



Jack Kemp

(AP Photo/Stephan Savoia)

## FOUNDATION FOCUS

## A Tribute to Jack Kemp (1935-2009)

By Mike Egan, Chief Executive Officer, Steadman♦Hawkins Research Foundation

Our dear friend and Foundation Board member, Jack Kemp, passed away recently. Jack joined the Board in 1991 at a very critical time for the Foundation, and his presence in the early days made an important difference in our Foundation's ultimate success.

Jack was a long-time patient at Steadman-Hawkins, and he epitomized our mission of keeping active people active. He sustained many injuries during his football career, but he never let them slow him down. He found his way to Steadman-Hawkins because he wanted to stay active, and his visits here began a tremendous personal and professional relationship.

Before his election to Congress in 1970, Jack played professional football as a quarterback for the San Diego Chargers and Buffalo Bills. He was captain of the Bills and led the team to the American Football League championship in both 1964 and 1965. Jack co-founded the AFL Players Association and was elected president five times. He was also recognized by *Sporting News* as one of the "Top 50 Quarterbacks of All Time" in 2005.

Jack received the Republican Party's nomination for Vice President in 1996 and throughout his political career campaigned for reform in taxes, Social Security, and education. His

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distinguished public service included positions as co-chair of the Council on Foreign Relations' Russia Task Force, co-chair of the Lincoln Bicentennial Cabinet, and co-director of Empower America; and he helped form the non-partisan Foundation for the Defense of Democracies.

As a board member of NFL Charities, Jack created and developed a long-term relationship between that organization and the Steadman•Hawkins Research Foundation. He was instrumental in assisting our Foundation to receive ten research grants over a period of 18 years. Those grants were directed toward studies of motion analysis, a better understanding of injuries, and return to full activities, research that was carried out in the departments of Basic Science and Biomechanics at Steadman-Hawkins.

Jack's personality was larger than life. Over the years, we all had the opportunity to spend time with Jack, Joanne, and their four children, and those occasions will always remain memorable. Jack was a

wonderful husband, father, and grandfather. A moving letter to his grandchildren can be seen on the Kemp Partners web site at [www.kemppartners.com](http://www.kemppartners.com).

Although many people will remember Jack as a great athlete, he may have been even more active and well known for a life committed to public service. His accomplishments, in addition to the ones already mentioned, are indicative of his remarkable character, his ability, and his dedication to improving the lives of others. He took an intense interest in our research program, how the outcomes of that research affected people, and the strategic direction of the Foundation.

All of us will miss Jack deeply as an important Board member, but we already miss him even more as a friend. We offer his family our sincere condolences and wish them all the best. We will find an appropriate way to honor Jack's memory and his impact on our Foundation.



## Legislation on Your Side

When was the last time the result of legislation made something easy? Well, legislation enacted last year does just that, giving you a way to further the life-changing breakthroughs of the Foundation's work that's easy and tax-free, as well.

### You Can See What Happens

To witness the impact your gift can make toward furthering our life-enhancing breakthroughs, consider using your individual retirement account (IRA) as a gift source now to make a tax-free gift to the Foundation.

To make a gift this way:

- You must be age 70 1/2 or older at the time of the gift.
- Total gifts cannot exceed \$100,000 in 2009.
- You must transfer your gift directly from your IRA to the Foundation.

### Easy and Simple

A gift from your IRA really is simple. For example, Jane, 78, has \$1 million in an IRA. She is concerned by the debilitating and painful effects of degenerative arthritis experienced by others. She feels strongly about supporting the Foundation's research to help end that suffering.

In the past, Jane was hesitant to use her IRA because of the complications of taxes and paperwork her \$100,000 gift would generate. With the new legislation, fulfilling her desire to make a compassionate change for others is as easy as transferring funds from one account to another. Jane only needs to instruct her IRA account administrator to transfer her gift directly from her IRA to the Foundation. Because she receives no income herself, there is no reportable income for tax purposes, thus no federal income taxes are incurred.

### Convenient Tool

And even though minimum distributions from IRAs are not required at this time, many supporters are choosing to use this asset as a convenient tool for tax-free giving before the opportunity expires at the end of this year.

### Let Your IRA Change the Future Today

This type of IRA gift offers you the chance to impact the Foundation's ability — without any nuisance from taxes — to create longer, healthy lifestyles for people who have never had that opportunity. To put this asset to use right now, simply contact John McMurtry, Vice President, Program Advancement, at [john.mcmurtry@shsmf.org](mailto:john.mcmurtry@shsmf.org) or 970-479-9797 for guidance on making the transfer.

## Dr. Marc Philippon and the Foundation: A Perfect Fit

By Jim Brown, Ph.D., Executive Editor,  
*Steadman•Hawkins Research Foundation News*

Consider this scenario. You have successful practices in two states. You serve as a consultant to professional teams and leagues, and you treat high-profile athletes in multiple sports. You are on the faculty at a large, well-respected research university and you direct the sports medicine/hip disorders programs. You've already been recognized as one of the leading orthopaedic surgeons and hip specialists in the world, and you can live and work anywhere you like. You're set for life, right?

Not if you are Marc Philippon, M.D., who left what many would consider a dream situation to move his family to Vail and to become a partner in the Steadman-Hawkins Clinic and member of the Steadman-Hawkins community. Why?

"It was a perfect fit," answers Dr. Philippon. "I had known Dr. Steadman (and Dr. Hawkins) for some time, and they had been referring patients to me. I knew that Dr. Steadman was a great surgeon and a great innovator, and I was honored to become a part of the Clinic and Foundation. Dr. Steadman asked me to continue what I had been doing at the University of Pittsburgh and to keep developing the fellowship program I had in Pittsburgh with the same type of program here in Vail.

"But probably the most important factor was the Steadman•Hawkins Research Foundation," says Dr. Philippon. "It was well established and well known in the orthopaedic medical community and around the world. I thought this position would allow me to do with hip disorders what Dr. Steadman had done with the knee."

And then there are those Colorado mountains. "There were also the mountains, the skiing (Dr. Philippon and his wife, Senenne, both like to ski), the town of Vail, and the positive energy at the Clinic and Foundation," he adds. "Everybody I've met is happy. They are willing to help, and everybody from the person at the front desk on seems to be happy to be here. It's like a big family."



Photo: John Kelly

*Dr. Marc Philippon*

Dr. Philippon is now a managing partner of the Clinic, a member of the Foundation's Board of Directors, and a member of the Scientific Advisory Committee. "The decision to come to Steadman-Hawkins," says Dr. Philippon, "turned out to be a very good idea."

### INTERNATIONAL RECOGNITION

Dr. Philippon treats a variety of hip disorders, but much of the international recognition he has received comes from his innovative, arthroscopic treatment of a condition called femoroacetabular impingement. (Luckily for us, we'll call it FAI from here on.) FAI, which affects 10 percent to 20 percent of the general population, is a developmental condition (not something that exists at birth) in which abnormally shaped bones of the hip joint rub against each other during movement. This repetitive action eventually damages the soft tissue in the area, particularly the articular cartilage, and damaged cartilage is hard to treat. Any sport that involves forceful rotation — golf, hockey, baseball, football, and soccer, for example — can compound the FAI problem.

"FAI is a disease of active people," says Dr. Philippon. "It has been seeing us for many years, but we were not recognizing it. And until recently, we didn't have a predictable treatment. Now we have a better understanding of the problem and better surgical techniques. Many people who might not have sought treatment earlier follow the

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## STEADMAN-HAWKINS UPDATE

## International Cartilage Repair Society Honors Dr. Steadman



*Dr. Steadman receives Lifetime Achievement Award from David Levine, M.D., Vice-President, Clinical Research, Genzyme Corporation, middle, and Bert Mandelbaum, M.D., President, International Cartilage Repair Society, at the 8th World Congress of the International Cartilage Repair Society, May 23-26, Miami, Florida.*

At the 8th World Congress of the International Cartilage Repair Society (ICRS), May 23-26, in Miami, Florida, Dr. Richard Steadman was awarded the Lifetime Achievement Award. He was recognized for his life-long devotion to cartilage research and cartilage repair, and for contributing to our knowledge base of cartilage and patient care. Past recipients include Drs. Lars Peterson, Allan Gross, and Arnold Caplan.

The ICRS was founded in 1997 in Switzerland with the purpose of promoting research and exchange of knowledge among physicians, scientists, patients and researchers in the field of cartilage repair. The ICRS has 950 members from 57 countries. Approximately 1,000 participants from 60 countries attended the 2009 World Congress in Miami.

## American College of Sports Medicine, Rocky Mountain Chapter, selects J. Erik Giphart Ph.D., as President

In February, Steadman•Hawkins Research Foundation Senior Staff Scientist J. Erik Giphart, Ph.D., became the acting President of the Rocky Mountain Chapter of the American College of Sports Medicine (RMACSM). Erik was elected at the Annual Meeting in 2008 and will serve a total of three years on the Governing Board.

The Rocky Mountain Chapter is the regional chapter of American College of Sports Medicine and consists of over 200 academic, medical, professional, and student members in the Colorado

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(Dr. Marc Philippon, continued from page 3)

example of professional athletes who have the procedure to correct FAI and return to their sports relatively quickly."

### TREATING HIGH-PROFILE ATHLETES

Although Dr. Philippon and the other surgeons at Steadman-Hawkins don't deliberately seek professional athletes as patients, the athletes find them. Dr. Philippon had already treated golfer Greg Norman and hockey great Mario Lemieux before coming to Vail, and more recent patients have included Arizona Cardinals quarterback Kurt Warner and New York Yankees slugger Alex Rodriguez.

"These people make a living with their bodies," explains Dr. Philippon. "They want to go to a place where they are safe and where they think they will have a good outcome. The word gets around to other elite athletes and then to the general public."

Does he feel any added pressure treating high-profile athletes? "Not really," answers Dr. Philippon. "I treat everyone like I would treat my parents and my family. The key is preparation. The work of the Foundation prepares us for any kind of surgery. If we are well prepared, it is easy to execute well. The goal of the Clinic, the Foundation, and the physician is to provide every patient with the best possible care."

### THE NEXT BIG THING

Dr. Philippon's vision for the injuries he treats and for the research of the Foundation extends beyond FAI. "I'm interested in the prevention and treatment of hip injuries, but also in figuring out a way to actually modify the course of cartilage damage. We need to make cartilage more durable. It will be difficult because every joint has specific cartilage, several layers of tissue, and a lack of blood supply. It's very complex."

There are other items on his already-full agenda. "Repairing the labrum (the ring of cartilage around the joint), reconstructing the labrum, treating cartilage injuries, and early detection are all in the future of hip injuries," he says.

The Foundation and its surgical outcomes database are making Dr. Philippon's work possible. "When I came in 2005, we didn't have much of a database for hip injuries. Now we have 2,000 cases in our database and in five years we'll probably have close to 4,000. Most importantly, we'll

have more answers in terms of the prevention of hip injuries and in the health of cartilage after FAI treatment.

“If the Foundation’s research allows us to discover better prevention and better techniques to repair cartilage, it will have a huge impact. We’ll be able to help more people remain active as long as they want without having hip joints replaced.” When — not if — that happens, it will truly have been a perfect fit for Dr. Philippon, and the Foundation.



## Karen Briggs: Putting the Evidence into Evidence-Based Medicine

By Jim Brown, Ph.D., Executive Editor,  
*Steadman-Hawkins Research Foundation News*

In 1993 Karen Briggs, already a respected medical researcher at the University of Colorado Medical School in Denver, came to Vail to ski. While she was here, she saw an ad for a research position at the Steadman-Hawkins Research Foundation.

Three things motivated her to apply for the job. She was ready to move out of the city (Denver), she had family close to Vail, and she had been told that Steadman-Hawkins was a special place to work. So she applied for the job, interviewed for it, and got it.

Sixteen years later, she is Karen Briggs, M.B.A., M.P.H., Director of Clinical Research. “I was hired to do two things: work on validating the outcomes of the healing response and establish a database that would contain comprehensive information about every procedure done at the Steadman-Hawkins Clinic.”

Now, the healing response, an arthroscopic procedure used to help reattach a ligament in the knee back to the bone, has not only been validated, it is performed around the world for the treatment of anterior cruciate ligament (ACL) injuries. And the database, which didn’t exist when Briggs arrived, now has approximately 20 million data points — pieces of information — on the knee, hip, shoulder, and spine.

“This information provides a tool to understand the patient’s perspective and our surgical outcomes,” explains Mike Egan, the Foundation’s Chief Executive Officer, “and is the key to our research. We study how



Photo: John Kelly

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

patients recover from treatment subjectively, based on the patient’s assessment of improved function and quality of life, and objectively through our surgical and post-operative data.”

The database is arguably the most comprehensive collection of orthopaedic medical evidence in the world and it grows daily, if not by the hour or minute. The term, evidence-based medicine, has recently become a buzzword in the medical community, but the database at the Foundation began to document outcomes almost two decades ago.

Two questions for Briggs: Are other institutions trying to imitate the kind of database established at Steadman-Hawkins, and will they ever catch up? “Yes, they are trying, and no, they won’t catch up,” says Briggs.

### HOW IT WORKS

“We have four full-time research associates, four interns, and, at any given time, up to two Steadman-Hawkins Visiting Research Scholars in the Department of Clinical Research,” Briggs explains. “The interns help collect data on every patient who is treated at the Clinic. Patients get a four-page form, as well as follow-up questions regarding their condition, treatment, and results up to 15 years after a procedure at Steadman-Hawkins. When the forms are completed, they are scanned and entered into the database. The questionnaires are reviewed by our Internal Review Board to protect our patients. The data we collect never leaves this building.

“At the same time, our physicians complete forms detailing what they did with each patient. Their forms are very descriptive — as many as 420 data points on a single

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procedure. For example, if surgery is performed to repair a torn meniscus, we would not only know which knee, but whether it was on the medial or lateral side (inside or outside), exactly what was done, etc.

"When a doctor or fellow wants to begin a research project, that person can work on our server or we can give them an overview of what the database contains, then run specific searches to produce the information they need to complete the study and prepare a manuscript," says Briggs. "It is very much a joint effort between staff and physicians. The doctors come up with most of the ideas and details, and we do most of the analysis of the data that validates their procedures. Our goal is to provide service to physicians. We consider ourselves to be a service organization as much as we are a research unit.

"Research breeds more research," says Briggs. "For every project you do, five others develop." She has trouble leaving her work at the office. In fact, she keeps a notebook on her bed stand for those times during the night when she wakes up with another idea for a research project.

Once the research has been completed, it still has to be written for publication. Briggs writes many, if not most, of the papers in conjunction with the Foundation's scientists and physicians. "I do that at night, at home, on a PC. We have a person in the office who checks for grammar and sentence structure, then the paper goes to Dr. Rodkey, our Chief Scientific Officer and Director of Basic Science, for his review. And finally, the paper will go back to the doctor who initiated the project."

In spite of the success of the Clinical Research department, there are limitations and challenges. "We have to have research questions for the database to answer. Sometimes I worry that we'll run out of questions. But each year we get six of the brightest fellows in sports medicine to bring new questions. Getting people to respond will always be a problem. If they are doing okay, they may not want to take time to fill out the questionnaires. If they are not doing well, they let us know about it, which we use as feedback to the physicians so they can try to help those people not doing well. But our success depends on the patient's willingness to participate in the process. We want

them to know that their responses can affect the lives of other people.

#### WHAT HAPPENS WHEN OUTCOMES ARE PUBLISHED?

"When we do a study at the Foundation and the results are presented at a meeting and published in professional literature," says Briggs, "it can literally change the way medicine is practiced.

"For example, microfracture has become the procedure of choice because of results validated at Steadman-Hawkins. And before 1998, physicians seldom performed surgery on the ACL in people over 40. They were just told to limit activities that would stress the knee joint. Dr. Steadman showed them the results of studies in which his patients did very well after ACL surgery, and now older adults can stay active for a lifetime.

"Another example is the treatment of a hip condition called femoroacetabular impingement. Treatment refined at Steadman-Hawkins moved new techniques forward so that doctors and patients began to accept the procedure as a standard for care. Even more importantly, when we published the results of the procedure, insurance companies began to recognize the value of these new treatments and included them in their coverage.

"One more example: We have just validated and published normal values that will allow other physicians to document the outcomes of their knee patients by using a one-page form. With this form, every doctor should know how his or her patients are doing. This document will give them a method that is simple and cost-effective."

#### EGAN ON BRIGGS AND THE FUTURE OF EVIDENCE-BASED MEDICINE

"Karen Briggs is an outstanding example of talented people who have built the Steadman♦Hawkins Research Foundation into a world-class research organization," says Egan. "She has almost single-handedly developed the Department of Clinical Research into the leading sports medicine clinical research group, one that is vital in shaping our future. Karen has been recognized worldwide in orthopaedics for validating clinical research in sports medicine and she speaks at society conferences all over the world regarding her findings. Her passion has also influenced key employees to



continue their studies and to earn a master's degree in Public Health (MPH), which is underwritten by our Foundation.

"Our Clinical Research group," continues Egan, "now manages millions of data points and it keeps on growing. But we are not going to sit back and admire our work. We are constantly looking for ways to improve. Together with Karen, we are involved in discussions with an international university recognized as the creator of evidence-based medicine. We hope to announce a collaborative agreement with this institution in the near future."

Briggs gets the final word regarding the Department of Clinical Research: "What we do provides doctors with feedback to improve the health care of all patients. If we weren't here, they might not know if what they are doing is good or bad — successful or not. We can help people all over the world by providing validated data so patients and surgeons can decide the right time, the right procedure, and the right person for successful outcomes."



#### PATIENTS IN THE NEWS

## Matt LaPrade: Raising Awareness of FAI

By Jim Brown, Ph.D., Executive Editor,  
*Steadman•Hawkins Research Foundation News*

**Q**uestion: What do the following athletes have in common: Alex Rodriguez, Greg Norman, Michelle Kwan, Mario Lemieux, Kurt Warner, and Matt LaPrade?

Answer: They all had a relatively unknown condition called femoroacetabular impingement (FAI); they were all successfully treated by Dr. Marc Philippon, one of the famed orthopaedic surgeons at Steadman-Hawkins; and they all returned, or will return, to very high levels of competition in their respective sports.

Matt LaPrade is a 16-year-old, two-sport honor student who will rejoin his hockey team this fall at Holy Family Catholic High School in Victoria, Minnesota, near Minneapolis-St. Paul. He was an All-Conference goalie during his freshman and sophomore seasons. Matt may not be as well known — yet — as the Hall of Fame athletes mentioned above, but his case will



Photo: Sandy LaPrade

be important in raising national awareness of FAI among young athletes. Here is his story:

*Matt LaPrade is a two-sport honor student at Holy Family Catholic High School and All-Conference goalie in Victoria, Minnesota.*

### MORE THAN JUST A GROIN INJURY

"My hips started hurting early in the 2008-2009 season," he explains. "I thought I had just tweaked a groin muscle. It was sore at first, then the pain gradually increased. Both sides hurt, but the pain was worse on the right side. By the end of the season, I felt it almost all the time — sitting, walking, getting down into the butterfly position, whatever."

Matt had a hip fracture four years ago, but hip and pelvic x-rays showed no signs of FAI. Once the 2009 season was over, he had another set of x-rays taken in Minneapolis and they showed FAI in both hip joints. The x-rays illustrate that FAI is a developmental condition. It doesn't exist at birth, but it can develop during the years when a person's bones are still growing.

### PROFESSIONAL ADVICE AT HOME

Matt's mother, Sandy, was a critical care nurse and is now a full-time mother of three boys. Chris, 18, just graduated from high school and will attend the University of Minnesota. Jeff, another goalie in the LaPrade family, is 14. Matt's father is Robert LaPrade, M.D., Ph.D., an internationally prominent knee and shoulder surgeon at the University of Minnesota.

The LaPrades decided that Matt's treatment should be done in Vail. Matt says he didn't know about Steadman-Hawkins or Dr. Philippon, but his parents did.

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*Matt LaPrade reviews the results of his surgery with Dr. Philippon.*

Photo: Sandy LaPrade

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“We knew that Steadman-Hawkins was the best orthopaedic clinic in the country and that Dr. Philippon was the best hip specialist in the world,” explains Sandy. The treatment Matt would receive is an arthroscopic procedure to correct excessive bone

growth at the hip socket that characterizes FAI. It has been developed and validated by Dr. Philippon and his colleagues through research conducted at the Foundation.

### FIRST IMPRESSIONS

“My first impression of Steadman-Hawkins was good,” remembers Matt. “Everything felt comfortable. The place was packed, but everyone looked happy, and walking down those hallways and seeing the jerseys of all of those famous athletes who had been treated there made me feel good. I knew that this was not going to be career-ending surgery.”

Within hours after the first surgery, Matt was already doing rehab exercises. He stayed in Vail for a week in order to participate in specialized hip therapy at Howard Head Sports Medicine in the Vail Valley Medical Center. Four weeks later he was back in Vail for surgery on the other hip. “Dr. Philippon is probably one of the few hip surgeons in the world so familiar with the FAI condition that he knew a 16-year-old’s body would be able to recover quickly,” says Sandy. “That’s why we were able to have the second procedure done so soon after the first.”

### UPDATE

How does Matt feel today? “Really good,” he says. “I started skating yesterday (six weeks after the second surgery). No pain, a little tightness in the left hip, but it gets better every day.”

What about the Steadman-Hawkins experience? “It’s the best possible care you could get,” answers Sandy. “State-of-the-art everything. It’s like nothing I had ever seen. The atmosphere is upbeat, everyone works together, and you know the decisions they make are backed by research.”

Matt has a word for other young athletes who might have hip pain or even FAI. “If the pain doesn’t go away pretty quickly, see a doctor. Even if it happens after a season has started, do something about it sooner rather than later. That way, you’ll be able to go all out the next year.”

### THE BIG PICTURE

Dr. Philippon, not surprisingly, sees the big picture. “Matt has a great future ahead of him. We were able to intervene early and treat his injury. The procedure gives him a healthier joint and a chance to continue playing his favorite sport at a high level without worrying about his hip as a limiting factor.”

Matt LaPrade didn’t choose to be injured or to need surgery. But he is believed to be the youngest hockey player in the world to have successful FAI surgery on both hips. By going through this process early in life, he has raised the awareness of a potentially career-ending condition and injury, and his story might encourage others to seek medical attention early rather than waiting and hoping that their hip pain will go away. That’s enough to put Matt in our FAI Hall of Fame.

[Editor’s note: The butterfly technique is a style of play used by goalies in hockey. Butterfly goalies play with their feet apart and knees bent. On low shots they drop to their knees and spread their legs to cover the bottom of the net. Don’t try this at home.]



### RESEARCH UPDATE

## What We Know About Clavicle Fractures

By Marilee Horan, M.P.H.

[Editor’s note: Marilee Horan is a research associate in the Clinical Research Department.]

The clavicle is the bone we commonly refer to as the collar bone. The clavicle is part of the shoulder complex and it connects the arm to the body. The bone is located at the top of the chest and in some people, particularly in females, the bone is visible. This short bone runs between the breast bone and the shoulder blade. It is curved at each end, resembling a stretched “S”.

Fractures to the clavicle are common. They often occur in the young, active popu-



lation and most are caused by sport, traffic accidents, or a blow to the shoulder. The fractures are commonly due to a fall on an outstretched arm, a fall on the shoulder, or a direct hit to the clavicle. Most clavicle fractures occur in the middle third of the bone. The most common treatment is non-operative, in which the bone is allowed to heal by itself. In the right patient, this treatment has been very successful.

In some cases, the two fractured pieces of the bone don't line up to allow for healing. In these cases, surgical treatment may be necessary. Some patients are treated with surgical open reduction of the fracture, and a plate is screwed on to keep the two pieces of bone in place. Another option is to place a pin in the middle of the bones and bring the two pieces of bone together. This is called fracture reduction with intramedullary (IM) pin fixation. Both types of treatment have been studied with each having its advantages and disadvantages. However, new types of fixation devices have been developed and may decrease complications involved with surgical treatments.

Since the clavicle is one of the most common bones broken and a superior treatment option is not clearly defined, a line of research projects focusing on the clavicle have begun. In a project led by Dr. Peter Millett, Dr. Jason M. Hurst, and others, complications were studied in 61 patients treated with pin fixations. This study, titled "Complications after Treating Mid-Shaft Clavicle Fractures with Intramedullary Pinning," was presented at the American Orthopaedic Society for Sports Medicine Specialty Day this past February in Las Vegas, Nevada. Various data points were collected from a chart review, such as time to pin removal, age, gender, and mechanism of injury, to see whether any of these factors were associated with a surgical complication.

Of the 61 patients in this study, 18 (30 percent) had complications. Overall, there was an excellent healing rate, and good function was achieved in the majority of patients. We found that patients need to be further educated that IM fixation has the potential to be temporarily unsightly. Hardware sticking out of the skin can be alarming. Another problem that should be discussed between the patient and the treating surgeon is the slightly higher incidence of nonunion than in other fixation methods.

However, patients with pin fixation can expect smaller scars, no long-term hardware complications, and small potential for re-fracture or further complications after the hardware is removed.

Another study under the direction of Dr. Millett and Dr. Hurst involves analyzing patient outcomes in displaced clavicle fractures that were fixed with the IM pin versus patients that were treated without surgery. Our goal is to identify which patients do best with non-operative treatment and which do best with an operation. This will allow us to define a treatment procedure based on patient outcomes. It will also provide physicians and patients with information that will assist them in making treatment decisions and which will result in better function. This will result in higher patient satisfaction, which is the goal of all physicians.



*Clavicle fracture*



*Intramedullary pin fixation*



*Plate and screw fixation*

## WHAT'S NEW

## Platelet-Rich Plasma (PRP) Technology Helps the Denver Broncos

By Theodore F. Schlegel, M.D.

Dr. Schlegel is an orthopaedic surgeon, a member of the Foundation's Scientific Advisory Committee, and principal in the Steadman-Hawkins Denver Clinic.

In the National Football League, the key to success for any team is keeping the players healthy and returning them to the field as quickly as possible after they are injured. In their 16th season with the Denver Broncos, Drs. Ted Schlegel and Martin Boublik are always looking for innovative ways to achieve this task. Now there is a new treatment strategy, platelet-rich plasma (PRP), which is showing great promise.

Platelets are cell fragments found in blood that contain growth factors critical to clotting blood, stimulating the immune system, and directing the healing process.

Like red and white blood cells, platelets are produced in bone marrow from stem cells. Platelet-rich plasma injection therapy is a new procedure that harnesses the body's healing potential. By concentrating the platelets and then injecting them into damaged tissue, the platelets can have a positive effect on collagen synthesis. The procedure consists of drawing a very small amount of the patient's blood, then concentrating the platelets in a centrifuge. This results in a thick jelly-like material that is approximately a half-teaspoon that is then injected into the site of injury. The PRP solution contains from 10 to 20 times the amount of platelets that are normally found.

Over the last three football seasons, PRP has been a great help in returning players to the field more quickly. At this year's NFL Combine Team Physicians Meeting, Dr. Schlegel presented his work, along with co-authors Drs. Boublik, Bushnell, and Philippon, regarding the benefits of using PRP to speed healing of groin injuries. The last few seasons, the Broncos have been plagued with devastating hip tendon injuries, losing star players such as Champ Bailey and Peyton Hillis. In the past, an athlete might have been out for the entire season, which is what happened with star running back Mike Anderson when he sustained a groin injury. However, with this new technology that can help manipulate healing, it is possible to return players to the field sooner. Even a week earlier can be a huge advantage in a 16-week season.

In some situations, the technology has been used to avoid surgery that might have taken a player out for up to a year. This was the case when PRP was used to treat an NFL quarterback who sustained a significant ligament injury to his throwing elbow. By enhancing the poor healing potential of this area, the athlete was able to return to throwing in about three months. It would have been up to a year had he undergone a ligament reconstruction.

Currently we are conducting ongoing research that will help us understand how better to harness this technology. Questions to be answered include (1) when is the ideal time after an injury to inject the PRP, (2) are multiple injections better than a single shot, and (3) can this help in more chronic conditions?



Photo: John Kelly

## Answering the Call— Lieutenant Commander Chris Dewing, M.D.

“When I joined the ROTC program in high school, I had no idea that someday I would be in Iraq with a group of Marines,” says Dr. Chris Dewing, an orthopaedic surgeon and Lieutenant Commander in the United States Navy who is completing his training in the Steadman-Hawkins Research Foundation Fellowship Program. Iraq was just one of the interesting ports-of-call on Dr. Dewing’s journey that eventually brought him to Vail.

“I’m originally from Columbus, Indiana, but my family moved around a lot,” Dr. Dewing continues. “We lived in Providence and Memphis, and I spent the last two years of high school in Belgium.”

His next stop was at Harvard, where he enrolled with an ROTC scholarship, was a member of the varsity crew, first started thinking about medicine as a career, and graduated magna cum laude. “I was part of a leadership team that took Harvard freshmen on an outdoor program into the Green Mountains of Vermont and Maine. First aid was part of the training program and that got me interested in being a doctor.” After Harvard, that interest took him to Columbia University, where he earned his medical degree at Columbia’s College of Physicians and Surgeons.

### IRAQ CALLING

The timing for his deployment to Iraq was less than ideal. “I was assigned to a Marine battalion and stationed at Camp Pendleton, north of San Diego. My fiancée (Jill) and I were at a premarital counseling retreat in California when I got a call from my colonel, who told me to get back immediately and start administering small-pox vaccinations to the Marines in our battalion before they were deployed to Iraq. I took a deep breath and realized that ‘they’ included me.”

Lt. Commander Dewing knew he was going, but didn’t know when. The date turned out to be (1) not good, and (2) not romantic. Instead of getting married on



*Dr. Chris Dewing.*

March 15, 2003, as he and Jill had planned, Dr. Dewing left for Iraq on Valentine’s Day a month earlier. Welcome to tough love, Navy style. Their church wedding would have to wait until the end of the year.

The war in Iraq had just begun and Dr. Dewing had finished his first year as an intern in general surgery at the Naval Medical Center in San Diego. His title was battalion surgeon, but his role was to provide general medical care for between 600 and 1,000 Marines.

“My battalion was extremely fortunate,” Dr. Dewing recalls, “There were times when ambushes occurred ahead of and behind our position, but none of our Marines were seriously injured. Once towns were secured, we set up impromptu medical clinics and started taking care of Iraqi townspeople. The medical system in Iraq had completely collapsed and the people had almost no other option but us.”

To add to their misery, Saddam Hussein had drained the area once irrigated by the Tigris and Euphrates rivers and turned it into a dust bowl. “The people were grateful to see us and to get a break from the destitute lives they were leading,” says Dr. Dewing. “We had limited supplies, but we provided a lot of services to the Iraqis.”

Dr. Dewing has had time to reflect on his experiences in Iraq. “It’s easy for us to forget that there is no fundamental difference in the average American and the average Iraqi. They want the same things we want — freedom, a better quality of life, (continued on page 12)



*Dr. Chris Dewing in Iraq.*



*Dr. Dewing, pictured at Guantanamo Bay Naval Base in Cuba with Jill and holding Georgianna, born at the base, and their two sons Everett (center) and Winston.*





Photo: John Kelly

(continued from page 11)

and the opportunity to watch their children grow up in a safe environment in a country where conflicts have lasted for hundreds of years.”

On his service during that deployment, he says, “I was glad to have the opportunity to serve as a naval officer and doctor in a combat setting, and to serve with the Marines. I’ve always admired their courage and their leadership. Over the course of our nation’s history, a lot of people have made sacrifices to protect our way of life. To be a part of that tradition and put yourself in harm’s way was a rewarding experience.”

### GUANTANAMO ON THE PHONE

Back in the States, Dr. Dewing was supposed to stay in San Diego for a year. But he got another surprise telephone call from the senior naval officer responsible for filling positions all over the world. “I’m in a bit of a bind,” the caller said, “and need somebody to go to Guantanamo Bay Naval Base in Cuba for a year. The others under consider-

ation don’t have your military background and you’d be a good fit. Would you be willing to do it?”

Dr. Dewing says that when a superior officer in the Navy asks you to do something, you say, “Yessir. Sounds like a great opportunity.” It didn’t hurt that his family, which now included two boys, Everett and Winston, would be allowed to go with Chris and live in Guantanamo also.

“Jill was great about it,” says Chris. “She said if it meant being able to live together as a family rather than being separated, she was all for it. Eventually, we had our third child, Georgianna, while living at the naval base in Cuba.

“Guantanamo is not a very friendly place. It’s a small, hot, muggy corner of Cuba that has been a point of controversy for 100 years,” says Dr. Dewing. “But for those who are deployed there, the military community is very supportive. We lived in a small duplex, had a nice back yard where the boys could play, and the hospital was only three miles away.

“I wore two hats while in Cuba. One was to serve as orthopaedic surgeon for the naval base and the other was to be the only surgeon for the Joint Task Force that managed the GITMO Detention Center. I had patients from every branch of the service, as well as civilian contractors, teachers, government agency workers, and a variety of interesting people.

Dr. Dewing also treated detainees. “I felt comfortable treating them, although I always had a security guard and an interpreter, and had to wear a ‘stab vest’ to protect against the possibility that a patient might try to attack with a knife. We were a little anxious at times because there were rumors that officers might be attacked.

“I will say this about treating those held at the Detention Center: My interaction with them could not be described as friendly, but I felt that I gained their confidence, treated their injuries effectively, and that they appreciated the care they received.

“I never saw detainees being mistreated. In fact, it was more like they were being pampered. A lot of the injuries I took care of were sustained while they were playing soccer, not because the detainees had been beaten by guards. Even though the detention facility has been described as a dark, evil place, that portrayal is not accurate. I

feel the same way about the war in Iraq. There was a huge difference between what we saw on the ground and what was being reported to the rest of the world.”

#### A CALL FROM DR. RODKEY

The call that brought Dr. Dewing and his family to Vail was from Dr. William Rodkey, Chief Scientific Officer and Director of the Foundation’s Basic Science Department. “My obligation to the Navy prevented me from getting my application to the Steadman ♦ Hawkins Research Foundation’s Fellowship Program in on time,” he says, “but I was allowed to interview for one of the positions. It was bitterly cold in Vail, but we were warmly welcomed and had a great time. Shortly thereafter, Dr. Rodkey called and told me I had been accepted as a Fellow for 2008-2009.”

Lieutenant Commander Chris Dewing, M.D., has already had successful military and medical careers that have included difficult assignments, honors, and publications. But his experience at the Clinic and Foundation will present a different challenge after his fellowship ends. “Fellows at the Foundation work with the most talented surgeons in the world who are using the most advanced techniques with state-of-the-art equipment. The challenge will be to perform as well and as consistently as these surgeons do when I leave Vail. It’s not as easy as these guys make it look. This experience allows you to jump light years ahead of where you would have been professionally at this point in your career.

“Very few private institutions in the country do as much clinical and biomechanical research as we do here at Steadman-Hawkins. The quality of the work is unparalleled. Looking ahead, many practices in the field of orthopaedic surgery will have come

from ideas and innovations that have been validated by the research conducted at the Foundation. That alone should encourage people to continue supporting the Steadman♦Hawkins Research Foundation.”

Dr. Dewing feels as strongly about the support staff at Steadman-Hawkins as he does the physicians and scientists. “The thing that cannot be said enough is that the people who work with and around these great surgeons are first-rate. The receptionists, interns, insurance specialists, trainers, physical therapists, and front-office people make it possible for the Clinic and the Foundation to put forth such an excellent product. I’ve enjoyed working with all of them. People are familiar with the world-class reputations of the physicians here, but I want them to know that all of these other people work hard to help them make it happen.”

#### WHAT’S NEXT?

After his fellowship ends at Steadman-Hawkins, Dr. Dewing will return to the Naval Medical Center in San Diego as Assistant Director of Sports Medicine. He will be teaching and training residents, practicing his profession, and continuing some of the research begun at Steadman-Hawkins. In a few years, he and Jill will have to make a decision about whether to complete 20 years of service with the Navy or to go into private practice. “Whether working in the Navy or in civilian life,” he predicts, “I will be content with a job that allows a balance between work and family.”

But for the next six years you can find the Dewing family in San Diego. Unless he gets another of those telephone calls.

[Editor’s note: U.S. Naval Base Guantanamo Bay is separate from the Detention Center. Although the center is being closed, the Naval Base will remain in operation.]



## 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 2008/2009 Steadman-Hawkins Fellowship Class are **Mr. and Mrs. Lawrence Flinn, The Gustafson Foundation** (Biomechanics Research Laboratory), **Mr. and Mrs. Brian P. Simmons, Mr. and Mrs. John W. Jordan, 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. J. Michael Egan, Mr. and Mrs. Milledge Hart, the Fred and Elli Iselin Foundation, Mr. and Mrs. John W. Jordan, Mr. and Mrs. S. Robert Levine, Mr. and Mrs. Kent Logan, Mr. and Mrs. Jay Precourt, and Mr. and Mrs. Stewart Turley.**

(Steadman-Hawkins Update, continued from page 4)



Photo: John Kelly

Erik Giphart, Ph.D.

and Wyoming area. Visit <http://www.rmascsm.org/> for more information.

The American College of Sports Medicine is the largest sports medicine and exercise science organization in the world, and has more than 35,000 International, National, and Regional Chapter members from 75 countries. ACSM was founded in 1954. Since that time,

ACSM members have applied their knowledge, training, and dedication in sports medicine and exercise science to promote healthier lifestyles for people around the globe. Visit <http://www.acsm.org/> for more information.

## Publications, Presentations, and Research

Mike Torry, Ph.D., director of the Biomechanics Research Laboratory, reports that eight presentations of Foundation research were accepted by the 55th Annual Meeting of the Orthopaedic Research Society, Las Vegas, February 2009.

Yongpravat C, Torry MR, Giphart JE, Woo SL-Y, Steadman JR, Shelburne KB. "Prediction of ACL Strain Using Combined CT and Biplane Fluoroscopy: A Sensitivity Analysis."

Giphart JE, Horn N, Shelburne KB, Anstett T, Horne A, Pault JD, Brunkhorst JP, Millett PJ, Torry MR. "Comparison of glenohumeral translations between scaption and forward flexion in healthy subjects using biplane fluoroscopy."

Yanagawa T, Torry MR, Shelburne KB, Hackett T, Pandy MG. "Individual Muscles Forces and Glenohumeral Joint Reaction Forces during the Bear Hug Rehabilitation Exercise."

Giphart JE, Horn N, Shelburne KB, Anstett T, Horne A, Pault JD, Brunkhorst JP, Millett PJ, Torry MR. "Comparison of glenohumeral rotations between scaption and forward flexion in healthy subjects using biplane fluoroscopy."

Giphart JE, Shelburne KB, Anstett T, Horne A, Pault JD, Brunkhorst JP, Horn N, Millett PJ, Torry MR. "Comparison of acromioclavicular rotations between scaption and forward flexion in healthy subjects using biplane fluoroscopy."

Giphart JE, Shelburne KB, Horn N, Anstett T, Horne A, Pault JD, Brunkhorst JP, Millett PJ, Torry MR. "Analysis of glenohumeral rotations and translations during shoulder external rotation at 90 degrees of abduction using biplane fluoroscopy."

Shelburne KB, Yanagawa T, Torry MR, Hackett T, Pandy MG. "Contribution of the Long Head of the Biceps to Glenohumeral Joint Stability."

Keeley DW, Hackett T, Keirns M, Sabick MB, Torry MR. "Predictors of Pitch Velocity in Youth and Professional Baseball Pitchers."

On May 9, Dr. Torry presented these four lectures to the Department of Mechanical Engineering at Stanford University:

Torry MR, "Biomechanical Analysis of Youth Pitching."

Torry MR, "Predictors of Pitch Velocity in Youth and Professional Baseball Pitchers."

Torry MR, Shelburne KB, Giphart JE, Steadman JR. "Development and Clinical Application of the Biplane Fluoroscopy System."

Torry MR and Shelburne KB. "Effects of Valgus Bracing and Insole Orthotics on the Knee During Gait."



Photo: John Kelly



## Treatment of Plantar Fasciitis

By Steve Stalzer

[Editor's note: Steve Stalzer is the director of the Howard Head Sports Medicine Centers in Vail, Colorado.]

**P**lantar fasciitis is a common cause of foot and/or heel pain that is often worse when placing weight on the foot first thing in the morning. Pain is usually sharp and can radiate up the back of the leg or into the arch of the foot. Plantar fasciitis often plagues individuals who participate in endurance sports, stand for prolonged periods, or increase their normal levels of physical activity.

Degenerative plantar fasciitis is usually the result of prolonged trauma in individuals who have not changed activity level or suffered trauma in recent years. Mechanical or overuse, plantar fasciitis is often caused by excessive pronation of the foot, which leads to microtears in the plantar fascia. A change in activity level, such as an increase in running mileage over a short period of time, typically accompanies mechanical causes.

The plantar fascia is a thick ligament attached to the bottom of the heel that fans out and attaches at the base of the toes. Acting like a shock absorber during walking, it flattens out as the foot hits the ground. This action pulls on the plantar fascia, which stretches slightly. When the heel comes off the ground the tension on the ligament is released. If the foot flattens excessively, the plantar fascia can stretch greater than it is accustomed to, causing micro damage.

One of several factors that contributes to the flattening of the arch of the foot is tightness of the calf muscles. The calf muscle attaches to the foot at the back of the heel near the Achilles tendon. When the calf muscle is tight, it limits the movement of the ankle joint and results in excessive tension of the plantar fascia. Tightness of the calf muscles can be a result of walking, jogging inactivity or prolonged rest. Women who wear high heels and men who wear cowboy boots can, over time, develop tightness in the calf muscles.

### TREATMENT

Acute or short-term treatment often includes anti-inflammatory medications; methods for reducing symptoms, as well as tissue healing; and foot orthotics to decrease the level of stress on the plantar fascia.

Long-term treatment should include intrinsic and extrinsic muscle strengthening, and plantar fascia stretching. One effective strengthening exercise for the intrinsic muscles is towel rolling. For this exercise, the patient sits, places the heel on a smooth floor, and the front of the foot on a towel beneath the foot. Using the toes, the towel is pulled toward the patient. Stretching of the plantar fascia can be accomplished with a rolling pin or soup can. While sitting, the rolling pin is placed under the foot and rolled back and forth with light pressure.

If conservative treatment fails, night splints or surgery may be considered. There are some exceptions to this course of treatment and it is up to you and your physician to determine the most appropriate plan of care for you.

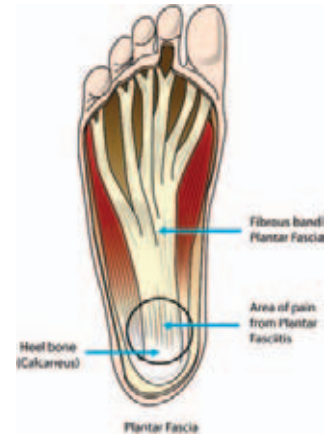


Illustration: Marty Bee



Toe Crunches



Calf Stretch



Calf Stretch, Knee Bent



Calf Stretch, Straight Leg

## Managing your weight may be the most important way to protect against cancer and other chronic illnesses.

### Cancer Prevention Guidelines

By Melanie Hendershott, R.D., C.S.O.

[Editor's note: Melanie is the outpatient dietitian for the Shaw Regional Cancer Center in Edwards, Colorado.]

In 2008, about one-third of all cancer deaths were related to obesity, inactivity, and poor nutrition. This accounts for about 65 percent of preventable deaths due to cancer from diet and lifestyle when alcohol and tobacco abuse are included. The American Institute for Cancer Research (AICR) has provided guidelines for prevention of cancer. There are 9 guidelines based on an expert review of over 7,000 studies (See Fig. 1). These can be summarized into three primary guidelines (See Fig. 2).

The most important guideline is to be as lean as possible without becoming underweight. There is convincing evidence that excess body fat increases risk for not only cancer but also for other chronic conditions such as heart disease and diabetes. Managing your weight may be the most important way to protect against cancer and other chronic illnesses. One of the best ways to manage your weight is to follow the next two guidelines.

The next guideline is to choose mostly plant foods, limit red meat, and avoid processed meat. Evidence shows that choosing fruits, vegetables, whole grains, legumes (beans), nuts, and seeds protects against cancer. Fiber is also an important part of our diet and is only found in plant foods. Red meat and processed meat (smoked, cured, added salt, or added preservatives such as nitrates) increase the risk of colorectal cancer. Greater amounts increase your risk by 15 percent for colorectal cancer. There is not a safe level of consumption with processed meats, and for every 1.5 oz. consumed you increase your risk of colorectal cancer by 21 percent. It is best to fill your plate with at least 75 percent of foods from

plants and only have small portions of animal products.

Physical activity is important for weight management and for cancer prevention. The next guideline says to be physically active every day for 30 minutes or more. It is important to make exercise part of your everyday life. In addition, limiting television or computer time helps move us out of our sedentary lives and into a more active one. In the winter time, there are many opportunities for activity, including skiing, snowshoeing, and Nordic skiing, and hiking, biking and walking/jogging during the summer. In conclusion, your risk for cancer is not primarily due to the radon under your home or your genetics, but to your diet and lifestyle. Changes now can improve your health in the future. Get more information on the AICR guidelines at [www.AICR.org](http://www.AICR.org).



Fig. 1:

#### AICR Guidelines

1. Aim to be a healthy weight throughout life.
2. Be physically active every day.
3. Avoid sugary drinks and energy-dense foods.
4. Eat mostly foods of plant origin.
5. Limit red meat and avoid processed meat.
6. Limit alcohol consumption.
7. Limit salt.
8. Meet nutritional needs through diet (avoid high-dose supplements).
9. Breastfeed infants.

Fig. 2:





Photo: John Kelly

#### FREQUENTLY ASKED QUESTIONS

### *WHAT IS THE DIFFERENCE BETWEEN THE STEADMAN♦HAWKINS RESEARCH FOUNDATION AND THE STEADMAN-HAWKINS CLINIC?*

The Steadman-Hawkins Clinic is an orthopaedic medical practice dedicated to delivering the highest standard of orthopaedic care and personal attention to every patient seeking help. Whether an injured professional athlete or a person just wanting to be able to walk again without pain, the physicians help each patient achieve their goal.

The Steadman♦Hawkins Research Foundation is known throughout the world for its research into the causes, prevention, and treatment of orthopaedic disorders. The Foundation is dedicated to solving orthopaedic problems that limit an individual's ability to maintain an active life.

The Foundation collects data and publishes clinical research results on knees, hips, shoulders, and spine, and it has become one of the most published and one of the most innovative organizations in sports medicine research and education. The Foundation publishes its findings in peer-reviewed scientific and medical journals and presents its research results at medical meetings worldwide.

### **The Foundation's Primary Areas of Research and Education are:**

- **Basic Science Research** - undertakes biological studies to investigate the causes and effects of degenerative arthritis, techniques of cartilage regeneration, and basic biological healing processes.
- **Clinical Research** - conducts evidence-based medicine "outcomes" research based on actual clinical data that aids both physicians and patients in making better-informed treatment decisions.
- **Biomechanics Research Laboratory** - studies dynamic joint function using motion analysis, computer modeling, and dual-plane fluoroscopy imaging in an effort to understand injury mechanisms and to enhance rehabilitation techniques and outcomes.
- **Imaging Research** - develops and evaluates noninvasive imaging techniques of the joints for the purpose of directing and monitoring clinical treatment and outcomes and to enhance the clinical relevance of Biomechanics Research.
- **Education and Fellowship Program** - administers and coordinates the physicians-in-residence fellowship training program, hosts conferences and international medical meetings, and produces and distributes publications and teaching visual media.

(continued on page 18)



(continued from page 17)

### **WHAT IS FAI?**

According to Dr. Philippon, “FAI is a disease of active people.” FAI, or femoroacetabular impingement, occurs when abnormally shaped bones of the hip repetitively hit into each other during movement. As a result, soft tissue structures of the hip, including the acetabular labrum and the articular cartilage, are often entrapped and injured. Impingement is particularly common in hip flexion and internal rotation, a position frequently encountered during activities of daily living. Difficulty with putting on shoes and socks and getting into and out of a car are common complaints in patients with extensive impingement.

There are two distinct types of femoroacetabular impingement, cam and pincer. Most commonly, patients have a combination of the two types of impingement. Cam impingement results from excess bone located on the femoral neck. Pincer impingement results from excess bone located on the acetabulum. The precise cause of the impingement is unknown. However, it likely has both developmental and activity-related (i.e., contact in sports) components. Knowing the damage that can be caused to the

labrum and articular cartilage by FAI, Dr. Philippon uses two small arthroscopic incisions to remove the excess bone from the femoral neck and the acetabulum. It is the goal of the arthroscopic procedure to relieve the impingement and create joint clearance to stop the bony abutment and soft tissue damage. This may lessen the damage to cartilage and reduce the later need for total hip arthroplasty. With this technique, the patients do very well after surgery.

### **WHAT HAPPENS TO UNDESIGNATED GIFTS RECEIVED BY THE STEADMAN♦HAWKINS RESEARCH FOUNDATION?**

Undesignated gifts go into the general fund and are applied to the greatest need at the time of the gift. The greatest need could be a research project, piece of equipment, or overhead.

### **HOW DO PEOPLE NOT ASSOCIATED WITH THE FOUNDATION BENEFIT FROM ITS RESEARCH?**

The Foundation has influenced the practice of orthopaedics — from diagnostics to rehabilitation. For example, microfracture has become the procedure of choice because of results validated by the Foundation. And before 1998, physicians seldom performed surgery on the ACL in people over 40. They were just told to limit activities that would stress the knee joint. Dr. Steadman showed them the results of studies in which his patients did very well after ACL surgery, and now older adults can stay active for a lifetime.

Another example is the treatment of the hip condition, femoroacetabular impingement. Treatment refined by the Foundation moved new techniques forward so that doctors and patients began to accept the procedure as a standard for care.

### **WHAT IS THE FIRST STEP I SHOULD TAKE IF I WANT TO MAKE A GIFT TO THE FOUNDATION?**

Please contact John McMurtry, 970-479-5781, e-mail [john.mcmurtry@shsmf.org](mailto:john.mcmurtry@shsmf.org), for information on our various research projects and programs. We have an extensive menu of giving options and areas of need.



Photo: John Kelly

SAVE THE DATES

## Treat your senses to a sensational *Night to Remember*, featuring the wines of Duckhorn Wine Company, July 24.



Please join us at master chef Wolfgang Puck's Spago in the Rocky Mountain setting of the Ritz Carlton, Bachelor Gulch, on Friday, July 24, 2009. This spectacular evening will benefit the orthopedic research and educational programs of the Steadman-Hawkins Research Foundation. Bid on one of our many exotic items through a live and silent auction. For more information or to request an invitation, please contact Sheri Wharton at 970.479.5788 or [swharton@shsmf.org](mailto:swharton@shsmf.org).

## Steadman-Hawkins On the Links

THE STEADMAN-HAWKINS SANCTUARY GOLF TOURNAMENT, PRESENTED BY RE/MAX INTERNATIONAL, SET FOR AUGUST 20, 2009

Proceeds from the sixth annual tournament will support the development of new procedures and methodology to battle degenerative arthritis. 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.

Through 2008, more than 235 charities have raised more than 43 million dollars to benefit the constituents they serve. 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-Hawkins Research Foundation is grateful to Dave and Gail Liniger, owners and co-founders of RE/MAX International, who created this unique opportunity for the Foundation 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 ([shsmf.org](http://shsmf.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 Foundation events, please contact John McMurtry at the Steadman-Hawkins Research Foundation (970) 479-5781.



## Habervision Is Here!

The Steadman-Hawkins Research Foundation would like to offer all our supporters and their families and friends the opportunity to purchase the new and exciting line of Habervision Polarized Eyewear products and accessories at a 50 percent savings! A portion of the proceeds from each sale goes to the Foundation.

The sunglasses and ski goggles incorporate the very best polarized technology available. There is something for everyone. Go to [www.habervision.com](http://www.habervision.com) and enter Affinity Member Code: FOUNDATION, or click on the link below. There is no expiration date. Share the code! Shop and enjoy.



Photo: John Kelly



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

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

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Treat your senses to a sensational *Night to Remember*, featuring the wines of Duckhorn Wine Company July 24.

Wolfgang Puck's Spago Restaurant, Ritz Carlton, Bachelor Gulch.

For more information, contact Sheri Wharton at 970.479.5788 or [swharton@shsmf.org](mailto:swharton@shsmf.org).

**AUGUST 20, 2009**

2009 Steadman-Hawkins Golf Classic, presented by RE/MAX International at Sanctuary in Sedalia, Colo.

For more information, contact John McMurtry at (970) 479-5781.

**Your Legacy, Our Future. Please remember Steadman♦Hawkins Research Foundation in your will, trust, or other estate plan.**

**Executive Editor:**  
Jim Brown, Ph.D.