifts with these assets.

Can these transfers fund life-income gifts such as charitable remainder trusts or charitable gift annuities? No, these types of gifts are not eligible to be funded through this gift mechanism.

Can I make a transfer to my donor advised fund or supporting organization? No, these are not eligible. What are the tax benefits? Because the gift transfers directly from the IRA to the Institute, you do not have

Steadman Philippon Research Institute's State-of-the-Art Biomechanics Laboratory Offers New Insight into Orthopaedic Joint Repair

Institute unveils multi-million dollar orthopaedic research facility for pioneering research in joint preservation and reconstruction techniques.

The Steadman Philippon Research Institute (SPRI) has completed construction of its highly anticipated multi-million-dollar, state-of-the-art Biomechanics and Surgical Skills facilities. The principal goal for these unique research facilities is to understand how injuries occur and what the demands on joints are for specific sports or motions. This high-tech research space has been the vision of the Institute for more than two decades. Vail Valley Medical Center, a long-term supporter of the Institute, was a significant financial partner in the endeavor.

"We are very appreciative of their support and help in building this new laboratory," remarked Dr. Richard Steadman, Chairman and Founder of SPRI. "This new (continued on page 5)

to report any taxable income; therefore, you are not eligible for a federal income tax deduction. We encourage you to talk with your advisors about your individual state tax law as it may influence the most tax-wise method for giving in order to receive a state tax benefit.

Can the transfer qualify for the minimum required distribution? Yes, if you have reached age 70½ and are taking required annual minimum distributions from your retirement plan, your IRA rollover to the Institute will qualify toward your minimum required distribution.

How do I effect an IRA rollover? Simply call your plan provider and request a transfer from your IRA directly to the Institute. If you would like a sample letter for your IRA plan provider, please contact John McMurtry, Vice President, Program Development, at 970-479-5781 or mcmurtry@sprivail.org.

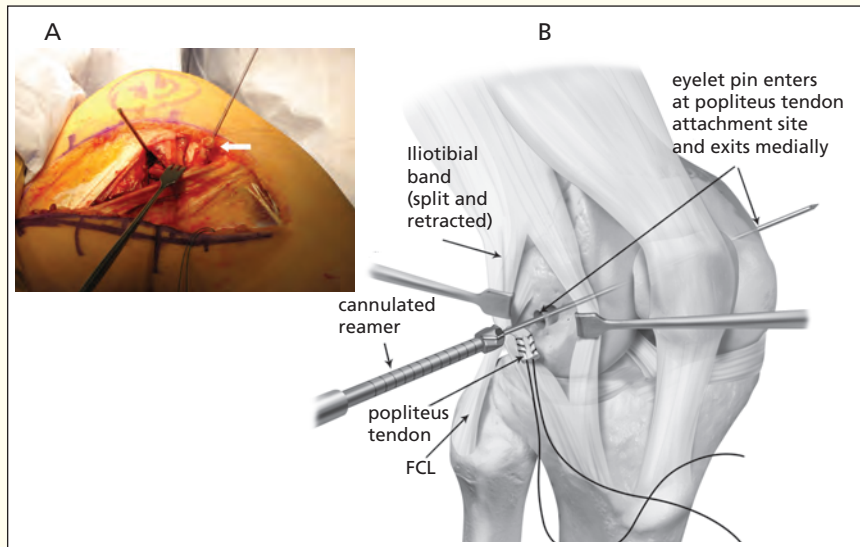
Publications, Presentations and Research

Institute Research Leads the World Research Project Recognized at International Conference

ISAKOS Ranks Institute Research Paper in the Top 10

Outcomes of Treatment of Acute Grade III Isolated and Combined Posterolateral Knee Injuries: A Prospective Case Series, was awarded as a top 10 e-poster out of more than 1,000 submitted at the eighth biennial meeting of The International Society of Arthroscopy, Knee Surgery, and Orthopaedic Sports Medicine (ISAKOS) held in Rio de Janeiro, Brazil, May 15-19. The authors, Robert LaPrade, M.D., Ph.D., Chief Medical Research Officer for the Steadman Philippon Research Institute, and Andrew G. Geeslin, M.D., University of Minnesota Medical School (who helped write up the study while on a medical student research rotation at the Institute) investigated whether acute grade III posterolateral knee injuries are best treated with repairs, reconstruction, or a hybrid of both.

The purpose of the research was to report on the subjective and objective outcomes of acute treatment with a combined anatomic repair and/or reconstruction of these injuries, often referred to as "the dark side" of the knee because it is recognized as the most complex and difficult to treat when injured. In effect, this



Copyright 2011 *Journal of Bone and Joint Surgery*

A: Photograph of a right knee showing sutures placed in the femoral attachment of the avulsed popliteus tendon (arrow) in preparation for a recess procedure.

B: Illustration depicting the popliteus recess procedure. The cannulated reamer is shown producing a recess for femoral fixation of the popliteus tendon. FCL = fibular collateral ligament.

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Mike had a very special way of dealing with people and creating a positive atmosphere in any conversation he was having. He was a remarkable person whose high level of enthusiasm was contagious among his colleagues.

J. RICHARD STEADMAN, M.D.

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Skills facilities were re-shaped, remodeled, and expanded.

- In Clinical Research, the collection of data and entering the information into the database was digitized, reducing the amount of paper used and vastly streamlining the data collection process.
- Fellowship programs were added in imaging research and foot and ankle.
- The Visiting Scholars program was established for international participants.
- Collaborative research efforts were forged with corporations, institutions, universities, and individuals around the world.

With these and many other accomplishments, the awareness of the Institute was increased locally, nationally, and internationally.

Mike led by example and took the Institute's mission of "Keeping People Active" to heart. As a young man he was a college and minor league ice hockey player. Throughout his adult life he was a skier, hiker, cyclist and yoga practitioner.

But those who knew him best remember his personal qualities—integrity, leadership, excellence, and vision.

INTEGRITY

Richard Steadman: "He personified integrity. I think that's why we became such good friends over the years. He always did what he said he would do. He never tried to bend the truth to make a point."

Marc Philippon: "Unmatched integrity and leadership. As I got to know Mike over the years, I had the utmost respect for him. He became one of my best friends."

Marc Prisant: "Mike was a person I knew and worked with daily for 19 years. During this long history together, he never did anything that he didn't think was the right thing to do. His integrity and values were such that he was more than willing to take ideas from any person, if it met the desired goal. And when he did take and act on advice from someone else, he would give credit where credit was due. It was also about teamwork."

Steven Read: "He had a very keen sense of listening as it related to the needs of the organization. He had the Richard Steadman touch, the Marc Philippon touch, the John McMurtry touch. How can I help you? How can I make your life easier and better? That's who Mike was. It was a perfect fit."

LEADERSHIP

Richard Steadman: "Mike had a very special way of dealing with people and creating a positive atmosphere in any conversation he was having. He was a remarkable person whose high level of enthusiasm was contagious among his colleagues."

Marc Philippon: "Mike was able to maximize everyone's skills to make the team work efficiently and with positive results. He knew every person at the Institute and was able to bring all of them together to work toward the common goal of excellence."

Marc Prisant: "He wouldn't have acknowledged achievements as his own. He would have referred to them as 'our' achievements. Mike was a very strong proponent of the team approach to work. No one does it alone; everyone does it together. From the moment I first began working with Mike, the common theme was 'there's no 'I' in team.' "

Steven Read: "Great leaders are people who empower you. Mike was quiet, careful, deliberate, and very disciplined, but he made people feel comfortable and allowed them to realize the potential they possessed. For the Steadman Philippon Research Institute, he was the right leader at the right time."

EXCELLENCE

Richard Steadman: "Mike had sought excellence in all the businesses he had been involved with and he brought that same spirit to the Institute. I think it matched up with his lifelong desire for excellence."

Marc Philippon: "Mike always had a plan and a goal. He said that our goal was to be the best in the world at what we did. He wanted to see a synergy between our evidence-based medicine and the clinical application of our research to provide better care for patients."

Marc Prisant: "His overriding goal was excellence. He wanted everyone coming to work to strive to be number one, every day. His philosophy was, let's be the best we can be, whether it was an intern or himself."

Steven Read: "He wanted us to continue to build the research capacity of the Institute that drives the value and the excellence of the Clinic."

VISION

Richard Steadman: "Mike understood, as well as or better than anyone, the goals of the Institute—whether to create operations and procedures that will improve the health and fitness of every patient—are very important."

Marc Philippon: "Our mission now is to continue the vision he created. That will be done because he put the structure in place very successfully. Losing Mike has been difficult for all of us, but he inspired us with his charisma, and that will stay with us forever."

Steven Read: "Mike was the igniter of potential that has been carefully built over the past 20 years. His dream and what we are left with is the opportunity to accelerate that process."

Marc Prisant: "Only his character as a person overshadows the accomplishments achieved during his tenure at the Institute. His integrity, leadership, insistence on excellence, and vision are attributes to which the Steadman Philippon Research Institute will always aspire."

By Jim Brown, Editor, SPRI News



Photo: John Kelly

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research facility will help us continue our role as a world leader in validating new surgical procedures and in understanding injury mechanisms and injury prevention."

SPRI's ongoing research on the hip, ankle, hand, elbow, shoulder, knee and spine has significantly impacted the treatment of joint disorders worldwide. Patients with severe or complex injuries and those with degenerative joint disease look to SPRI for the innovative treatments developed by the Institute's world-class scientists and The Steadman Clinic physicians conducting biomechanics and clinical research. Their findings have become crucial for delaying "last-step" surgeries such as joint replacement procedures.

Located at the base of Vail Mountain in Vail Valley Medical Center, the facilities host three specific areas: a BioMotion Laboratory, a Biomechanical Testing Laboratory with robotics, and a Surgical Skills Laboratory used for surgeons to demonstrate and practice techniques.

Inside the BioMotion Laboratory, staff scientists and engineers have constructed an artificial ice-rink for studying athlete movements. Injuries to the hip, for example, are common in hockey players. Researchers will be able to visually scrutinize body rotation and function, along with the forces generated, that contribute to injuries. The floor of the rink has been constructed so that it can be converted to turf for other sports such as

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Photo: John Kelly

Robotics Engineer Mary Goldsmith operating the KUKA KR60 robot.

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golf, soccer, and tennis. The motion analysis system used for this research is similar to that used for creating movies such as *The Matrix* and other video games with athletes' signature moves.

The motion analysis section of the new facility will house some highly advanced technologies not yet used in orthopaedics, including a one-of-a-kind dual-plane fluoroscopy system that records 3-D x-ray movies rather than 2-D still shots at frame rates up to 1,000 per second. Researchers will use this technology, two x-ray machines working in concert, to analyze the motion of joints in three-dimensions. There are only a handful of these types of machines in the world right now.

The Biomechanical Testing Laboratory utilizes a robot manufactured by KUKA Robotics, specifically developed to meet the Institute's specifications. Using this novel technology, the department will be able to test joints in a manner that will enhance and validate joint reconstruction techniques.

The expanded Surgical Skills Laboratory will be used for teaching. It will consist of 10 fully equipped surgical skill operating stations for visiting clinicians, scholars, and fellows.

Under the direction of Biomechanics Research Department Director and Senior Staff Scientist Coen A. Wijdicks, Ph.D.; Director of BioMotion Eric Giphart, Ph.D.; and Kelly Adair, Surgical Skills Manager, these laboratories will benefit orthopaedists and patients worldwide by facilitating the development, enhancement, and training that allow patients to keep their own joints while maintaining their desired activity levels for as long as possible.



Advancing Orthopaedic Surgery with the Latest Techniques and Tools in Our Newly Renovated Surgical Skills Laboratory

By Kelly Adair, Surgical Skills Manager

Innovation has arrived at the Steadman Philippon Research Institute's Surgical Skills Laboratory with one of the most advanced laboratories in North America. Amid recent renovations, thanks to many generous contributions from private donors and industry, as well as our continued partnership with Vail Valley Medical Center, the SPRI laboratories are at the peak of advancing orthopaedic medical education. The new Surgical Skills lab has been off to a great start. We have hosted several different labs for visiting surgeons, scholars, fellows and medical companies.

Medical education is at a high point in the industry and continually increasing throughout the world. Companies have private laboratories at their headquarters and staff dedicated specially to managing and operating multiple courses annually. The more hands-on cadaver labs we have for surgeons, the better the outcomes for the future. Practically, the labs will further innovation and advance less-invasive procedures that will benefit every patient in the long run by creating more reproducible, highly trained surgeons throughout the world.

Since February, a total of 20 outside company labs have been held at our facili-

ties and more are expected. The goals of various company labs range from physician training to product development. Large multi-station surgeon training courses provide a highly valuable, hands-on experience for both orthopaedic sports medicine fellows and newly experienced surgeons to practice techniques with our Institute's highly respected surgeons. Product development labs provide a unique "brainstorming" setting with the goal of helping to further advance the design of orthopaedic-related implants and products. Surgical Skills labs allow for practice and reproducibility of surgical techniques, eventually increasing patient safety.

We have hosted labs in all major joints of the human body, such as the knee, hip, shoulder, elbow, foot and ankle, and hand and wrist, significantly increasing continuing education opportunities for physicians.

For example, we hosted a two-day course for Small Bone Innovations, Inc., attracting surgeons throughout the country to practice Scandinavian Total Ankle Replacement (S.T.A.R). We have also continued to host several hip arthroscopy courses with Smith and Nephew. Medical education courses continue to attract visiting clinicians from all over the world and allow them the opportunity to further advance and master their surgical skills. The Institute has hosted labs for, among others, Conmed/Linvatec; Arthrex, Inc.; KFx Medical; Memometal, Inc. (Stryker); Wright Medical; Sonoma Orthopedics; and BioMet Sports Medicine.

Additionally, the more revenue we can generate from labs, the more we can independently support our Fellowship program, research and education, and continue to be the world leader in research into the causes, prevention, and treatment of orthopaedic disorders. We anticipate having up to 1,000 surgeons visit our lab annually. The more surgeons we can reach out to, the better the outcome for the patients in the operating room. Thus, we are able to advance SPRI's mission of "Keeping People Active."



Institute's 10-station surgical skills laboratory with arthroscopic video towers.



Two arthroscopic stations with our custom drop-down panels.



Live demonstration of a 5-station arthroscopic hip lab.



A group of surgeons participating in a Total Ankle Replacement Medical Education Course.

PATIENTS IN THE NEWS

Tommy Ford, Tim Jitloff, and Tucker Perkins: Skiing's Rising Stars Shoot for 2014 Olympics

Steadman Philippon Research Institute sponsors Alpine and Free Ride skiers.

By Jim Brown, Editor, SPRI News

Want a preview of what you might see in the 2014 Winter Olympics? Remember these names: Tommy Ford, Tim Jitloff, and Tucker Perkins. These young men have established themselves as national champions in their sports and now they are official representatives of the Steadman Philippon Research Institute.

Tommy Ford, an Alpine racer from Bend, Oregon, was a member of the 2010 U.S. Olympic team, a three-time National Champion in 2010, and a two-time National Champion in 2011.

Tim Jitloff was named to the U.S. Development Team in 2005, the same year he won a Junior World Championship. The Reno resident is now a three-time National Champion, a seven-year member of the U.S. Ski Team, and has his sights set on the next Olympic games.

New Hampshire's Tucker Perkins is a professional free ride skier, a Halfpipe National Champion in 2010, and in April was named to the first ever U.S. Freeskiing National Team.

TOMMY FORD: FAMILY TRADITION

For Ford, skiing is a family tradition. His father was on the U.S. team in the late 1960s and early 1970s, and he later coached at Dartmouth. His mother, Mary Ellen, coached for the Mount Bachelor Ski Foundation and at the University of Vermont, and Tommy's brother, Tyson, was a college racer.

Not surprisingly, Tommy was on skis by the time he was two or three years old. Skiing came naturally. "I was almost more comfortable skiing than I was walking." Ford joined the U.S. Development Team right out of high school and has been moving up as a world-class Alpine skier ever since. His rise in the world of ski racing has been marked by winning and consistent improvement.

Ford's schedule is hectic, but very carefully planned. He gets a little down time (or at least a change of pace) each year as a student during a two-month spring semester at Dartmouth. He steps up the intensity of his training regimen beginning in July. In August, he was off to New Zealand with the U.S. Ski Team. Then it will be back to the States, down to Chile, home again, and finally in Europe to get ready for the 2011-2012 World Cup competition.

Tommy's Olympic experience in Vancouver, British Columbia, was unique, he says. He interrupted his training to attend the Opening Ceremonies, then flew back to the States to get ready for his events. "Huge. Lots of energy and definitely a different kind of energy. It was quite the experience."

As he prepares for the next Olympic Games in Russia, he is returning to the approach he had earlier in his career of enjoying the sport and trying to perform well, regardless of Olympic expectations. "My focus will be on great racing with great energy," he says, "not thinking so much about the Olympics specifically."

Tommy had known about The Steadman Clinic and the Steadman Philippon Research Institute because many of his teammates had been treated there. Then he met SPRI's Mike Egan, Marc Prissant, and Dr. Marc Philippon at a meeting in San Francisco and began to better understand the sports medicine research conducted at the Institute. He later became personally involved as a patient when he was treated for a hip injury by Dr. Philippon.

"The physicians at Steadman have worked with a lot of high-end athletes," says Ford, "and the impact of their research has benefitted ski coaches and athletes at every level. I wanted to be an ambassador for them because I realize the importance of their mission. At some point, most of us will benefit from what they do."

TIM JITLOFF: IT'S ABOUT THE TEAM

Most fans think of ski racing as a highly individual sport, but Tim Jitloff's career, on and off the slopes, has been more about the team. He was on the U.S. Development Team in 2005, is a member of the U.S. Ski Team now, and hopes to be a member of the U.S. Olympic Team (for the second time) when it competes in Sochi, Russia, in 2014. But Tim's team orientation is equally impressive apart from ski racing. "My mom is a breast cancer survivor," he explains. "After her experience, the two of us decided to

get involved with Susan G. Komen for the Cure, an advocacy organization that supports breast cancer research, education, and support programs. Our Komen Race for the Cure team raised about \$25,000 in the Reno area over a two-year period, and we will continue to support breast cancer awareness."

Tim sees his new role with the Steadman Philippon Research Institute as a continuation of a team effort. "Some of the best surgeons in the world are at The Steadman Clinic," he says. "Anyone who is a ski racer knows about this Clinic and the Research Institute. This is where we go when we have an injury. Dr. Steadman and his colleagues have been involved with the U.S. Ski Team for a long time. For the athletes, it's like we're part of the same team."

After the next Winter Olympics, Tim will decide on whether to keep on skiing competitively, to continue his studies in Germany (he is fluent in German and lives there for part of the year) or the United States, or to do both. He is interested in the business side of sports medicine. "I'm excited about the possibility of working in a field that develops tools to help people stay healthy or to heal after an injury. It would be great to do that and still be associated with Steadman Philippon."

There's that team thing again.

TUCKER PERKINS: FREESKIING PIONEER AT 20

"I grew up playing practically everything," says Perkins. "My parents gave me the opportunity to explore what I liked to do, and I played lacrosse, swam, and surfed."

Tucker, like Tommy Ford, was on skis at a very young age. Later, he got his competitive start in ski racing, then switched to mogols, tried slopestyle skiing, and by the time he was 14 began to focus on halfpipe. (The halfpipe is a long half-cylinder of packed snow where the athlete performs jumps, spins, and maneuvers while moving from the start to the finish. Although only 20 years old, his résumé reads like that of a veteran.

Perhaps his greatest honor yet was being named as one of the four men on the first U.S. Pro Halfpipe team. "When I got the call, it was one of the most exciting days of my career," says Tucker. "Halfpipe has always been a very individual sport, but being named to the U.S. team gives me and my teammates the opportunity to be part of something bigger than ourselves."

Making the team also opens the possibility of representing the United States in the 2014 Winter Olympics. The team will be selected based on the results of a series of

Grand Prix events leading up to the Olympic Games, and the top four Americans will make the squad. If Tucker continues to perform as he has during the past few years, he will become an Olympian.

My first encounter with the Institute and Clinic was when I was in Vail five years ago," says Perkins. "Each of the procedures they performed on me was added to the data they have obtained from patients for the past 20 years. That information helped me get the best care and results possible. I like knowing that my data points will contribute to the evidence-based medicine that helps others."

REPRESENTING STEADMAN PHILIPPON

Skiing stardom has given Tommy Ford, Tim Jitloff, and Tucker Perkins a platform to help educate others. As spokesmen for the Steadman Philippon Research Institute, they will wear the SPRI logo, provide feedback regarding their training and performance, contribute to research, make appearances on behalf of the Institute, and share their personal experience and knowledge of SPRI.

"We want to shine a positive light on the Institute and all the great things its doctors and scientists have done for recreational and professional athletes," says Tucker. "I've personally seen positive outcomes among my friends, family members, and sports superstars."

"These three accomplished athletes are great spokespersons for the Steadman Philippon Research Institute," says John McMurry, Vice President of Development and former U.S. Ski Team Coach and Alpine Director. "They are living examples of what we stand for in orthopaedic research and what we want to be able to preserve in people of all ages — making dreams come true and keeping people active in all stages of life."



Tommy Ford

Photo: Eric Schramm



Tim Jitloff

Photo: Joe Margolis



Tucker Perkins

RESEARCH UPDATE

Researchers Confirm New Treatment Option for Osteoarthritis of the Shoulder

The Institute states that the CAM procedure was designed to treat the symptoms of osteoarthritis of the shoulder and is best used for patients who are too young, or too active, for joint replacement surgery.

Researchers at the Steadman Philippon Research Institute (SPRI) have recently validated a new treatment developed by Peter Millett, M.D., M.Sc., to help minimize and alleviate the symptoms associated with osteoarthritis of the shoulder. In the initial study group that has undergone the CAM procedure, the vast majority has reported a significant improvement in the pain, stiffness, and weakness related to the disease. The initial data, collected and analyzed by Dr. Millett and Marilee Horan, M.P.H., of the SPRI Clinical Research Department, will be reported in *Arthroscopy*. Editors of this top medical journal have called the procedure “amazingly innovative!”

The U.S. Centers for Disease Control and Prevention estimates that in the next 25 years at least 71 million Americans will have some form of arthritis, a degenerative condition of the joints, creating pain, swelling, and limited movement for sufferers. Osteoarthritis is one of the most debilitating forms of arthritis and is characterized by the deterioration of articular cartilage accompanied by changes in the subchondral (below the cartilage) bone and soft tissue of the joint.

Dr. Peter J. Millett, an orthopaedic shoulder surgeon and sports medicine specialist with The Steadman Clinic in Vail, is the pioneer of the CAM procedure. CAM stands for Comprehensive Arthroscopic Management. According to Dr. Millett, “The CAM procedure was developed because we began to see a higher occurrence in younger patients—predominantly athletes—with

advanced arthritis of the shoulder. In addition, older patients who wish to remain active were in need of other options in order to delay total joint replacement surgery.”

The CAM procedure was designed in stages over the course of five years with a specific focus of alleviating pain along the back and side of the shoulder. During the procedure, damaged cartilage and labral tissue is removed and regenerated. Scarred ligaments and capsular tissues are released to restore mobility. The most important aspect of the procedure is the decompression of the axillary nerve, which becomes entrapped by scar tissue and bone spurs. Freeing up this nerve alleviates much of the pain associated with the osteoarthritis.

Osteoarthritis is often hereditary and can occur due to degenerative changes within the body, but it can also occur as a result of a prior sports or traumatic injury. While not many orthopaedic surgeons have adopted the CAM procedure to date, Dr. Millett believes that with further study, research, and education through the Institute, the technique can be shared, both nationally and internationally, with other surgeons so that it can be offered to more patients. The procedure requires a high degree of technical skill and experience and therefore requires advanced training to perform it safely.



SPORTS AND WELLNESS

Keep Yourself and Your Ankles in the Game

Understanding and preventing the most common orthopaedic injury: Ankle Sprains

By Thomas O. Clanton, M.D.
Foot and Ankle Specialist
The Steadman Clinic

My experience with ankle sprains includes over 30 years as a team physician caring for high school, college, and professional athletes in Houston, including the Rice University Owls, the Houston Rockets, and the Houston Texans. Their ankle sprains occurred through similar mechanisms to what you or

I might do while hiking June Creek or fly-fishing the Eagle River. One wrong step can cause the foot to turn inward and the outside of the ankle to roll under (see photo 1).

Anthony Rendon was an exceptional college baseball player I treated while acting as team doctor for the Rice Owls. In 2008, he was the Freshman Player of the Year in NCAA Division I Baseball. Sadly, in the last game of that season, he completely tore all his ligaments and dislocated his ankle. In the spectrum of ankle sprains, his was clearly among the worst. Fortunately, most ankle sprains are far less severe and can be managed with the typical R.I.C.E. formula of rest, ice, compression, and elevation.



Photo 1 – Rice baseball player Anthony Rendon turning right ankle in season-ending injury.



Photo 2A – The simple exercise of a heel raise can be a good way to start building ankle strength.



Photo 2B - A more advanced heel raise exercise with added weight and more elevation can be the next step.

Photos: Thomas O. Clanton, M.D.



Photo 3 – Band exercises are an excellent method to strengthen all muscle groups around the ankle.



Photo 4 – Balance exercises provide both strength and position sense to the ankle.

When Dr. Steadman invited me to join The Steadman Clinic in 2009, the opportunity to join a world-class sports medicine clinic was very attractive. An added bonus was the presence of our two married daughters in the Vail Valley, along with two grandchildren. So while I am not running onto baseball diamonds, basketball courts, or football fields to evaluate twisted ankles any longer, I am certainly seeing the effects of the incredibly active lifestyle that is practiced by most residents of the Vail Valley. That is what contributes to the fact that lateral ankle sprains are the most common injury causing lost playing time in sports around the world. That's right—it is the ankle and not the knee or the shoulder!

If the ankle is so susceptible to injury, is there anything that can be done to keep you or me from becoming another victim? Reducing risk is the answer. This can be done by strengthening the leg and ankle muscles

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through exercise. A few regularly performed heel raises and band exercises in the comfort of your home may be all you need (see photos 2 and 3). Balance exercise is also helpful for ankle stability (see photo 4).

Those who ski and snowboard know that we spend a lot of time and money finding the right boots and insoles or orthotic devices so that our performance can be maximized during the winter season. Don't fail to take the same precautions for your summer season by finding the right shoes and orthoses and perhaps even an ankle brace, if you need the additional support.

The good news for Anthony Rendon is that his ankle recovered well enough after surgery and rehabilitation that he won the Dick Howser Award as the Player of the Year in 2009, and he is now one of the top college players projected to be drafted in the first round of this summer's Major League Baseball draft. With this as an example, if you happen to injure your ankle, make sure you get proper care, particularly if you can't put weight on it or you are tender over the bone itself. While surgery is reserved only for the most severe cases, professional treatment of an ankle injury may keep you from losing playing time.

To learn more, visit thesteadmanclinic.com.



STOP Sports Injuries — Keeping Kids in the Game for Life

By Peter J. Millett, M.D., M.Sc.
Director of Shoulder Surgery
Shoulder, Knee, Sports Medicine
The Steadman Clinic
and
Trevor R. Gaskill, M.D.

Dr. Gaskill was a 2010–2011 Fellowship Surgeon at the Steadman Philippon Research Institute and is now practicing orthopaedics at the Bone and Joint Sports Medicine Institute, Naval Medical Center, Portsmouth, Virginia.

WHAT CAUSES SKIING AND SNOWBOARDING INJURIES?

Most snowsport injuries are traumatic, caused by being on dangerous terrain, lift accidents, falls, and collisions. In many instances, fatigue after a long day on the slopes or poor judgment can be blamed for

injuries. The most common issues that predispose people to injury are:

- Time skiing/snowboarding without rest
- Skiing/snowboarding above ability level
- Improper/faulty equipment
- Inadequate adjustment to altitude
- Dehydration/fatigue
- Skiing/snowboarding off trail or in closed areas
- Failure to observe posted warning signs by the mountain responsibility conduct code

WHAT ARE SOME OF THE MOST COMMON SKIING /SNOWBOARDING INJURIES?

The wide range of skiing and snowboarding injuries involves many areas of the body, including:

- Anterior cruciate or collateral (ACL) ligament injuries
- Shoulder dislocations or fractures
- Shoulder separations
- Lower extremity fractures
- Spinal injuries
- Closed head injuries
- Wrist, hand, or thumb injuries

HOW ARE SKIING/SNOWBOARDING INJURIES TREATED?

Fortunately, most snowsport injuries are minor and can be treated with rest, bracing, nonsteroidal anti-inflammatory medication, and avoidance of secondary injury. However, some fractures and ligament injuries may require surgical intervention where recovery periods vary from three to six months or possibly more.

HOW CAN SNOWSPORT INJURIES BE PREVENTED?

Proper Instruction and Equipment

Instruction prior to getting on the slopes is important in preventing injuries. Instructors can educate beginners on the importance of a good warm-up and cool-down, properly fitted equipment, and safe skiing techniques. These same principles hold true for snowboarders. They can also determine at what point it is appropriate for beginners to progress to more advanced levels of terrain.

Appropriate equipment is critical to being safe. Poorly functioning or improperly adjusted equipment is a frequent cause of injuries. Bindings that are too loose or too tight, as well as equipment that is improperly sized or used on improper terrain, can cause injury.

Preventative equipment such as helmets can help you avoid disastrous and even fatal accidents, even though resorts do not universally require them. Only about 48 percent of U.S. skiers and snowboarders routinely wear helmets. In terrain parks, wrist guards and elbow and kneepads are also recommended. The use of protective equipment has been associated with a 43 percent decrease in the rate of head, neck, and face injuries.

Parental Oversight

Parents play an important role in educating their children about safe skiing and snowboarding practices. They should help their children avoid terrain that is beyond their ability and encourage professional instruction and routine rest breaks with rehydration. It is also important to caution children against improper speeds and the risks of skiing/snowboarding out-of-bounds.

Common Sense Precautions

Most injuries occur after lunch and when fatigued. Be sure to stay adequately hydrated throughout the day and stop to rest every couple of hours. In addition, changing snow and ice conditions can dramatically increase the complexity of terrain quickly. Abiding by the signs and warnings is imperative for your safety and the safety of others.

NATIONAL SKI AREAS ASSOCIATION RESPONSIBILITY CODE FOR REDUCING RISK

- Always stay in control.
- People ahead of you have the right-of-way.
- Stop in a safe place for you and others.
- Whenever starting downhill or merging, look uphill and yield.
- Use devices to help prevent runaway equipment.
- Observe signs and warnings, and keep off closed trails.
- Know how to use the lifts safely.

Sports Tips provide general information only and are not a substitute for your own good judgment or consultation with a physician. To order multiple copies of this fact sheet or learn more about sports injury prevention, please visit www.STOPSportsInjuries.org.



Dr. Henry Ellis Prepares for Future in Pediatric and Adolescent Sports Medicine

“The number of sports injuries among pediatric and adolescent athletes has increased five times in the past ten years,” says Henry Ellis, M.D., a member of the 2010-2011 class of Fellows at the Steadman Philippon Research Institute. “This huge increase has resulted in more interest and research into causes, treatment, and prevention of sports injuries.”

Dr. Ellis has spent the past decade preparing to make pediatric and adolescent sports medicine the focus of his career. “Over the next five to ten years, we need to develop additional information on injury prevention, especially on the hip,” he says, “and I hope to be able to contribute to a better understanding of the problem in that age group.”

OFF TO A GREAT START

During his undergraduate studies at the University of Texas, he spent a summer

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Dr. Henry Ellis performing arthroscopic surgery.

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internship at what was then the Steadman Hawkins Sports Medicine Foundation (now the Steadman Philippon Research Institute). He enjoyed the experience so much that he returned after graduation for a year as a research intern.

Two people have been especially influential regarding Dr. Ellis's decision to become a physician and orthopaedic surgeon. One was his grandfather, Dr. John Ellis, a general practice physician in Sherman, Texas. "He practiced medicine the way it used to be done, making house calls and devoting himself to the entire community."

The other person was Dr. Richard Steadman, founder of The Steadman Clinic and SPRI. "My particular interest in sports and sports medicine started during that first internship back in 1997. I spent the summer in the biomechanics lab and learned about treatment, analysis, and how to keep people active. I was also able to talk with Dr. Steadman and learn more about what he and his colleagues were doing at the Clinic and Institute. That really motivated me."

Dr. Ellis graduated from the University of Texas Medical School in San Antonio, where he was a member of the Alpha Omega Medical Honor Society. During his orthopaedic residency at the University of Texas Southwestern in Dallas, he assisted with sports medicine coverage for high school and college teams. As chief resident, he was honored with teaching and academic awards, including the W. Brandon Carrell Distinguished Physician Award. "During my training at the Texas Scottish Rite Hospital in Dallas," says Dr. Ellis, "I was really influenced by the number of sports injuries we saw. That exposure also had an effect on my involvement in pediatric sports medicine."

THIRD TIME AROUND

Then he was back at SPRI for a third time. ("Can't get enough," he says.) For the past year he has been a Fellow at Steadman Philippon. "I really didn't plan on returning, but once I started looking at sports medicine programs, it was clear to me that this was the best one in the country. It was an easy decision." His research focus at SPRI has been pediatric and adolescent hip arthroscopy.

"There have been tremendous changes in the Foundation/Institute since I first came

here. Steadman Philippon has always been a well-known institution, and now it really has an international presence. Orthopaedic surgeons around the world recognize its research excellence and innovation.

"One thing that hasn't changed is the feeling shared by everyone associated with the Research Institute," observes Dr. Ellis. "There has always been a coordinated effort—without self-promotion—among all of the departments. Everyone is trying to determine the best way to keep people on their feet and getting back into physical activity and sports."

ONE MORE STOP

Dr. Ellis has one more stop in his preparation for a career in pediatric sports medicine before joining an orthopaedic group in Dallas. In August, he began a six-month fellowship in pediatric orthopaedics at the Hospital for Sick Children (SickKids) in Toronto. SickKids is recognized as one of the world's foremost pediatric healthcare institutions.

When he and his wife, Kacy, and their daughter, Wynn, finally settle in Dallas (once a Texan, always a Texan), he will continue to practice and research, and he will teach interns and fellows at UT Southwestern. Much of his research will be conducted at the Children's Medical Center. It is the only academic healthcare system in Dallas-Fort Worth dedicated solely to the comprehensive care of children from birth to age 18.

UNIQUE PERSPECTIVE

After serving at three different times and in three different capacities at Steadman Philippon, he has a perspective based on experience. "The Institute is as strong as it has ever been. It keeps progressing, keeps improving, and continues to enhance its role as a world leader in sports medicine.

"The Fellowship program has given me exposure to highly specialized surgical techniques and patient management," he concludes. "More important is Dr. Steadman's philosophy of how to treat patients from the time they walk through the door to the time their treatment, physical therapy, and recovery are complete. That has been the highlight of my experience at Steadman Philippon."



Olivier A. J. van der Meijden, M.D. — 2010-2011 Arthrex European Visiting Scholar

Knee injuries change career goal from professional athlete to sports medicine.

By Jim Brown, Editor, SPRI News

Your goal is to become a professional athlete. Your talent and drive give you a good chance of achieving that goal. Then two things happen, both before the age of 20. You tear the anterior cruciate ligament in one knee when you are 15, and you tear the ACL in the other knee at 19.

Those kinds of injuries have a way of changing your perspective in terms of a career, and that's what happened to Olivier A. J. van der Meijden, M.D., a citizen of The Netherlands and the 2010-2011 Arthrex European Visiting Scholar at the Steadman Philippon Research Institute.

"I had a dream of becoming a professional soccer player," he says, "but that dream faded pretty quickly after the second injury. Since I couldn't be a professional athlete myself, I wanted my profession to have some connection to sports," he recalls. "The second injury really increased my interest in sports medicine."

THE STEADMAN PHILIPPON REPUTATION

"The first time I heard of The Steadman Clinic and the Institute was in 2000 when Dr. Steadman performed surgery on one of our famous soccer players," says Dr. van der Meijden. "In due course, I heard more and more about the Clinic and the Institute.

"Shortly after I graduated at the University Medical Center in Utrecht, I got in touch with Dr. Peter Millett through my Dutch mentor in orthopaedics. From our correspondence the idea grew that it would be a great opportunity for me to come to SPRI and do research." Previously, Olivier had spent five weeks in Boston for an ENT-internship rotation, which intensified his interest in returning to the U.S. and conducting research.



Photo: John Kelly

Dr. van der Meijden preparing a specimen for testing on the Instron Electropuls E10000.

Dr. van der Meijden would also meet Coen Wijdicks, Ph.D., Director of Biomechanics Research, and Dr. Robert LaPrade, Chief Medical Research Officer at SPRI, at an international sports medicine conference in Oslo, Norway.

This meeting and eventually an offer to join the SPRI staff as a Visiting Scholar changed the normal order of orthopaedic training for Dr. van der Meijden. After completing his medical degree, he gained experience for a year as a non-training physician in general and orthopaedic surgery with the goal of advancing into the orthopaedic residency program afterwards.

Following his time in Vail, he will return to The Netherlands and begin a six-year residency in orthopaedic surgery. His goal now is to become a private practice orthopaedic surgeon specializing in the shoulder and knee.

The European Visiting Scholars program that sponsors Dr. van der Meijden and other young physicians was developed in conjunction with Arthrex, Inc., an orthopaedic medical device company. It reflects Arthrex's commitment to orthopaedic research in advancing knowledge of the global medical community and to helping surgeons treat their patients better.

WORKING, ADJUSTING

At SPRI, Dr. van der Meijden worked closely with Dr. Millett on shoulder research, and he was involved with a variety of research projects in the Biomechanics Research Department with Dr. Wijdicks and other scientists/physicians. Under the direction of Dr. Millett, Dr. van der Meijden is researching the enforcement of repairs of massive rotator cuff tears. The investigation is nearing completion and the findings will be submitted for publication in a professional journal.

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Visiting Scholar

The European Visiting Scholar, developed and sponsored by Arthrex, Inc., has become the model for our Visiting Scholars program. The Visiting Scholars program is sponsored by corporate and individual donors. Our program was developed in conjunction with Arthrex, Inc., an orthopaedic medical device company. Arthrex's founder and president, Reinhold Schmieding, has had a long-time interest in education. Reinhold approached us with an idea for educating a European orthopaedic surgeon with interest in research, committed to funding it, and the Visiting Scholars program was created. Reinhold Schmieding commented, "Arthrex is pleased to contribute annually to the Institute. The sponsoring of a European research fellow exemplifies Arthrex's commitment to orthopaedic research to advance knowledge of the global medical community and to helping surgeons treat their patients better." Jorge Paulo Lemann is supporting our Brazilian Visiting Scholar. These scholars learn new surgical techniques and conduct research, which is submitted for publication in leading orthopaedic journals.

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Dr. van der Meijden is not a novice when it comes to living in other countries and adjusting to new environments. His father worked for Shell Oil, and as a child, Olivier lived in Nigeria, England, and Australia before his family moved back to The Netherlands. He speaks Dutch, English, and “manageable” French and German.

“Vail was an all new wonder world,” he says. “Different culture, different style of work, so many possibilities and options, both in research and in all the things you can do here in the mountains.” His knees are fine now, and his two primary recreational sports are cycling and skiing.

SPRI OBSERVATIONS

On physician/patient relationships:

“Physicians seem to have a close relationship with their patients. This is a good thing and something I will strive for when I begin my practice.”

On patient care:

“World-famous athletes and normal patients are treated the same way. If you didn’t recognize the names or faces, you wouldn’t know who was famous and who was not.”

On the spirit of collaboration:

“The collaboration among The Steadman Clinic, Howard Head Sports Medicine (physical therapy center), and the Steadman Philippon Research Institute is like a ‘golden triangle’ of sports medicine treatment, rehabilitation, and research. It’s great that people from all over the world come here to see how things are done, how they can collaborate with each other, and how they can contribute.”

On being a Visiting Scholar:

“There is always a lot going on, and with both the Clinic and Institute’s emphasis on training and education, it is also a great learning opportunity. We never run out of work. I’m very grateful for the opportunity Dr. Millett and the Research Institute gave me to be here.”

On ever playing competitive soccer again:

“I could, but I won’t. I still have some years ahead of me, and I’ll need my knees to do other things.”



Brazilian Orthopaedic Surgeon Dr. Bruno Nogueira Joins Steadman Philippon as Visiting Scholar

By Jim Brown, Editor, SPRI News

On Tuesday, February 1, 2011, Bruno Nogueira, M.D., arrived in Vail ready to begin his work at the Steadman Philippon Research Institute. The official temperature was -4 degrees Fahrenheit.

He had come from Forteleza, a sprawling city of 2.4 million people on the northeast coast of Brazil, where the average temperature in February is 87.7°F and where the highs can reach 100°F.

“What am I doing here?” he briefly thought to himself.

What he was doing in mid-winter Colorado was beginning a one-year of intensive training and research as a Visiting Scholar. He was chosen from among the 10,000 practicing orthopaedic surgeons in Brazil after an application and selection process that included written and oral tests, interviews, and a review of his résumé, presentations, and publications.

Before he came to Vail, Dr. Nogueira had already completed six years of medical school and four years of residency in his home country, as well as additional training at hospitals in Miami and Chicago.

ADJUSTING TO A NEW ENVIRONMENT

“That first week was really hard,” says Dr. Nogueira, “but I knew that adjusting to my new environment was just a matter of time and that everything was going to be okay. I got a great welcome from the entire staff at Steadman Philippon. They treat people really well and made me feel right at home.”

Dr. Nogueira is the third in a series of Visiting Scholars from Brazil, all of whom received support from a program sponsored by famed Brazilian businessman Jorge Paulo Lemann. These physician/scholars (and their counterparts in the European Visiting Scholars Program) spend 12 months at Steadman Philippon learning new surgical techniques and conducting research that is submitted for publication to leading orthopaedic journals.

“Being named a Visiting Scholar at Steadman Philippon is the best award I’ve

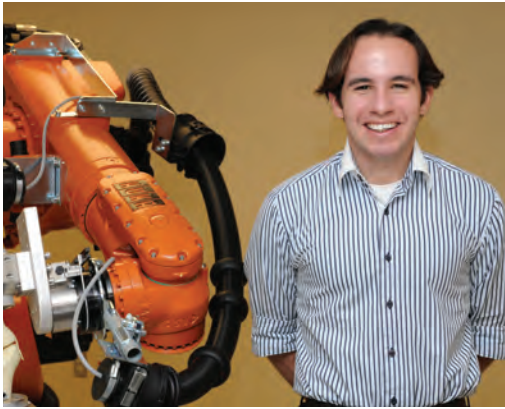


Photo: John Kelly

Dr. Bruno Nogueira with the KUKA KR60 robot.

won in my entire life," says Dr. Nogueira. "I really wanted to come here and couldn't believe when I was told I had been accepted into the program. I knew that it would allow me to learn from the very best sports medicine surgeons and scientists.

"I work under the supervision of Dr. Marc Philippon, who I believe is the foremost hip surgeon in the world," says Dr. Nogueira. "He is an artist in the way he conducts surgical procedures. His surgical skills and his ability to perform labrum reconstruction are two of the attributes that set him apart from other great physicians. Hip arthroscopy is very, very difficult, but he makes it look easy."

Dr. Nogueira's schedule at the Institute is packed. On Mondays, Tuesdays, and Thursdays he observes and assists Dr. Philippon in surgery. During the rest of the week he is busy attending meetings, seeing patients, conducting research, and writing. Two areas of emphasis are femoroacetabular impingement (FAI) and hip arthroscopy. Hip arthroscopy in professional tennis players is a particular interest.

When he has a little free time and the weather is warmer, he enjoys playing tennis and cycling "on a very good bike."

RETURNING TO BRAZIL

When Dr. Nogueira returns to Brazil in 2012, he will be one of only four or five orthopaedic surgeons trained in hip arthroscopy in the entire country. In addition to his surgical skills, he will also be able to use his experience gained in the SPRI Biomechanics Research Department and other areas of the Institute. "The Biomechanics Lab is one of the best facilities of its kind—anywhere," he says.

Dr. Nogueira plans to continue conducting research, sharing his research through professional journals and in presentations,

and teaching other orthopaedic surgeons at the Federal University of Ceara. But his focus will be surgery, specifically hip arthroscopy.

"This year of serving as a Visiting Scholar with the best people and in the best facilities in the world will be a tremendous boost to my career. I will be able to take what I am learning here to benefit patients, students, and physicians in an area of South America where it is desperately needed."



Welcome 2011-2012 Fellows Eight New Physicians Introduced

Each year, eight young orthopaedic surgeons are selected from a field of more than 160 to participate in 12 months of vigorous training in the Steadman Philippon Sports Medicine Fellowship Program. Our goal is to prepare them to be leaders in the field of orthopaedic sports medicine for the remainder of their careers. Many go on to hold high-level faculty positions at top medical schools.

In 2010, we added two Fellows to our program when we welcomed the Institute's first Foot and Ankle Fellow and the world's first Sports Medicine Imaging Research Fellow. In addition, we now have three Visiting Scholars, who are in essence research fellows from overseas. All eleven (Fellows and Visiting Scholars) are being given a unique opportunity to perform research in their respective areas of interest, including Biomechanics Research, Clinical Research, Imaging Research, and Basic Science Research.

Once every 18 months after that, they will return with other past Fellows for further education and to exchange the additional knowledge they have gained since completion of Fellowship training. The Institute currently maintains a network of more than 180 Fellows in communities around the world who serve in academic positions at leading universities and in private practices.

2011-2012 STEADMAN PHILIPPON FELLOWS

Adam W. Anz, M.D.

Dr. Anz spent his first 18 years of life in Auburn, Alabama. He graduated summa cum laude from Vanderbilt University with

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Thank you

A special "thank you" to our sponsors who make the Fellowship program possible. We'd like to recognize those individuals and foundations that support the entire Fellowship Class through the sponsorship of Academic Chairs.

Chair sponsors of the 2011/2012 Steadman Philippon Fellowship Class are **Mr. and Mrs. Lawrence Flinn, Mr. and Mrs. Brian P. Simmons, Mr. and Mrs. Peter Kellogg, Mr. and Mrs. Al Perkins, and Mr. and Mrs. Steven Read.**

Fellowship Benefactors fund the research of one Fellow for one year. Each benefactor is assigned a Fellow, who provides written reports and updates of his or her work. We extend our gratitude to the following individuals for their generous support: **Mr. and Mrs. Milledge Hart, the Fred and Elli Iselin Foundation, Mr. and Mrs. S. Robert Levine, Mr. Tim McAdam, Mr. and Mrs. Jay Precourt, and Mr. and Mrs. Stewart Turley.**

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a degree in mathematics and was also a member of Phi Beta Kappa and Sigma Chi. He was awarded an Alabama Merritt Scholarship for medical education and attended the University of South Alabama College of Medicine, where he graduated Alpha Omega Alpha and second in his class. His orthopaedic residency training was performed at Wake Forest University in Winston-Salem, North Carolina, with research that included 3-D CT reconstruction for identification of mild hip dysplasia and a biomechanical project involving pitchers and elbow injuries.

Dr. Anz's strongest interest has been in cartilage regeneration, for which he traveled to Malaysia for three weeks and aided a recent publication of a case series utilizing a novel method with peripheral blood progenitor cells. He has been working at Wake Forest to initiate a randomized controlled trial involving this method, including the acquisition of safety and quality data for preparation of an Investigational New Device application from the FDA.

B. Christian Balldin, M.D.

Dr. Balldin graduated summa cum laude and a Brother Daniel Lynch Scholar from St. Edward's University with a bachelor of arts degree. He also graduated magna cum laude from University of Texas at San Antonio with a bachelor of science degree. He played NCAA soccer his entire collegiate career and was involved in developing youth soccer talent throughout his college years. He attended the University of Texas Medical School in Houston, where he was named a Merck Scholar, and then performed his orthopaedic residency at the University of Texas Southwestern Medical Center in Dallas. During his time in Dallas, Dr. Balldin covered local schools and teams during athletic events. His research interests have included the biomechanical testing of fixation techniques in tendon transfers.

Robert E. Boykin, M.D.

Dr. Boykin graduated as a Morehead Scholar with highest distinction and Honors from the University of North Carolina at Chapel Hill, where he received a bachelor of science degree in biology and was a member of Phi Beta Kappa. While an undergraduate,

he completed an Outward Bound Course in Colorado and Utah, focusing on mountaineering and canyoneering. He then received his medical degree from Vanderbilt University, where he was elected president of the Alpha Omega Alpha Honor Society and vice-president of his medical school class. Dr. Boykin completed residency training in the Harvard Combined Orthopaedic Residency Program, where he served as administrative chief resident for the Massachusetts General Hospital. His research interests include nerve injuries and trauma of the shoulder, which have yielded numerous publications and presentations. After a fellowship in Vail, he plans to travel to Annecy, France, to work with Dr. Laurent Lafosse studying shoulder surgery at the Alps Surgery Institute.

Mark R. Geyer, M.D.

Dr. Geyer graduated summa cum laude from Baylor University, where he earned a bachelor of arts degree in philosophy and membership in Phi Beta Kappa. He graduated medical school from Baylor College of Medicine. He completed an orthopaedic surgery residency at Duke University and helped provide team coverage for local high school and collegiate athletes at Duke University and North Carolina Central University. Dr. Geyer has been published in the *Journal of the American Academy of Orthopaedic Surgeons*, among other journals, and has co-authored two book chapters. His interests include open and arthroscopic shoulder reconstruction in addition to ACL reconstruction and rehabilitation.

Jeffrey R. Padalecki, M.D.

Dr. Padalecki graduated magna cum laude from St. Mary's University, where he was named a presidential scholar and captain of the basketball team in his final season. He completed medical school at the University of Texas Medical School at Houston. During his orthopaedic residency at the University of Texas Southwestern, he served as assistant team physician to local high school, collegiate, and semi-professional athletes. While in residency, he was elected by Southwestern faculty to attend the American Orthopaedic Association Resident Leadership Forum. Dr. Padalecki has co-authored publications in the *Journal of Orthopaedic Trauma* and the *Journal of the American*



Front row from left to right: Thomas O. Clanton, M.D.; Benjamin M. Petre, M.D.; Mark R. Geyer, M.D.; Robert E. Boykin, M.D.; B. Christian Balldin, M.D.; Jeffrey R. Padalecki, M.D.; Adam W. Anz, M.D.; Peter J. Millett, M.D.; M.Sc. Back row from left to right: J. Richard Steadman, M.D.; Norman E. Waldrop, M.D.; Marc J. Philippon, M.D.; Randy W. Viola, M.D.; Robert F. LaPrade, M.D., Ph.D.; Eric K. Fitzcharles, M.D.

Academy of Orthopaedic Surgeons. His research efforts have been presented at American and Canadian orthopaedic trauma meetings, as well as at the Texas Orthopaedic Association annual meeting.

Benjamin M. Petre, M.D.

Dr. Petre graduated from Colgate University. He earned a degree in biology and studied for a semester at the National Institutes of Health. Following his undergraduate training, Dr. Petre performed biophysics research in the department of cell biology at Harvard Medical School. He attended medical school at University of Rochester School of Medicine and Dentistry and then went on to complete his internship and residency at Johns Hopkins Hospital. While at Hopkins, Dr. Petre was selected as the Administrative Chief Resident by his faculty and peers and was also honored by the *Journal of Orthopaedic Trauma* as the “Best Orthopaedic Teaching Resident” in 2009. His research has been broad and includes geriatric outcomes,

the biomechanics of triceps tears, and micro-processor applications in orthopaedics.

FOOT AND ANKLE FELLOW

Norman E. Waldrop III, M.D.

Originally from Mobile, Alabama, Dr. Waldrop earned his bachelor of arts degree in chemistry from the University of Virginia. Following graduation, he returned to Alabama, where he earned his medical degree from the University of Alabama School of Medicine in Birmingham. He completed his residency in orthopaedic surgery at Carolinas Medical Center in Charlotte, North Carolina. Dr. Waldrop’s research interests include damage control orthopaedics, as well as applications and complications of circular thin wire external fixation frames used in foot and ankle surgery. He has presented research at the American Academy of Orthopaedic Surgeons, Orthopaedic Trauma Association, and American Orthopaedic Foot and Ankle Society national meetings. His other research interests include sports-related injuries of the foot and ankle. After completing

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Where Are They Now. . . ?

The graduating class of 2010/2011 Steadman Philippon Fellows are busy establishing new careers in orthopaedics.

James Ames, M.D.

Dr. Ames is practicing at the Dartmouth-Hitchcock Medical Center in Hanover, New Hampshire.

Henry Ellis, M.D.

(see page 13).

In August, Dr. Ellis began a six-month fellowship in pediatric orthopaedics at the Hospital for Sick Children in Toronto. In February, he will settle in Dallas, where he will practice, research, and teach at the University of Texas Southwestern.

Trevor Gaskill, M.D.

Dr. Gaskill is practicing at the Bone and Joint Sports Medicine Institute at the Naval Medical Center in Portsmouth, Virginia.

John McDonald, M.D.

Dr. McDonald is establishing a practice at the Texas Orthopaedics, Sports, and Rehabilitation Center in Austin.

Douglas Nowak, M.D.

Dr. Nowak has moved to Mukiteo, Washington, and is practicing at the Everett Bone and Joint Clinic.

Paul Rath, M.D.

Dr. Rath is now in Tyler, Texas, practicing sports medicine at Mother Francis Hospital Trinity Clinic.

Cliff Willimon, M.D.

Dr. Willimon is establishing his sports medicine practice at Children's Orthopaedics of Atlanta.

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his fellowship at The Steadman Clinic under Dr. Clanton, he will return to Birmingham, where he will join Andrews Sports Medicine and Orthopaedic Center.

SPORTS MEDICINE IMAGING FELLOW

Eric K. Fitzcharles, M.D.

Dr. Fitzcharles is a graduate of the University of Kansas, earning a B.S. in chemical engineering, with highest distinction, in 1988. He competed on the Kansas Crew rowing team during college. Following two years of work as a consulting engineer in Washington, D.C., he attended medical school at the University of Virginia, graduating in 1994, and completed his diagnostic radiology residency at the University of Iowa in 1998.

Following residency, Dr. Fitzcharles worked in a Lexington, Kentucky, private practice for nine years as an outpatient radiologist specializing in MRI, PET-CT, and other cross-sectional imaging modalities. Four years ago, he founded Lexington Radiology, PLLC, a consulting office-based and teleradiology business with clients from throughout the country. He is a volunteer faculty member in the department of neurology at the University of Kentucky.



Vail and Denver High School Teams Participate in the Steadman Philippon Research Institute Golf Classic at Sanctuary

Proceeds to benefit ongoing orthopaedic research, including exploration into the prevention of youth sports injuries

The 8th annual Vail Valley Medical Center Steadman Philippon Research Institute Golf Classic presented by RE/MAX, LLC, held on August 18, paired two high school foursomes, Valor Christian High School of Highlands Ranch and Battle Mountain High School of the Vail Valley. Proceeds from the day-long fundraiser benefited orthopaedic research and educational programs conducted at the Steadman Philippon Research Institute.

Sanctuary, a stunning course designed by renowned course architect Jim Engh, was again the official site for the tournament.



Valor Christian High School and Battle Mountain High School teams.

Left to right: Chris Aubel, Michael Thompson, Kevan Aubel, Grant Verlinde, Christian (CJ) Andrews, John Galgano, Blake Patterson, Josh Gardella, Mathieu L'Esperance, and John Hibben.

“There is a growing epidemic of preventable youth sports injuries that is disrupting children’s athletic hopes and dreams at an early age.”

MARC PRISANT, EXECUTIVE VICE PRESIDENT AND CHIEF FINANCIAL OFFICER OF THE INSTITUTE.

Located near Sedalia, just south of Denver, it is ranked as one of the top 100 courses in the U.S.

The Valor team was sponsored by John Hibben of Clinical Trial Site Solutions, and Battle Mountain was sponsored by Xerox High Country Copiers.

Chris Aubel, owner of Xerox/High Country Copiers, consistently looks for opportunities each year that will promote sports in the Vail Valley. “Sponsoring a group of local athletes in the tournament was a great way to deliver on our commitment, as well as supporting research on youth sports injuries,” said Chris.

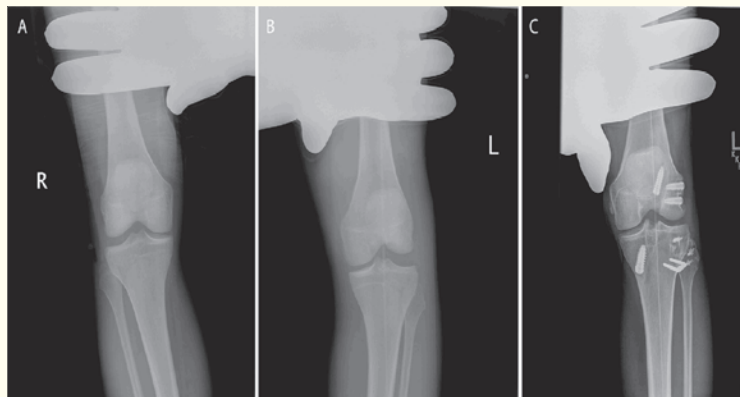
The local Battle Mountain team consisted of Kevan Aubel, Mathew L’Esperance, Michael Thompson and Grant Verlinde. The front-range Valor team included Christian (CJ) Andrews, John Galgano, Josh Gardella, and Blake Patterson. The scratch golfers of the Valor team won the youth championship, scoring a low net of 59.

More than 92 golfers participated in the tournament to support the orthopaedic research and educational programs of the Institute. Institute scientists are giving more specific attention to injury prevention in youth.

“There is a growing epidemic of preventable youth sports injuries that is disrupting children’s athletic hopes and dreams at an early age,” said Marc Prisant, Executive Vice President and CFO of the Institute.” He added, “These early injuries have also been shown to lead to the development of osteoarthritis very early in life for these young athletes.”



(Steadman Philippon Update, continued from page 3)



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Anteroposterior varus stress radiographs (at 20° of knee flexion) of a patient with an injury to the posterolateral corner of the left knee.

A and B: Preoperative radiographs of the right and left knees showing a side-to-side difference of 7 mm.

C: Radiograph of the left knee at the final follow-up evaluation. Following reconstruction of the posterolateral corner and the anterior cruciate ligament and repair of the lateral meniscus and the lateral capsular ligament, the side-to-side difference was -1 mm.

research represents the culmination of over a decade of work and over 50 peer-reviewed publications by Dr. LaPrade.

The paper was also published in *The Journal of Bone and Joint Surgery*, the premier peer-reviewed orthopaedic journal, on September 21, 2011 | Vol. 93, Issue 18.

The study elicited the following discussion points:

- Acute repairs of avulsed structures and reconstructions of non-repairable acute grade III PLC injuries showed significantly improved objective and subjective patient outcomes.
- Concurrent reconstructions of concomitant cruciate ligament tear(s) are both possible and also are recommended without any risk of increase in patient complications or postoperative stiffness.
- Early postoperative motion and functional activities within the limits of “safe zone” motion determined by the surgeon not only results in improved patient outcomes but also does not result in the surgical treatment stretching out over time. This is a major advancement in the treatment of this particular injury because many centers cast or immobilize patients for 3-6 weeks after surgical treatment due to concerns that early motion may result in failure of the repair.

ISAKOS was established to develop, support and promote charitable, scientific and literary works that disseminate and further the increased knowledge of arthroscopy, knee surgery and orthopaedic sports medicine. ISAKOS works with regional and local societies that share similar goals, providing a larger arena where these national societies and continental organizations can combine their strengths in an international forum.

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(Steadman Philippon Update, continued from page 21)

Award-Winning Research to be Presented at American Academy of Orthopaedic Surgeons Annual Meeting

“Arthroscopic Transcapsular Axillary Nerve Decompression,” by Peter Millett, M.D., has been acknowledged as an award-winning research abstract and will be presented at the Academy’s 79th Annual Meeting to be held February 7-11, 2012, in San Francisco. The video of the abstract will be included in the Academy’s Orthopaedic Surgery Video Library.

The Academy provides education and practice management services for orthopaedic surgeons and allied health professionals. The Academy also serves as an advocate for improved patient care and informs the public about the science of orthopaedics. Founded as a non-profit organization in 1933, the Academy has grown from a small organization serving less than 500 members to the world’s largest medical association of musculoskeletal specialists. The Academy now serves more than 34,000 members internationally.

Steadman Philippon Research Institute Team Gather in Brazil for a Special Awards Evening

Several physicians and scientists from the Steadman Philippon Research Institute (SPRI) visited Brazil to participate in the eighth biennial meeting of The International Society of Arthroscopy, Knee Surgery, and Orthopaedic Sports Medicine (ISAKOS) held in Rio de Janeiro, May 15-19. Among others, the group included Dr. Peter Millett, Dr. Robert F. LaPrade, and Dr. Marc Philippon.

During their visit, the SPRI team attended an awards dinner where three Brazilians who received the Jorge Paulo Lemann Scientific Research Prize were recognized:

- Bruno Schoeder de Sousa, from Minas Gerais State
- Leandro Ejnisman from Sao Paulo
- Francisco Bruno Gruz from Ceara

The Jorge Paulo Lemann award is a full research scholarship for highly qualified Brazilian doctor-researchers that allows them to develop, for one year, their knowledge in biomechanics and hip arthroscopy at the Steadman Philippon Research Institute. The only requirement is that upon returning to Brazil, they must share, publish, and demonstrate all the knowledge gained.



Dr. Marc J. Philippon Named member of U.S. Ski and Snowboard Team Foundation’s Board of Trustees

Renowned hip surgeon joins Dr. Steadman on the Ski Team Board

Dr. Philippon, Managing Partner of The Steadman Clinic and director of the Steadman Philippon Research Institute, has been named to the U.S. Ski and Snowboard Team Foundation’s Board of Trustees. The announcement was made by the U.S. Ski and Snowboard Association’s (USSA) President and CEO Bill Marolt.



Marc J. Philippon, M.D.

Photo: John Kelly

Philippon, who is one of the world’s leading orthopaedic hip surgeons, joined The Steadman Clinic in 2005 after serving at the University of Pittsburgh Medical Center, where he was Director of Sports Related Hip Disorders and Director of the UPMC Golf Medicine Program.

“Marc’s knowledge can play an integral role in furthering the work of our athletic organization in sports medicine,” said Marolt. “His enthusiasm and knowledge of both our sport and how to best treat our athletes will prove to be very important in achieving our Best in the World vision.”

Known internationally for performing hip joint preservation techniques, Dr. Philippon treats painful joint injuries in high-level athletes. He is a consultant to teams in the National Hockey League, National Football League, National Basketball Association, and Major League Baseball. He is also a consultant to the NHL Players Association.

Dr. Philippon is an active member with the American Orthopaedic Society for Sports Medicine and the Arthroscopy Association of North America. He is a fellow with the American Academy of Orthopaedic Surgeons, a Master Instructor with the Arthroscopy Association of North America - Masters Experience Hip Course, and a member of the Herodicus Society.

“I am honored to be a part of this Board,” said Philippon. “After treating numerous USSA athletes I am extremely impressed with the caliber of person and athlete the USSA supports. I am very proud to be a part of this team and to help athletes optimize their training and medical care.”

Dr. Philippon lives with his family in Vail, where they are active skiers at Vail and Beaver Creek.





Photo: John Kelly

In the Media

A Close-Up Look at Medical Research in Vail

Students from local middle and high schools see what the scientific method can do

Scott N. Miller, *Vail Daily*

Like many high school students, Jamie Barnett has often wondered if the scientific method is good for anything besides homework and test questions. Recently, she got an up-close look at the scientific method in action.

Barnett, a 15-year-old Battle Mountain High School student, was part of a group of local middle and high-school students who got an up-close look at some of the research going on at the Steadman Philippon Research Institute at Vail Valley Medical Center. The students got a good look at some of the work local cardiologist Larry Gaul is doing, too.

But in the far corners of the hospital building, the people at Steadman Philippon gave these students—all

part of the Eagle County School District’s “Eagle Program” for gifted and talented kids—a look at what leading-edge researchers do. And it all starts with the scientific method.

Robotics engineer Mary Goldsmith put the students through a quick exercise about how the Institute’s robots—one of which worked in the auto industry in a former life—can help test a hypothesis.

Goldsmith laid out a fairly simple exercise—how a research intern might determine the effectiveness of ligaments of various sizes in knee surgery—then asked the students how they might arrange their work in terms of sample size, number of categories, and other factors.

Dr. Coen Wijdicks, the Institute’s Director of Biomechanics, then showed the students a model of a knee and explained how the model, along with the Institute’s robots, can help researchers answer questions about what surgical methods might produce the best results for patients.

After talking with Goldsmith in the robotics lab, the students met Erik Giphart, who talked about how the Institute uses imaging that also helps create video games to examine athletes’ motion and how it might lead to injury.

“This is incredibly useful,” teacher Deb Harrison said. “These kids are getting exposure to cutting-edge research in their own back yard.”

The students on this trip had all listed an interest in robotics, engineering, or medicine on the individual learning plans all “Eagle Program” students complete.

For Barnett, the demonstrations helped reinforce her goal of becoming a physical therapist.

“It was really cool,” she said. “I really liked the X-ray motion capture.”

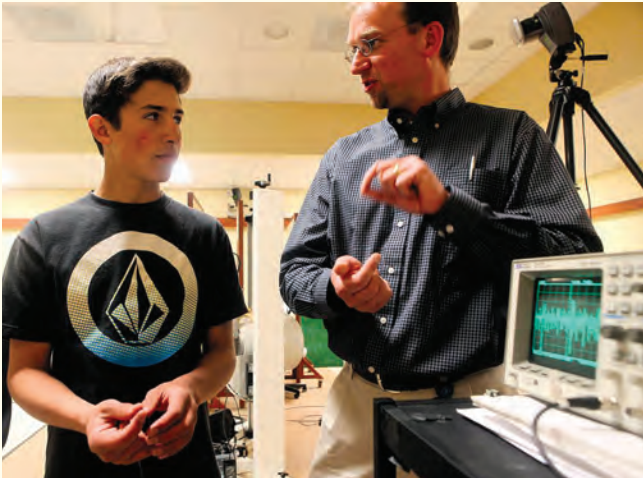
(continued on page 24)



Dominique Taylor / dtaylor@vaildaily.com

Steadman Philippon Research Institute Director of Biomechanics Coen Wijdicks, Ph.D., left, shows local students a model of a knee that the research department’s robot can mimic for knee surgery research. The students, part of the Eagle County School District’s “Eagle Program,” toured the Institute and other parts of Vail Valley Medical Center.

(Steadman Philippon Update, continued from page 23)



Dominique Taylor / dtaylor@vaildaily.com

Battle Mountain student Trixler Hirn, 15, left, tries out an EMG system that senses muscle activity as Erik Giphart, right, director of the Steadman Philippon Research Institute's BioMotion Laboratory, explains how it can be used to help with injury rehabilitation during a student tour of the lab.

Fellow Battle Mountain student Trixler Hirn was also impressed.

"I know what I'd be getting into," he said.

Barnett said going through the morning exercise with Goldsmith gave her a look at what the proofs, math, and other work in school might lead to.

"You go through school and think, 'How are we going to use this?'" she said. "It really will come in handy."

Jaime Trudeau is still in seventh grade at Gypsum Creek Middle School, so she hasn't had the kind of work in math and science the high schoolers have. At least not yet. But she saw some of the work she'll need to do if she wants to achieve her goal of working in sports medicine in Vail.

"I need to work more on the scientific method," Trudeau said.



Fifth-graders from the Vail Mountain School sent "thank you" notes following their tour of the new biomechanics laboratory this past May.

Steadman Clinic and Institute Physicians Named Top Doctors

Orthopaedic surgeons **Richard Steadman, Marc Philippon, Peter Millett, and Tom Clanton** of The Steadman Clinic and Steadman Philippon Research Institute have been named to the nation's Top Doctors list by *U.S. News & World Report* in collaboration with Castle Connolly Medical Ltd., publisher of America's Top Doctors and other consumer health guides. The free searchable directory, available at www.usnews.com/top-doctors, lists nearly 30,000 peer-nominated physicians across the country. Consumers can search for a Top Doctor by location, hospital affiliation, and a full range of specialties and subspecialties.

Each of the four Steadman Clinic physicians listed earned the distinction as a "high performing" doctor. In addition, **Steadman, Philippon, and Millett** were ranked among the top one percent of doctors in their specialties.

To assemble the Top Doctors roster, Castle Connolly sought nominations from physicians in academic medical centers, specialty and regional hospitals, and physicians in private practice. Its research team then reviewed each nominee's training, achievements and appointments, among other credentials.

Robert LaPrade, M.D., Ph.D., was recently selected as *Best Doctor for 2011 – 2012*. Based in Boston, Best Doctors was founded in 1989 by physicians affiliated with the Harvard Medical School to provide expert medical consultation services. The *Best Doctors in America* list includes the nation's most respected specialists and outstanding primary care physicians. The list represents the top five percent of doctors in the U.S. among more than 46,000 doctors in over 400 specialties and subspecialties across the country. The list is the result of over two decades of work conducting the largest continuous independent survey of the medical profession.

Dr. LaPrade was also recognized in April as one of America's Most Compassionate Doctors by *Patient's Choice*. This award is based on reviews written by hundreds of thousands of patients. Only a select few physicians receive praise about the compassion that accompanied their care. Of the nation's 720,000 active physicians, less than three percent were accorded this honor by their patients in 2010. PatientsChoice.org provides in-depth information on doctors who have been recognized and awarded for outstanding patient care and expertise.



SPRI Principals Coen Wijdicks, Ph.D.; Peter Millett, M.D.; and David Karli, M.D., Present a Three-Part Series on Health and Wellness to the Vail Symposium.

In September, the Vail Symposium's Health and Wellness series examined current trends in sports medicine and injuries. Topics included how we can keep athletes and people of all ages healthy for life and why some people stay well throughout their lifetime while others do not. The programs each featured renowned medical and scientific authorities.

"This series fits perfectly with the goals of our community and those of the Symposium, and it is a very important part of what our Valley is about," said Vail Symposium board member Jamie Stone. "Our goal this year is to give the people in the Valley and visitors from beyond a taste of what is to come on this topic in the future."

The series kicked off with "Keeping the Body Healthy for Life." In this program Dr. Coen Wijdicks and Dr. David Karli discussed breakthroughs in sports medicine and how we can help keep bodies of all ages healthy for life. Coen Wijdicks, Ph.D., is the Director of the Biomechanics Research Department at the Steadman Philippon Research Institute. David Karli, M.D., is a Spine, Rehabilitation, and PRP Therapy Specialist at The Steadman Clinic.

"This program hits the core of life in the Vail Valley," said Vail Symposium board member John Stone. It addresses the basics of how our bodies work and how to keep them active."

The series continued with a program that was a must-attend for coaches and parents of young athletes. In "Staying in the Game for Life," Peter Millett, M.D., M.Sc., Director of Shoulder Surgery and shoulder, knee and sports medicine specialist at The Steadman Clinic, spoke on how sports injuries among our young athletes have become an epidemic. More than 30 million children and adolescents participate in youth sports in the U.S. each year. It is estimated that more than 3.5 million kids under age 14 receive medical treatment for sports injuries annually, a large majority attributed to overuse.



Institute Awarded Research Grant to Study Hip Injuries in Ice Hockey Goalies

The proposed study, Femoroacetabular Impingement Prevention in Hockey Goaltenders: A Biomechanical Analysis on Protective Sports Equipment, has been accepted for funding by the Hockey Equipment Certification Council. The principal investigator is **Coen A. Wijdicks, Ph.D.**, and the co-investigators are **Justin Stull; J. Erik Giphart, Ph.D.; Marc J. Philippon, M.D.; and Robert F. LaPrade, M.D., Ph.D.**

The purpose of the study is to investigate the effect of ice hockey pads on hip motions to determine whether the width of leg pads could have an impact on the health of goalies' hips. The investigators believe that we will see that the width of the goalie pads has a relationship with the degree of "at risk" positioning of the hip as well as force generated when going into the butterfly position for ice hockey goalies. According to Dr. Wijdicks, there does not appear to exist an epidemiological study that is limited to a specific anatomical region or mechanism of injury for ice hockey goaltenders.



Ephraim Gildor Climbs Mt. Everest



Ephi Gildor standing on the summit of Everest, Friday morning, May 20, 2011.

On May 20, 2011, Institute patient, and friend, Ephi Gildor (see Steadman Philippon Research Institute News, Patient in the News, Spring 2011) reached the 29,035-foot summit of the

world's highest mountain, Mt. Everest. Mr. Gildor, a patient of Dr. Peter Millett, is in the process of climbing the most famous peaks in the world. They are known as the "Seven Summits," the highest mountains on each of the seven continents. He has already logged ascents on Denali, Aconcagua, Mt. Vinson, Elbrus, and Carstensz, and has only Mt. Kilimanjaro left to climb.



FREQUENTLY ASKED QUESTIONS

WHAT ARE THE CORE FOCUS AREAS OF THE INSTITUTE?

The Steadman Philippon Research Institute (SPRI) is committed to solving orthopaedic problems that limit an individual's ability to maintain an active life. This includes:

- **Joint Restoration and Preservation** – Restoring and preserving joints for as long as possible is preferable to joint replacement. Research is focused in this area because these procedures are generally less invasive and have better outcomes by allowing patients to resume their previous activity level and regain their full range of motion. Research includes harnessing the body's own ability to heal itself.
- **Youth Sports Injury Prevention and Treatment** – As youth sports injuries rise to epidemic proportions due to early specialization and extensive practicing, the Institute is researching conditions and injuries commonly associated with specific sports. Injuries in growing children may cause unforeseen complications during adulthood such as an early onset of osteoarthritis. The Institute is committed to developing early intervention techniques to reduce the predisposition to osteoarthritis and to maintain peak activity levels into adulthood.
- **Osteoarthritis** – The U.S. Centers for Disease Control and Prevention estimates that in the next 25 years, at least 71 million

Americans will have some form of arthritis, a degenerative condition of the joints, creating pain, swelling and limited movement for sufferers. Osteoarthritis is the most significant cause of disability in the U.S., moving ahead of low back pain and heart disease. By the year 2020, more than 60 million Americans will be affected by some degree of osteoarthritis of just the knee. Osteoarthritis of other joints will raise this number significantly. It was estimated that osteoarthritis alone consumed more than \$89 billion of direct and indirect costs to the American public in 2010.

Accelerated by overuse and injuries to joints, osteoarthritis prevention is a key area of interest for the Institute. All new techniques and treatments developed and optimized at SPRI are focused not only on improving the direct outcome of repairing specific injuries but also on minimizing the predisposition to osteoarthritis that may result from the injury and wear and tear later in life.

- **Education** – Considered one of the most prominent and rigorous academic programs in orthopaedic sports medicine, our Fellowship and Visiting Scholars Programs are at the core of the Institute's educational effort. Each year, 11 young orthopaedic surgeons are chosen from more than 160 candidates for these programs. They are with us for an intensive 12-month training period to refine their skills in orthopaedic surgery and to conduct research into the causes, prevention, and cures of degenerative arthritis, as well as the treatment and prevention of injuries.

The education department also supports educational programs and medical conferences, and coordinates academic sessions for school-age students.

- **Publications and Presentations** – The Institute collects data and publishes clinical research results on knees, hips, shoulders, feet, ankle, and spine in the top-tier, peer-reviewed orthopaedic journals—approximately 35 articles annually. In addition, SPRI gave more than 200 presentations to medical and scientific audiences world-wide in 2010. SPRI has become one of the most published and one of the most innovative organizations in sports medicine research and education.



Photo: John Kelly



SAVE THE DATE

Steadman Philippon Golf Tournament

**THE VAIL VALLEY MEDICAL CENTER
2012 STEADMAN PHILIPPON RESEARCH
INSTITUTE GOLF CLASSIC PRESENTED
BY RE/MAX INTERNATIONAL SET FOR
AUGUST 16, 2012**

Proceeds will support the orthopaedic research and educational programs of the Steadman Philippon Research Institute. Known throughout the world for its research into the causes, prevention, and treatment of orthopaedic disorders, the Institute is committed to solving orthopaedic problems that limit an individual's ability to maintain an active life.

The team event will include a shotgun start with a modified scramble. The tournament is open to the public. Sanctuary organizes and hosts charitable events to support organizations devoted to the arts, children, health care, and crisis management.

Since 2004, the Institute has raised more than \$1.1 million from this golf tournament to support its research programs. Renowned

course architect Jim Engh, *Golf Digest's* first-ever "Architect of the Year" in 2003, designed the course that protects a private oasis of 220 acres, effectively complementing the 40,000 surrounding acres of dedicated open space.

Golf Digest listed Sanctuary as the best new private course in 1997. Gary McCord, CBS golf analyst and senior PGA tour professional, has said, "Sanctuary is simply the most spectacular golf course I have ever seen."

The Steadman Philippon Research Institute is grateful to Dave and Gail Liniger, owners and co-founders of RE/MAX International, who built this course and created this unique fundraising opportunity for the Institute to develop and enhance relationships with those who support our mission.

Sponsorship opportunities and team slots are available now. More information can be obtained by visiting our website (sprivail.org) under "Upcoming Events," or by calling the Development office at (970) 479-5781. To request an invitation or for more information on other upcoming events, please contact John McMurtry at the Steadman Philippon Research Institute, (970) 479-5781.





181 West Meadow Drive
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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.

ADMINISTRATION

Marc Prisant
Executive Vice President and Chief Financial Officer

Amy Ruther
Manager, Human Resources and Accounting Manager

DEVELOPMENT

John G. McMurtry, M.A., M.B.A.
Vice President for Program Advancement

BASIC SCIENCE

William G. Rodkey, D.V.M.
Director and Chief Scientific Officer

SURGICAL SKILLS LABORATORY

Kelly Adair
Surgical Skills Manager

CLINICAL RESEARCH

Karen K. Briggs, M.B.A., M.P.H.
Director

Theodore Fagreluis
Intern

Mackenzie Herzog
Intern

Marilee Horan, M.P.H.
Research Associate

Hannah Jarvis
Intern

Lauren Matheny
Research Associate

Diana Patterson
Intern

Casey Pierce
Intern

BIOMECHANICS RESEARCH LABORATORY

Coen A. Wijdicks, Ph.D.
Director

J. Erik Giphart, Ph.D.
*Senior Staff Scientist
Director, Bio Motion Laboratory*

Mary Goldsmith, M.Sc.
Robotics Engineer

Kyle Jansson, B.S.
Research Engineer

Frank Martetschlaeger, M.D.
European Visiting Scholar

Bruno Nogueira, M.D.
Brazilian Visiting Scholar

Kerry Costello
Intern

Justin Stull
Intern

Chris Zirker
Intern

IMAGING RESEARCH

Charles P. Ho, Ph.D., M.D.
Director

Eric Fitzcharles, M.D.
Imaging Fellow

Erin Lucas, M.Sc.
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Rachel Surowiec
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EDUCATION

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Mark Your Calendar:

AUGUST 16, 2012

Vail Valley Medical Center 2012 Steadman Philippon Research Institute Golf Classic, presented by RE/IMAX International at Sanctuary, Sedalia, Colo.

For more information, contact John McMurtry at (970) 479-5781 or mcmurtry@sprivail.org.

Executive Editor:

Jim Brown, Ph.D.

Your Legacy, Our Future. Please remember Steadman Philippon Research Institute in your will, trust, or other estate plan.



SPRI has a Facebook page! Search for "Steadman Philippon" on Facebook and click "like" on our page. Watch our wall for updates on our research as well as lecture series, orthopaedics in the news and more!